



UPPER UWCHLAN TOWNSHIP  
PLANNING COMMISSION  
AGENDA  
**June 13, 2024**

**6:00 p.m. Workshop, 7:00 p.m. Meeting**

LOCATION: Upper Uwchlan Township Building, 140 Pottstown Pike, Chester Springs PA 19425

		Packet Page #
I.	6:00 Workshop – Ordinance Review	
	A. Short-term Rental ordinance draft	2
	B. Landscape design	
II.	7:00 PM Meeting Call To Order	
III.	301 Park Road / P.J. Reilly Headquarters Preliminary Land Development Plan	5
	Continued review and discussion of the Preliminary Plan	
	dated 11/1/2022, last revised 3/28/2024. Consider making	
	recommendation of approval to the Board of Supervisors.	
IV.	Meeting Updates ~ Reports	
	A. Environmental Advisory Council (EAC)	
	B. Historical Commission (HC)	
	C. Village Concept Plan / Village Design Guidelines (VCP / VDG)	
	D. Comprehensive Plan Update (CompPlan)	
V.	Short-term Rental Ordinance	
	Consider making recommendation of approval to the Board of Supervisors.	
VI.	Village Design Guidelines Draft	41
	Review, discuss, consider making a recommendation to the Board of Supervisors.	
VII.	Approval of Minutes: May 9, 2024 Meeting minutes	144
VIII.	Next Meeting Date: July 11, 2024 7:00 p.m.	
IX.	Open Session	
X.	Adjournment	

UPPER UWCHLAN TOWNSHIP

CHESTER COUNTY, PENNSYLVANIA

ORDINANCE \_\_\_\_\_ - \_\_\_\_\_

**AN ORDINANCE OF THE TOWNSHIP OF UPPER UWCHLAN, CHESTER COUNTY, PENNSYLVANIA, AMENDING CHAPTER 200 OF THE UPPER UWCHLAN TOWNSHIP CODE TITLED "ZONING" TO DELETE THE DEFINITION OF "HOTEL/MOTEL/MOTOR INN" AND TO ADD DEFINITIONS OF HOTEL, MOTEL AND SHORT TERM RENTAL IN SECTION 200-7; TO AMEND SECTION 200-13.C TO ALLOW A SHORT TERM RENTAL IN THE R-1 DISTRICT BY CONDITIONAL USE; SECTION 200-17.B TO ALLOW A SHORT TERM RENTAL IN THE R-2 DISTRICT BY CONDITIONAL USE AND TO ADOPT A NEW SECTION 200-72.3 TO ADOPT CRITERIA FOR A SHORT TERM RENTAL.**

**NOW THEREFORE, BE IT ENACTED AND ORDAINED** by the Board of Supervisors of Upper Uwchlan Township that Chapter 200 of the Upper Uwchlan Township Code, titled "Zoning", shall be amended as follows:

**SECTION 1.** The definition of "Hotel, Motel and Motor Inn" in Section 200-7, titled, "Definitions and word usage" shall be deleted.

**SECTION 2.** The following definitions shall be added to Section 200-7, titled, "Definitions and word usage":

**HOTEL**- A facility offering transient lodging accommodations to the general public, which rooms are entered exclusively from an interior lobby, corridor or hallway from a common entrance, and which may include additional facilities and services, such as restaurants, lounges, meeting rooms and other common areas, or recreation facilities for use only by registered hotel guests.

**MOTEL**- Building or series of buildings in which transient lodging is offered for compensation, and which is distinguished from a hotel primarily by reason of providing direct independent access to, and adjoining parking for, each rental unit.

**SHORT TERM RENTAL** – Any single family detached dwelling unit rented for the purpose of overnight transient lodging for a period of less than 30 days. The leasing of one or more bedrooms in a dwelling unit shall not be permitted as a short term rental.

**SECTION 3.** Section 200-13, titled "Use Regulations" for the R-1 Residential District shall be amended in Section 200-13.C to add a new subparagraph (7) as follows:

(7) Short term rental subject to the criteria in Section 200-72.3.

**SECTION 4.** Section 200-17, titled “Use Regulations” for the R-2 Residential District shall be amended in Section 200-17.B to add a new subparagraph (4) as follows:

- (4) Short term rental subject to the criteria in Section 200-72.3.

**SECTION 5.** A new Section 200-72.3 titled, “Standards and criteria for short term rentals” shall be added and provide as follows:

**“§200-72.3. Standards and criteria for short term rentals.”**

- A. In addition to the requirements in Section 200-116 that apply to all uses permitted by conditional use, short term rentals shall also comply with the standards and criteria in this Section.
- B. Standards and criteria.
  - (1) Short term rentals shall be permitted in single family detached dwelling units in the R-1 Residential District and the R-2 Residential District by conditional use.
  - (2) The leasing of one or more bedrooms in a dwelling unit shall not be permitted as a short term rental.
  - (3) The short term rental must provide one off-street parking space per bedroom.
  - (4) The owner of a short term rental shall be required to obtain an annual rental permit and pay the applicable annual rental permit fee as established by Resolution of the Board. In order to obtain the rental permit, the short term rental shall be inspected on an annual basis by the Township Code Department. The short term rental shall demonstrate proof of the following:
    - a) working smoke detector in each bedroom;
    - b) working smoke detector outside each bedroom in a common hallway;
    - c) working smoke detector on each floor;
    - d) GFI outlet for all outlets located within 6 feet of a water source;
    - e) aluminum or metal exhaust from the dryer;
    - f) carbon monoxide detector if open flame furnace or gas fireplace is used;
    - g) carbon monoxide detector if a garage is attached;
    - h) fire extinguisher located in a conspicuous location in the kitchen; and
    - i) All indoor and outdoor staircases in good condition.

- (5) Short term rentals shall comply with all applicable federal, state and local governmental laws, rules, ordinances, resolutions and regulations including the Upper Uwchlan Township Code.
- (6) The maximum number of guests that may stay overnight in the short term rental shall be limited to two per bedroom.
- (7) A short term rental advertising more than three bedrooms shall provide proof to the Zoning Officer that the dwelling is connected to public sewer or in the case where the dwelling is served by a private septic system, the septic system is adequate to handle the additional flows estimated by the additional bedrooms. If the septic system malfunctions, the short term rental use shall be discontinued until such time as the septic system is repaired or replaced.

**SECTION 6. Severability.** If any sentence, clause, section, or part of this Ordinance is for any reason found to be unconstitutional, illegal, or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts hereof. It is hereby declared as the intent of the Board of Supervisors that this Ordinance would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, section, or part thereof not been included herein.

**SECTION 7. Repealer.** All ordinances or parts of ordinances conflicting with any provision of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

**SECTION 8. Effective Date.** This Ordinance shall become effective five (5) days following the enactment as by law provided.

**ENACTED AND ORDAINED** this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

**ATTEST:**

**UPPER UWCHLAN TOWNSHIP  
BOARD OF SUPERVISORS**

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Gwen A. Jonik, Secretary

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Jennifer F. Baxter, Chair

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Andrew P. Durkin, Vice-Chair

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Sandra M. D'Amico, Member



May 3, 2024

File No. 22-11010

VIA E-MAIL ONLY

Mr. Tony Scheivert  
Upper Uwchlan Township Manager  
140 Pottstown Pike  
Chester Springs, PA 19425

Reference: 301 Park Road – P.J. Reilly Contracting, Inc.  
Proposed Headquarters Building  
Preliminary Land Development Application – 3<sup>rd</sup> Review  
Upper Uwchlan Township, Chester County, PA

Dear Tony:

Gilmore & Associates, Inc. (G&A) is in receipt of the following documents prepared by Wilkinson Apex unless otherwise noted:

- Letter to Upper Uwchlan Township granting an extension of time on the Preliminary Plan Application until June 30, 2024, dated January 23, 2024.
- Letter of Transmittal to Upper Uwchlan Township dated April 5, 2024.
- Letter to G&A responding to April 7, 2023 review comments dated April 5, 2024.
- Waiver Request letter to G&A dated April 5, 2024.
- Plan set consisting of five (5) sheets titled “Proposed Headquarters Building 301 Park Road” prepared by Vosburgh Architects, dated March 12, 2024.
- Plan set consisting of eighteen (18) sheets titled “Preliminary Land Development Plan prepared for P.J. Reilly Contracting Co., Inc.” dated November 1, 2022 and revised March 28, 2024.

BUILDING ON A FOUNDATION OF EXCELLENCE

184 W. Main Street | Suite 300 | Trappe, PA 19426  
Phone: 610-489-4949 | Fax: 610-489-8447  
[www.gilmore-assoc.com](http://www.gilmore-assoc.com)

Reference: 301 Park Road – P.J. Reilly Contracting, Inc.  
Proposed Headquarters Building  
Preliminary Land Development Application – 3<sup>rd</sup> Review  
Upper Uwchlan Township, Chester County, PA

File No. 22-11010

May 3, 2024

- “Post-Construction Stormwater Management Plan Narrative Proposed Headquarters Building 301 Park Road”, dated March 28, 2024.
- Plan set consisting of seven (7) sheets titled “Retaining Wall Plan” prepared by Perspective Engineering & Design, dated March 27, 2024.
- “Erosion & Sediment Control Plan Narrative” dated March 28, 2024.

G&A, along with the other Township Consultants, have completed our third review of the above referenced land development application for compliance with the applicable sections of the Township’s Zoning, Subdivision and Land Development, and Stormwater Management Ordinance, and wish to submit the following comments for your consideration.

Please note that G&A comments with a **(V)**, **(RW)** or **(W)** require relief from the Township Ordinances. A **(V)** denotes a variance is required, a **(RW)** denotes a requested waiver, and a **(W)** denotes a waiver that has not been requested but we feel may be necessary to construct the project as proposed. Comments in *italics* are from our previous review letter, and comments in **bold text** require resolution by the applicant. Previous comments which have been satisfactorily addressed are not repeated herein.

## I. OVERVIEW

The site is approximately 3.12 acres in size and contains an existing one-story dwelling as well as part of an above-ground stormwater detention basin associated with the adjacent parcel. The property is located within the LI (Limited Industrial) Zoning District.

The Applicant is proposing to construct a one-story, 7,400 SF (gross footprint) 2-story building with an office (3,502 SF) and garage (3,633 SF) on the first floor and storage (3,507 SF) on the second floor as well as paved access drives, retaining walls and parking areas. Two (2) underground stormwater basins will be constructed to manage the post construction runoff.

File No. 22-11010

May 3, 2024

## **II. ZONING ORDINANCE COMMENTS**

1. Section 200-45.F – *No accessory building or structure shall be located within the front yard, nor within 30 feet of any side or rear lot line.*

**The setback shall be revised to be offset from the side property line (S43° 35' 47"W 405.83').**

2. Section 200-73.H – *Provide the parking calculation.*

**The parking shall be clarified as it does not appear 1 space for each stored vehicle has been included in the provided spaces list.**

3. Section 200-80.C(1) – *Outdoor storage facilities for fuel, including aboveground storage tanks, raw materials, and products, shall be enclosed with an approved safety fence compatible with the architectural and landscaping style employed on the lot. All fencing shall be erected in accordance with Sections 200-77 and 200-88 of this chapter, and with Chapter 162, Subdivision and Land Development. These items shall be addressed as part of the building permit process.*

A Refuse Area fence / enclosure detail as well as a Typical Chain Link Fence detail are provided (Sheet 10). However, the line type used on the plan view (which appears to be fence) is identified in the Legend as Metal Guardrail. The fence line type in the Legend should be verified as well as which fence type is proposed for the diesel fuel concrete containment boxes and the outdoor gravel surface storage area. Sheet 9 shows a Retaining Wall Fall Protection Reference Image; a detail for the proposed retaining wall fence should be provided.

## **III. SUBDIVISION & LAND DEVELOPMENT ORDINANCE COMMENTS**

1. (RW) Section 162-41.B – *Sidewalks shall be required in any subdivision or land development where it is desirable, in the opinion of the Board, to continue sidewalks that are existing in adjacent developments, or to provide access to community facilities (schools, shopping areas, recreational areas, etc.), or to ensure the safety of pedestrians in unusual or peculiar conditions with respect to prospective traffic.*

Reference: 301 Park Road – P.J. Reilly Contracting, Inc.  
Proposed Headquarters Building  
Preliminary Land Development Application – 3<sup>rd</sup> Review  
Upper Uwchlan Township, Chester County, PA

File No. 22-11010

May 3, 2024

The applicant is seeking a waiver from this requirement.

2. Section 162-47.A(4)(b) – All streets shall be monumented on the right-of-way line at changes in direction of street lines. Provide concrete monuments along the right-of-way in unpaved locations.
3. Section 162-58.C(3)(a) – *All outdoor lighting, whether or not required by this chapter, on private, residential, commercial, industrial, recreational or institutional property shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property. There appears to be significant light spill onto Park Road in the vicinity of Heather Hill Drive (providing access to residential uses) as well as onto adjacent parcel 3203 00690400 (to the east). Only one of the proposed light fixtures (B4) appears to be equipped with a house-side shield.*

It is noted that there continues to be light levels in excess of 1FC beyond the property line along Park Road. Fixture F now appears to have an external glare shield; however, the arrangement (double) and orientation (parallel to the roadway) does not appear to be directing the light “inward” towards the property. **Due to the residential uses on Heather Hill Drive, this light spill may be considered objectionable and shall be revised.** We continue to note the light spill in excess of 1FC along the FedEx parcel to the east. **Although this spill may not be considered a nuisance, it appears that slight adjustments to the orientation of the “G” light fixture may further reduce light spill and increase illumination levels on the site, close to the proposed building.**

4. Section 162-58.D(1)(a) – *A site plan showing: all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), and vegetation that might interfere with lighting...”. It is noted that proposed landscaping is shown on the lighting plan and appears that there will be multiple conflicts between proposed lighting locations and proposed canopy/shade trees. In the proximity shown, the twenty-foot-high luminaires would be within the tree canopy as they mature. Locations shall be coordinated, and adequate separation provided.*

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Proposed Headquarters Building  
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File No. 22-11010

May 3, 2024

Plans have been revised; however, it is noted that the proposed vegetation is no longer depicted on the lighting plan (Sheet 7). **Vegetation shall be shown to verify coordination between vegetation and proposed light fixtures.**

**IV. STORMWATER MANAGEMENT ORDINANCE COMMENTS**

1. The Applicant is proposing two underground detention / infiltration basins to control post-development runoff.
2. (W) Section 152-306.J(3) – All infiltration practices shall have setbacks from property lines and rights-of-way consistent with accessory structures in the Zoning Ordinance for the applicable zoning district. Per Section 200-45.F, no accessory structure shall be located within the front yard, nor within 30 feet of any side or rear lot line. Basin A (infiltration basin) is in the front yard setback, and Basin B (infiltration basin) is in the rear yard setback. **We recommend a waiver be requested to permit these infiltration basins in the required yard setbacks.**
3. Section 152-402.A(2) – Final approval or adequacy letters must be submitted to the municipality prior to (or as a condition of) the municipality's issuing final approval of the SWM site plan. Proof of application and approval shall be provided for the NPDES Permit and the Erosion and sediment control plan letter of adequacy.
4. Section 152-402.F(2) and 152-703.A – An O&M agreement shall be provided.

**V. GENERAL COMMENTS**

1. It seems construction easements will be required to construct the proposed retaining walls along the southern property line. These should be provided.

The response letter states that a temporary grading easement is in development with the neighboring FedEx property and will be provided with the Final Recorded Plans.

File No. 22-11010

May 3, 2024

2. *Written verification shall be provided from the owner of the large basin indicating his support for the proposed modifications.*

The response letter states that the neighboring FedEx property, which has an existing easement over the existing surface basin for access, maintenance, discharge, etc., will be asked for a support letter and will be provided with the Final Plan.

3. It appears that all proposed building mounted light fixtures may be in conflict with window locations at the 20' mounting height shown. Fixture locations shall be coordinated with architectural elevations to ensure mounting is feasible as proposed.
4. Note on plan “Architectural design to ensure 5 FC illumination at all entrances” seems to indicate that there will be additional architectural light fixtures proposed. Additional information shall be provided for these proposed fixtures.

**VI. TOWNSHIP TRAFFIC CONSULTANT COMMENTS**  
**BOWMAN**

1. SALDO Section 162-9.H(1) – The overall size of the building has been increased from 8,400 square feet to 10,642 square feet since the last submission. Based on the previous development proposal, the applicant stated the site will have 11 employees regularly on site, and contractors employed by the company will arrive and depart during off-peak hours. The applicant should confirm the operations of the site based on the increased building size, as well as clarify the use of the proposed 3,507 square feet of second floor storage space.
2. ZO Section 200-73.H – The parking tabulation on Sheet 3 allocates parking spaces associated with the proposed office and garage space within the building. However, the building also includes 3,507 square feet of storage space which is not accounted for in the parking tabulation. The applicant should confirm the use of the storage space, and whether this area will contribute to the traffic and parking needs of the site. If the storage space will be a generator of traffic and parking, then the parking supply for the site should be increased appropriately.

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Preliminary Land Development Application – 3<sup>rd</sup> Review  
Upper Uwchlan Township, Chester County, PA

File No. 22-11010

May 3, 2024

3. Section 162-27.1.K(1) – Provide truck turning templates for the left-turn entering and exiting movements.
4. The site driveways propose stamped asphalt to help narrow the appearance of the accesses for car and small truck traffic, while creating a wider driveway opening for large trucks. Our office has concerns regarding the durability and maintenance of the stamped asphalt. As such, we recommend a paver material in lieu of the stamped asphalt. Furthermore, the paver material will create a rougher surface for traffic, which may help to slow traffic entering and exiting the site, and discourage non-truck traffic from traversing over this portion of the driveway openings. Provide a construction detail for the proposed paver design.
5. The access designs necessary to accommodate truck movements results in very wide driveway openings along Park Road. Furthermore, the revised plans show a wider western driveway as compared to the previous plan submission. We recommend additional paver material at the western driveway to limit the effective pavement width for cars and small trucks, similar to the proposed eastern driveway.
6. Provide a radius on the inside edge of the textured pavement at its intersection with Park Road at both accesses in order to create the appearance of a traditional driveway opening.
7. SALDO Section 162-41.B – The applicant requests a waiver to not provide sidewalk along the site frontage. The Township's Active Transportation Plan does not contemplate pedestrian improvements on the south side of Park Road, and therefore, we could support the waiver, subject to agreement by the Township.
8. ZO Section 200-75.H(3) –Provide the source of the sight distance requirements shown in the sight distance note on Sheet 6, as the values shown appear to be less than PennDOT's safe stopping sight distance requirements for the 35 miles per hour posted speed limit. Furthermore, it appears the sight line for traffic exiting the western driveway looking to the left conflicts with the retaining wall and fence, which limits the sight distance for exiting vehicles below the required sight distances. The wall and fence should be removed from the sight line.

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Proposed Headquarters Building  
Preliminary Land Development Application – 3<sup>rd</sup> Review  
Upper Uwchlan Township, Chester County, PA

File No. 22-11010

May 3, 2024

9. The applicant's engineer has indicated the proposed retaining wall cannot be located outside the Park Road right-of-way due to the location of the existing stormwater facilities located to the west of the site. However, as indicated above, our office is concerned that the wall will restrict sight distance for traffic exiting the site looking to the left. Furthermore, the proposed retaining wall and fence is located within the Park Road clear zone and will represent a blunt object safety hazard. We strongly recommend that the retaining wall should be located outside the Park Road right-of-way, and the guiderail on the south side of Park Road should be continued along the proposed southwestern radius of the proposed western driveway. With modifications to the western edge of the driveway, it should be possible to ensure the wall is located outside the right-of-way.
10. Chapter 79-8.C –The proposed redevelopment is located in the Township's Act 209 Transportation Service Area, and as such, this development is subject to the Townships Transportation Impact Fee of \$2,334 per weekday afternoon peak hour trip. Based on the Institute of Transportation Engineers publication, Trip Generation Manual, 11th Edition (Land Use Code 180, Specialty Trade Contractor), and the assumption that the 3,507 square feet of second floor storage space is not a trip generator (to be confirmed by the applicant as requested in comment 1), the proposed 7,135 square feet of building space will generate 14 new trips during the weekday afternoon peak hour. As such, the Transportation Impact Fee for the proposed development will be \$32,676.

Upon resubmission, the applicant's engineer should compose a response letter that describes how each comment has been addressed and where any revisions are located. Additional comments regarding the plans may follow upon receipt of future submissions.

**VII. TOWNSHIP LAND PLANNER COMMENTS  
BRANDYWINE CONSERVANCY**

The applicant's response letter dated April 5, 2024 addresses and resolves the original comments provided by the Brandywine Conservancy in April of 2023. However, the Brandywine Conservancy provides the following comments for the Township's consideration.

File No. 22-11010

May 3, 2024

### Variance Requests

The Brandywine Conservancy recognizes that meeting the tree planting requirements is challenging given the site and space for tree planting. However, we encourage the Township and Applicant to explore every alternative to better meet these requirements. The Conservancy notes that the existing stormwater basin is not planned to be planted. The Conservancy wonders if in consultation with the Township's stormwater engineer, consideration might be given to naturalizing the basin to include native species that would tolerate and thrive under these conditions. Given the property contains the upslope portion of the stormwater basin (which is therefore less inundated and for shorter periods of time), this may be a possible solution on the applicant's lot. This may also present an opportunity to better meet the shrub planting requirements dictated by SALDO.

As indicated in our prior review letter, while not required under the provisions of the SALDO, consideration may also be given to seeking alternative Township owned sites where portions of the required planting could be installed to provide environmental and community benefits to residents and the Township.

While we recognize that the applicant has noted in their waiver request letter that the Township's Planning Commission has expressed support for the waiver associated with the provision of public sidewalks, the Conservancy would strongly recommend that the Township consider at least having the applicant provide a safe crossing of Park Road to provide access to the sidewalk and trail on its northside. Such a connection would allow employees located onsite to safely access this facility for recreation during breaks or to access local restaurants and businesses during the lunch hour without having to drive. The Conservancy would look to the Township's traffic engineer (Bowman) for design and location suggestions and/or specifics to such a crossing in this area.

### **VIII. TOWNSHIP SEWER CONSULTANT COMMENTS** **ARRO CONSULTING, INC.**

1. The site is currently a single-family dwelling. Plans proposed the demolition of the existing single-family home and the construction of a

Upper Uwchlan Township Manager

Reference: 301 Park Road – P.J. Reilly Contracting, Inc.

Proposed Headquarters Building

Preliminary Land Development Application – 3<sup>rd</sup> Review

Upper Uwchlan Township, Chester County, PA

File No. 22-11010

May 3, 2024

one-story office building with associated garage bays. Based on discussions with the applicant's engineer, the building is to be occupied by 11 full-time employees and includes associated restrooms, a small kitchen break room and a shop sink in the garage area. The needed sewer usage capacity is 225 gallons per day (GPD) or one equivalent dwelling unit (EDU). The required capacity will need to be purchased by the applicant. We recommend the Township reserve the right to review water usage in the future and require the purchase of additional sanitary sewer capacity if warranted.

2. Pennsylvania Department of Environmental Protection correspondence dated November 13, 2023, indicates that no planning modules are required for this project.
3. The necessary financial security shall be posted with the Township, which shall be in a form and amount acceptable to the Township.

If you have any questions, please do not hesitate to contact me.

Sincerely,

*David N. Leh*

David N. Leh, P.E.

Vice President

Gilmore & Associates, Inc.

cc: Upper Uwchlan Township Planning Commission Members  
Upper Uwchlan Township Board of Supervisors  
Gwen Jonik – Township Secretary  
Rhys Lloyd – Director of Code Enforcement  
Anthony Campbell – Zoning Officer  
Kristin Camp, Esq. – Buckley, Brion, McGuire, & Morris LLP  
Rob Daniels, Brandywine Conservancy  
Christopher J. Williams, P.E., Bowman  
G. Mathew Brown, P.E., ARRO Consulting, Inc.

Upper Uwchlan Township Manager

Reference: 301 Park Road – P.J. Reilly Contracting, Inc.

Proposed Headquarters Building

Preliminary Land Development Application – 3<sup>rd</sup> Review

Upper Uwchlan Township, Chester County, PA

File No. 22-11010

May 3, 2024

David Schlott, P.E., ARRO Consulting, Inc.

Phil Reilly, P.J. Reilly Contracting

Joseph C. Mongeluzi, P.E., Wilkinson Apex Engineering Group, LLC

# Lionville Fire Company

15 South Village Avenue  
P.O. Box 478  
Lionville, Pennsylvania 19353  
Emergency: 911  
Business: (610) 363-7663

TO: Upper Uwchlan Township  
FROM: Richard Ruth, Upper Uwchlan Township Fire Marshal  
DATE: May 13, 2024  
RE: 301 Park Road – P.J. Reilly Headquarters – Land Development Plan

## MEMORANDUM

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I have reviewed the plans for 301 Park Road – P.J. Reilly Headquarters land development plan dated November 1, 2022, and last revised March 28, 2024 and offer the following comments:

- Provide the location(s) and distance(s) from the nearest fire hydrant(s) on Park Road.
- The needed flow for the fire hydrant @ Heather Hill Drive is 2,000 GPM @ 20 PSI residual pressure.
- The address needs to be clearly posted and visible, when traveling in either direction.
- Landscaping/trees along the driveway need to be of a variety that will not impede fire apparatus.
- Advise if the building will be sprinklered.
- Advise how the fuel storage tanks will be contained.
- Advise the size of each fuel storage tank.
- It appears that there is adequate turning radius and maneuverability for a 40' tower truck.

Thank you for the opportunity to review this plan and offer comments for consideration.

Feel free to contact me if you have any questions regarding this or any other matters of mutual concern.

Sincerely,

  
Richard Ruth  
Fire Marshal



April 5, 2024

David N. Leh, P.E.  
Gilmore & Associates, Inc.  
184 W. Main Street, Suite 300, Trappe, PA 19426

**RE: 301 Park Road – P.J. Reilly Contracting, Inc.  
Proposed Headquarters Building  
Preliminary Land Development Application  
Upper Uwchlan Township, Chester County**

**WKNAPEX No. 2021-231**

Dear David:

On behalf of the above referenced project, we are requesting the following waivers to the Upper Uwchlan Township Subdivision and Land Development Ordinance:

§162-57.D.(1): SEEKING RELIEF FROM THE TREE PLANTING REQUIREMENTS OF THIS SECTION. DUE TO THE EXISTING SURFACE BASIN AND SIZE OF SITE THERE IS NOT ENOUGH AREA TO FULFILL TREE PLANTING REQUIREMENTS. IT HAS BEEN DISCUSSED WE WILL WORK WITH THE TOWNSHIP FOR CONDITIONS OF THIS WAIVER.

§162-41.B.: SEEKING RELIEF FROM HAVING TO INSTALL PUBLIC ACCESS SIDEWALKS REQUIRED FOR SUBDIVISION/LAND DEVELOPMENT PLANS. THE PLANNING COMMISSION HAS EXPRESSED SUPPORT FOR THIS WAIVER IN PUBLIC MEETINGS.

Based on these reasons stated above, we are requesting the Township consider these waivers.

Should you have any questions or require additional information during your review, please do not hesitate to contact me at 610-897-5032 or jmongeluzi@wknapex.com.

Sincerely,  
**Wilkinson APEX Engineering Group, LLC**

A handwritten signature in black ink, appearing to read "J. C. Mongeluzi".

Joseph C. Mongeluzi, Jr., P.E.  
Principal Engineer

J:\Apex\PROJECTS WKNAPEX\2021\2021231 - PJ Reilly\Correspondence\Letters\2024-04-05 Waiver Request Letter



April 5, 2024

David N. Leh, P.E.  
Gilmore & Associates, Inc.  
184 W. Main Street, Suite 300, Trappe, PA 19426

**RE: 301 Park Road – P.J. Reilly Contracting, Inc.  
Proposed Headquarters Building  
Preliminary Land Development Application  
Upper Uwchlan Township, Chester County**

**WKNAPEX No. 2021-231**

Dear David,

Since the last submission, we have adopted new drafting standards that improve visibility and clarity of the plans. We have also adopted new stormwater calculation software (HydroCAD) and supporting calculation spreadsheets which further clarify the project. We have consolidated the proposed SWM systems into two (2) large systems for value engineering purposes. Due to these changes, many of the comments received are now not applicable to the current submission. We are in receipt of your review letter, dated April 7, 2023. Please find our responses below.

## **II. ZONING ORDINANCE REVIEW**

1. Section 200-45 – Show the front lot line / street line on the plans; Park Road has an ultimate right-of-way of 50-feet.  
The Right of Way along Park Road needs to be clarified. There is an Ultimate Right of Way shown as well as a line labeled "Pa-DOT Required Right of Way per DB 9926 PG 1799". There is also additional line work which appears to be right-of-way, but it is not clear. This should all be clarified.

***Response: Our survey shows the Ultimate ROW of Park Road, with regard to our site, has already been taken; therefore, this Ultimate ROW is now legal and has been shown as such.***

2. (V) Section 200-45 – A portion of the proposed building is shown within the required rear yard setback, which will require a variance. The Applicant has noted on Sheet 4 they will be seeking this relief.

***Response: This variance has been granted. The ZHB decision is shown on the Site Layout / Record Plan – Sheet 3 of 18.***

3. Section 200-45.F – Add the accessory buildings/structures restriction to the Zoning table on Sheet 4: No accessory building or structure shall be located within the front yard, nor within 30

feet of any side or rear lot line. The plans show the Diesel Fuel Concrete Containment Boxes within 30 feet of the rear yard. These should be relocated to comply with this section.

**Response: The accessory building setback requirement has been added to the proposed Zoning table (now located on Sheet 3 of 18), and an accessory setback line has been shown on the plan. The proposed diesel fuel boxes have been moved to a more appropriate location adjacent to the loading zone outside of this setback.**

4. (V) Section 200-73.A(3) – In any industrial district, no parking, loading or service area shall be located within 25 feet of the ultimate right-of-way line. **Show the ultimate right-of-way of Park Road as well as this setback.**

The setback has not been shown on the plans. The response letter states that a variance may be required from this section as the parking along the road is within 25 feet of the ultimate right-of-way line; they are awaiting confirmation if the parking count is sufficient. Based on our review, a variance will be required. See parking space requirements comment herein (Section 200-73.H).

**Response: As mentioned, the Ultimate ROW line is now legal and shown on the plan. The 25' setback has been shown on Sheet 3 of 18. Please see the Parking / Storage Tabulation note on Sheet 3 of 18 which shows compliance to the current proposed building / use. A variance has been granted to allow for parking within the 25' setback. The ZHB decision is shown on Sheet 3 of 18.**

5. Section 200-73.H – Provide the parking calculation.

The parking calculation has been provided. **However, the number of required spaces for "Office Space" appears to have been computed incorrectly. For this use, 5 spaces / 1,000 SF is required. If 3,900 SF is proposed for this use, 19.5 (20) spaces would be required to bring the required total for the site to 31 spaces. Only 28 spaces are currently proposed.**

**Response: This has been updated. Please see the Parking / Storage Tabulation note on Sheet 3 of 18 which shows compliance to the current proposed building / use.**

6. (V) Section 200-80.A(5) – No storage shall be permitted within the front yard of any lot. It should be confirmed this requirement is being met.

The Applicant has noted on Sheet 4 that they will be seeking a variance from this requirement.

**Response: A variance has been granted to allow for permanent outdoor storage within the front yard. The ZHB decision is shown on Sheet 3 of 18.**

7. Section 200-80.B - Show the proposed garbage storage area on the plans in accordance with this section.

A dumpster area has been shown. **Please provide a construction detail for the proposed enclosure.**

**Response: The proposed dumpster pad has been revised, and a corresponding construction detail provided. Please see the Construction Details Plan – Sheet 10 of 18.**

8. Section 200-80.C – Clarify whether any fuel or other explosive materials are intended to be stored on the site.

The plans show two (2) "Diesel Fuel Concrete Containment Boxes." Sheet 4 notes "No fuel or other explosive materials will be stored on site." Clarify the purpose of the Diesel Fuel Concrete Containment Boxes.

**Response: Diesel fuel will be stored for the vehicles operating at the site. This note has been removed from the plan.**

9. Section 200-80.C(1) – Outdoor storage facilities for fuel, including aboveground storage tanks, raw materials, and products, shall be enclosed with an approved safety fence compatible with the architectural and landscaping style employed on the lot. All fencing shall be erected in accordance with Sections 200-77 and 200-88 of this chapter, and with Chapter 162, Subdivision and Land Development. These items shall be addressed as part of the building permit process.

**Response:** *The outdoor fueling area will comply with all federal, state, and local regulations. A safety fence has been shown around the proposed diesel fuel boxes and corresponding construction detail provided. Please see the Construction Details Plan – Sheet 10 of 18.*

### **III. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE**

1. Section 162-9.B.(2)(b)[10] – The locations and dimensions of all existing streets, sewers and sewage systems, water mains and feeder lines, fire hydrants, gas, electric, and oil transmission lines, watercourses, sources of water supply, easements, and other significant features within the property, or such driveways, intersections and utilities within 100 feet of any part of the property proposed to be developed or subdivided should be shown on the plan.

**Features within 100 feet of the site shall be shown on the plans. Providing an aerial photograph of the property in the plan set should satisfactorily address this requirement.**

**Response:** *The latest GIS aerial imagery has been shown on the Cover Sheet – Sheet 1 of 18, along with other appropriate maps.*

2. Section 162-9.B.(2)(c)[10] – Show the locations of right-of-way monuments.

**Response:** *Existing and proposed ROW survey monuments have been shown on the Site Layout / Record Plan – Sheet 3 of 18 and a corresponding construction detail provided. Please see the Construction Details Plan – Sheet 9 of 18.*

3. (W) Section 162-41.B – Sidewalks shall be required in any subdivision or land development where it is desirable, in the opinion of the Board, to continue sidewalks that are existing in adjacent developments, or to provide access to community facilities (schools, shopping areas, recreational areas, etc.), or to ensure the safety of pedestrians in unusual or peculiar conditions with respect to prospective traffic. The applicant shall discuss whether sidewalks are required. The Applicant's Engineer in her response letter stated the Planning Commission agreed that sidewalks would not be necessary along the frontage of the property or leading to other adjacent developments. While the Planning Commission may be in support of the waiver, it is our understanding and indicated in the Planning Commission meeting minutes that the application is to seek a waiver from installing sidewalks. **Therefore, if the intention is to not install sidewalks, a waiver should be sought.**

**Response:** *A SALDO waiver for this is requested. Please see the corresponding request on the Site Layout / Record Plan – Sheet 3 of 18.*

4. Section 162-47.A(1) – Permanent stone or concrete monuments shall be accurately placed at the intersection of all lines forming angles and at changes in directions of lines in the boundary (perimeter) of the property being subdivided. Please revise the plans to show monuments along the perimeter boundary instead of pins. Iron pins may be utilized elsewhere.

**The existing monument symbol is missing in the Legend, which should be revised. Monuments appear to be proposed where existing iron pins were found; this should be verified.**

**Response:** *Since no subdivision is occurring, and many of the perimeter property lines fall within the paving of Park Road or underneath the bridge crossing I-76, we have proposed iron pins at*

**all ROW points for the site with a corresponding construction detail provided. Please see the Construction Details Plan – Sheet 9 of 18. If perimeter survey monuments are suggested, then we would suggest using mag nails to avoid placing concrete monuments within vehicular travel lanes.**

5. **Sections 162-49** – Although the plans indicate the site will be serviced by public water, we note that the plans do not show any water service connection. This should be provided. The proposed water service is shown. **The proposed water service line is under Basin B, which shall be revised.**

**Response: This has been revised. Please see the proposed water service on the Improvement Construction / Utilities Plan – Sheet 4 of 18.**

6. **Section 162-58.C(3)(a)** – All outdoor lighting, whether or not required by this chapter, on private, residential, commercial, industrial, recreational or institutional property shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property." There appears to be significant light spill onto Park Road in the vicinity of Heather Hill Drive (providing access to residential uses) as well as onto adjacent parcel 3203 00690400 (to the east). Only one of the proposed light fixtures (B4) appears to be equipped with a house-side shield.

**Response: The Lighting Plan has been updated, please see Sheet 7 of 18. The proposed light spill onto Park Road within the vehicular travel lane is only 0.1 FC or less. The adjacent parcel to the east is the FedEx Limited Industrial Zoned property, therefore § 162-58.C(3)(i) does not apply. We would like to note that where the proposed light spill occurs onto the FedEx property it is heavily wooded / undeveloped, so no nuisance is expected. It is noted that the FedEx property has its own outdoor parking lot lighting which is adjacent to the subject property.**

7. **Section 162-58.D(1)(a)** – A site plan showing: all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), and vegetation that might interfere with lighting...". It is noted that proposed landscaping is shown on the lighting plan and appears that there will be multiple conflicts between proposed lighting locations and proposed canopy/shade trees. In the proximity shown, the twenty-foot-high luminaires would be within the tree canopy as they mature. Locations shall be coordinated, and adequate separation provided.

**Response: Proposed landscaping and lighting have been updated to avoid this. Please see Sheets 6 & 7 of 18, respectively.**

8. **Section 162-58.C(4)** – Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces shall be placed a minimum of five feet outside paved area, or on concrete pedestals at least 30 inches high above the pavement, or suitably protected from potential vehicular impact by other approved means." It appears that several light fixtures are proposed on or directly adjacent to retaining wall structures with fencing and very little separation between paved vehicular areas. There do not appear to be any details provided that depict how the installation of these lights will be accomplished/coordinated with the retaining wall and fencing. Additional information shall be provided to depict constructability and protection from adjacent vehicular areas.

**Response: Proposed lighting has been updated to resolve this. Please see the Lighting Plan – Sheet 7 of 18, along with corresponding construction detail on same sheet.**

#### **IV. STORMWATER MANAGEMENT ORDINANCE REVIEW**

1. The Applicant is proposing four infiltration basins to control post-development runoff, three subsurface and one above-ground.

**Response: SWM calculations have been updated. The project now proposes two (2) large subsurface infiltration beds (pipe and stone). The existing surface basin has not been used for any stormwater calculation (peak rate control, volume, WQ, etc.).**

2. Section 152-306.J(3) – The infiltration facility shall completely drain the retention (infiltration) volume within three days (72 hours) from the end of the design storm. Provide calculations showing same.  
Basin dewatering time was provided for Basin A only. **Please explain the "0 hour" Time to Dewater ("above Water Quality Orifice"). Also, please provide the dewatering calculations for all proposed basins.**

**Response: Please see the drain time supporting calculation sheet in the PCSM report – Page 16 of 239. Both Basin A and B drain the infiltration volume (referred to as recharge depth) in less than 50 hours. A factor of safety of 2 is used for all infiltration rates.**

3. (RW) Section 152-306.K(3) – Setbacks from property lines and rights-of-way are to be consistent with accessory structures in the Zoning Ordinance for the applicable zoning district. Per Section 200-45.F, no accessory building or structure shall be located within the front yard, nor within 30 feet of any side or rear lot line. Basins A, B and C are in the front yard setback, and Basin D is in the rear yard setback.

A waiver is being requested to permit the infiltration basins in the setback and is listed on Sheet 4 ("Waiver Requests"). **We have no objection to the granting of this waiver; however, the applicant shall discuss this request with the Planning Commission.**

**Response: Due to the existing site constraints, the subsurface infiltration beds cannot be located in an area that will not impact the front or rear yard setbacks. We respectfully request that these SWM facilities are not considered Structures, since per the Zoning Definition driveways, sidewalks, utilities, retaining walls, etc. may also be considered Structures.**

**(“Structure” Zoning Definition: Anything constructed or erected on the ground or attached to the ground, including, but not limited to, buildings, sheds, manufactured homes, and other similar items. This term includes any man-made object having an ascertainable stationary location on or in land or water whether or not affixed to land.) This plan has been reviewed by the ZHB with a decision made, and none of the above mentioned items were considered as Structures; therefore, by extension we assume the SWM facilities would not be classified as Structures as well.**

4. Section 156-306.P – Where sediment transport in the stormwater runoff is anticipated to reach the infiltration system, appropriate permanent measures to prevent or collect sediment shall be installed prior to discharge to the infiltration system. Provide “Snout” devices or equivalent in upstream inlets draining to infiltration beds. Provide O&M steps as well.

**Response: A note has been provided on the Improvement Construction / Utilities Plan – Sheet 4 of 18 (bottom right corner) stating all proposed stormwater inlets to have 12" sump and Snout BMP. This same note is provided on the PCSM Plan – Sheet 15 of 18. The Snout construction detail on Sheet 18 of 18 states to be installed on all proposed stormwater inlets. The Type C and Type M inlet construction detail on the same sheet states all inlets to have 12" sump. PCSM O&M is provided on the PCSM Notes Plan – Sheet 16 of 18.**

5. Section 152-309.E – Runoff curve numbers (CN) for both predevelopment and proposed (post-construction) conditions to be used in the Soil Cover Complex Method shall be obtained from Table B-1 in Appendix B of this chapter.

For the purposes of determining compliance with this chapter, compacted soils or stone surfaces used for vehicle parking and movement shall be considered impervious. **Please revise the CN value for the gravel storage area accordingly.**

**Response: The proposed permanent gravel storage area now uses a CN of 98 and is considered impervious. This is shown in the CN supporting calculation sheet in the PCSM Report – Page 14 of 239 and reflected in the PCSM Plan – Sheet 15 of 18.**

6. Section 152-402.A(2) – A listing of all regulatory approvals required for the proposed project and the status of the review and approval process for each shall be included in the PCSM plan. Final approval or adequacy letters must be submitted to the municipality prior to (or as a condition of) the municipality's issuing final approval of the SWM site plan. Proof of application and approval shall be provided for the NPDES Permit and the Erosion and sediment control plan letter of adequacy.

**Response: Please see the Regulatory Approvals Required note on the PCSM Plan – Sheet 15 of 18.**

7. Sections 152-402.B(18)(a) , (c), 152-402.F(3) and 152-704.A – Identify the person or entity responsible for BMPs after construction and provide easements.

**The Applicant's Engineer indicated in her response letter a blanket easement has been provided for Township inspection. This could not be located. Please clarify its location.**

**Response: Please see the PCSM Plan – Sheet 15 of 18, bottom right corner. This will be included in the formal SWM O&M agreement.**

8. Section 152-402.F(2) and 152-703.A – An O&M agreement shall be provided.

**Response: A formal SWM O&M agreement will be provided with the final plans.**

9. Section 152-402.G – A letter of adequacy from the Conservation District must be submitted to the municipality prior to (or as a condition of) the municipality's final approval.

**Response: Please see the Regulatory Approvals Required note on the PCSM Plan – Sheet 15 of 18.**

10. Section 152-502 – For regulated activities involving one acre or more of earth disturbance, the applicant shall provide to the municipality final as-built plans (signed and sealed by a qualified licensed professional) of all BMPs, conveyances, other stormwater facilities, and related improvements shown in the final approved SWM site plan.

**Response: Please see the Regulatory Approvals Required note on the PCSM Plan – Sheet 15 of 18.**

11. Section 152-705.B to D – The statements in these sections shall be added as notes to the PCSM Plans.

**Response: Please see PCSM Notes on the PCSM Plan – Sheet 15 of 18.**

12. The applicant shall determine an adequate tailwater elevation to use in the calculations.

**The Applicant's Engineer indicated in her response letter tailwater has been added to all basins including the existing basin. However, we are unable to verify this. Please clarify.**

**Response:** Since the existing surface basin is not used for any calculation purposes (peak rate control, volume, WQ, etc.), and all peak rates and volume to the existing surface basin are being reduced, thus any tailwater condition will be improved.

**V. GENERAL COMMENTS**

1. All uses as listed on the Application shall be listed on the Record Plan. Add the notation "Record Plan Sheet \_\_ of \_\_" on all sheets to be recorded.  
Sheets 4 and 8 have the notation added. **However, Sheet 8 will be recorded with O&M agreement; verify this sheet is intended to be a record plan.**

**Response:** It is noted on the Cover Sheet – Sheet 1 of 18 that all sheets are intended to be recorded.

2. On Sheet 2: Clarify the "Stone drive (construction entrance)" label; no driveway outline is shown.

**Response:** This label has been removed from the plan.

3. Clarify the pipes from building to ST-18 and from ST-12 (i.e., source).  
The Applicant's Engineer indicated in her response letter these are roof drain collection pipes.  
**Please verify whether there are only two (2) down spout connections, or if there is a roof drain collection piping proposed.**

**Response:** Proposed downspout connections have been picked up from the architectural plans attached as part of this submission. All roof drain pipe will be collected and directed towards Basin B.

4. Add top and bottom of wall elevations.

**Verify the TW 498.50 elevation near Basin D, TW 501.00 near rear building corner, TW 497.00 near ST-17, and the TW as they appear incorrect.**

**Response:** Proposed retaining wall has been revised, TW BW elevations are shown on the Improvement Construction / Utilities Plan – Sheet 4 of 18. Please see structural plans attached as part of this submission for further detail.

5. Clarify how the retaining wall construction area will be protected from water when the basin is activated during a storm.

**The Applicant's Engineer indicated in her response letter this has been addressed in the construction sequence. Please clarify where as we were unable to locate.**

**Response:** We have corresponded with Redi-Rock, the product specified for the proposed retaining wall, our structural engineer, and they provided a suggested resolution based on similar installations, which appears in the Sequence of Construction on Sheets 12 and 16 under Resolution for Retaining Wall Construction During Storm Event header.

6. Pipes and inlets near a retaining wall shall be included in the design of the walls.

**Response:** Both proposed storm outlet pipes going through the retaining wall have been included in the wall design. Inlets A3 and B4 are currently shown as Type C inlets, they will be revised to Type M inlets in the subsequent submission so to not interfere with the retaining wall construction.

7. Clarify the "C" line type and verify that it and underground electric are acceptable under/through Basin B, as currently shown on the plans.

The Applicant's Engineer indicated in her response letter this has been addressed in the construction sequence. Please clarify where as we were unable to locate.

**Response: N/A, proposed electric and telecom service now cross above the storm conveyance run from Inlet A1 to A2. No conflict is anticipated, and these utilities have 4.3' of cover at its shallowest location.**

8. Clarify how the retaining wall will be constructed adjacent to the infiltration basins, as the infiltration basin areas are to be protected from compaction and will be surrounded by geotextile material.

The Applicant's Engineer indicated in her response letter the product used for the retaining wall will not require geotextile fabric nor excessive compaction. **At a minimum, prior to preliminary plan approval, a preliminary structural design should be provided to confirm the walls can be constructed without adversely affecting the basins.**

**Response: Proposed Basins A and B now have enough horizontal area away from the retaining wall to avoid compaction. Please see structural plans attached as part of this submission for further detail.**

9. It seems construction easements will be required to construct the proposed retaining walls along the southern property line. These should be provided. Temporary construction easements are now shown on Sheets 16 and 17. **Executed easement agreements shall be provided to the Township prior to Final Plan Approval. In addition, these easements should be delineated on the "Site Layout Plan."**

**Response: A temporary grading easement is in development with the neighboring FedEx property and will be provided with the Final Recorded Plans. Please see Site Layout / Record Plan – Sheet 3 of 18.**

10. **A waiver request letter shall be provided indicating all requested waivers as well a justification for each request.**

**Response: Agreed. Letter is attached as part of this submission.**

11. **Written verification shall be provided from the owner of the large basin indicating his support for the proposed modifications.**

**Response: The neighboring FedEx property, which has an existing easement over the existing surface basin for access, maintenance, discharge, etc., will be asked for a support letter and will be provided with the Final Plan.**

12. **The site location map (USGS Quad) is not legible on the sheets which it appears. Please improve clarity.**

**Response: This has been revised on all sheets in which it appears.**

## **VI. TOWNSHIP TRAFFIC CONSULTANT MCMAHON ASSOCIATES, INC.**

1. **SALDO Section 162-9.H(1) – Based on the supplemental information provided by the applicant, the proposed building will feature 4,000 square feet of office space and the remaining portion of the building will be garage space. In addition, the applicant indicates the site will have 11 employees regularly on site, and contractors employed by the company will arrive and depart during off-peak hours. Based on this information, the site will generate 71 daily trips, and 11 trips during the weekday morning and weekday afternoon peak hours, and as such, the Township's threshold of 200 daily trips or 20 peak hour trips for completion of a traffic study is not met.**

**Response: Agreed, furthermore office space has been reduced, see architectural plans and Parking / Storage Tabulation on Sheet 3 of 18.**

2. SALDO Sections 162-27.1.F(1) and 162-27.1.F(2) – This project is located within the LI zoning district, and is subject to the Township's access management standards. The development proposes two driveways to the site when only one driveway is permitted, unless it is demonstrated additional access is necessary to accommodate traffic to and from the site in a safe and efficient manner. According to the applicant's response letter, trucks are not able to access and circulate within the site with only one driveway, and therefore, two driveways are necessary for this use.

**Response: Agreed**

3. Section 162-27.1.K(1) – The following comments related to the truck turning template plan (sheet 5):
  - a. Provide the dimensions of the largest truck expected to access the site.

**Response: Please see the Site Maneuverability Plan – Sheet 5 of 18 for maneuverability and vehicle sizing.**

- b. As previously requested, truck turning templates for the Township's largest emergency service vehicle should also be provided.

**Response: Please see the Site Maneuverability Plan – Sheet 5 of 18 for maneuverability and vehicle sizing.**

- c. As currently shown, the on-site circulation of the truck will traverse in close proximity to the proposed building. If feasible, the applicant's engineer should modify the internal site layout to provide additional space for the trucks to navigate within the site in the vicinity of the building.

**Response: This has been updated, please see the Site Maneuverability Plan – Sheet 5 of 18 for maneuverability and vehicle sizing.**

- d. The driveway radii necessary to accommodate the truck will result in very wide driveway openings along Park Road. We recommend modifying the driveway edges and corner radii to give the appearance of narrower driveways. This can be accomplished using a flush pavement treatment (such as stamped asphalt or pavers) that can be traversed by trucks. Giving the appearance of narrower driveways will be more compatible with the area, and it will provide better alignment of the eastern driveway opposite Heather Hill Drive.

**Response: Modifications to the driveways have been shown on the Site Layout / Record Plan – Sheet 3 of 18.**

- e. The truck templates do not show any trucks entering or exiting to/from the west along Park Road. Please confirm the proposed truck routes, and a note to the plan to memorialize the proposed truck routes.

**Response: Painted traffic arrows and traffic signage have been proposed on the Site Layout / Record Plan – Sheet 3 of 18. A callout for proposed truck route and note has been provided on the Site Maneuverability Plan – Sheet 5 of 18.**

4. SALDO Section 162-28.A – The plans should clearly label and dimension the existing legal right-of-way along the Park Road site frontage. Since Park Road is classified as a minor collector

road, the half-width right-of-way along the site frontage should be 25 feet to meet the ordinance requirement. Any additional right-of-way required to meet the 25-foot half-width right-of-way requirement should be labeled "Required Right-of-Way (To Be Deeded To Upper Uwchlan Township)". If the "ultimate right-of-way" currently shown on the plan is less than the legal right-of-way, the line currently labeled as "ultimate right-of-way" should be removed from the plan. Furthermore, the applicant's engineer should verify that the proposed retaining wall and guiderail along the western driveway radius is located outside the legal right-of-way if the existing legal right-of-way is more than the right-of-way currently shown on the plan.

**Response:** *As previously mentioned, the ultimate ROW for this site has been taken and is now legal and shown as such. No further ROW is needed for dedication. Due to the existing stormwater surface basin, the existing grade drops off sharply from Park Road. Since it was agreed that this site requires two driveways for proper commercial truck circulation, the proposed retaining wall is required to be within the ROW to protect public health and safety regarding the proposed western driveway. The applicant, successor, and assigns will be responsible for the maintenance of this retaining wall.*

5. SALDO Section 162-28.A – The plans should be revised to show the location of the guiderail on the south side of Park Road in the vicinity of the western site driveway in order to determine whether the guiderail must be adjusted to accommodate the western driveway curb radius.

**Response:** *A portion of the existing guiderail is proposed to be removed. Please see the Site Analysis & Impact / Demolition Plan – Sheet 2 of 18.*

6. ZO Section 200-73.H – The parking tabulation on sheet 4 indicates that the proposed 3,900 square feet of office space will require 15 parking spaces. However, since the Township's parking supply requirement for office space is five parking spaces per 1,000 square feet, the parking requirement for the office space would be 20 parking spaces ( $3.9 \times 5 = 20$  parking spaces), and as such, additional parking spaces will be required. In addition, the applicant's response to comment 1 indicates the office square-footage will be 4,000 square feet, and the parking tabulation should be updated to show the total square-footage of the office space.

**Response:** *This has been updated. Please see Parking / Storage Tabulation on the Site Layout / Record Plan – Sheet 3 of 18.*

7. The Planning Commission should determine whether a pedestrian connection to the existing path on the opposite side of Park Road should be required as part of this development. If a pedestrian connection is required, we recommend the appropriate pedestrian accommodations (ADA compliant curb ramps, pedestrian warning signs, and crosswalk markings) be provided at the crossing.

**Response:** *As mentioned above, the Planning Commission agreed that sidewalks would not be necessary along the frontage of the property or leading to other adjacent developments.*

8. ZO Section 200-75.H(3) – The plans have been revised to show sight lines for traffic existing both proposed driveways; however, these line should be labeled with the available sight distances . In addition, the plans should also label and dimension the available sight distances for left-turn vehicles entering both driveways looking ahead and behind. In addition, the plans should include a PennDOT-style sight distance note which states the required sight distances, as follows:

"All sight distance obstructions (including but not limited to embankments and vegetation) shall be removed by the permittee to provide a minimum of XXX sight distance to the left and XXX sight distance to the right for a driver exiting the proposed driveways onto the through highway. The driver must be considered to be positioned ten feet from the near edge of the

closest highway through travel lane (from the curbline if curbing is present) at an eye height of three feet six inches (3'6") above the pavement surface located in the center of the closest highway travel lane designated for use by approaching traffic. This sight distance shall be maintained by the permittee."

**Response: Sight distance lines required and proposed sight distances, and the aforementioned note has been provided on the Landscaping Plan – Sheet 6 of 18.**

9. Chapter 79-8.C – The proposed redevelopment is located in the Township's Act 209 Transportation Service Area, and as such, this development is subject to the Township's Transportation Impact Fee of \$2,334 per weekday afternoon peak hour trip. Based on the Institute of Transportation Engineers Publication Trip Generation Manual, 11th Edition (Land Use Code 71, General Office), the proposed 4,000 square feet of office space will generate 11 new trips during the weekday afternoon peak hour. As such, the Transportation Impact Fee for the proposed development will be \$25,674.

Upon resubmission, the applicant's engineer should compose a response letter that describes how each comment has been addressed and where any plan and/or report revisions are located. Additional comments regarding the traffic improvements and/or land development plans may follow upon receipt of future submissions.

**Response: Agreed**

## **VII. TOWNSHIP LAND PLANNER BRANDYWINE CONSERVANCY**

The applicant's response letter dated March 1, 2023, addresses, and resolves most of the original comments provided by the Brandywine Conservancy in December of 2022. In consultation with the Township, it has been determined that the property is not classified as an historic resource within the Township and is not listed on its Historic Resource Inventory. The original comment regarding this item is not applicable.

### Landscape Plan

The Applicant's revised submission included a landscape plan for the proposed development. The following are new observations based upon this newly submitted Plan sheet.

1. The Applicants Landscape Compliance Chart shows a lesser number of required deciduous, evergreen, and shrub material as required by SALDO. While recognizing the constraints of the property, the Conservancy suggests the Applicant work with the Township to identify opportunities to increase the number of trees and shrubs planted at the site. While not required under the provisions of the SALDO, consideration may be given to seeking alternative Township owned sites where the required planting could be installed to provide environmental and community benefits to residents and the Township.

**Response: A SALDO waiver is being requested regarding required landscaping. We will work with the Township to determine the conditions of this requested waiver.**

2. The twenty-seven shrubs located on the plan have been placed in a linear fashion along the edge of the driveway. The Conservancy suggests that a more "natural" configuration, staggering, and grouping of planting be considered in this area while also meeting the requirements of the ordinance. This may also provide opportunities to increase the number of shrubs planted at the site. In addition, the plan does not clearly identify where specific shrub species be planted. Suggest noting the specific species on the plan drawing.

**Response: The configuration of the proposed shrubs has been updated to be staggered. The overall number of proposed shrubs on-site has been increased. Identifying labels have been added to all proposed landscaping with corresponding charts. Please see the Landscaping Plan – Sheet 6 of 18.**

3. The required tree replacement caliper for four (4) of the listed tree replacements is 4-4.5", yet the table of planting material simply shows a minimum of 3.5" caliper. The Conservancy suggests the Applicant make clear in its table of plant material which four (4) trees will meet the replacement requirement of the 9", 10", and 11" trees that are to be removed.

**Response: The Tree Replacement Requirements table and the Proposed Landscaping table have been color coded to more clearly demonstrate this. Please see the Landscaping Plan – Sheet 6 of 18.**

4. Trees to be removed from the site should be noted on the plan.

**Response: Please see Tree Replacement Requirements table, Landscaping Plan – Sheet 6 of 18.**

5. The text associated with the tree protection and root pruning details on the sheet is difficult to read and should be improved for clarity.

**Response: This has been updated, Landscaping Plan – Sheet 6 of 18.**

6. While a planting guide for shrubs is provided, no tree planting guide is provided. The Conservancy suggest one be added.

**Response: This detail has been added, Landscaping Plan – Sheet 6 of 18.**

7. The planting material table lists five (5) evergreen trees (*Pinus strobus*), yet the plan includes six (6) evergreen trees. This discrepancy should be corrected.

**Response: This has been updated, Landscaping Plan – Sheet 6 of 18.**

8. The plan identifies two (2) pin oaks directly under the overhead utility line toward the eastern end of the property. The Conservancy suggests the Applicant ensure the mature height of these trees will not interfere with the overhead utility line and require unnecessary maintenance and significant pruning in the future, potentially undermining the integrity, appearance, and longevity of the tree. Alternatively, consider altering the location of these trees to not interfere with the overhead utility line. As a minor note, the orientation of the notation referring to the overhead utility line (OH) is oriented incorrectly (it reads HO, rather than OH). I suspect this may be a result of the direction the line was digitized originally.

**Response: This has been updated, Landscaping Plan – Sheet 6 of 18.**

9. The proposed features legend should include symbology for the plant material.

**Response: This has been updated, Landscaping Plan – Sheet 6 of 18.**

10. Subject to review and approval by the Township, Upper Uwchlan's SALDO allows for existing plant material to be credited toward the planting requirement provision. If the Applicant intends to utilize this provision in their calculations, the location and number of credits sought should be noted on the plan and the tables and charts modified accordingly.

**Response: This is not being considered at this time.**

## **VIII. TOWNSHIP SEWER CONSULTANT COMMENTS ARRO CONSULTING, INC.**

We offer the following comments for your consideration at this time:

1. The site is currently a single-family dwelling. Plans proposed the demolition of the existing single-family home and the construction of a one-story office building with associated garage bays. Based on discussions with the applicant's engineer, the building is to be occupied by 11 full-time employees and includes associated restrooms, a small kitchen break room and a shop sink in the garage area. We estimate the anticipated sewer usage to be 225 gallons per day (GPD) or one equivalent dwelling unit (EDU). The required capacity will need to be purchased by the applicant. We recommend the Township reserve the right to review water usage in the future and require the purchase of additional sanitary sewer capacity if warranted. The proposed capacity shall be noted on the plans.

***Response: The estimated sewer usage has been noted on the plan. Please see the Improvement Construction / Utility Notes (#6) on the Improvement Construction / Utilities Plan – Sheet 4 of 18.***

2. The appropriate sewage facilities planning modules (SFPM) approval by the Pennsylvania Department of Environmental Protection is required prior to plan approval.

***Response: A sewer planning module will be prepared for the estimated one (1) EDU and the change in use of the property.***

3. The 6-inch sewer lateral pipe material shall be PVC SDR-35. The lateral connection into the existing manhole shall be core drilled and include a watertight seal. The profile shall be revised accordingly.

***Response: The proposed sanitary sewer lateral material is shown as such, and a note regarding the connection has been added. Please see the Sanitary Sewer Lateral Profile on the Improvement Construction / Utilities Plan – Sheet 4 of 18.***

4. The proposed sewer lateral vent and cleanout are proposed within a paved area. The Service Line Clean-out and Vent detail (7000SD18) should be replaced with Service Line Clean-out and Vent in Paved Areas (7000SD19).

***Response: The Service Line Clean-out and Vent detail (7000SD18) has been replaced with Service Line Clean-out and Vent in Paved Areas detail (7000SD19). Please see the Construction Details Plan – Sheet 9 of 18.***

5. A detail of the appropriately-sized oil and water separator shall be provided for the proposed shop sink on the plans.

***Response: This construction detail has been provided, please see the Construction Details Plan – Sheet 10 of 18.***

6. The necessary financial security shall be posted with the Township, which shall be in a form and amount acceptable to the Township.

***Response: Acknowledged***

Should you have any questions or require additional information during your review, please do not hesitate to contact me at 610-897-5032 or jmongeluzi@wknapex.com.

Sincerely,

**Wilkinson APEX Engineering Group, LLC**



Joseph C. Mongeluzi, Jr., P.E.

Principal Engineer

J:\Apex\PROJECTS WKNAPEX\2021\2021231 - PJ Reilly\Correspondence\Letters\2024-04-05 Twp Response Letter

SOIL TABLE PER USDA NRCS WSS					
SYMBOL	NAME	SLOPE	DEPTH TO BEDROCK	DEPTH TO WATER TABLE	HYDROLOGIC GROUP
GdB	GLADSTONE GRAVELLY LOAM	3+6%	60-80'	80'+	B
GdC	GLADSTONE GRAVELLY LOAM	8+15%	65-67'	80'+	B

#### SITE ANALYSIS AND IMPACT PLAN NOTES:

- ALL STEEP SLOPES OF 15% AND 25% ARE HAMMERED.
- THE SITE IS LOCATED IN FLOW-THRU ZONE X, AREA DETERMINED TO BE OUTSIDE THE 50-YEAR FLOODPLAIN AS ILLUSTRATED ON FEMA MAP # 4220508905, EFFECTIVE DATE 06/20/01, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. NO COMPUTATIONAL FLOODPLAIN STUDY HAS BEEN PERFORMED AS A PART OF THIS PLAN PREPARATION.
- NO SURVEY HAS BEEN PERFORMED ON THIS PROPERTY. THE SITE IS OWNED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
- THERE ARE NO EXISTING WATER BODIES OR WATERCOURSES ON SITE VIA VISUAL OBSERVATION. THE SITE IS LOCATED IN AN AREA THAT IS NOT SUBJECT TO FLOODING BASED ON THE EXISTING FEDERAL FLOODPLAIN PROPERTY.
- A WETLAND EVALUATION WAS PERFORMED ON MAY 18, 2018. NO WETLANDS OR WATERSHEDS WERE IDENTIFIED. NO DETERMINATION WAS MADE AS TO WHETHER ANY PORTION OF THE PROPERTY SHOULD BE CLASSED AS A REGISTERED WETLAND OR WATERCOURSE BY THE U.S. ARMY CORPS OF ENGINEERS OR PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- SOIL TESTS FOR HYDROLOGIC GROUPING AND TESTS FOR SOIL INFILTRATION RATES WERE PERFORMED ON SITE ON MAY 18, 2018 BY PENN TRAC ENVIRONMENTAL LLC. GROUNDWATER WAS NOT ENCOUNTERED IN ANY OF THE SOIL TESTS THAT WAS PERFORMED ON SITE.
- THE SITE IS LOCATED IN THE SHALLOWEST LOCATION ON THE PROPERTY. GRAVELY LOAM SOILS ARE ESTIMATED TO EXIST AT A DEPTH OF 60 INCHES FOR THE USA NRCS WSS IN THE SHALLOWEST LOCATION ON SITE.
- THE SITE IS NOT ON THE NATIONAL RECORD OF HISTORIC PLACES.
- A PARK ROAD IS SHOWN AS A ROADWAY ALONG THE EAST SIDE OF PARK ROAD AWAY FROM THE PROPERTY AS SHOWN ON PLAN. THE PROJECT DOES NOT PROPOSE TO ALTER THIS ROAD.
- THERE ARE NO PROTECTED WILDLIFE ON SITE.

#### GENERAL NOTES:

- THE SITE IS KNOWN AS 30 PARK ROAD, POTTSTOWN, PA 19435, UPPER UCHLAW TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA. THE SITE IS ALSO KNOWN AS APN #350400072000, AND RECORDED IN DEED BOOK 990 PAGE 1789 AND DEED BOOK 990 PAGE 2110.
- THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY WILKINSON & ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON. THE SUBJECT PROPERTY MAY BE SUBJECT TO CHANGES IN THE FUTURE DUE TO THE ACTIVITIES OF THE PROPERTY OWNER AND CLAUSES BY OTHERS. OTHER RECORDS OR UNRECORDED THAT A THOROUGH & ACCURATE TITLE REPORT WOULD REVEAL. THE REFERENCED SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. SURVEYS SHOWN ARE BASED ON NAV 1988 VERTICAL DATUM OBTAINED USING SATELLITE, NO BENCHMARK WAS USED.
- LOCATION OF ALL SURVEYED FEATURES ARE APPROXIMATE, ALL LINES AND SEES ARE BASED ON SURVEYED POINTS AND UNDERGROUND FEATURES THAT ARE NOT ACCESSIBLE. THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY, AVAILABLE AS-IS. PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE ANY EXCAVATION. EXCAVATION OF UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
- THE PLAN IS VALID ONLY WHEN SHOWN IN AND ENCLOSED WITH A RAISED SEAL OR STAMPED WITH A RED INK SIGNATURE. COPIES OF THIS PLAN MAY NOT BE MADE OR COPIED IN WHOLE OR IN PART, OR STORED, PROCESSED, OR USED ON ANY COMPUTER OR OTHER SYSTEM WITHOUT THE PRIOR PERMISSION OF THE ENGINEER OR RECORD OR HIS SUCCESSOR OR ASSIGNEE.

#### STATEMENT OF INTENT:

THE PROJECT SITE CONSISTS OF ONE (1) PARCEL IN THE LIMITED INDUSTRIAL ZONING DISTRICT AND CONTAINS AN EXISTING TUTORIAL BUILDING WITH ASSOCIATED DRIVEWAYS, WALLS, AND OTHER RELATED FEATURES CURRENTLY BEING UTILIZED FOR RESIDENTIAL USE. THE PROJECT PROPOSES THE DEMOLITION / REMOVAL OF AFOREMENTED FEATURES AND THE CONSTRUCTION OF A NEW COMMERCIAL BUILDING, PARKING, AND RELATED FEATURES, INCLUDING PARKING RETAINING WALLS, WALKS, UTILITIES, STORMWATER MANAGEMENT, AND OTHER SITE IMPROVEMENTS. THE PURPOSE OF THIS PLAN IS TO DETERMINE ANY NECESSARY ZONING VARANCES, SWALLOWS WATERS, OR OTHER RELIEF REQUIRED FOR THE CONSTRUCTION OF THE DEPICTED PROPOSED FEATURES SHOWN HEREIN.

- LAND DEVELOPMENT APPROVALS WILL BE REQUIRED PRIOR TO THE START OF ANY GRAVITY EXCAVATION, REMOVAL OF TOPSOIL, REMOVAL OF TREES, OR REMOVAL OF ANY OTHER VEGETATIVE COVER.
- IT SHALL BE THE DUTY OF EACH EXCAVATOR WHO INTENDS TO PERFORM EXCAVATION OR DEMOLITION WORK TO NOTIFY THE OWNER AND THE CONTRACTOR WHO IS TO PERFORM THE EXCAVATION OR DEMOLITION WORK, OWNER THROUGH THE CONTRACTOR, OR CALL SYSTEM, NOTIFICATION SHALL NOT BE ON OR AFTER THE THIRD BUSINESS DAY IN ADVANCE OF BEGINNING EXCAVATION OR DEMOLITION WORK. NO WORK SHALL BE STARTED EARLIER THAN THE LAWFUL START DATE WHICH SHALL BE ON OR AFTER THE THIRD BUSINESS DAY AFTER NOTIFICATION. THE CONTRACTOR WHO IS TO PERFORM THE EXCAVATION OR DEMOLITION WORK SHALL BE ADVISED BY THE ONE CALL SYSTEM AND NOTIFICATION RECEIVED ON A SATURDAY, SUNDAY OR HOLIDAY, WHICH SHALL BE PROVIDED ON THE FOLLOWING BUSINESS DAY. IN THE CASE OF A CONTRACTOR WHO NOTIFICATION SHALL NOT BE PROVIDED IN ADVANCE OF BEGINNING EXCAVATION OR DEMOLITION WORK.
- WHERE EXCAVATION OR DEMOLITION WORK IS PROPOSED ON PRIVATE PROPERTY, THE POTENTIAL FOR UNDERGROUND UTILITIES EXISTS THAT WERE NOT MARKED AS A RESULT OF THE ONE CALL SYSTEM. ANY SHOWN UTILITIES ARE NOT GUARANTEED TO BE PRECISE. EXCAVATOR DRAWS OF UTILITIES TO BE REMOVED, IF UTILITIES ARE FOUND, THE RESPONSIBILITY TO INVESTIGATE THE AFOREMENTIONED UTILITIES SHALL BE BORNE BY EACH EXCAVATOR WHO INTENDS TO PERFORM EXCAVATION OR DEMOLITION WORK.
- OWNER SHALL NOT ALLOW EXCAVATION OR DEMOLITION WORK TO BE PERFORMED ON ANY STRUCTURE THAT IS NOT BEING PROPOSED. (I) THE CONTRACTOR IS RESPONSIBLE TO ACCOUNT FOR ANY STRUCTURE THAT IS NEEDED TO SUPPORT THE EXCAVATION OR DEMOLITION WORK. (II) THE CONTRACTOR IS RESPONSIBLE FOR ANY EXCAVATION OR DEMOLITION WORK ON ANY UNDERGROUND TANKS OR VAULTS, OR ANY OTHER STRUCTURE WHOSE REMOVAL RESULTS IN A NEED FOR TIL TO ACHIEVE PROPOSED GRADES.
- ALL EXCAVATION OR DEMOLITION WORK REMOVED FROM THE SITE AND RECYCLED OR DEPOSED IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260A ET SEQ. 2714, AND IN THE CASE OF HAZARDOUS WASTE MATERIALS, SHALL BE BURIED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
- IN THE CASE OF HAZARDOUS WASTE MATERIALS, THE CONTRACTOR SHALL NOT DISCHARGE ANY HAZARDOUS WASTE MATERIALS.
- ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS MUST BE FOLLOWED FOR THE USE, HANDLING, AND DISPOSAL OF POTENTIALLY HAZARDOUS MATERIALS.
- ALL SPILL AND WASTE AND BORROW AREAS MUST HAVE AN EAS PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR DEP FULLY IMPLEMENTED PRIOR TO BE ACTIVATED.



ZONING REQUIREMENTS FOR LIMITED INDUSTRIAL DISTRICT		REQUIRED	EXISTING
MIN. LOT AREA	3 AC / 120,000 SF	136,912 SF	34,242 AC
MIN. LOT WIDTH	300'	300'	300'
MIN. FRONT YARD	75'	75'	EX. NON-CONFORMING
MIN. SIDE YARD	50'	50'	EX. NON-CONFORMING
MIN. REAR YARD	50'	50'	EX. NON-CONFORMING
MAX. BUILDING COVERAGE	40%	TIR	
MAX. IMPENETRABLE COVERAGE	70%	TIR	
MAX. DROPOFF HEIGHT	20'	TIR	

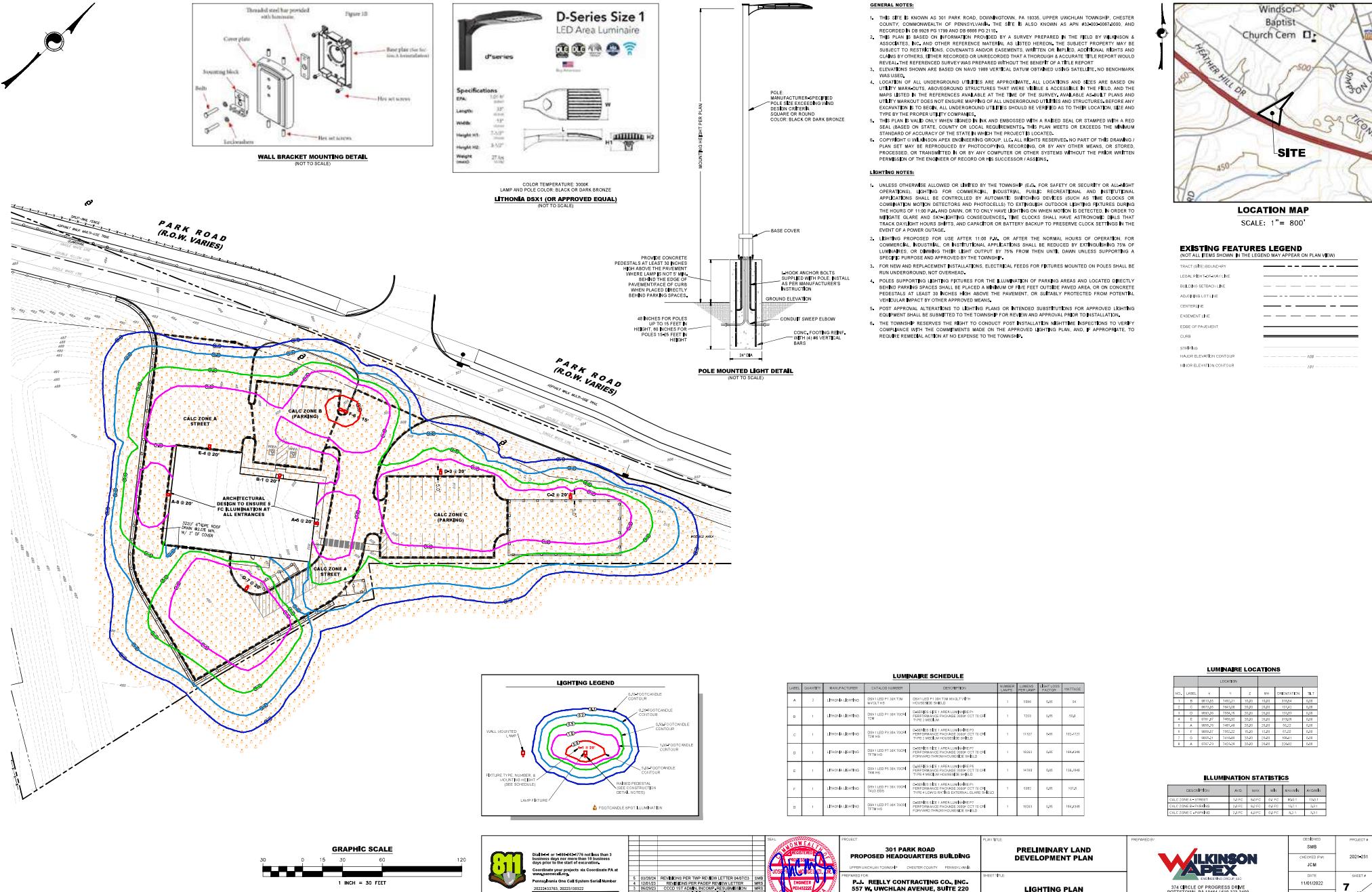
#### EXISTING FEATURES LEGEND

(NOT ALL ITEMS SHOWN IN THE LEGEND MAY APPEAR ON PLAN VIEW)	
TRACT / SITE BOUNDARY	
LEGAL DESCRIPTION LINE	
BUILDING RETAINING LINE	
AS-BUILT RETAINING LINE	
CENTRELINE	
EXCAVATION LINE	
EDGE OF PAVED	
CLUB	
MAIN STREET/LOCATOR	100'
MIN. ELEVATION/CONTOUR	5' - 5' - 5'
SHUTTER SENSE	
STORM SEWER	
WATER LINE	
OVERHEAD UTILITY LINE	
PIPELINE	
SEWER	
ASPHALT	
CONCRETE	
STEEP SLOPES 15%	
STEEP SLOPES 25%	
FEATURE TO BE REMOVED	
VEGETATION TO BE REMOVED	
BKC	× 175.50
GRAPHIC SCALE	1 INCH = 30 FEET

REFERENCE:	
1. BOUNDARY & TOPOGRAPHIC SURVEY OF 400' X 200' LOT 200, PREPARED BY WILKINSON & ASSOCIATES, INC. ON 10/10/18, LAST REVIEWED 04/04/19, PROJECT # 200-231.	
2. PLAT ENTITLED "PARK PROPERTY PLAT PLAN, PLAN NO. RW 5025A, ROADWAY AND BRIDGE RECONSTRUCTION", PREPARED BY TRAFFIC PLANNING AND DESIGN, INC. DATED 11/14/18, AND RECORDED IN DEED BOOK 990 PAGE 1791.	
3. 301 PARK ROAD PROPOSED HEADQUARTERS BUILDING, UPPER UCHLAW TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA.	
4. P-REBILY CONTRACTING CO., INC. 557 W. UCHLAW AVENUE, SUITE 220, EXTON, PA 19341	
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# PJ REILLY CONTRACTING

PARK ROAD, DOWNTONTOWN, PA 19335  
UPPER UWCHLAN TWP., CHESTER COUNTY



NORTHEAST VIEW

ABBREVIATIONS		CAPACITY		DWG	DRAWING	EQUIPMENT	M.O.	MASONRY OPENING	P.S.I.	POUNDS PER SQUARE INCH	TLT	TOILET
A.F.F.	ABOVE FINISHED FLOOR	CAP.	CAST IN PLACE	D.F.	DRINKING FOUNTAIN	EPON	ETHYLENE PROPYLENE DIENE MONOMER	MAT	PRECAST	T&G	TONGUE AND GROOVE	
A.F.F.	ABOVE FINISHED FLOOR	CAP.	CAST IN PLACE	D.F.	DRINKING FOUNTAIN	EPON	ETHYLENE PROPYLENE DIENE MONOMER	MAT	PRECAST	T&G	TONGUE AND GROOVE	
ACCOUS	ACOUSTICAL	C.L.	CAST IRON	E.W.	EACH	EXTO	EXISTING	MAX	PRECAST	T.O.F.	TOP OF	
ACT	ACOUSTICAL CEILING TILE	C.B.	CATCH BASIN	E.W.	EACH WAY	EPS	EXPANDED POLYSTYRENE	MECH	PREFABRICATED	T.O.F.	TOP OF FOOTING	
ADDL	ADDITIONAL	CLG	CEILING	ESPR	EARLY SUPPRESSION FAST RESPONSE	E.B.	EXPANSION BOLT	MTL	PREFABRICATED	T.O.M.	TOP OF MASONRY	
ADJ	ADJUSTABLE	CEM	CEMENT	E.E.	EAST	HGR	HANGER	MIN	P.T.	TOP OF PLATE	TOP OF WALL	
ALUM	ALUMINUM	CIC	CENTER TO CENTER	ELEV	ELEVATION	HGR	HARDWARE	MISC	PROPERTY TREATED	T.O.W.	TREAD	
ADA	AMERICANS WITH DISABILITIES ACT	C.	CENTERLINE	ELEV	ELEVATOR	HGR	HARDWOOD	MOD	QTY	Q.T.	QUARRY TIE	
AMT	AMOUNT	CER	CERAMIC	E/E	END TO END	HDR	HEADER	NOM	QUANTITY	T.D.	TRENCH DRAIN	
AB	ANCHOR BOLT	CLR	CLEAR	HT	HEIGHT	HT	HEIGHT	N	QTR	TYP	TYPICAL	
APRX	APPROXIMATE	CLO	CLOSET	HPL	HIGH PRESSURE LAMINATE	N/A	NOT APPLICABLE	RAD	RADIUS	U.C.	UNDERCUT	
ASPH	ASPHALT	COL	COLUMN	HPL	HOLLOW METAL	N.L.C.	NOT IN CONTRACT	REINF	REINFORCED	U.E.	UNDERWITERS LABORATORY	
AVE	AVENUE	E.J.	EXPANSION JOINT	HPL	HORIZONTAL	N.T.S.	NOT TO SCALE	REQ	REQUIRED	S002	GENERAL STRUCTURAL NOTES	
AVG	AVERAGE	CONC	CONCRETE	HPS	EXTERIOR INSULATED-FINISHING SYSTEM	H.B.	HOSE BIB	#	NUMBER	S003	GENERAL MECHANICAL NOTES	
BSMT	BASEMENT	CMU	CONCRETE MASONRY UNIT	XPS	EXTRUDED POLYSTYRENE	HR	HOUR(S)	O.C.	ON CENTER	S101	FOUNDATION PLAN	
BB	BACK TO BACK	CONST	CONSTRUCTION	F/F	FACE TO FACE	ID.	INSIDE DIMENSION	OPNG	OPENING	S102	FRAMING PLAN	
BLDG	BOARD	CONT	CONTINUOUS	FT	FEET (FOOT)	INSTL	INSTALLATION	OPP	OPPOSITE	S001	STRUCTURAL DETAILS	
BM	BEAM	CONTR	CONTRACTOR	F.F.	FIBER FILAMENT REINFORCED	INSUL	INSULATION	O.H.	OPPOSITE HAND	SECT	VESTIBULE	
BRG	BEARING	C.J.	CONTROL JOINT	FG	FIBERGLASS	INV	INVERTED	O.D.	OUTSIDE DIMENSION	SHTG	SHEATHING	
B.F.F.	BELOW/FINISH FLOOR	CORR	CORRUGATED	FRP	FIBERGLASS REINFORCED PLASTIC	JT	JOINT	O.A.	OVERALL	SHT	SHEET	
BTR	BETTER	CTR	COUNTER	FIN	FINISHED	KP.	KICK PLATE	O.H.	OVERHEAD	SCWD	SOLID CORE WOOD	
BET	BETWEEN	CTSK	COUNTERSINK(SUNK)	F.F.	FINISHED FLOOR	KIT	KITCHEN	O.H.D.	OVERHEAD DOOR	S	SOUTH	
BTM	BITUMINOUS	CU	CUBIC	F.F.	FINISHED FLOOR ELEVATION	KO	KNOCKOUT	PNT	PAINT(ED)	W.C.	WATER CLOSET	
BLK	BLOCKING	CUB	CUBICAL	F.D.C.	FIRE DEPARTMENT CONNECTION	LAB	LABORATORY	PR	PAIR	W.H.	WATER HEATER	
BD	BOARD	DEMO	DEMOLITION	F.E.	FIRE EXTINGUISHER	LAD	LADDER	PTN	PARTITION	WT	WEIGHT	
B.S.	BOTH SIDES	DIA	DIAMETER	F.E.C	FIRE EXTINGUISHER CABINET	LAM	LAMINATE(D)	PERF	PERFORATED	SSR	STANDING SEAM METAL ROOF	
BW	BOTH WAYS	DW	DISHWASHER	FLR	FLOOR	LOG	LANDING	PERIM	PERIMETER	VCT	VINYL COMPOSITION TILE	
BOT	BOTTOM	DIV	DIVISION	F.D.	FLOOR DRAIN	LAV	LAVATORY	PLAS	PLASTERED	VWC	VINYL WALL COVERING	
BRK	BREAK	DR	DOOR	FTG	FOOTING	LT	LIGHT	PLAM	PLASTIC LAMINATE	W.C.	WATER CLOSET	
BRDG	BRIDGING	DBL	DOUBLE	FND	FOUNDATION	LWT	LIGHTWEIGHT	PLT	PLATE	W.G.	WIREGLASS	
BLDG	BUILDING	DWS	DOWELS	GALV	GALVANIZED	MACH	MACHINE	PLYWD	PLYWOOD	W.I.	WATER HEATER	
BUR	BUILT UP ROOF	DN	DOWN	GA	GAUGE	MANF	MANUFACTURING(ER)	P.I.	POINT OF INTERSECTION	W/O	WITHOUT	
CAB	CABINET	D.S.	DOWNSPOUT	GWB	GYPSUM WALL BOARD	MAS	MASONRY	PVC	POLYVINYLCHLORIDE	WD	WOOD	

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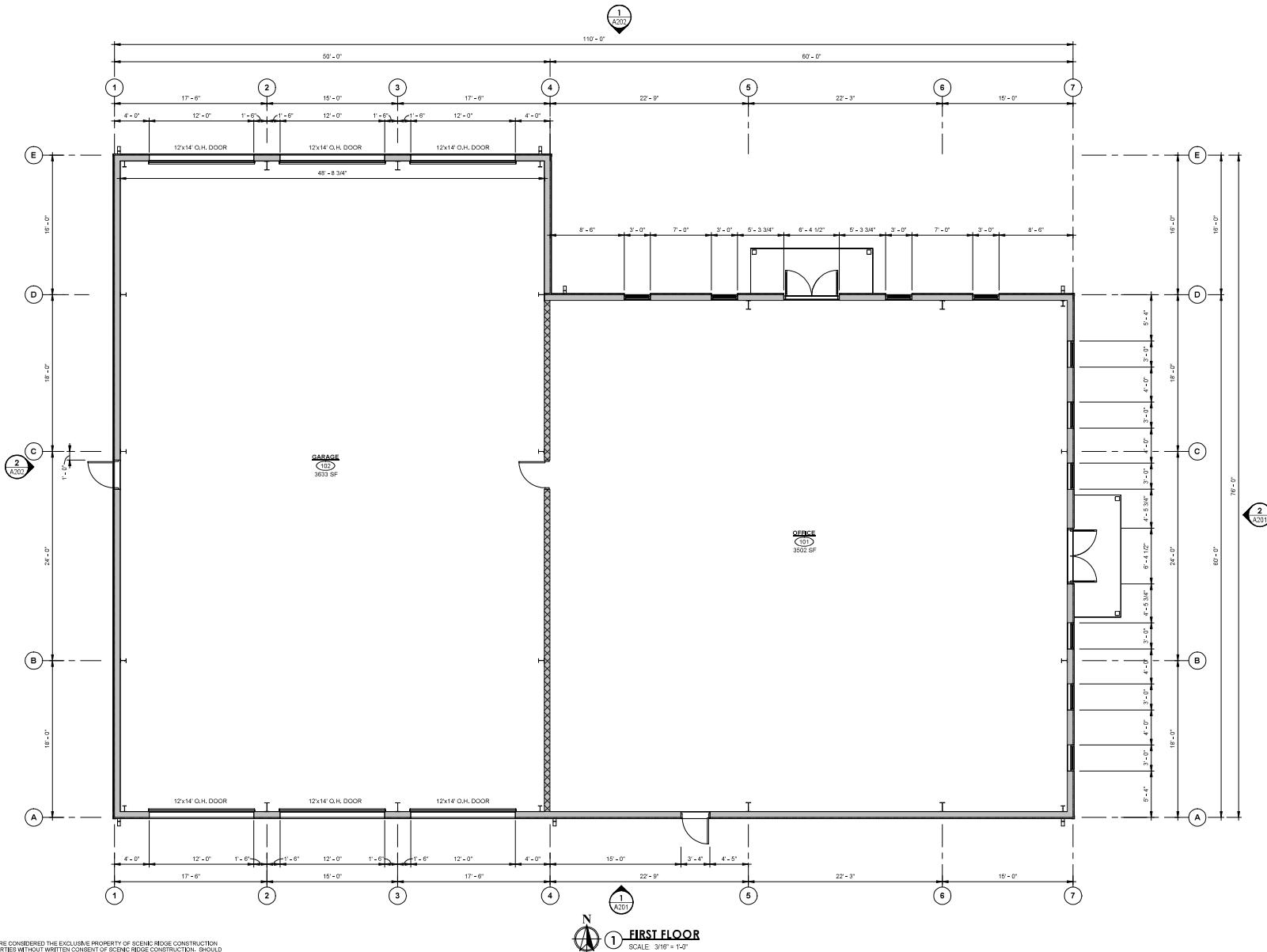
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SHEET #	SHEET NAME	REV.	REV. DATE
A001	COVER SHEET		
A002	RENDERING VIEWS		
A003	CODE INFORMATION		
A101	FIRST FLOOR PLAN		
A102	SECOND FLOOR PLAN		
A103	ROOF PLAN		
A201	ELEVATIONS		
A202	ENLARGED PLANS		
A301	SECTIONS		
A401	DETAILS		
A501	SCHEDULES		

SHEET LIST - STRUCTURAL			
SHEET #	SHEET NAME	REV.	REV. DATE
S001	GENERAL STRUCTURAL NOTES		
S002	GENERAL MECHANICAL NOTES		
S101	FOUNDATION PLAN		
S102	FRAMING PLAN		
S001	STRUCTURAL DETAILS		

GENERAL NOTES			
1.	NOTIFY THE ARCHITECT, IN WRITING, OF ANY DISCREPANCIES FOUND WITHIN THE CONSTRUCTION DOCUMENTS PRIOR TO BEGINNING THE WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL DIMENSIONS, FLOOR TO FLOOR HEIGHTS, TOP OF STEPS, ELEVATIONS, MAJOR OPENING LOCATIONS AND SIZES, COLUMN LOCATIONS AND SIZES, SIMILAR CONTRACTOR REQUIREMENTS, EXISTING CONDITIONS, AND OTHER CONDITIONS WHICH ARE RELEVANT. THIS IS REQUIRED TO TEIN. THIS INCLUDES ALL DIMENSIONS AND CONSTRUCTION CONDITIONS WHETHER SHOWN ON PLANS OR NOT, IF DISCREPANCIES ARE FOUND. NOTIFY ARCHITECT AND PROVIDE VERIFIED FIELD CONDITIONS.		
2.	COPY WITH AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE LAWS, STATUTES, ORDINANCES, LAWS, REGULATIONS, REQUIREMENTS, AND STANDARDS OF THE APPLICABLE BUILDING, PLANNING, AND ZONING UNLESS CONTRACT DOCUMENTS REQUIRE A HIGHER OR GREATER STANDARD TO BE CONFORMED TO. IF PORTIONS OF THE CONTRACT DOCUMENTS ARE RECOGNIZED AS NOT NECESSARY THE STANDARD ESTABLISHED THEREBY, PROMPTLY NOTIFY ARCHITECT AND PROVIDE VERIFIED FIELD CONDITIONS.		
3.	BE FAMILIAR WITH THE TO BE DONE, MATERIALS AND EQUIPMENT TO BE INSTALLED AND COORDINATE IN ADVANCE PRIOR TO INSTALLING ANY SYSTEM OR PORTION THEREOF.		
4.	EACH CONTRACTOR WHO FAILS TO COORDINATE INSTALLATION OF HIS WORK WITH OTHER TRADES SHALL BEAR ALL COSTS OF EACH TRADE FOR DISCONNECTING, REMOVAL AND RE-INSTALLATION OF AFFECTED SYSTEMS, EQUIPMENT OR PORTION THEREOF.		
5.	UNLESS NOTED OTHERWISE, GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING FOR ALL STRUCTURAL STEEL, WOOD, SHEET METAL, AND OTHER UNITS AS NECESSARY TO SUPPORT ALL ROOF, TOP, FLOOR, EQUIPMENT, MASONRY OPENINGS, PASSAGES, WINDOWS AND FRAME ALL ROOF OPENINGS. GENERAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL DRAWINGS OF ALL CONTRACTS TO DETERMINE QUANTITY, SIZE AND LOCATIONS OF ALL ROOF TOP EQUIPMENT, MASONRY OPENINGS AND ALL ROOF AND FLOOR OPENINGS.		
6.	REFER TO MEPR DRAWINGS FOR RECESSED SEMI-RECESSED PLUMBING AND HEATING EQUIPMENT AND GRILLE LOCATIONS NOT SHOWN ON BUILDING PLANS. VERIFY EXACT LOCATION WITH ENGINEER PRIOR TO CONSTRUCTING WALLS.		
7.	PROVIDE BOND BREAKER SEPARATION AT ALL LOCATIONS OF DISIMILAR MATERIALS.		
8.	PROVIDE WOOD BLOCKING OR STRAPPING AS REQUIRED IN WALLS TO SUPPORT WALL-MOUNTED ITEMS.		
9.	INTERIOR DIMENSIONS ARE TO FINISH FACE UNLESS OTHERWISE NOTED.		

NEW BUILDING FOR: <b>PJ REILLY CONTRACTING</b> PARK ROAD, DOWNTONTOWN, PA 19335 UPPER UWCHLAN TWP., CHESTER COUNTY	ISSUE: SCHEMATIC ISSUE DATE: 03/2024
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REV. DESCRIPTION	REV. DATE
A001	COVER SHEET
DRAWN BY: DJD/JMR	SCALE: 12' 0" x 12' 0"
SHEET NUMBER:	DWG NUMBER: E2298
1	SET #



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REV BY:

SHEET NUMBER:  
FIRST FLOOR PLAN

## FIRST FLOOR PLAN

101

A10

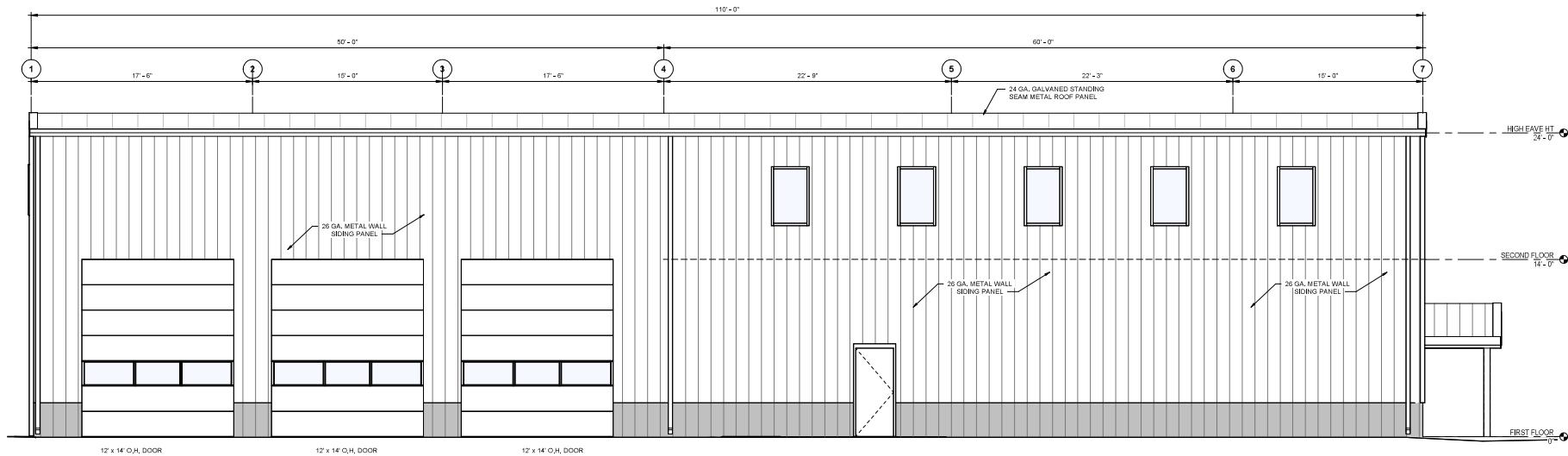
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1

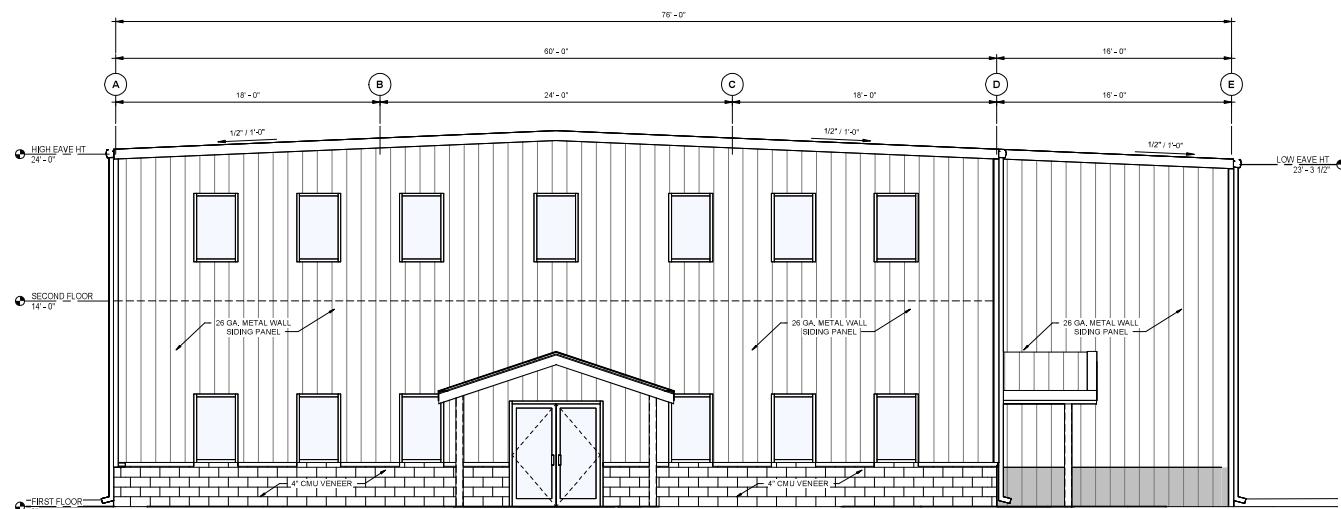
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1 SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



2 EAST ELEVATION

SCALE: 1/4" = 1'-0"

DESIGN PROFESSIONAL  
VICKSBURGH ARCHITECTS  
Scenic Ridge Company

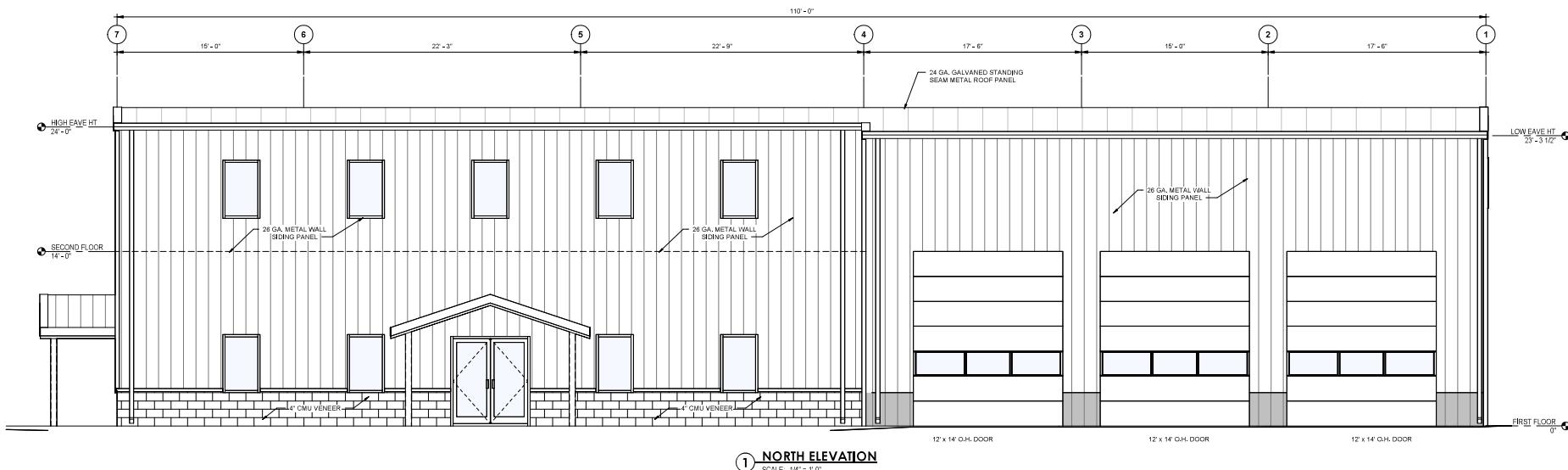
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**PJ REILLY CONTRACTING**  
PARK ROAD, DOWNTOWN, PA 19335  
UPPER UCHLAN TWP., CHESTER COUNTY

ISSUE: SCHEMATIC  
ISSUE DATE: 03.12.2024

DRAWING NUMBER: E2298  
SCALE: 1/4" = 1'-0"  
DRAWN BY: DJG/JMR  
REV BY:  
SHEET NUMBER:  
ELEVATIONS

A201

SET # 1



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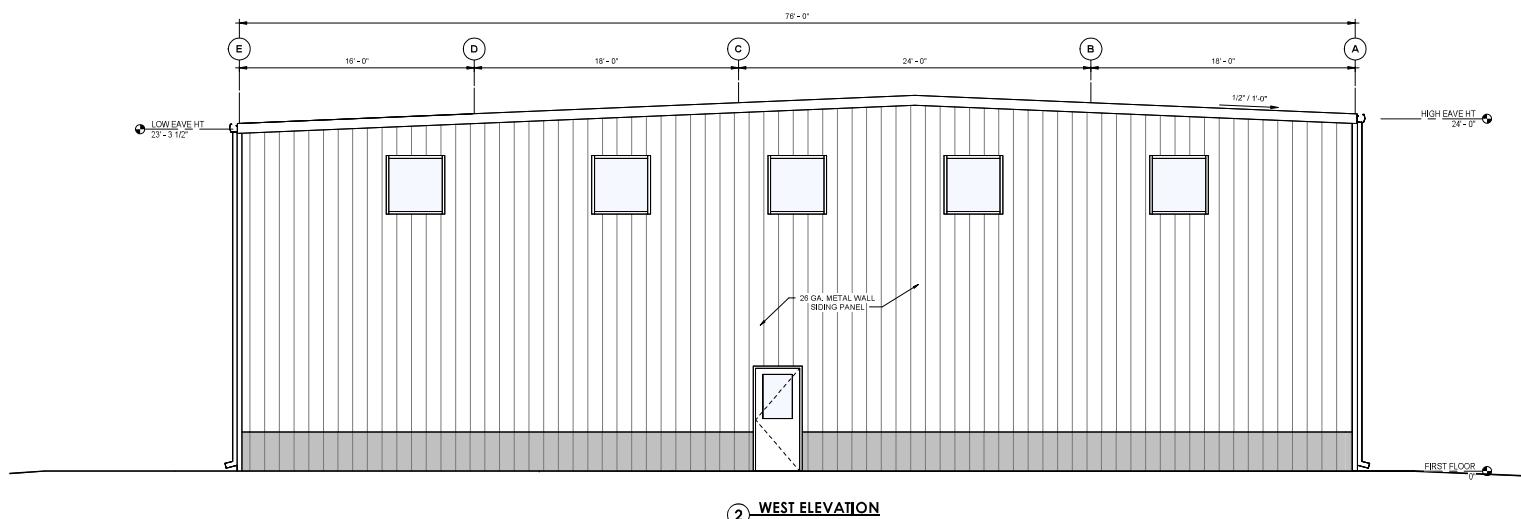
ISSUE: SCHEMATIC  
ISSUE DATE: 05.12.2024

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SCALE: 1/4" = 1'-0"  
DRAWN BY: DJJ/UR  
REV BY:  
SHEET NUMBER:  
ELEVATIONS

A202

SET # 1

REV. DESCRIPTION DATE





# **VILLAGE DESIGN GUIDELINES**

## **VILLAGE PLANNING AREA, INCLUDING VILLAGES OF EAGLE & BYERS Upper Uwchlan Township, Chester County, Pennsylvania**

**Commissioned by  
Board of Supervisors  
Upper Uwchlan Township**

**Prepared by  
Richard Grubb & Associates, Inc.  
The Brandywine Conservancy, Inc.**

**Draft: May 30, 2024**



## TABLE OF CONTENTS

### ACKNOWLEDGEMENTS.....**V**

### CHAPTER 1 • INTRODUCTION ..... **PAGE 1**

Purpose .....	2
Village Concept Plan Committee .....	2
Village Planning Area.....	2
Consistency with Village Concept Plan Goals .....	3
Preserving Historic Resources.....	3
Consistency with Township Ordinances .....	3
Architectural Considerations .....	3
Principles and Standards .....	4
Baseline Information .....	4
Figure 1. Village Planning Area .....	5
Figure 2. Village of Eagle.....	6
Figure 3. Village of Byers and Byers Station Historic District. 7	

### CHAPTER 2 • HISTORICAL & ARCHITECTURAL SIGNIFICANCE . **PAGE 8**

Brief Village Histories.....	9
Village Architecture .....	10
Eagle.....	10
Byers.....	11
Architectural Styles .....	12
Colonial.....	12
Federal.....	13
Greek Revival .....	13
Italianate .....	14
Gothic Revival.....	14
Second Empire .....	15
Victorian / Queen Anne.....	15
American Foursquare .....	16
Colonial Revival .....	16
Craftsman / Bungalows.....	17
Cape Cod.....	17

Figure 4. Historic map of Eagle (then called Windsor) in Breou's Atlas of 1883.....	10
Figure 5. Historic map of Byers in Breou's Atlas of 1883 .....	11

**CHAPTER 3 • GENERAL DESIGN GUIDELINES ..... PAGE 18**

Secretary of the Interior's Standards.....	19
--	----

**CHAPTER 4 • DESIGN GUIDELINES FOR HISTORIC RESOURCES & SETTINGS ..... PAGE 21**

Overview.....	22
---------------	----

Roofs and Related Features .....	22
----------------------------------	----

Roof Design and Configuration.....	23
------------------------------------	----

Roof Maintenance and Repair.....	23
----------------------------------	----

Roofing Replacement .....	24
---------------------------	----

Roof Reconstruction .....	24
---------------------------	----

Dormers .....	25
---------------	----

Gutters and Downspouts .....	25
------------------------------	----

Skylights .....	26
-----------------	----

Mechanical Elements.....	26
--------------------------	----

Chimneys.....	26
---------------	----

Wood Siding, Details, and Trim .....	28
--------------------------------------	----

Historic Wood Siding and Trim .....	29
-------------------------------------	----

Covering Wood Siding .....	30
----------------------------	----

Replacement Synthetic Materials .....	30
---------------------------------------	----

Synthetic Materials for New Additions.....	30
--	----

Entrances and Doorways.....	30
-----------------------------	----

Historic Entrances.....	31
-------------------------	----

Historic Doorways and Detailing .....	32
---------------------------------------	----

Storm and Screen Doors .....	32
------------------------------	----

Windows and Window Treatments .....	33
-------------------------------------	----

Historic Windows - Preservation, Repair, Replacement....	34
--	----

Storm Windows.....	35
--------------------	----

Replacement Windows .....	36
---------------------------	----

Shutters .....	37
----------------	----

New Windows Openings in an Existing Historic Facade...	39
--	----

Historic Porches.....	39
-----------------------	----

Porch Flooring .....	41
----------------------	----

Porch Steps .....	42
-------------------	----

Porch Enclosure .....	43
-----------------------	----

Accessibility .....	43
---------------------	----

Site Features .....	44
---------------------	----

Streetscape.....	44
Walkways.....	44
Fencing.....	45
Lighting .....	45
Solar Panels .....	46

**CHAPTER 5 • DESIGN GUIDELINES FOR NEW ADDITIONS &  
CONSTRUCTION..... PAGE 48**

Overview.....	49
Guiding Principles for New Design.....	50
Site Layout and Orientation .....	50
Architectural Expression .....	51
Scale, Massing, and Form .....	53
Materials .....	54
Building Features .....	56
Roof Forms .....	56
Skylights .....	56
Entrances.....	56
Windows .....	57
Porches.....	57
Garages and Outbuildings .....	58
Mechanical Equipment.....	59
Site Features .....	59
General Guidelines .....	59
Walkways.....	60
Lighting .....	60
Driveways and Parking .....	60
Decks and Patios .....	61
Fencing .....	61
Landscaping .....	61

**CHAPTER 6 • SIGNS..... PAGE 62**

Village Signage .....	63
-----------------------	----

**CHAPTER 7 • DESIGN GUIDELINES FOR PUBLIC SPACES & FEATURES  
PAGE 65**

Parking and Public Spaces .....	66
---------------------------------	----

Lighting Standards .....	66
Outdoor Furniture Standards .....	66
Rural Center Design Guide Link .....	66
<b>APPENDICES .....</b>	<b>PAGE 67</b>
<b>A - HISTORIES OF THE VILLAGES OF EAGLE &amp; BYERS.....</b>	<b>PAGE 68</b>
Historic Overview .....	68
Village of Eagle .....	68
Village of Byers .....	70
<b>B - HISTORIC BUILDING MATERIALS &amp; TREATMENTS .....</b>	<b>PAGE 74</b>
Overview .....	74
Wood .....	74
Condition and Causes of Wood Deterioration .....	75
Wood Treatment .....	76
Brick Masonry .....	77
Condition and Causes of Brick Masonry Deterioration .....	77
Brick Masonry Treatment and Repair .....	79
Pointing and Mortar .....	80
Stone Masonry .....	82
Condition and Causes of Stone Masonry Deterioration .....	82
Stone Masonry Treatment and Repair .....	83
Stucco .....	84
Condition and Causes of Stucco Deterioration .....	85
Stucco Treatment and Repair .....	85
Metals .....	86
Condition and Causes of Metal Deterioration .....	86
Metal Treatment and Repair .....	87
<b>C - ARCHITECTURAL GLOSSARY .....</b>	<b>Page 89</b>
<b>D - STREET LIGHTING.....</b>	<b>Page 91</b>
<b>E - STREET FURNITURE .....</b>	<b>Page 95</b>

# Acknowledgements

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## **Special Acknowledgement**

Peter Benton, Heritage Strategies, LLC.





*Isaac D. Frame House, 124 Pottstown Pike*

## **CHAPTER 1**

## **INTRODUCTION**

## PURPOSE

These *Village Design Guidelines* have been developed to help property owners and Upper Uwchlan Township preserve the historic character of the Township's Village Planning Area (VPA). The VPA includes, but is not limited to, the distinctive historic resources and settings of the villages of Eagle and Byers. (See Figure 1. Village Planning Area Boundary, below.)

**The *Village Design Guidelines* (*Guidelines*) are designed for use within the VPA as may be required by Township Ordinances. Property owners are encouraged to use the *Guidelines* voluntarily throughout the Township.**

The *Guidelines* are intended to provide property owners and Township officials with a "go to" illustrated manual for preserving, rehabilitating and enlarging historic resources, designing new buildings, and making changes to streetscapes and historic settings within the VPA. The *Guidelines*' purpose is to help ensure changes in the VPA will be compatible with and sensitive to the VPA's historic resources and settings, particularly in the villages of Eagle and Byers.

The *Guidelines* and associated Township Ordinances are also intended to help preserve the VPA's historic architecture and settings for the use, enjoyment, convenience, and economic vitality of all citizens of Upper Uwchlan Township.

The *Guidelines* are a resource to help property owners and applicants make appropriate design decisions for their historic resources and settings. Rather than addressing every situation, the *Guidelines* outline important concepts and principles to protect the character-defining features of historic resources within the VPA, focusing on Eagle and Byers.

Beyond the VPA, the *Guidelines* can be useful to property owners in the appropriate maintenance and treatment of their residences and other buildings. It will assist property owners in making desired alterations and changes to their historic residences in ways that preserve the character of the buildings as well as of their neighborhoods as a whole.

Finally, the *Guidelines* are intended to inspire creative and sensitive solutions to issues that may not be originally envisioned in a project. The Township believes the best outcomes meet the needs of residents and property owners while preserving the architectural features that define a historic building, as well as its historic landscape.

## VILLAGE CONCEPT PLAN COMMITTEE

The *Guidelines* were prepared by the Village Concept Plan Committee (Committee). The Committee first convened in 2010 to guide planning for the future of the VPA, Eagle and Byers. The Committee included Township officials, members of commissions and other Township entities, planning consultants, and the public. In 2022, the Committee reconvened to update the Village Concept Plan and the original *Village Design Guidelines* (2011), resulting in these *Guidelines*.

## VILLAGE PLANNING AREA

The Village Planning Area (VPA) spans approximately 315 acres on either side of Route 100 north of the Pennsylvania Turnpike. Its boundary is based on the location of the Township's principal historic, cultural, social, and business core, and historically significant resources and their connections with surrounding

landscapes, natural features, and the built environment.

The VPA includes the village of Eagle, the village of Byers (most of which is within the Byers Station National Register Historic District), and surrounding areas. (See Figure 1. Village Planning Area Boundary, as well as other figures showing the VPA, below.)

## CONSISTENCY WITH VILLAGE CONCEPT PLAN GOALS

The Village Concept Plan established the following goals:

1. Improve and maintain the visual integrity of the VPA by:
  - a. Preserving Class I and Class II historic resources.
  - b. Developing and/or revising existing standards for new construction and redevelopment (including but not limited to external alterations to existing structures).
  - c. Amending, as needed, the uses permitted in each zoning district under existing Township ordinances, as well as adding and/or revising, as needed, existing architectural standards and guidelines.
  - d. Implementing consistent streetscapes.
2. Offer opportunities to attract more people to the villages.

The *Guidelines* are designed to help protect historic resources and their settings throughout the VPA, enabling a robust business environment and comfortable place to live, work, shop, and be entertained.

## PRESERVING HISTORIC RESOURCES

Among other things, the *Guidelines* are designed to help property owners make appropriate decisions regarding changes to historic resources within the VPA. The Township has surveyed, inventoried, and mapped properties containing historic resources throughout Upper Uwchlan. Each property has been classified for its architectural and/or historical significance. Inventoried historic resources are indicated here by their historic name, address, and/or historic resource number.

## CONSISTENCY WITH TOWNSHIP ORDINANCES

The *Guidelines* may augment various provisions in the Upper Uwchlan Township Zoning Code. Within the VPA, the *Guidelines* augment the architectural design standards within the C-1 Village Zoning District (Ordinance §200-36). (See Figure 1, below, showing the C-1 Zoning District boundary within the VPA.) They may be used with other zoning districts within the VPA, if required. Like the architectural design standards (Ordinance §200-36, C-1 Zoning District provisions), the *Guidelines* encourage consistency with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (see Chapter 3).

## ARCHITECTURAL CONSIDERATIONS

When considering changes to historic resources or new construction within the VPA, the *Guidelines* help address the following questions:

1. Are the height and width and overall size of the proposed work or structure visually compatible with the existing historic resource and/or nearby historic resources?

2. Is the proposed roof shape visually compatible with the existing historic resource and/or nearby historic resources?
3. Is the siting, setback(s), and orientation of the proposed work or structure compatible with the existing historic resource and/or nearby historic resources?
4. Is the relationship of solids to voids in the front façade of the proposed work or structure visually related?
5. Is the relationship of solids to voids in the front façade of the proposed work or structure visually compatible with the existing historic resource and/or nearby historic resources?
6. Is the massing of the proposed work or structure visually compatible with the existing historic resource and/or nearby historic resources?
7. Is the relationship of entrances and porches visually compatible with the existing historic resource and/or nearby historic resources?
8. Is the relationship of materials of the façade and roof of proposed work or structure visually compatible with the existing historic resource and/or nearby historic resources?
9. Are the height and width of windows on the proposed work or structure visually compatible with the existing historic resource and/or nearby historic resources?
10. Are the proposed landscaping infrastructure improvements visually compatible with the existing historic resource and/or nearby historic resources, as well as the historic landscape and streetscape?
11. Does the proposed work or structure preserve the defining historic architectural characteristics of the existing historic resource and/or nearby historic resources?

## PRINCIPLES AND STANDARDS

The *Guidelines* closely follow the *Principles and Standards for Design Guidelines in Pennsylvania Communities*, as established by the Pennsylvania State Historic Preservation Office (PA SHPO), April 2020. The *Principles and Standards* is intended to provide local governments, community organizations, and consultants with guidance on how to develop effective and useful design guidelines for older and historic communities in Pennsylvania.

## BASELINE INFORMATION

The *Guidelines* are based on the *Historic Preservation Design Guidelines*, Town of Wellesley, Massachusetts, due to similarities with various architectural features found in Eagle and Byers. The Wellesley guidelines were developed by Peter Benton, Heritage Strategies, LLC, 2021, and are used with his permission. The *Guidelines* also utilize design guidelines found in *Landscapes3*, Chester County's Comprehensive Plan (2018), as well as the original VPA *Village Design Guidelines* (2010).

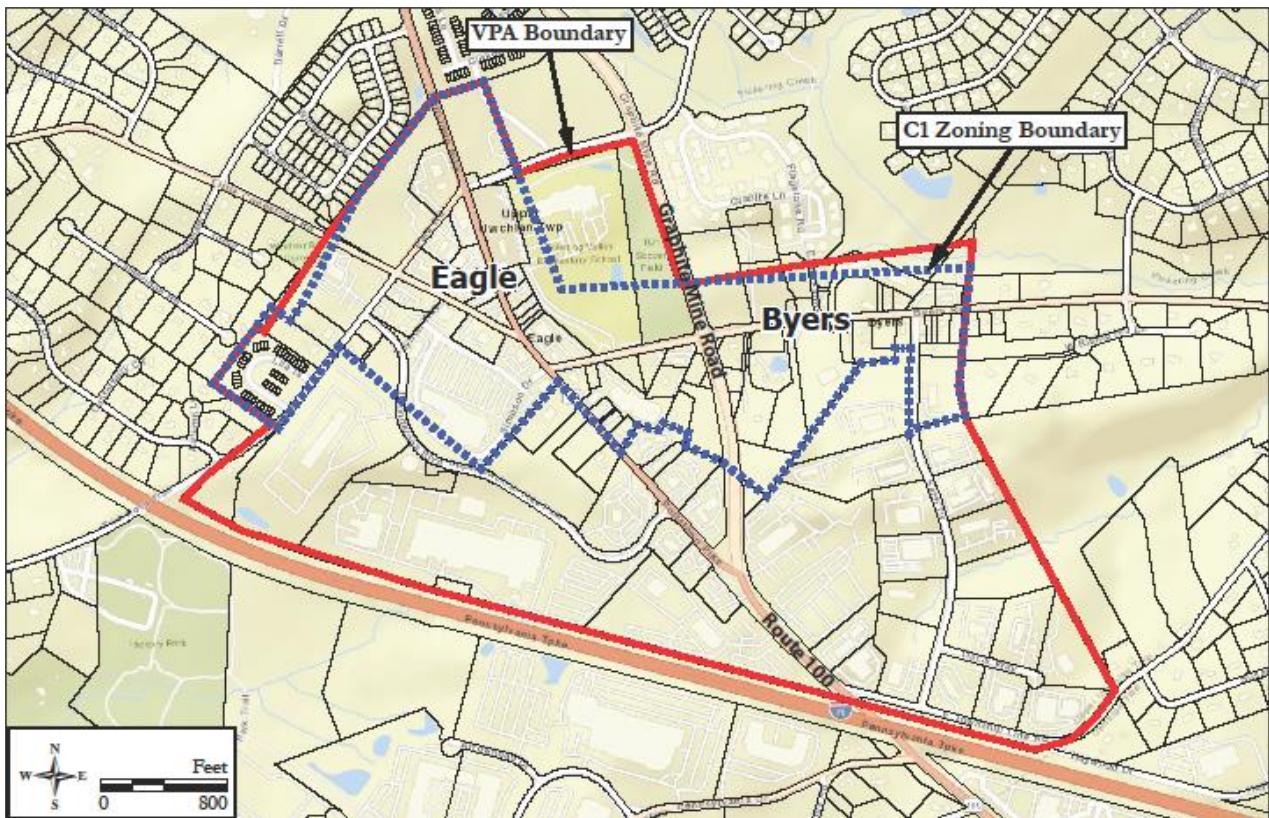


Figure 1. Village Planning Area Boundary (2022) (red line) showing Eagle and Byers, as well as the C-1 Village Zoning Boundary (blue dotted line).

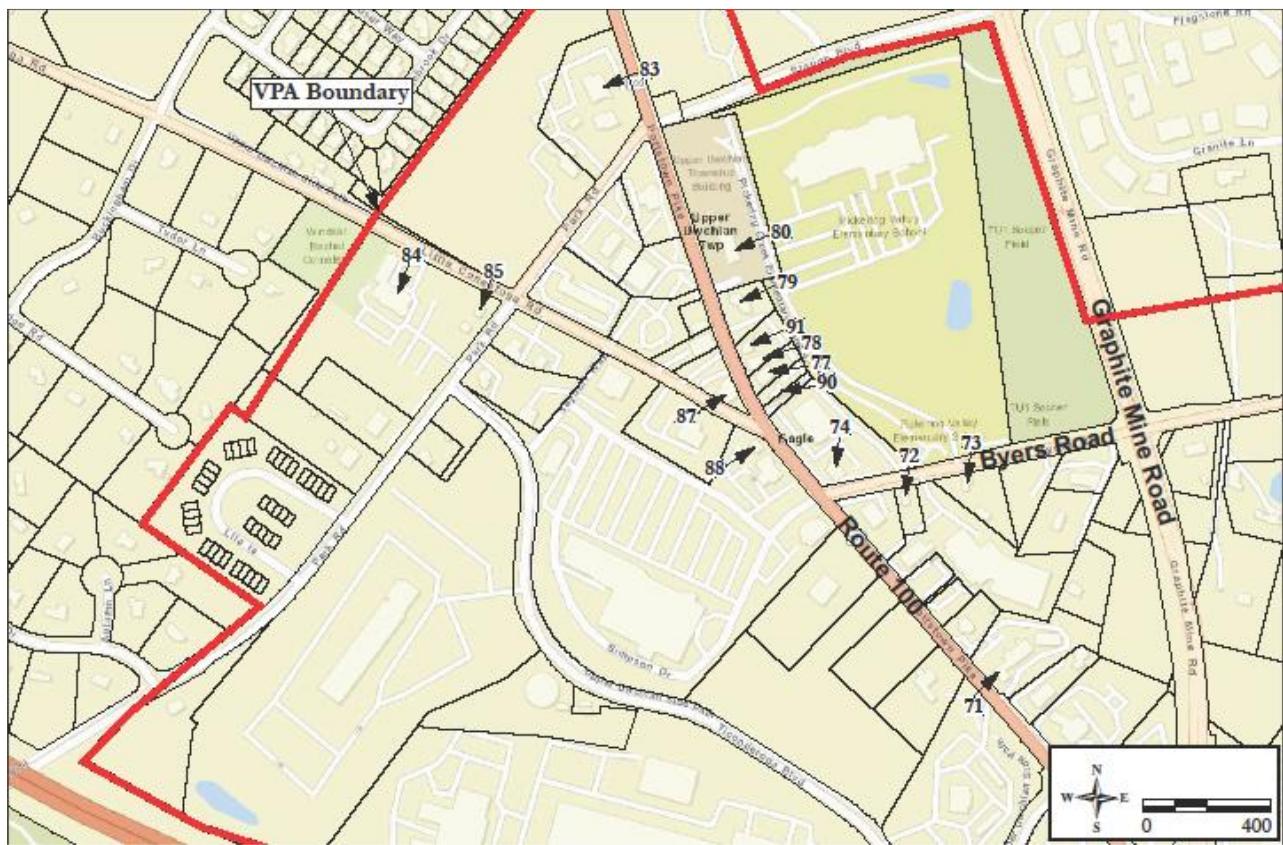


Figure 2. Village of Eagle with Historic Resources Identified.

Historic Resources (as shown indicated by Historic Resource Number on map):

- #71: 70-74 Pottstown Pike (Elizabeth Todd House);
- #72: 108 Byers Road;
- #73: 124 Byers Road;
- #74: 102 Pottstown Pike (John Todd House);
- #77: 120 Pottstown Pike (Butler House);
- #78: 124 Pottstown Pike (Isaac D. Frame House);
- #79: 134 Pottstown Pike (Huxley Blacksmith Shop);
- #80: 140 Pottstown Pike (Windsor School House);
- #83: 160 Park Road (Funderwhite Farm);
- #84: 213 Little Conestoga Road;
- #85: 213 Little Conestoga Road;
- #87: 123 Pottstown Pike (Former Eagle Hotel);
- #88: 350 Simpson Drive (Beerbower/Pugh House);
- #90: 114 Pottstown Pike (Frank and Hannah Pearson);
- #91: 130 Pottstown Pike (Beerbower Duplex).

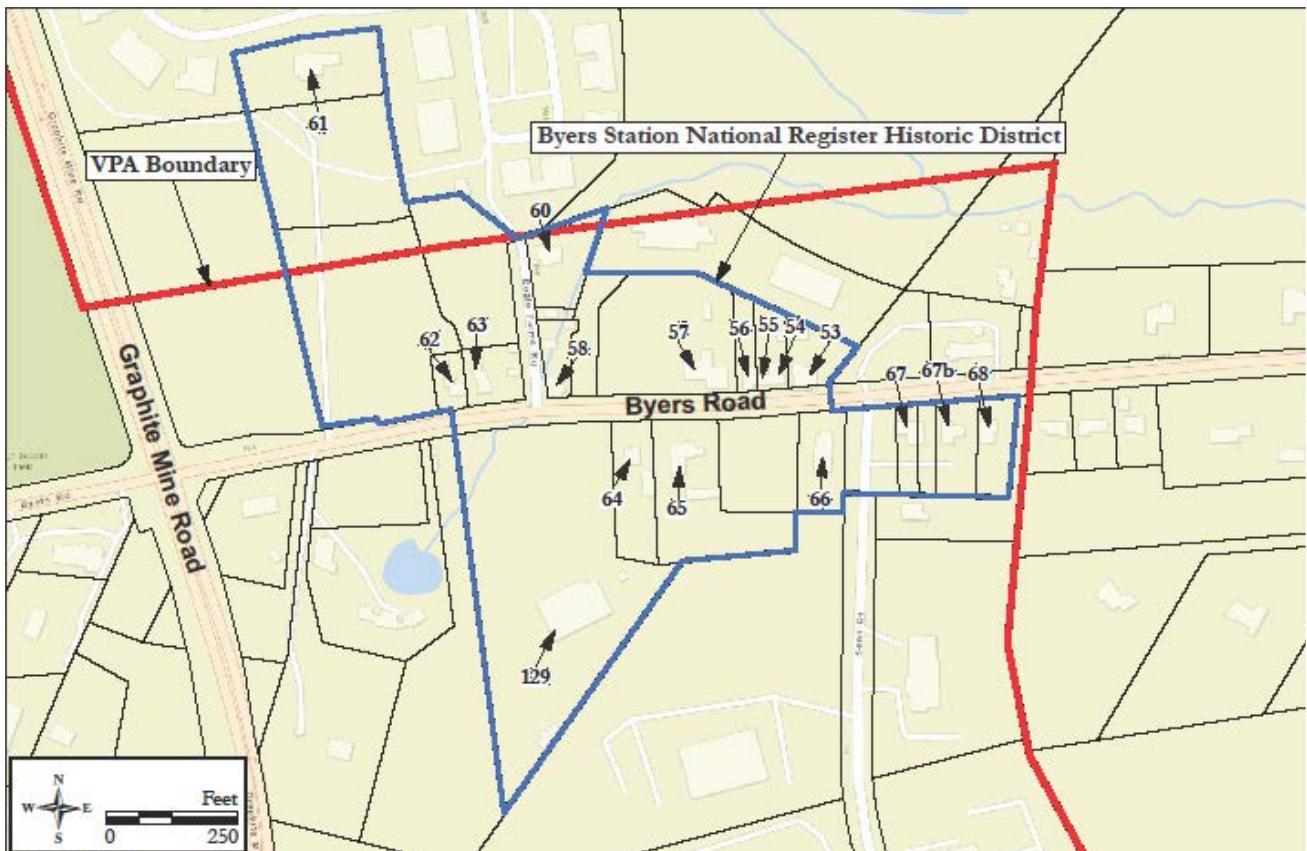


Figure 3. Village of Byers, showing the Byers Station Historic District (blue border), with Historic Resources Identified.

Historic Resources (as shown indicated by Historic Resource Number on map):

- #53: 225 Byers Road (Byers Hotel);
- #54: 219 Byers Road (Emeretta C. Green House);
- #55: 219 Byers Road (Farmers Bank of Uwchlan);
- #56: 215 Byers Road (Emeretta C. Green House);
- #57: 211 Byers Road (A. M. F. Stiteler House) (\*Historic Resource Demolished);
- #58: 201 Byers Road (Isaac B. Lewis House);
- #60: 119 Eagle Farm Road (Joseph Butler House);
- #61: 161 Byers Road (Joseph Butler Farmstead);
- #62: 181 Byers Road (Eliza March House);
- #63: 191 Byers Road (Frank March House);
- #64: 204 Byers Road (Woodland House);
- #65: 210 Byers Road (J.H. Todd House);
- #66: 218 Byers Road (Mount Pickering Masonic Hall);
- #67: 226 Byers Road (Elizabeth Todd House);
- #67b: 230 Byers Road (Joseph Grow House);
- #68: 236 Byers Road (S.W. Todd House);
- #129: 190 Byers Road (Pennsylvania Graphic Processing Plant).



*Village of Byers /Byers Station Historic District*

## **CHAPTER 2**

## **HISTORICAL & ARCHITECTURAL SIGNIFICANCE**

## BRIEF VILLAGE HISTORIES

***The historic villages of Eagle and Byers are significant in the areas of commerce, transportation, mining/processing, and agriculture throughout much of the eighteenth, nineteenth, and early twentieth centuries. Appendix A provides a more extensive history.*** Please see Figures 2 and 3, above, showing the villages of Eagle and Byers, with historic properties identified.

Eagle, the older village, began in the eighteenth century at the intersection of two heavily traveled roads. The village emerged around an inn / tavern that opened around 1727 to serve travelers and drovers. The village and its road system provided a market and transportation hub for the surrounding farms. Today, many of Eagle's older residential, commercial, and educational buildings remain, and the Eagle Tavern continues to serve customers at the intersection of Pottstown Pike and Little Conestoga Road, though in a newer building (built in 1859) and with a new business name. Some historic buildings in Eagle were moved across Pottstown Pike in the early 2000s.

Byers, meanwhile, began nearly 150 years after Eagle. In the 1870s, a group of businesspersons from Eagle helped finance

the construction of a railroad, bringing passenger and freight service to within a quarter mile of Eagle. The resulting terminus was named Byers Station. A village (Byers) developed adjacent to the station, its growth augmented by the discovery and subsequent mining and processing of plumbago (graphite) a few years after the station opened. Byers became a thriving village clustered along its main street (Byers Road). With the closing of the final graphite operation in 1910, the railroad eventually ceased operating in 1947. Most businesses closed in Byers, leaving behind the quiet, mainly residential community there today.

Although close in proximity, the villages of Byers and Eagle remain physically separated and differ in architectural appearance. They developed at different times for different purposes. Yet, Byers would have not existed without Eagle, and the residents and businesses in Eagle depended on Byers as their lifeline to the larger markets and institutions of Phoenixville and Philadelphia. Though changing economic and transportation forces have altered their historic functions, these villages are an important part of Chester County's history. The village of Byers was listed in the National Register of Historic Places in 2002 as the Byers Station Historic District.

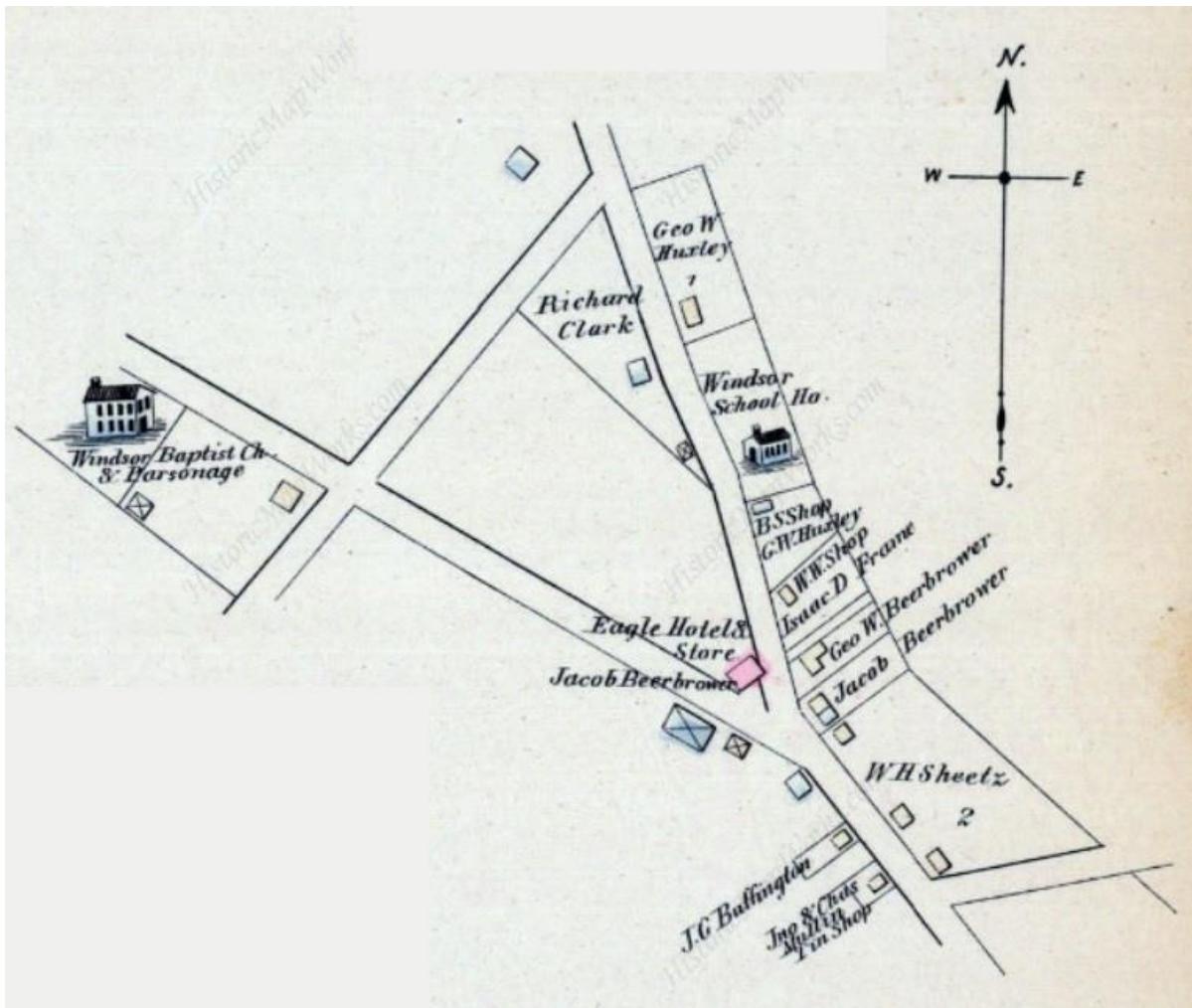


Figure 4. Historic map of Eagle (then called Windsor) in Breou's Atlas of 1883.

## VILLAGE ARCHITECTURE

***The Villages of Eagle and Byers emerged at different times and for different reasons. Transportation was the big factor in shaping these villages, resulting in their respective historic landscapes.***

### EAGLE

The historic core of Eagle includes approximately 15 properties containing historic resources. These historic resources generally date to the eighteenth

or nineteenth century. Notable buildings include a variety of residences (c. 1750 to c. 1875), a one-room schoolhouse (1858), and a tavern (1727, rebuilt in 1859).

Historic buildings in Eagle, representing the portion of the VPA located west of Graphite Mine Road, reflect a greater range of style and details than those in Byers. The village emerged at the intersection of Pottstown Pike and Little Conestoga Road, with most buildings oriented towards Pottstown Pike. The buildings, most of which were constructed as residences but are now used mainly for commercial purposes, are not densely grouped as in Byers, yet their proximity and orientation towards the Pike easily

identifies Eagle as a village. Architectural styles include Federal, Greek Revival, Italianate, and Second Empire. Roof types include end-gabled and mansard, with small cornices. Front porches vary widely, including porticoes, full-length porches,

and wrap-around porches. Historic windows and shutters survive on about half of the buildings in Eagle.

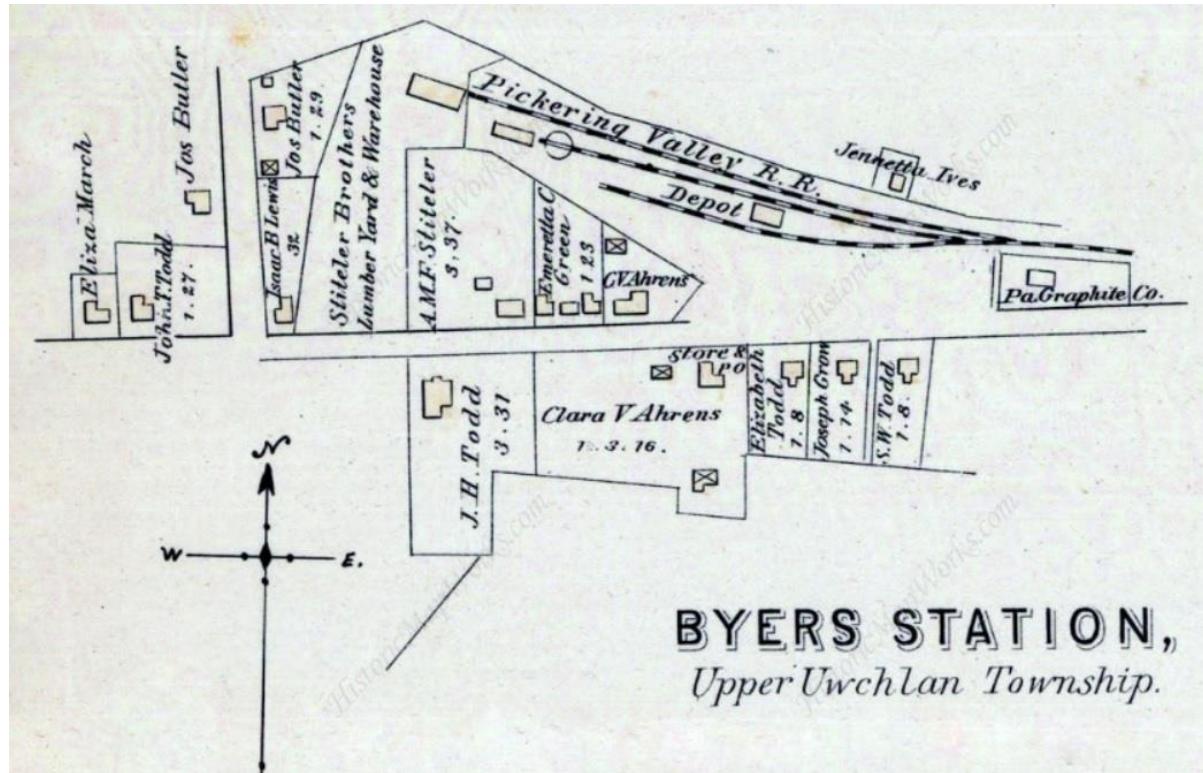


Figure 5. Historic map of Byers in Breou's Atlas of 1883.

## BYERS

The Byers Station Historic District is listed in the National Register of Historic Places and consists of 17 properties containing contributing historic resources. The community grew around the Byers railroad station after its opening in 1871 and continued growing after plumbago (graphite) was discovered nearby in 1875. The village is historically significant for mining and processing, transportation, and commerce. The Byers Station Historic District contains several Italianate and Greek Revival buildings, including the former Byers Hotel (c.

1874), the John Todd House (c. 1875), and a Masonic Hall (1894).

Historic buildings in Byers are located east of Graphite Mine Road. They have a greater degree of cohesion than those in Eagle both in terms of style and building details. Most buildings here are located in a dense concentration along the north side of Byers Road. Their location reflects the former location of the railroad station and associated line terminus activities. Byers's buildings are either two-story or three-story and were mostly constructed in the late nineteenth century. Roof types are either end-gabled or pyramidal,

several featuring pronounced cornices. The walls are mostly frame, many with decorative wood quoins at the corners and a front porch or pent roof. Several buildings retain either original or historic windows. Few buildings retain their historic shutters. Most buildings in Byers are now residential even if they were built as commercial properties.

## ARCHITECTURAL STYLES

The historic architecture of Upper Uwchlan runs the gamut of styles through time, from the earliest styles (Colonial) to mid-twentieth-century styles (Split Level). Architectural styles changed through time due to changes in building technology, changes in the use of interior spaces, and currents of exterior aesthetic. These styles are scattered throughout Upper Uwchlan, although several important examples are found in the VPA.

Byers exhibits more architectural continuity than Eagle, as the Italianate and Greek Revival styles influenced the majority of its architecture. Eagle exhibits a more eclectic architectural vocabulary, with a wider range of building styles and vernacular buildings.

The VPA includes additional historic buildings, including some suburban type housing from the mid- to late twentieth century. A brief overview of the most prevalent styles within the VPA and throughout Upper Uwchlan is provided below.

Note: the dates assigned to each style below do not necessarily correspond to architecture in Upper Uwchlan.



*Whelen House, 2602 Conestoga Road*

### **COLONIAL STYLE (1600–1780)**

Colonial style houses represent the earliest buildings in the Township. They are often small buildings that today sometimes appear as additions. Colonial houses are sometimes identified by their building plans.

The earliest examples reflect the Hall Plan; these buildings, which include log houses from the eighteenth century, have a single room on the first and second floors, sometimes with a second-floor loft. Two-room plan houses come in two varieties. Houses with two rooms placed side by side on each floor are called the Hall and Parlor Plan, and houses with front and back rooms are called Penn Plan. Houses built before the American Revolution with a center hall or side hall plan are usually considered to be Georgian, a somewhat rare architectural style in northern Chester County. Common features of Colonial style houses include asymmetry, pent roofs, and small windows.



*Beerbower/Pugh House, 350 Pottstown Pike*

### **FEDERAL STYLE (1780–1825)**

The Federal Style emerged after the American Revolution as a refinement of the Georgian style of the eighteenth century. An important example in Eagle is the Beerbower/Pugh House (Historic Resource #88, pictured above). This two-story house is an example of the Side Hall Plan; it retains its original fanlight with intersecting tracery and has an Italianate-style wrap-around porch (added later). Differences between Federal Style houses and their Georgian predecessors include increasingly flat walls, occasional use of curved elements, and increasing symmetry. Louvered shutters were also introduced during the Federal period.

On the interior, frame architectural elements during the Federal period exhibit a more delicate molding profile than the Colonial or Georgian styles, including doorframes, window muntins, and wall moldings. The Funderwhite House, Historic Resource #83, located at 160 Park Road at the north end of Eagle, is a Federal style house built in 1823 with a full center hall plan. Other common Federal style elements include large chimneys, windows usually with six lights per sash, shutters, paneled exterior doors, pent roofs, and a heavy timber framing system.



*Conrad Keeley House, 395 Font Road*

### **GREEK REVIVAL STYLE (1825–1860)**

The Greek Revival style was introduced in the 1820s. The high-style Greek Revival style buildings replicate a classical Greek temple using front end gables, porches with thick entablatures, frieze band windows, and hipped roofs. These high-style Greek Revival residences are less prevalent in Southeast Pennsylvania. Here the more common type of Greek Revival style is usually a Federal style building with Greek Revival features. These houses often have a more traditional farmhouse appearance with frieze band windows on the upper floor, such as the Conrad Keeley House (Historic Resource #23, pictured above).

The more conservative Greek Revival style residences are sometimes called Late Federal or in some cases early Italianate. Common features include frieze band windows on the third floor (usually three-over-three sash units), smaller chimneys than found on Federal style houses (due to changes in heating and stove technology), a smooth wall surface that may have been originally stucco clad, larger windows, and shutters and doors with recessed panels.



*John Todd House, 210 Byers Road*

### **ITALIANATE STYLE (1840–1885)**

In the 1840s, the Picturesque movement began to supplant the Federal and Greek Revival styles. The Italianate style was one of two prevalent streams of the Picturesque movement.

The John Todd House in Byers (Historic Resource #65) is an important local example. The house has a two-and-a-half-story, three-bay main elevation facing the road. It features a gabled roof with overhanging eaves supported by brackets and a projecting center bay. The corners of the house use large wooden blocks that imitate stone corner blocks called “quoins.” (Wooden quoins are common on several buildings in Byers.) Other key features of the house include windows that are larger than those found in earlier architectural styles and a full-length front porch (“piazza”) with decorative brackets.

Another major building with Italianate features in Byers is the former Byers Hotel (Historic Resource #53, 225 Byers Road). Like the Todd House, it exhibits a large porch with decorative supports and quoins, and two-over-two sash windows, among other stylistic features of the time.



*Robert Phipps House, 500 Park Road*

### **GOTHIC REVIVAL STYLE (1840–1880)**

The Gothic Revival style ran concurrently with the Italianate style as part of the Picturesque movement, which occurred in the mid- to late nineteenth century. One of the more important examples in Upper Uwchlan Township is the William Denny Farmhouse (Historic Resource #005, 720 Little Conestoga Road). The Denny house was first built in 1803. It was enlarged upwards in the mid-nineteenth century with a Gothic Revival style third floor. The key Gothic Revival elements are its steeply pitched, centered cross gable with pointed arched window, overhanging cornice supported by decorative brackets, and Y-tracery.

The Robert Phipps House (Historic Resource #102, pictured above), is an example of the most common type of Gothic Revival houses in Chester County. It is a two-and-a-half story, three-bay building with a centered cross-gable. Pure Gothic Revival style houses have rather simple porches, often with light spandrel elements, but it is also common to see a Gothic Revival style house with a porch featuring heavy Italianate brackets.



William Sheetz House, 102 Pottstown Pike

### SECOND EMPIRE STYLE (1865–1885)

Around the time of the Civil War, the Second Empire Style became a prevalent style for upscale architecture. The key feature of the style is the Mansard roof. Developed in medieval France, it provides a more usable upper floor (than a typical gabled roof) while creating a completely different appearance. Mansard designs could utilize a convex, concave, or bell-shaped roof profile, often clad with hexagonal slate shingles that included polychromatic floral patterns in the slate.

Second Empire style houses often added decorative ironwork called cresting at the top of the Mansard. The style was in many ways an elaboration of the Italianate style, as it used many Italianate characteristics: a heavy molded cornice supported by thick brackets, large windows, doors with thick molding profiles, symmetry, and a nearly flat outer wall surface with a wrap-around porch. The key example in Eagle is the William Sheetz House (Historic Resource #74, pictured above), at the northeast corner of Pottstown Pike and Byers Road.



395 Pottstown Pike

### VICTORIAN / QUEEN ANNE (1880–1910)

In the final quarter of the nineteenth century, residential architecture became more complicated and ornate, with various types of applied wooden features, multiple gables, twisted chimneys, and other ornamentation not usually found on earlier buildings. These architectural elements were mostly mass-produced by companies in the Northwest and shipped by rail, then incorporated into construction projects. Subsets of Victorian architecture include the Stick style, the Queen Anne style, and the Shingle style. Many of these houses were made possible by federal pensions that supplemented the income of Civil War veterans.

Few Victorian residences were constructed in the Township. The three styles in the Victorian movement shared some architectural features as mentioned above. Roofs became much more complicated, with multiple gables and turrets, often using slate as a roof cladding material. The walls of houses were also complicated; they often used different cladding material for each floor level, such as a stone first floor and wood-shingled second floor. Windows often had decorative upper sashes, and the general appearance of the building became more complicated with features such as ornate wrap-around porches and/or bay windows. Finally, the symmetry of the center hall plan found on earlier architectural styles gave way to a more complicated interior floor plan.



Woodland House, 204 Byers Road

### AMERICAN FOURSQUARE (1900–1930)

The American Foursquare form is a transitional approach to building that was used with several architectural styles, including the Queen Anne, Prairie, and Colonial Revival styles. As it appeared in the first three decades of the twentieth century, the American Foursquare was a two-and-a-half-story building with a pyramidal roof featuring at least one dormer, a two- or three-bay main elevation, and a front porch.

The house at 204 Byers Road (Historic Resource #64, pictured above) is a Byers example. It has Prairie windows with the muntins offset from the center, paired windows in the west bay, and a typical hipped porch of the era with short columns standing on stone piers. American Foursquare houses usually feature four rooms on the two main floor levels, with one room opening into its two adjacent rooms rather than using a hallway to connect the rooms. Side entrances were often located between the first-floor level and the basement level, with interior stairs required at that entrance to enter the building. Although 204 Byers Road has stone walls, most Foursquare houses had wood cladding.

Many American Foursquare houses were sold through catalogs, such as Montgomery Ward, Radford, or Sears and Roebuck.



A. M. F. Stiteler House, 211 Byers Road (prior to late 2023 fire and demolition)

### COLONIAL REVIVAL STYLE (1880–1955)

The Colonial Revival style represented a rejection of the complicated architecture of the late nineteenth century. It looked back to Colonial and Federal architecture. In the Colonial Revival style, the roof was a simple gable, sometimes with dormers. Chimneys were often attached onto the exterior of the main building envelope, which had not been a practice in Chester County earlier and helped to distinguish Colonial Revival houses from the style's antecedents. Wall surfaces were also simplified, rarely incorporating bay windows or wrap-around porches.

Some features found on Colonial Revival style houses but not generally found on Colonial/Federal style houses include through-the-cornice wall dormers, a wider center bay to accommodate a more formal entrance with a fanlight and sidelights, and windows with eight lights in a sash. Colonial Revival style houses rarely feature a pent roof. In many cases, Colonial Revival style houses were designed to make it difficult to distinguish from a Colonial/Federal style house.

Note: The A. M. F. Stiteler House (Historic Resource #57, shown above [\*Historic Resource Demolished]) was heavily damaged by fire in late 2023, resulting in its demolition.



521 Font Road

### CRAFTSMAN STYLE / BUNGALOWS (1905–1930)

New types of small-scale residential architecture were introduced in the early twentieth century, including the Craftsman and Bungalows. These two building types were often sold as “kit houses” from mail order companies that shipped crates containing the disassembled house by railroad to the purchaser. Kit houses came with a detailed instruction booklet outlining how to assemble the house (part numbers were embossed after World War I for easier identification). After the house was built, the owner could take the booklet to a hardware store, buy the required items, and build an identical house using the same plans, especially after 1925 when new standardized sizes for building materials were adopted.

Craftsman houses were usually front gabled, while Bungalows were generally end gabled; stylistic differences between the two in other parts of the nation were not generally observed here. In Chester County, the two architectural types shared many common features such as widely overhanging eaves, small chimneys, deep front porches (sometimes incised) with columns standing on elevated stone piers, windows with multi-light upper sashes, and decorative cast stone (concrete) foundation blocks.



207 Park Road

### CAPE COD (1930–1960)

One of the most common small-scale house types of the mid-twentieth century was the Cape Cod, one of several types of mid-century tract housing. This building type was based on a traditional New England house, and some architectural historians consider it to be part of the Colonial Revival movement. In its mid-twentieth-century form, the Cape Cod was a one-and-a-half-story house with three symmetrical bays. The main elevation usually features two gabled dormers on the main elevation and a wide dormer on the rear slope. The door was usually centered on the front, opening under a gabled porch between paired windows.

The house at 207 Park Road (Historic Resource #165, pictured above) is a typical example of the type.



Byers Hotel, 225 Byers Road, village of Byers/Byers Station Historic District

## CHAPTER 3

### **GENERAL DESIGN GUIDELINES: *The Secretary of the Interior's Standards for the Treatment of Historic Properties***

## SECRETARY OF THE INTERIOR'S STANDARDS

The philosophy that guides *the Village Design Guidelines* is *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, commonly called the "Standards." The Standards is also the basis for design guidance in the Township's C-1 zoning district (§200-36 Design Standards).

The Standards were established by the federal government in 1966 as guidance for the appropriate treatment of historic buildings impacted by federal projects. Their usefulness has led to their adoption throughout the field of historic preservation.

The Standards are a list of "best practices" for historic preservation. They are a touchstone for all activities affecting historic buildings and landscapes, and they help ensure that proper care is part of the decision making process. The Standards also guide the appearance of new construction to reduce potential impact on existing historic resources nearby.

When the Standards are used in the context of a construction project involving an historic building, they are a starting point to discuss proposed changes to the building's historic character and fabric.

**STANDARD 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.**

Standard 1 recommends compatible use in the context of adaptive reuse and changes to historic buildings and landscapes. It encourages property owners to find uses that retain and enhance historic character, not detract from it. The work involved in reuse projects should be carefully planned to minimize impacts on historic features, materials, and spaces.

**STANDARD 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial**

*relationships that characterize a property will be avoided.*

Standard 2 recommends the retention and preservation of character-defining features. It emphasizes the importance of preserving integrity and as much existing historic fabric as possible. Alterations that repair or modify existing historic fabric are preferable to those that remove it.

**STANDARD 3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.**

Standard 3 focuses on authenticity and discourages the conjectural restoration of a property, feature, or design. It also discourages combining and/or grafting historic features and elements from different properties and constructing new buildings that appear to be historic. Reconstruction should not be attempted without adequate documentation.

**STANDARD 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.**

Standard 4 recognizes that buildings change, and that many of these changes contribute to a building's historic significance. Understanding a building's history and development is as important as understanding its original design, appearance, and function. Most historic buildings contain a visual record of their own evolution. Changes that are significant to the history of the building should be retained.

**STANDARD 5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.**

Standard 5 recommends preserving the distinctive historic components of a building or landscape that represent its historic character. Workmanship, materials, construction methods, floor plans, and architectural details should be identified prior to undertaking work.

**STANDARD 6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.**

Standard 6 encourages property owners to repair historic features instead of replacing them. In cases where deterioration makes replacement necessary, new features should closely match historic features being replaced.

**STANDARD 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.**

Standard 7 warns against using chemical and physical treatments that can permanently damage historic features. Sandblasting and harsh chemical cleaning are extremely harmful to wood and masonry surfaces because they can destroy the material's physical properties and speed deterioration.

**STANDARD 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.**

Standard 8 addresses the importance of below ground prehistoric and historic features. This is important when a construction project involves excavation. An assessment of a site's archeological potential prior to work is recommended. If archeological resources are present, some type of mitigation should be considered.

**STANDARD 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.**

**STANDARD 10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.**

Standards 9 and 10 are linked by issues of the compatibility and reversibility of additions, alterations, and new construction. Both standards are intended to minimize the damage to historic fabric caused by building additions, and ensure that new work will be different from, but compatible with, existing historic conditions.



*William Sheetz House, 102 Pottstown Pike, Eagle Village*

## **CHAPTER 4**

### **DESIGN GUIDELINES FOR HISTORIC RESOURCES & SETTINGS**

## OVERVIEW

The historic buildings in the VPA were constructed between the late eighteenth and early twentieth centuries. They include a variety of architectural styles prevalent during that time. Individual building features associated with those styles are essential to the character and significance of each building. Preserving these features, as well as guiding the design of new construction and landscape changes within the VPA, are the central themes of these *Guidelines*.

Preservation of historic buildings within Eagle and Byers will help preserve their respective historic settings. In many buildings, features added over time might be historically significant to the building, and help to document the villages' different periods of development.

The *Guidelines* are appropriate for both Eagle and Byers. Each village is unique, and the proper use of the *Guidelines* should help preserve their respective design characteristics and settings. Byers, for example, is more compact and residential; Eagle is more spread out (mainly along Pottstown Pike) and commercial. The *Guidelines* are adaptable to both settings and uses.

This chapter addresses the treatment of historic building features, including roofs, siding, entrances and doorways, windows, and porches – the key character defining features of a building's exterior. Preservation and appropriate maintenance of historic features and authentic building fabric are strongly encouraged. The first step is understanding the feature's relationship to the building in terms of time period and historical significance, as well as the design characteristics that are significant to the feature itself.

Repair of historic features is always preferred over replacement – significant features should rarely, if ever, be removed. Replacement is recommended only when existing features are deteriorated beyond repair. Existing features can be modified and new features can be

added, when necessary, to accommodate contemporary needs. Significant changes should be limited to the side or rear facades of buildings.

The *Guidelines* also apply to design changes and new construction. The recommendations are intended to encourage the compatible design of buildings and additions and the application of materials.



*Gabled roofs are the most common roof type in the VPA (Isaac D. Frame House, 124 Pottstown Pike, Eagle).*

## ROOFS AND RELATED FEATURES

The roof is among the most critical features of any building. Roofs are not only important character defining features, their function and physical integrity are critical to a building's preservation.

Roofs are composed of a variety of building elements that together function as a system. Roof elements include various structural elements (framing, sheathing, roofing materials, and flashing) as well as the drainage system. The drainage system includes drains, gutters, scuppers, downspouts, and splash blocks or piping that convey water away from the building. Together they serve a critical functional purpose and important design features. Providing a weather-tight roof and

properly functioning drainage system should be addressed before any other concern.

Gable roofs are the most common roof type within the VPA. Historically, most roofs were likely covered with wood or slate shingles. Today, most roofs have been covered with contemporary asphalt shingles. However, the Todd or Sheetz house at the corner of Byers Road and Pottstown Pike in Eagle has a fine example of a slate roof. Many roofs have design features such as dormers (various configurations) as well as complicated ridge, valley, and flashing arrangements. Chimneys are present on most historic buildings, though they tend to be simple and utilitarian.

It is of primary importance that roofing systems be properly maintained. If not, damage that occurs to concealed roof and wall structures due to water penetration may go unnoticed for years. Wood members will rot (especially at bearing points), metal elements will rust and expand, and masonry will deteriorate and crack. By the time these conditions become apparent, the required repairs will be much more costly than had the roof been properly maintained. Regular and ongoing roof maintenance is critical to the preservation of historic buildings.

## Roof Design and Configuration

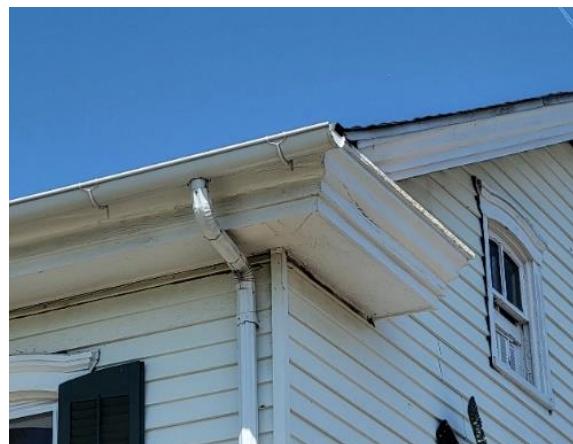
- a. **Preservation:** Preserve roofs and roof elements that are significant to a building's historic character, including form, shape, pitch, materials, and decorative features such as gables, dormers, turrets, and chimneys.
- b. **Gable and Eave Details:** Preserve historic detailing at gable ends, cornices, barge boards, and eaves. Leave historically-exposed rafter ends and eaves open and uncovered.
- c. **Removals:** Only roof elements that are not historic or heavily deteriorated should be removed.
- d. **Deteriorated Features:** Deteriorated roof features and detailing that require replacement should be replaced with features that match the material, form,

shape, function, historic polychromatic features (specifically slate roofs) and size of the original.

- e. **Roof-top Additions:** Roof-top additions or decks, other than appropriately scaled dormers, discussed below, are not appropriate on existing historic buildings within the VPA.

## Roof Maintenance and Repair

- a. **Annual Inspection:** Inspect roofs on an annual basis to ensure all roof surfaces, flashing, gutters, and downspouts are watertight and draining properly. Clean gutters, downspouts, and areas with flashing every spring and fall at minimum to remove leaves and debris. Check that flashing is intact at dormers, chimneys, parapets, and projections as well as along valleys created by intersecting slopes.
- b. **Timely Repair:** Repair leaking roofs as soon as possible. If repairs are not made quickly, adjacent building materials will rapidly deteriorate.
- c. **Temporary Coverings:** When faced with a leaking roof, protect materials with temporary coverings, such as tarps or roll roofing, until permanent repairs can be made. Temporary coverings will help slow deterioration of surrounding building materials.
- d. **Selective Repair:** Whenever possible, selectively repair deteriorated sections of historic roofing material rather than completely replacing the roof.



*A properly maintained roof and drainage system will help protect fine historic detailing, such as the molded cornice and eave pictured here. (Pearson House, 114 Pottstown Pike).*

## Roofing Replacement

- a. **Historic Roofing:** Whenever possible, replace historic roofing materials such as slate or metal with new materials that match the existing.
- b. **Slate Roofs:** Slate roofs are present on at least one building in the VPA and should be preserved whenever possible. Slate roofs were installed historically for their visual appeal and longevity. Slate varies in color, shape, pattern, and detailing, and should be replaced in-kind, from the same quarry or geologic formation, if possible. Generally, replacement of individual slates should be undertaken before replacement of the entire roof.
- c. **Substitute Materials:** When in-kind replacement of historic roofing materials is not feasible, install substitute materials that are visually, physically, and chemically compatible with the historic roof materials. New materials should match historic materials in color, texture, size, shape, profile, and general appearance. For example, synthetic slate may be appropriate provided the visual characteristics of the replacement are similar to the historic roof.
- d. **Metal Replacement:** Replacement metal roofing should match the original metal roof in layout, configuration, and appearance of the seams and trim.
- e. **Metal Replacement of Shingle Roofs:** Replacement of conventional shingle roofs with new metal roofing may be appropriate provided that the new metal roofing approximates the appearance of historic standing seam metal roofs and that roof colors are restrained and compatible with the character of the building and/or the VPA.
- f. **Wood Shingles:** Though few in number in the VPA, wood shingles should be replaced in-kind. Replacing asphalt roofs with wood

shingles is generally acceptable.

- g. **Asphalt Shingles:** Contemporary asphalt shingles are an appropriate roofing material for pitched roofs throughout the VPA. In general, shingle colors should be dark grey, brown, or black. Light-colored shingles are not appropriate.



*Few wood shingle roofs remain in the VPA.*

- h. **Flat Roofs:** Flat or gently sloping roofs not visible from the ground may be replaced with appropriate contemporary roofing systems such as EPDM/rubber membrane roofing.
- i. **Removals and Substrates:** When replacing roofing, remove all existing roofing material and inspect and repair roofing substrates, such as wood and waterproof underlayment. New roofing should never be applied over old roofing.
- j. **Protection:** During roof replacement, protect adjacent historic features such as dormers, cornices, eaves, trim, windows, and chimneys from possible construction damage.

## Roof Reconstruction

- a. **Reconstruction:** When historic roof features are to be replaced or when missing features are to be reconstructed, use physical and/or historical documentation to accurately ascertain their materials, form, and detailing. When sufficient evidence is not available, design new roofs and roof features to be compatible with the architectural character of the building.

- b. **Documentation:** Document any existing historic roof feature that is to be removed, replaced, or reconstructed with photographs prior to the removal.



*Cross-gabled roofs, as pictured, are not common on historic buildings within the VPA. Note the shed dormer at the rear of the building. (Joseph Grow House, 230 Byers Road).*

## Dormers

- a. **New Dormers:** Gable and shed roofed dormers of various types are common throughout the VPA. Some are original, but some may have been added to create usable space at the attic level. The addition of new dormers to existing roofs may thus be appropriate.
- b. **Primary Facades:** Dormers should not be installed on primary facades if they were not historically present on the facade.
- c. **Secondary Facades:** New dormers may be constructed on secondary or rear facades provided they are appropriately sized and located and do not dramatically alter the character of the roof and the building.
- d. **Dormer Design:** New dormers should be appropriately scaled and located to maintain the dominant roof form. Locate dormers away from top, side, and eave lines so that the overall roof form is visually apparent. Use matching or complementary materials, forms, and detailing to those of

other portions of the building. New dormers should limit the removal of historic material and should not damage or visually obscure other historic building fabric.

- e. **Windows:** Windows in new dormers should complement the character of historic windows in the building, though they need not precisely replicate them.
- f. **Maintenance:** Maintain dormers in good condition for appearance and to prevent water infiltration. Pay special attention to flashing locations where the dormer meets the roof.
- g. **Synthetic Materials:** Synthetic siding and trim materials such as cement fiber board and polymers may be used for new or existing dormers that are difficult to access, inspect, and maintain. Vinyl and aluminum siding are not recommended. See the section on Wood Siding, Details, and Trim, below, for appropriate use.



*Contemporary K-style (molding shaped) gutter was installed on these buildings.*

## Gutters and Downspouts

- a. **Preserve and Maintain:** Preserve and maintain historic gutters, downspouts, and related features on buildings where they are character defining features.
- b. **Replacement:** Where historic gutters or downspouts are missing or must be replaced, the new gutters and downspouts should match the historic ones in type,

material, profile, color, and finish.

- c. **Missing Downspouts:** Replace missing or damaged downspouts as quickly as possible to prevent damage to walls, trim, foundations, and interiors.
- d. **Historic Detailing:** Preserve and retain historic building details at eaves, walls, and other locations when installing new or replacement gutters. Do not remove, alter, damage, or obscure historic detailing.
- e. **New Gutters:** New gutters and downspouts can be installed on historic buildings where they have not existed before when the gutters and downspouts are needed to prevent damage to other historic building features such as wood or masonry walls and trim, or for safety reasons.
- f. **Design:** The style and material of new gutters and downspouts should be sensitive to the historic roof characteristics, including roof edge, cornice, and trim. Half-round gutters and round downspouts are preferred. Contemporary K-style gutters may be appropriate in some locations.
- g. **Built-in Gutters:** Preserve built-in gutters whenever possible. Where built-in gutters are poorly designed and causing damage to the eave, cornice, or wall, replacement may be considered.
- h. **Replacing Built-in Gutters:** Where built-in gutters are to be replaced by hanging gutters, the built-in gutters should be roofed over and the hanging gutters attached to the fascia board at the eaves of the roof.
- i. **Materials:** Various metals are available for gutters and downspouts, including copper, terne, aluminum, and galvanized metal. Metal painted or baked finishes should complement the color of the historic building. Vinyl gutters and downspouts are not recommended.
- j. **Ground Level:** Direct downspouts to convey water away from the building foundation at ground level. Grade soil to slope away from the building and use splash blocks, extenders, underground piping, or other means as necessary.

## Skylights

- a. **Skylight Location:** Skylights may be installed preferably located facing the rear of the building. Skylights may be installed on side-facing roof planes provided they are limited in size and number and do not adversely affect the character and appearance of the building. Skylights should not be installed on primary facades facing the street.
- b. **Skylight Type:** Skylights should be flat, low, and flush with the roof plane (not “domed” type). Skylight frames should be similar in color to that of the roofing material.

## Mechanical Elements

- a. **Equipment:** Modern rooftop elements, such as mechanical units, vents, ducts, solar panels, antennae, and satellite dishes, when necessary, should be located at the rear of the building such that they are not visible from the street. Where prominently visible and where and if architecturally appropriate, install a visual buffer.
- b. **Bathroom Vents:** Bathroom vents may be installed where needed on any roof surface but should be of material and color to minimize their appearance.

## Chimneys

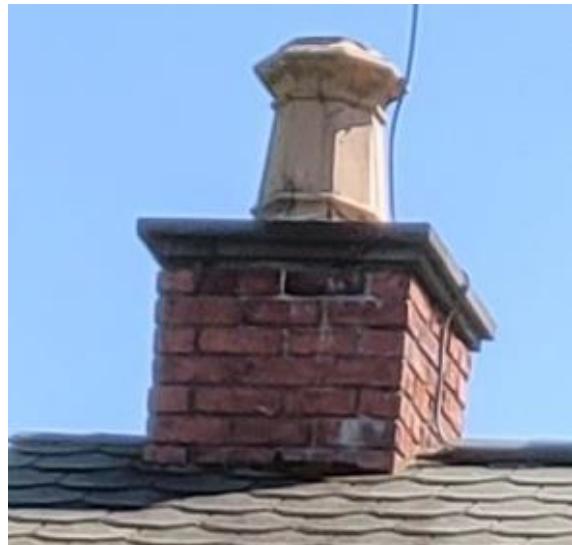
- a. **Inspection:** Chimneys should be inspected annually. Ideally, inspections should be conducted from the roof during dry weather. Preliminary inspections can take place from the ground.
- b. **Condition:** Evidence of movement, leaning, or cracking should be addressed immediately. These issues can lead to other material and architectural problems. If a chimney appears unstable, a structural engineer should be consulted to determine an appropriate treatment.
- c. **Chimney Repair:** Chimney repairs and

replacement should always be undertaken by a professional experienced in historic masonry. Retain masonry coursing (patterns in rows of laid brick), ornamental brickwork, corbelling (projecting courses of brick) and any decorative features during chimney repair. See the Masonry section of these guidelines.

- d. **Missing Materials:** Missing chimney materials should be replaced and matched in-kind.
- e. **Stucco:** Stucco veneers can show cracks and holes over time. These should be patched immediately as they can quickly lead to larger cracks where moisture can accumulate.
- f. **Reconstruction:** Where severe structural issues cause a safety concern or building issue, the chimney should be documented, dismantled and reconstructed to match the original. Existing materials should be salvaged when possible for reuse.
- g. **Cap Unused Chimneys:** Cap unused historic chimneys with an appropriate material, such as flagstone or thin concrete slab, to keep water out. Contemporary metal cap flashing may be appropriate as long as it does not adversely affect the historic appearance of the building.
- h. **Decorative Chimney Caps:** Where chimney caps are a visible design detail, replace the historic materials to match existing.



*Open mortar joints may allow water to penetrate and deteriorate the brickwork.*



*Common utilitarian chimney with original brick and terra cotta chimney pot.*



*A variety of metal cap types have been installed on chimneys, not historic but acceptable for fire safety. This metal vent system is part of a rebuilt chimney with brick reasonably similar to the appearance of historic brick.*



*A masonry plate was added to the top of this corbelled brick chimney to retard downdrafts and repel water. Although altering the historic appearance of the chimney, the design treatment is appropriate.*

## WOOD SIDING, DETAILS, AND TRIM

Wood was one of the predominant material used in the construction and exterior detailing of residences within the VPA, however much of it is now covered with synthetic siding. Wood siding was mainly horizontal clapboard, which as noted, is often covered by aluminum or vinyl siding replicating the wood clapboard beneath. Wood was and still is commonly used for trim, eaves, bargeboards, gable elements, moldings, columns, and other exterior features.

Wood siding conveys the texture and feel of the building's exterior particularly when augmented by fine wood detailing. The first goal regarding the treatment of exterior woodwork is the preservation of authentic historic building fabric.



*Many types of wood elements are found throughout the VPA. This house has wooden eaves, brackets, siding, and shutters.*

Wood siding protects a building's underlying structural framing and interior materials from weather, primarily by shedding rain and wind-blown water, but also by withstanding the effects of intense sunlight. Siding must be permeable to water vapor, allowing the vapor to pass from the interior of the building to the exterior. Siding that fails to allow the passage of water vapor will be susceptible to condensation within the wall with resulting deterioration, rot, and peeling paint.

Historically, wood siding was installed over wood board sheathing. By the early twentieth century, the sheathing was usually covered with building paper that was resistant to water penetrating from the exterior but permeable to the passage of water vapor from the interior. Today, this function is performed by synthetic materials such as Tyvek. The wood siding serves as the first line of defense against rain water while the building sheathing is the final line of defense. The overlapping joints of wood siding should never be caulked or have sealant installed. The open joints allow the passage of the interior water vapor. If they are sealed, the water will pass through the wood causing the delamination of its painted coating.

Wood siding and detailing should be protected from deterioration by water with properly applied paint. When thus protected and properly maintained, wood siding is durable, serviceable, and can last indefinitely.

## Historic Wood Siding and Trim

- a. **Preservation:** Retain, repair, and maintain authentic wood siding, trim, and detailing that is significant to the historic character of a building.
- b. **Repair:** When wood siding or trim experiences deterioration, it is preferable to repair the element in place by removal of the deteriorated portion only and patching with new wood to match or an epoxy consolidant. Retain historic materials to the greatest extent possible.
- c. **Replacement:** When wood siding or trim is deteriorated beyond repair, replacement wood should match the original the same type or species (if possible), width, profile, shape, and appearance. Deterioration is evident when the surface of the wood is soft, rotted, and unstable.



*Decorative wood quoins at corners are commonly found in Byers. This Italianate feature should be maintained as much as possible, and if elements of the original wood must be replaced, it is recommended to have replacement wood of the same shape and character.*

- d. **Substitute Materials:** If substitute materials are necessary, they should convey the same visual appearance of the original feature, including size, shape and texture. Cement fiber products, such as Hardie Plank, is an appropriate substitute, as is Diamond Kote, an engineered wood product. Vinyl and aluminum are generally not recommended, but may be a reasonable alternative in certain circumstances.

- e. **Flashing Repairs:** Repair flashing, gutters and cracks in siding to reduce deterioration of historic wood siding and other elements due to water penetration.
- f. **Missing Features:** If a wood feature is missing, replace it with a new feature based on accurate documentation of the original, or a new design compatible in style, scale, size, material, and texture with the historic building and neighboring area of the VPA.
- g. **Authenticity:** Do not introduce new wood features or details that create a false historical appearance.
- h. **Painted Coatings:** Protect historic exterior woodwork from weathering due to rain or sun with a properly applied painted coating. Maintain painted wood surfaces in good condition. Remove peeling paint and repaint when necessary. Insure the overlapping siding boards are not sealed with paint (or caulked), to allow water vapor to escape from the interior.
- i. **Paint Removal:** Removal of older layers of intact paint is not recommended but if undertaken, carefully remove older paint by thermal means or a mild chemical stripper.
- j. **Power Washing:** Power washing of exterior wood walls or detailing is not recommended. Power washing causes exposed wood to absorb significant amounts of moisture. The absorbed moisture will cause paint failure, especially if it is applied while the wood is still damp. Power washing raises wood grain and drives water into the building's frame.
- k. **Paint Application:** Apply paint with a brush; do not spray. Brushing results in a thicker coat with better adhesion than spraying or rolling.
- l. **Natural Finishes:** Do not strip paint from existing features to bare wood for application of clear stains or natural finishes.

- m. **Sealant:** Sealant should be installed at vertical joints where wood meets a dissimilar material. Do not apply sealant or caulk to the horizontal joints in wood siding.

## Covering Wood Siding

Synthetic sidings such as vinyl and aluminum are not recommended for use on historic buildings, especially as a covering over authentic wood elements. Over time, synthetic coverings degrade, require replacement, and could be more expensive than proper maintenance of wood siding. Synthetic coverings may prevent proper ventilation of the wall, causing water to condense and build up on the interior. Because they do not show deterioration, synthetic sidings can mask deterioration that may be occurring to materials underneath.

- a. **Preservation:** Retention and exposure of authentic wood siding and detailing is always preferred over the installation of synthetic coverings.
- b. **Coverings:** Artificial stone, stucco, asphalt shingles, and vertical plywood siding are also not appropriate materials to cover wood siding or other features on historic buildings.
- c. **Removal of Coverings:** When authentic siding and detailing have previously been covered with other materials, consider exposing and restoring the authentic wood elements beneath.
- d. **Existing Synthetic Siding:** Existing synthetic siding, such as aluminum, vinyl or fiber cement can be repaired in-kind.

## Replacement Synthetic Materials

- a. **Preservation:** Synthetic materials such as cement fiber siding can be used as replacement for wood siding, if repair or replacement of the historic wood siding is not feasible.
- b. **Complex Details:** Glass fiber reinforced concrete is an appropriate material for the

replication of complex detailed elements of a historic building when the authentic elements are deteriorated or missing and must be replaced.

- c. **Vulnerable Locations:** In rare and specific circumstances, the use of cement board, polymers, or fly ash composites or other materials as a replacement for deteriorated or vulnerable wood may be appropriate where conditions are unusually susceptible to damage or deterioration and difficult to properly maintain.

## Synthetic Materials for New Additions

- a. **Synthetic Materials:** Synthetic materials such as cement board, polymers, or fly ash composites may be used to simulate wood siding and details in new additions.
- b. **Aluminum and Vinyl Siding:** Aluminum siding or vinyl siding may be appropriate for new construction in locations remote from the main views of a historic building, such as the rear of a building or on new dormers on the side or rear of a building's roof. Aluminum and vinyl siding are generally not recommended elsewhere, aside from in-kind repair and replacement.

## ENTRANCES AND DOORWAYS

Entrances and doorways are among the most visible and character defining features of a historic building. Within the VPA, most principal entrances face the street and are prominent due to the close proximity of buildings to the public way. They often include walks, steps, small porches or sheltering hoods, doorways, sidelights, and other features. Historic entrances should never be abandoned or filled in even when rarely used.



*Historic entrances of the Byers Hotel.*

Doorways are comprised of frames, sills, doors, hardware, sidelights, and other features and can become worn through constant use. Over time, small problems such as sticking doors, missing fasteners, broken glass, or worn finishes can make historic doors seem unattractive, sometimes leading to more serious deterioration. However, historic doors and doorways are usually better built than contemporary products and should be preserved and maintained. Historic wood doors are typically built of harder and heavier wood than commonly in use today and are thicker and more substantial. Regular maintenance can be as simple as cleaning, caring of hardware, limited paint removal, and application of protective coatings. Repair of an existing historic door is often more cost effective than replacing it with a new one.



*Entrances play a strong role in the visual character of historic buildings (Eliza March House, 181 Byers Road).*

## Historic Entrances

- a. **Preservation:** Preserve, repair, and maintain historic entrances that are significant to the building and contribute to the building's architectural character.
- b. **Entrance Components:** Preserve and retain the components of historic entrances such as walks, steps, railings, porches, hoods, posts, columns, doorways, and detailing, if historic.
- c. **Primary Entrances:** Preserve and retain the primary entrances of buildings in their historic configurations. Later changes to entrances that have become significant to the building should be retained.

- d. **Secondary Entrances:** Preserve and retain secondary entrances on the side and rear of buildings to the maximum extent possible. Alterations to secondary entrances should be compatible with the character of the entrance and the building, as with any addition or alteration to a historic building.
- e. **Closing Historic Entrances:** Removing, closing or filling-in historic entrances is not recommended. Preserve historic entrances and their contributing features even when no longer in use to preserve character and significance of the facade.
- f. **New Entrances:** Do not create new entrances on primary facades. If needed, locate new entrances on side or rear facades in locations that will result in a minimal loss of historic materials and features. Design new entrances to be compatible in size, scale, shape, proportion, material, and massing with the existing building features.
- g. **Enclosure:** Do not add enclosed exterior vestibules to primary entrances. Enclosed vestibules may be added to secondary entrances but should be compatible with the character of the building.

## Historic Doorways and Detailing

- a. **Preservation:** Preserve, repair, and maintain historic doorways and doorway components such as doorframes, sills, doors, hardware, sidelights, fanlights, and other features.
- b. **Retain Historic Doors:** Retain historic doors whenever possible. Do not replace a historic door if repair and maintenance can improve its performance and preserve its physical and historical integrity.
- c. **Replacement Doors:** Historic doors that are deteriorated beyond repair and non-historic doors should be replaced with new doors that are architecturally appropriate to the character and period of the building.



Wood basement door.

- d. **Replication:** When possible, where existing doors are to be replaced and historical evidence is available, install new doors that replicate the design, detailing, arrangement of paneling, and glazing of the historic doors.
- e. **Inappropriate Doors:** When replacing non-original, non-historic doors, select new doors whose designs are compatible with the building's style and architectural features.
- f. **Doorway Configuration:** Maintain the original size, shape, and configuration of the historic doorway.
- g. **Doorway Alterations:** Where doorways are to be altered for functional or other purposes, such as to add a vestibule to a secondary entrance, retain as much original historic fabric and detailing as possible. Design alterations to include and

respect historic elements, materials, and configurations.

- h. **Missing Features:** Use historical documentation when reconstructing a missing doorway feature. If no sufficient evidence available, a contemporary design should be installed that is compatible with the architectural character of the building.



*Historic wood doorway with solid paneled Italianate style door on the Todd House, displaying divided sidelights, transom, wood trim and wooden quoins.*

- i. **Historic Hardware:** Retain and maintain historic door hardware to the maximum extent possible.
- j. **Weather Stripping:** When needed, install weather stripping around door frames to increase energy efficiency and help protect a door's historic features. New weather stripping should not alter the character or appearance of the doorway.

## Storm and Screen Doors

- a. **Storm Doors:** Storm or screen doors may be installed at historic doorways to improve

thermal performance and/or ventilation.

- b. **Wood Storm Doors:** Wood storm or screen doors custom fabricated to fit the historic door frame are preferred, especially for primary entrances. Determine whether the doorway was originally designed to accommodate storm or screen doors and work with the designed configuration.
- d. **Matching Existing Doorways:** New storm and screen doors should match the size and shape of the door opening, use a narrow-frame design with clear glass (and/or screen) that enables the inner door to be mostly visible and a finish that matches or complements the inner door.

## WINDOWS AND WINDOW TREATMENTS

Windows are among the most significant and character defining features of a building. Their preservation and treatment should be a high priority. The arrangement of windows on a building's facade is a key aspect of its architectural design. The manner in which individual windows are composed - their type, organization, function, operation, and internal division - are distinguishing elements of the building's architectural expression and are often specifically characteristic of the style and era of its construction.

The preservation of historic windows should be a priority. Historic windows should not be replaced unless they are deteriorated to such an extent that reasonable repair and rehabilitation are not possible or economically feasible. The most common type of window within the VPA is the wood double hung sash window, common to residential construction since 1725.



*Typical Italianate style, two-over-two sash window with arched head, authentic flanking shutters shaped to fit, and decorative cap trim and surround.*

When properly maintained, historic wood double hung windows can last indefinitely. Historic wood windows are usually built better than new replacement windows and can often be repaired to working order. Because they are better constructed, they may be more cost effective over the long run. Historic windows can also be made as energy efficient as new windows through the installation of weather stripping and, if desired, storm windows.

Options for window repair should be assessed before replacement windows are considered. Repair is preferable over replacement. Often, windows that look like they are in poor condition are in fact repairable. Consulting with a historic preservation professional is recommended. If replacement windows are necessary, the new windows should match the type, size, and appearance of the historic windows.

## Historic Windows – Preservation, Repair, Replacement

- a. **Preservation:** As a high priority and when possible, retain, preserve, and maintain authentic original or historic windows.
- b. **Later Windows:** Retain later replacement windows from the various periods within the VPA unless the windows negatively impact the character and use of the building.
- c. **Window Elements:** Retain the elements of preserved windows that contribute to a building's architectural character. These may include frames, sash, muntins, glazing, hardware, sills, lintels, and other features. Alteration or removal of such features diminishes a building's architectural integrity.



*Windows are among the most visible and significant character defining features of a building (A. M. F. Stiteler House, 211 Byers Road, prior to a fire and subsequent demolition in 2024).*

- d. **Window Deterioration:** Windows significant to the historic development of a building should not be replaced unless they are missing or deteriorated beyond feasible repair. Peeling paint, broken glass, stuck sash, and high air infiltration are all problems that can be remedied and do not constitute valid reasons for replacement.
- e. **Window Repair:** Repair historic windows, retaining original materials and fabrication

techniques. Replace missing or broken pieces in-kind. Epoxy consolidates may be used to strengthen and save deteriorated wood at frames and sills.



*Period windows such as this Prairie window in Byers contribute to the historic appearance of many historic houses. These windows should be retained as much as possible, particularly on the main elevation of the house (Woodland House).*

- f. **Limited Replacement:** Avoid replacing an entire window if limited replacement of deteriorated parts is possible. Many elements that are particularly susceptible to weathering, such as muntins, can be replaced without replacing the whole window. Use surviving prototypes to reconstruct missing window elements. Replacement elements should be visually, chemically, and physically compatible with the remaining portions of the window.



*Some buildings within the VPA appear to retain authentic historic windows and detailing dating to the period of their construction (Todd House, Byers Station Historic District*

- g. **Window Hardware:** Window hardware and operating mechanisms should be retained but are often in need of repair. Elements such as the sash locks, cords, and weights of historic wood double hung windows can be repaired and, if necessary, replaced in-kind.
- h. **Window Openings:** Enlarging, reducing, or filling in historic window openings is not appropriate on the main facades of historic buildings, and should be avoided on all facades if possible.

## Storm Windows

- a. **Storm Window Types:** Exterior and interior storm windows are appropriate for installation on historic buildings should they be desired to increase thermal performance.
- b. **Exterior Storm Windows:** Conventional exterior metal storm windows are

acceptable for application to historic windows because they not only provide thermal insulation, but also help protect and preserve the historic windows, even though they may somewhat alter exterior appearance.

- c. **Storm Window Design:** Exterior storm windows should match the full size and the shape of the historic window. The size and locations of storm windows and screen rails should match those of the historic window sash behind. Storm window finishes should be selected to match the color of the historic window frame.
- d. **Interior Storm Windows:** Various types of interior storm windows may be considered and generally do not affect the exterior appearance of the building. Fixed and removable magnetic storm windows are inexpensive, fully reversible, and may be removed during seasons when windows should be operable.



*This exterior metal storm window is discretely mounted on the historic window frame, matching its size, and is barely visible.*

## Replacement Windows

- a. **Replacement:** Replace historic windows that are severely deteriorated and cannot be repaired; or that are missing; or that have already been replaced with windows that are not historically significant to the building and are inappropriate to its character. Replacement windows should closely match the historic windows being replaced.
- b. **Reproduction Windows:** Whenever possible, replacement windows should closely match the appearance of the historic windows that were present. It is preferable that replacement windows be accurate reproductions of historic windows using historical, pictorial, and physical documentation in their design.
- c. **Manufactured Windows:** When the installation of accurate reproduction windows is not the selected option, a new similar and compatible manufactured window may be installed provided that the new replacement window is consistent with the historic character of the building.
- d. **Research:** Where historic windows are not present to provide a model, undertake research to determine the most historically appropriate configuration and profile of the replacement window.
- e. **Replacement Sash:** When possible, replace only the sash of the window, leaving the historic frame and windowsill intact. Install weather stripping between the new sash and the historic frame to enhance thermal performance. In many cases, thin insulating glass can be installed in the sash while retaining accurate historic muntin profiles.
- f. **Window Size:** New windows should be custom fabricated to match the full size of the historic window openings. Do not install

new windows that are smaller than the full size of the historic window opening.



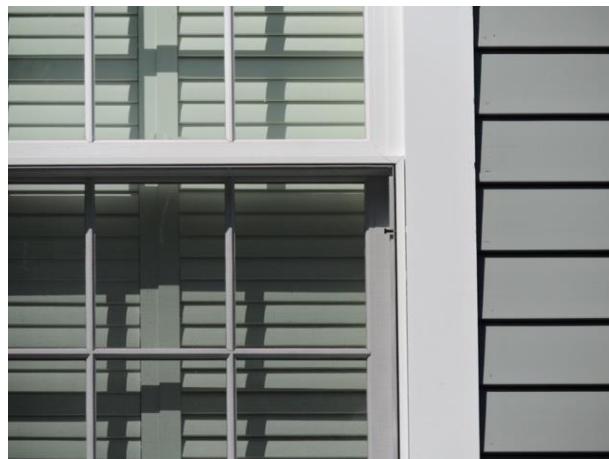
*Replacement windows should match the full size of the historic window opening.*

- g. **Frame, Sill, and Trim:** When installing replacement window units, modify or remove the existing frame to allow the new frame to match the existing size and location. Remove and reinstall interior and exterior trim to allow for placement of the new window. Retain existing sills or match existing sill detailing.
- h. **Window Material and Finish:** It is preferable that historic wood windows be replaced with new wood windows with a painted finish. However, certain types of manufactured windows with metal-clad sash or factory-coated wood may also be appropriate.
- i. **Vinyl:** Vinyl replacement windows are generally not appropriate as replacements for historic windows because they are generally incompatible in appearance with historic buildings in the VPA.

- j. **Simulated Divided Lights:** Simulated divided lights, whether “pop-in” or permanent, located on the inside of the sash, are not appropriate for houses older than 1955.
- k. **Window Type and Configuration:** Installation of replacement windows of the same type, sash configuration, and operation as the historic windows is generally appropriate. Historic double hung windows should be replaced with new double hung windows; historic casement windows should be replaced with new casement windows; historic awning windows should be replaced with new awning windows; historic fixed windows should be replaced with new fixed windows.
- l. **Insulating Glass:** The use of insulating glass to increase the thermal performance of windows may be appropriate. Minimize glass thickness to approximate the appearance of historic panes.



*Authentic wood reproduction windows are preferred, although manufactured wood windows with finished metal cladding or factory-coatings may be appropriate.*



*Historic muntin (divider) configurations should be used in the replacement windows, with profiles and details that replicate the historic appearance as closely as possible.*

- m. **Muntins:** Match the muntin (divider) configuration of the historic windows being replaced or what is appropriate for the style of the building. The use of true divided lights is preferred. However, certain types of false muntins simulating divided lights may be appropriate provided they are integral to the sash design and located, at a minimum, on the exterior of the sash. They should not easily be identified as a false or simulated feature.
- n. **Inappropriate Window Types:** Installing new contemporary windows that do not match the character of the historic building, such as stock residential windows, bay or picture windows, glass block, Jalousie windows are generally not appropriate.

## Shutters

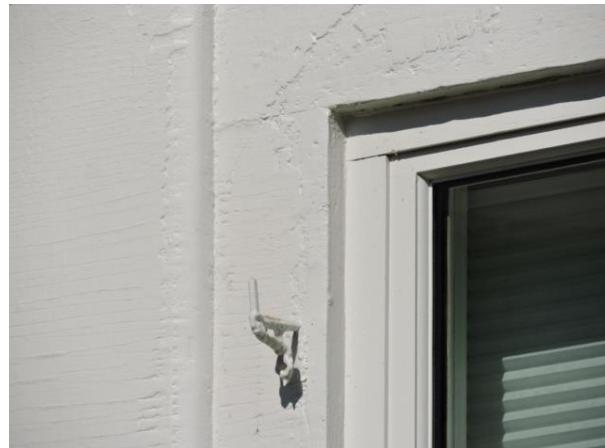
- a. **Preservation:** Retain, preserve, and maintain historic shutters and shutter hardware when they are present. Retain shutter hardware even when shutters are missing.
- b. **Shutter Installation:** The installation of historically appropriate shutters on historic windows is encouraged. In general, install shutters only where they existed historically.

and where appropriate to the architectural style of the house.

- c. **Shutter Size and Configuration:** New shutters should match the height and width of the window opening where they are being installed. Shutters should be mounted to be operational or appear to be operational.
- d. **Shutter Materials and Design:** Shutters should be of wood construction, but high-end composites closely simulating wood may be appropriate, and either one should be protected with a painted coating. Shutter form and design should be similar to what existed historically, if known. Panels on historic shutters relate to the sizes of panels on the front door.



*Shutters should match the height and width of the window opening and be operable or at least appear to be operable.*



*Historic shutter hardware such as this metal pintle should be preserved even when not used.*



*Faux shutters are not recommended.*

When information is not available, design shutters to be appropriate to the period and style of the historic building.

- e. **Inappropriate Locations:** Do not install shutters on windows that would not have had them, such as bay windows, casement windows, or fixed windows.
- f. **Inappropriate Sizes:** Do not install shutters that do not match the size and shape of the window on which they are installed.

- g. **Shutter Mounting:** Install shutters with shutter hardware typical of the period of the building. Do not screw, bolt, or attach shutters directly onto building walls without appropriate hardware. Shutters should stand slightly off the wall and window frame surfaces.

### New Window Openings in an Existing Historic Facade

- a. **New Window Openings:** New window openings should not be added to the primary facades. If necessary, new windows should only be added to side or rear facades that are not readily visible from the street.
- b. **New Window Design:** If new window openings are added to a side or rear facade, the type, size, placement, and detailing of the windows should be complementary with the design and detailing of the existing facade.



*In this example, despite the presence of authentic shutter hardware on the frame, shutters are mounted flat on the walls adjacent to the window, which could have been avoided.*

### HISTORIC PORCHES

Porches are a significant character defining feature of buildings within the VPA and are present on both primary and secondary facades. Their preservation helps maintain the character of the building and streetscape. In some cases, they were added to earlier buildings but remain significant to the building's historical development. They were common to buildings in the nineteenth and early twentieth centuries, before the introduction of air conditioning.

Typically, porches feature common architectural elements, such as a sheltering roof structure, brackets or spandrels, posts, railings, floor assemblies, and steps. The design and detailing of the porch usually reflect the architectural style and treatment prevalent elsewhere on the building. Porches contribute to the architectural integrity of a building and should be preserved. Generally constructed of wood, porches can deteriorate quickly due to exposure to the elements. Regular maintenance and upkeep is necessary to address deterioration before it escalates to a large-scale issue.



*This fine porch is a major expressive detail of the Italianate style (Emeretta Green House, 219 Byers Road).*

- a. **Preservation:** Preserve, repair, and maintain historic porches associated with buildings within the VPA.
- b. **Repair:** Repair damaged or deteriorated elements of historic porches. Repair is always preferred over replacement, and limited replacement of deteriorated elements is always preferred over complete replacement of an entire porch.
- c. **Replacement:** When deteriorated beyond repair, individual porch elements should be replaced in-kind, where feasible, to match original visual and physical properties, including materials, design, and scale.
- d. **Posts and Railings:** Porch posts, railings, balusters, and handrails are functional and decorative and should be preserved and maintained. Damaged or deteriorated porch posts and railings should be repaired, when possible, rather than replaced.



*Interesting historic porch details like this starburst should be carefully maintained and preserved.*



*Historic porch details often disappear when a*

*porch is rebuilt because the various elements are no longer in production or expensive to replicate.*



*Wood porches are prominent features of many houses within the VPA. Exposed to the weather, their wood features require ongoing maintenance and occasional repair and replacement (Woodland House, 204 Byers Road, Byers Station Historic District).*

- e. **Porch Ceilings:** Repair and replacement of porch ceilings should be based on their historic prototypes and should be undertaken in-kind. Sections of damaged or deteriorated ceilings should be completely removed prior to installation of the new material. New work should never be installed over damaged material or obscure historic features that contribute to the building's character.
- f. **Replacement Materials:** Cedar, which is highly weather resistant, is an appropriate replacement material for posts, railings, and decorative woodwork for porches. When used, it or any wood or other material should be painted. Unpainted wood, even pressure treated wood, is not appropriate.



An appropriate example of a rebuilt porch.

- g. **Contemporary Materials:** Replacing historic wood posts or railings with incompatible contemporary plastic or metal columns, posts, railings, or balusters, is not recommended.
- h. **Conjectural Features:** Conjectural features should not be added to a historic porch unless there is evidence that they were originally present.
- i. **Replacement in Entirety:** If a historic porch is severely deteriorated or structurally unsound, when feasible the entire porch may be removed and replaced in-kind. New work should closely match historic conditions. Replacement posts, railings and balusters should match in material, profile, and configuration.
- j. **Porch Additions:** New porches may be added to side or rear facades but should be designed to complement the historic building with similar configurations and detailing. Porches should not be added to a primary facade if the building did not historically have a porch.



Historic front porch on the Greek Revival-style Butler House (122 Pottstown Pike, Eagle).



*This porch has two-dimensional balusters, which were popular during the 1870s and 1880s. These balusters are character-defining elements of the porch and contribute to the building's original appearance. Also note the skirt enclosing the crawlspace beneath the porch (Sheetz House, 102 Pottstown Pike, Eagle).*

## Porch Flooring

- a. **Porch Flooring:** Wood porch floors can wear and weather quickly, depending on use and exposure. Replacing limited sections of deteriorated flooring is preferable to total replacement. Replacement floorboards should closely match the dimensions of historic wood floorboards, which were typically between 3/4- and 1-inch thick.
- b. **Replacement Floor Materials:** Mahogany,

which is very hard, is a good material for replacing wood porch flooring and may be stained or painted. Synthetic flooring materials such as polymers are not encouraged. Treated lumber may be used for structural elements and elements in contact with masonry in the reconstruction of porches; though if exposed to view, it should be painted.

- c. **Floor Installation:** Wood porch flooring should be laid perpendicular to the building wall and extend to the drip edge of the porch. A minimal slope away from the building to facilitate drainage is needed. A maximum gap of 1/16-inch should be left between boards to allow for expansion. Boards should be fastened with screws, not nails, to prevent cupping and bouncing. Wood edging should be applied to the exposed ends of floorboards to prevent moisture from entering the end grain. Surface coatings such as paint and stains that help prolong the color and condition of the wood are appropriate.
- d. **Crawlspace Enclosure (Skirt):** The use of semi-open materials such as wood lattice and grills to enclose the space between a porch floor and the ground, providing adequate ventilation, is appropriate. Enclosures should be designed to be visually appropriate to existing porch detailing. Avoid direct contact between wood members and the ground.



*Porch with a lattice skirt.*

### **Porch Steps**

- a. **Wood Steps:** Wood steps on nineteenth century buildings may have been replaced a number of times over the building's lifetime due to wear and exposure. The replacement of wood steps should be based on physical evidence and historic documentation if available, and not necessarily the current steps, which may not be an accurate copy of the original.
- b. **Stone Base:** To control the deterioration of wood steps, installation of a stone or concrete plinth (base) underneath the steps structure is recommended. Not only does it support the bottom of the steps, but prevents the wood from resting on the soil.
- c. **Masonry Steps:** Masonry steps may be found in the VPA. Treatment and repair should follow the recommendations contained in the masonry section of these guidelines.



*These brick steps have a railing that is consistent with the porch balustrade*

## Porch Enclosure

- a. **Interior Spaces:** Historic porches should not be enclosed with walls and windows to create or expand interior living space.
- b. **Limited Enclosure:** Generally, historic porches on the primary facade of a historic building should not be enclosed. On secondary or rear elevations, porch

enclosures may be appropriate. Limited enclosures involve installation of glass partitions inside of retained posts and railings, minimizing necessary wood structure. The installation should retain the visibility of historic details and maintain the original transparent and open appearance of the porch. It should be fully reversible.

## Accessibility

Property owners may need to alter buildings to accommodate people with disabilities, whether voluntarily or to meet requirements of the Americans with Disabilities Act (ADA). The principles of these *Guidelines* should be used, where possible, to appropriately locate and design ADA structure(s) to minimize impact on the historic resource and its historic setting. In considering such alterations, ask if a ramp, for example, can be located on the side or rear of a building, where it will usually be less visible or not impact character-defining architectural characteristics of the building? Can the material used, such as railings, be consistent with the appearance of similar features on the building? Can the structure include landscaping to help minimize its appearance?

## SITE FEATURES

Landscape context is central to the character of any historic neighborhood. Overall, spatial parameters of the landscape are established through the layout of the street, configurations of lots and lot lines, and the setbacks and forms of buildings, all of which may vary by neighborhood. Vegetation softens the landscape, modulates spatial character, and provides visual interest and shade.

Other features include retaining walls, steps, curbing, paving, fences, railings, lamps, and other permanent small-scaled structures. A considerable number of these features are not original historic fabric but have been added to the landscape over time, many of them in recent decades. This section addresses the importance of the overall streetscape and the shared public realm.

### Streetscape

The streetscape is within the public domain and includes the street, curbs, sidewalks, utilities, trees, and grass areas within the right of way.

Stewardship of the public streetscape is important. Changes adverse to the character of the historic neighborhood should be avoided. When changes are to be considered within the VPA by a public agency, utility, or other entity, the Historical Commission should be consulted.



*Streetscape on the north side of Byers Road in Byers.*

- a. **Identification and Assessment:** When public improvements are proposed within the VPA, historic landscape characteristics and features should be identified and the impact of proposed changes should be assessed.
- b. **Street Construction:** Assess the potential impact of street construction projects on adjacent historic landscapes and structures. Take steps to eliminate or reduce adverse impacts.
- c. **Historic Streetscape Elements:** Within the VPA, and particularly Byers, the scale of the road system is an important historic feature. Preserve major streetscape elements and characteristics, including street width and setbacks.
- d. **Circulation:** Retain historic pedestrian and vehicular circulation patterns.
- e. **Historic Character:** Avoid changes that might negatively impact the historic physical and spatial character of the streetscape and the neighborhood.

### Walkways

Walkways connect the house to the street and / or driveway. Though not necessarily historically significant, they are a visible part of the landscape.

- a. **Preservation:** Identify, retain, and



*Streetscape on the east side of Pottstown Pike (PA Route 100) in Eagle.*

preserve historic walkways, paving materials, and circulation patterns where they are present.

- b. **Pattern and Alignment:** If possible, retain the alignment, widths, and configurations of historic pedestrian walkways where they have become accepted features in the VPA.
- c. **Repair and Replacement:** When repair or replacement of materials is necessary, replace in-kind if feasible, utilizing paving materials that are similar in type, appearance, and composition.
- d. **New Walkways:** The addition of new sidewalks or walkways within a historic neighborhood may be desirable and necessary to enhance pedestrian access and connectivity. New or expanded pedestrian routes should be compatible in size, placement and materials with the existing pedestrian circulation patterns.
- e. **Concrete:** The use of concrete for new or existing walkways is appropriate. Concrete can be colored to match the muted hues of existing older concrete. Concrete using a natural sand finish for coloring is preferred.
- f. **Cast Pavers:** The use of cast pavers for new or existing walks is appropriate. Pavers should have exposed grains and be of natural colors similar to the grey of natural stone.

## Fencing

Fences are not prevalent in the VPA. Should a property owner wish to erect fencing, the placement, type, size and materials should be compatible with the historic settings of Eagle and Byers, or any historic property within the VPA.

- a. **Preservation:** Identify, retain, and preserve historic fencing.
- b. **Repair and Replacement:** Repair deteriorated portions of historic fencing

in-kind. Where replacement is necessary due to deterioration or other damage, replace historic fencing by matching the original in material, design, and installation.

- c. **New Fencing:** New fencing similar to existing design, size, materials and configurations is usually appropriate. Fencing in front yards along the sidewalk and streetscape should be of low height (approximately three feet).
- d. **Metal Fencing:** Metal fencing with narrow pickets similar to historic cast iron fencing may be appropriate.
- e. **Side and Rear Fencing:** Taller fencing may be appropriate along side and rear property lines for privacy. Vertical wood board fencing is preferred. The use of lattice tops installations is desirable.
- f. **Tall Front Fencing:** Taller fencing facing the street intended to protect rear yard areas may be appropriate but must be located in side yards beside the primary building. Tall fencing should be set back from the front façade of the residence. Tall fencing facing the street is not appropriate in front yards. Trellis style wood fencing is preferred.
- g. **Non-historic Materials:** Plastic fencing, chain link fencing, and other non-historic materials are not appropriate within Eagle or Byers.

## Lighting

Exterior site (property) lighting was not common in residential neighborhoods during the late nineteenth and early twentieth centuries. Exterior lighting in the VPA should be limited and discreet.

- a. **Flood Lighting:** The lighting of building facades and yard areas with flood lights is not recommended.

- b. **Building Features:** The limited facade lighting of individual building features such as entrances may be appropriate but should be discrete and of low intensity.
- c. **Ground Lighting:** The installation of low, ground level light fixtures at steps and along walkways may be appropriate but should be limited in extent. Fixtures should illuminate the ground, and bulbs should not be visible to pedestrians.
- d. **Fixture Style:** Metal lantern style fixtures mounted on poles or on buildings are a common form of exterior lighting within historic neighborhoods. Where lighting sources are visible, they should be of warm hue and limited strength. Many metal fixtures in use have a black finish.

## SOLAR PANELS

Sustainability is welcomed in Upper Uwchlan Township, including solar panels. Whether on roofs or ground mounted systems, solar panels are generally appropriate where they cannot be seen from the public right-of-way. (See Upper Uwchlan Zoning Code §77-6, Solar Energy Systems, for specific requirements regarding rooftop systems, ground arrays.)

### a. Types of Systems:

- 1. **Photovoltaic.** A photovoltaic system (PV system) uses one or more solar panels to convert sunlight into electricity. It consists of multiple components, including the photovoltaic modules, mechanical and electrical connections and mountings and means of regulating and/or modifying the electrical output.
- 2. **Solar Shingles.** Solar shingles, also called photovoltaic shingles, are designed to look like conventional asphalt shingles. There are several varieties, including shingle-sized solid panels that take the place of a number of conventional shingles in a strip, semi-rigid designs containing several silicon solar cells that are sized more like conventional shingles, and newer systems

using various thin film solar cell technologies that match conventional shingles both in size and flexibility.

- 3. **Freestanding.** Freestanding PV panels or freestanding arrays allow the benefits of renewable solar power without disrupting the roofline or altering the building. They are placed away from the building and connected through an underground wiring.

When planning the installation of solar panels, the overall objective is to preserve character-defining features and historic fabric of the building and setting while accommodating the need for solar access to the greatest extent possible. All solar panel installations must be considered on a case-by-case basis recognizing that the best option will depend on the characteristics of the property under consideration. The following guidelines apply to virtually all installation options.

### b. Primary Elevations

- 1. For most properties, locating solar panels on the primary facade is not recommended because it will have the greatest adverse effect on the property's character defining features and historic setting of the area. All other options should be thoroughly explored.
- 2. Utilization of low-profile solar panels is recommended. Solar shingles laminates, glazing, or similar materials should not replace original or historic materials. Use of solar systems in windows or on walls, siding, and shutters is not appropriate.
- 3. Panels should be installed flat and not alter the slope of the roof. Installation of panels must be reversible and not damage the historic integrity of the resource and VPA.
- 4. Position solar panels behind existing architectural features such as parapets, dormers, and chimneys to limit their visibility.

5. Use solar panels and mounting systems that are compatible in color to established roof materials. Mechanical equipment associated with the photovoltaic system should be treated to be as unobtrusive as possible.

#### **c. Secondary Elevations**

1. Solar panels should be installed on rear slopes or other locations not easily visible from the public right-of-way. Panels should be installed flat and not alter the slope of the roof. Installation of panels should be reversible and not damage the historic integrity of the resource.
2. Flat roof structures should have solar panels set back from the roof edge to minimize visibility. Pitch and elevation should be adjusted to reduce visibility from the public right-of-way.
3. Solar panels should be positioned behind existing architectural features such as parapets, dormers, and chimneys to limit their visibility.
4. Utilization of low-profile solar panels is recommended. Solar shingles laminates, glazing, or similar materials should not replace original or historic materials.
5. Solar panels should be positioned behind existing architectural features such as parapets, dormers, and chimneys to limit their visibility.
6. Use solar panels and mounting systems that are compatible in color to established roof materials. Mechanical equipment associated with the photovoltaic system should be treated to be as unobtrusive as possible.

#### **d. Freestanding or Detached**

1. When designing the solar system, consider its visibility from the historic building on the property, neighboring historic buildings and properties (particularly within the historic villages of Eagle and Byers) or throughout the VPA.
2. Freestanding or detached on-site solar panels should be installed in locations that minimize visibility from the public right of way. Screen solar systems from the public right of way with existing buildings and vegetation (preferably), or fencing or vegetation of suitable scale to the adjacent historic resource and/or the historic setting within the VPA.
3. Placement and design should not detract from the historic character of the site or destroy historic landscape materials.

#### **e. New Construction On-Site**

Solar panels should be integrated into the initial design of new construction or infill projects, when possible, to assure cohesion of design within a historic context, in this case the villages of Eagle or Byers or with regard to historic resources and historic landscape settings throughout the VPA.

#### **f. Actions Not Recommended**

1. Removal of historic roofing materials during the installation of solar systems.
2. Removing or otherwise altering historic roof configuration – dormers, chimneys, or other features – to add solar systems.
3. Installation that will cause irreversible changes to historic features or materials.



*Elizabeth Todd House with rear additions (70-74 Pottstown Pike)*

## **CHAPTER 5**

### **DESIGN GUIDELINES FOR NEW ADDITIONS & CONSTRUCTION**

## OVERVIEW

Additions and new construction can make interesting and meaningful contributions to a building and a historic area by adding creative visual elements that respond to and reinforce established patterns and context. As lifestyles change, buildings often need to adapt and evolve to accommodate new situations and needs. The challenge in historic preservation is to accommodate desired change in a way that reinforces rather than diminishes historic character.

The design of new construction should be compatible and sympathetic to the character of Byers and Eagles or to individual historic buildings throughout the VPA, especially buildings that are immediately adjacent, ensuring that the character and integrity of surrounding historic resources are preserved. New buildings should be consistent with the site layout, orientation, scale, form, materials, features, and detailing established by surrounding historic structures.

The design of new additions to existing historic buildings should follow the same guidance as outlined for new construction. The design of additions should be sensitive to and compatible with the building to which they are attached. Incompatible additions and alterations can diminish the integrity of a historic building.

New additions should be inspired by and designed to reflect the character of the building to which they are attached but should have a subsidiary visual role and may be expressive of their own use and purpose.

The character of the VPA's historic Villages and streetscapes relies upon the visual continuity and interplay of their historic resources and layout. The design of new construction – whether the expansion of an historic resource or a completely new building – should reflect the time in which it was designed while respecting its historic surroundings. New construction may also replicate historic buildings or styles, but should not create a false sense of history. Styles may

differ between Byers and Eagle. Thus, while contemporary to their time and place, additions and new buildings should fit in and contribute positively to the overall character of the respective village. Designs for new construction adjacent to the villages may consider a transitional design aspect between the historic landscape of the villages and the more contemporary landscape surrounding them.



*Eastern addition onto the John Todd House in Byers is somewhat compatible with the original design and in fact re-uses the original windows from the openings it covers.*



*Additions onto the Butler House (122 Pottstown Pike) have enabled the building to expand while retaining the prominent original form of the main façade.*

## GUIDING PRINCIPLES FOR NEW DESIGN

- a. **Design Context:** Identify the character defining features of the existing building and or the surrounding historic buildings and streetscape. Design additions and new buildings to visually relate to the immediate historic context. Respect established design precedents in the immediate area, in Eagle or Byers, for example.
- b. **Demolition and Removals:** Additions and new buildings should minimize the removal of authentic historic building features and fabric.



*This mid-19<sup>th</sup> century historic residence (the Elizabeth Todd House on Pottstown Pike in Eagle) was converted to commercial office use with a large but compatible addition to the rear. The addition modulates reasonably in form in relation to the historic residence and does not interfere with the principle façade. It uses matching materials and colors but has creative contemporary elements.*

## SITE LAYOUT & ORIENTATION

- a. **General Layout:** Retain established property line patterns, street relationships, setbacks, primary and secondary building orientation, circulation patterns, and landscape elements.
- b. **Location of Additions:** Additions should be located on secondary side or rear elevations. Additions to the primary, front facade of a historic building are generally

not appropriate.

- c. **Size of Additions:** The total square footage of an addition should be limited to no more than 30 percent of the square footage of the primary historic building.
- d. **Setback:** In areas where there is an established consistent setback, mainly in Eagle and Byers, the setback of new construction should match that of neighboring properties.
- e. **Varied Setbacks:** In Eagle and Byers, where there are areas with varied setbacks, or adjacent to historic resources elsewhere in the VPA, the setback for new construction should be within ten percent (10%) of those of neighboring properties.
- f. **Corner Lots:** New construction on corner lots should continue the established setback along both street frontages.
- g. **Variations:** Variations to these setback guidelines may be warranted in some cases, but decisions should be carefully considered with respect to their impact on the overall streetscape.
- h. **Lot Coverage:** New construction should be consistent with adjacent historic buildings in terms of lot coverage and building-to-lot ratio.
- i. **Spacing of Buildings:** Within Eagle and Byers, design new construction to follow the existing pattern of building widths and spacing between buildings. The spaces between buildings help define the spatial character of these areas.
- j. **Building Orientation:** Primary buildings should have a similar orientation and relationship to the street as the existing buildings in the vicinity.
- k. **Orientation and Additions:** The original orientation of a building should not be altered by an addition. For example, the addition should not result in a secondary facade becoming the primary facade.

- I. **Existing Entrances:** Additions and alterations should not obscure, obstruct, alter, or remove an existing building's primary entrance or other key features of the primary elevation.
- m. **Circulation Patterns:** Create pedestrian and vehicular circulation patterns that connect with and reflect the patterns along the streetscape and within the vicinity.
- n. **Yard Areas:** Establish yard areas and outdoor spaces that are consistent with and complementary to those of the streetscape and properties within the vicinity.
- o. **Secondary Structures:** Locate secondary structures, such as garages and sheds, in a manner consistent with existing secondary structures, generally to the rear and side of the primary building.



*Existing additions located on the rear of the primary historic buildings within the VPA (S.W. Todd House, 236 Byers Road). The addition is in an appropriate location, although its height has altered the historic roofline and is not an appropriate treatment.*

existing architectural vocabulary of historic buildings within the vicinity.

- b. **Complementary Additions:** Design additions and alterations to be sympathetic and complementary to the character of the historic building to which they are attached.
- c. **Character Defining Features:** Identify and retain historic character defining features when planning additions and alterations to a historic building.
- d. **Contemporary Design:** New buildings may be of contemporary design that reflects the historic building's style and historic use while being respectful of and compatible with the character of the VPA; the historic character of Eagle and Byers should not be adversely affected by the design.
- e. **Contemporary Additions:** New additions may be contemporary in design, or may replicate the historic character of the main building. Where an addition replicates the historic character of the main building, use subtle differences in the design to clearly distinguish it as a later structure.
- f. **Inspiration:** New architectural designs are encouraged to take inspiration from and make visual references to the historic character of historic building and those in the vicinity.
- g. **Compatibility in Contemporary Design:** In general, compatibility in contemporary design is achieved by reflecting some design characteristics of historic buildings in the vicinity (as outlined in these Guidelines) while varying from others and creating new elements expressing a level of individuality.
- h. **Contemporary Interpretation:** Consider integrating contemporary interpretations of traditional designs and details for new construction. Use of contemporary window moldings and door surroundings that are similar to but do not exactly replicate historic details, for example, can provide

## ARCHITECTURAL EXPRESSION

- a. **Complementary Expression:** New construction in the VPA should be sympathetic and complementary to the

visual compatibility while conveying that the building is new.



*This building, which replaced an earlier house of a similar design, is generally compatible with the architectural character of the Byers Station Historic District enclosed porch notwithstanding (Joseph Grow House, 230 Byers Road).*

- i. **Architectural Patterns:** The rhythm of the facade of new buildings should reflect the characteristic rhythm of surrounding buildings, including basic form, heights, massing, rooflines, fenestration, and floor-to-ceiling ratios.
- j. **Architectural Detailing:** Incorporate architectural detailing that is visually similar to the character and styles of detailing in neighboring buildings within the VPA. Detailing should be simple in design and should complement, but not visually compete with, the character of the neighboring historic buildings. Architectural detailing that is more ornate or elaborate

than historically found within Eagles or Byers is not appropriate.

- k. **Historic Similarity:** While compatible contemporary design is encouraged, new buildings that are similar to existing historic buildings in materials, form, massing, and architectural features may be appropriate.
- l. **Dramatic Contrast:** Radically contrasting designs for additions or new buildings is not appropriate.
- m. **Documentation:** Document existing historic conditions in drawings and photographs before beginning any alterations or additions to an existing historic building.
- n. **Building Relocation:** Relocating a historic building that would otherwise be demolished is an appropriate means of preserving it, particularly if the building can be used for its original appearance and the new setting is similar to its historic setting.



*The Frank and Hannah Pearson House (114 Pottstown Pike, Eagle) is an example of historic preservation in action! The house was moved from the west side of Pottstown Pike circa 2003 and appropriately rehabilitated. It is one of several buildings forming Eagle's historic core.*

## SCALE, MASSING & FORM

- a. **General Characteristics:** New buildings should be designed to complement the form and massing of neighboring historic buildings and should generally be of the same average height, width, and volume as buildings in the vicinity.
- b. **Subordinate Additions:** Additions should be subordinate to the primary historic structure. They should not overwhelm the original structure. Additions should be designed in such a way that they minimize their visual impact on the building.
- c. **Additions Near the Primary Facade:** Additions located near the primary facade should adhere more closely to historic character, while additions that are less visible from the front may be more adventurous.
- d. **Distinguishing Characteristics:** Design additions so there are subtle, distinguishing characteristics between the historic portion and new addition. This may include simplifying details, changing materials, or modifying proportions.
- e. **Building Scale:** The scale of a new construction is determined by the relative size and height of the construction in relationship to the existing building and/or its neighbors. Design additions to be compatible with the existing building in scale, massing, height, and form. The overall scale of a new building and building components should be compatible with those of neighboring buildings within the VPA, and particularly in Eagle and Byers.
- f. **Human Scale:** New construction should have a human scale. In general, the size of major architectural features in relation to the human body helps determine whether a building has human scale. Key features include building forms and shapes, windows, doorways, porches, steps, and other elements.



*Additions on the side or rear of historic buildings may be designed to significantly expand the useable space while retaining the character of the primary structures (Sheetz House, 102 Pottstown Pike, Eagle). The additions are also set back from the primary facade of the building.*

- g. **Building Mass:** Building mass should have a similar sense of weightiness or lightness as that of surrounding historic buildings, as determined by the proportion of solid surfaces (walls) to voids (windows, doors, porches).
- h. **Building Form:** Form in new construction is determined by the shape, volume, and size of the overall building envelope and its major components. The form of a new addition should reflect but be subsidiary to the form and shape of the existing building. The form(s) of new buildings should be complementary with and reflective of those of neighboring buildings, particularly in Eagle and Byers.
- i. **Proportion:** Design additions with similar proportions as those of the existing building. Design new buildings to be proportional to surrounding buildings. Consider important building proportions such as heights and widths, roof pitch, floor-to-floor heights, the size and placement of windows and doors, and the scale of articulated elements such as porches and bays.
- j. **Rhythm:** Respect the characteristic rhythms established by the forms, rooflines,

window and door placement, and other architectural features of the existing or neighboring buildings.

- k. **Floor-to-Floor Heights:** Foundation and floor-to-floor heights in new construction should be within ten percent (10%) of the floor-to-floor heights of existing or neighboring historic buildings.
- l. **Height Variations:** Where there is variation of building height within the immediate neighborhood, a new building should generally relate to the predominant pattern.



*Although varying slightly in height, buildings along the north side of the road in Byers exhibit a consistent architectural rhythm.*



*Buildings in Eagle have some variation in height but present a generally consistent pattern along Pottstown Pike.*

## MATERIALS

- a. **Compatibility:** Exterior building materials for new buildings should be complementary to and compatible with the materials used on the primary building for additions and on neighboring historic buildings. Materials should be of a complementary type, material, size, texture, color, and level of craftsmanship to promote continuity within the historic areas.
- b. **Quality:** Cover and finish exterior walls with quality materials that are compatible with those of the existing or surrounding buildings.
- c. **Traditional Materials:** The continued use of traditional materials such as wood, stone, stucco and brick is preferred; cement fiber siding such as Hardie Plank may be appropriate. Synthetic material such as vinyl may be appropriate for less visible elements when viewed from the public right-of-way or street.
- d. **Visual Compatibility:** Materials need not be exactly the same as those of the primary building or of adjacent historic buildings but should at minimum be visually complementary. The use of materials that are visually similar to the materials of the primary building or neighboring historic buildings is an important way of achieving a level of compatibility within the VPA.





*Wood is the predominant material of primary historic buildings within the VPA and is easily adaptable to the expression of additions and new construction (Byers Hotel and Todd House, Byers Station Historic District).*

- e. **Roof Materials:** Authentic historic roof materials such as wood shingles and slate are encouraged for both new and replacement construction. However, high quality asphalt shingles and synthetic slate shingles are appropriate. For additions, match or complement the roofing materials of the primary building if feasible. For new buildings, select roof materials that are similar in type, pattern, form, texture, and color to those traditionally used within the vicinity.
- f. **Metal Roofs:** Custom and prefinished metal roofs may be appropriate for new or replacement construction. Install new metal roofs in a similar manner and appearance as historic metal roofs.
- g. **Incompatible Materials and Treatments:** The use of synthetic materials that dramatically contrast with the character or quality of historic materials should be avoided. Such materials include vinyl and aluminum siding, unpainted or naturally finished wood, exterior plywood systems, fiberboard, simulated or veneer stone, and glass block. These are usually incompatible with the visual character of the VPA.
- h. **Synthetic Materials:** As discussed under the topic of Wood Siding, quality synthetic

materials such as cement board and some polymer materials that visually replicate the appearance of wood may be appropriate in new construction, especially in locations subject to extreme weathering or that are difficult to maintain.

- i. **Stucco:** Where stucco is appropriate as an exterior finish material, Exterior Insulation Finishing Systems (EIFS) is not appropriate as a substitute for actual stucco.



*Stucco-clad Butler House (122 Pottstown Pike)*



*Stucco is a common exterior material of prominent historic buildings within the VPA (Sheetz House, 102 Pottstown Pike, Eagle).*

# BUILDING FEATURES

Individual building features such as roofs, entrances, windows, bays, and porches add visual interest to a facade and break up the building mass, helping to establish a human scale. The location, size, placement, and style of these building features contribute to the character of the surrounding neighborhood. New construction that respects and replicates the types of prevailing architectural features of the primary building for additions or of neighboring buildings for new buildings reinforces compatibility and consistency within the historic areas and throughout the VPA.

## Roof Forms

- a. **Primary Roof Form:** Design new buildings so that the orientation of the primary roof form is parallel or aligned with the majority of other roofs on the street where roof forms are relatively consistent and a character defining feature. The roofs of new additions are often perpendicular to those of the primary building.
- b. **Form and Appearance:** Roofs of new construction should visually relate to those of the primary building for additions or of neighboring historic buildings for new buildings in pitch, size, scale, complexity, color, and material. End-gable roofs are the most common roof types within the VPA.
- c. **Ridge Heights:** The ridgelines of roofs with multiple gables should generally be uniform in height. Cross gables should intersect at the primary ridgeline unless established as a uniform secondary roof form. The ridgelines of additions should generally be lower than that of the primary building, reflecting its smaller form and subsidiary visual role.
- d. **Low Pitched Roofs:** Nearly flat roofs are sometimes used in historic buildings for entrance porches, side porches, and shed additions and may be appropriate as a secondary roof form in new construction.

Generally, they are constructed using flat seamed metal, but other materials such as rubber roofing may be considered for roofs that are not visible. Generally, these roof types are not appropriate in the VPA for new buildings or additions.

- e. **Cornice Detailing:** Cornices, bargeboards, and edge treatments of new roofs should be designed to have a similar size, scale, and configuration as historic detailing though need not replicate historic detailing.

## Skylights

Where needed, install skylights on side or rear-facing planes of roofs minimizing their visibility from the street. Do not install skylights on the roof of the principal facade facing the street. Minimize the frame size and profile of the skylight, and use frame colors that blend with the color of the roofing.

## Entrances

- a. **Orientation:** As discussed under Entrances and Doorways, the orientation of the primary entrance of a new building should be similar to the orientation of other neighboring buildings, most commonly on the principal facade and related directly to the street.
- b. **New Entrances in Additions:** In some cases, it may be desirable to create a new entrance in an addition or alteration which will be in primary use, such as an entrance adjacent to a driveway or parking area. In such cases, the primary entrance of the original historic building should not be altered or removed, even though it will have limited use.
- c. **Design:** The size, scale, organization, and presentation of the primary entrance of a new building should be similar to those of neighboring buildings (particularly in Eagles and Byers) and should evoke a human scale. The primary entrance should

enhance the connection between the street and the building.

- d. **Doorways:** Doorways in new construction should relate to the character of those of the primary building for additions and to neighboring historic buildings for new buildings. Frame dimensions, proportions, and configurations should be comparable though need not precisely replicate historic configurations. The use of comparable panel and light configurations, including the presence of sidelights and transoms, is recommended.
- e. **Entrance Porches:** Entrance porches of various sizes and configurations are present within the VPA and are appropriate for new construction. In general, most entrances are simple and modest in size but adequate to protect those using the doorway from the weather.
- f. **Entrance Steps:** Simple wood and stone steps are common for entrance porches within the VPA, though brick and concrete are present as well. All are appropriate and can add visual quality to the entrance.

## Windows

- a. **Window Design and Placement:** Design windows in new construction to be compatible with the type, size, proportions, operation, arrangement, and placement of the windows of the primary building for additions and of neighboring historic. Windows in new construction need not precisely replicate historic design and placement, but they should generally be of compatible character.
- b. **Expression:** Design windows to be expressive of the architectural character of the new facade while generally sympathetic with the character of the primary building for additions or of neighboring buildings for new construction. Creative but sympathetic variation is appropriate. Be cognizant of the use of windows to achieve a sense of human scale in the facade.

- c. **Bay Windows:** The installation of new bay windows in areas where they are inappropriate to historic architectural styles and for which there is no historic precedent is not appropriate. Bay windows are appropriate to some late nineteenth and early twentieth century styles. If and where appropriate, design new bay windows to be compatible with the width, height, projection, and general style of historic bay windows of buildings in the vicinity and of appropriate scale to the facade in which it is placed.
- d. **Picture and Jalousie Windows, etc.:** Picture windows, jalousie windows, and other types of contemporary windows are generally not a historic treatment in the VPA and are not compatible.

## Porches

- a. **New Porches:** The incorporation of porches into new construction in a manner, location, and use characteristic of neighboring historic buildings is encouraged. The use of porches that relate to the pedestrian character of the streetscape is encouraged.
- b. **Porch Design:** Design of new porches should be compatible with the layout, form, scale, building relationships, and detailing of those of the primary building for additions and of neighboring historic buildings for new buildings.
- C. Historic Prototypes:** In locations where traditional historic porch columns, posts, railings, and steps are prevalent, design new elements to be compatible with the historic porch types, they do not need to be an exact copy of the historic design.



*This porch was added onto this former residence to accommodate business customers. It is not of the same style as the house but has a historic design that is compatible with the residence and historic landscape (Pearson House, 114 Pottstown Pike, Eagle)*

- e. **Building Size:** New outbuildings should be no larger in plan than 40 percent of the principal historic building footprint.
- f. **Character:** Relate new garages and outbuildings to the period of construction of the principal building on the lot through the use of complementary materials and simplified architectural details.
- g. **Windows and Doors:** Design window and door openings to be similar to those found on historic garages or outbuildings in the VPA or on the principal building in terms of spacing and proportions.
- h. **Garage Doors:** Design and place garage doors of secondary structures in a manner characteristic of historic garages of properties within the VPA. New garage doors should have similar proportions and materials as those traditionally found within the VPA.
- i. **Garage Doors on Additions:** Do not place garage doors on the front, street facades of additions to the primary building where there is no historic precedent.

## GARAGES & OUTBUILDINGS

- a. **Secondary Structures:** New secondary structures such as detached residential garages, sheds, and outbuildings should have a similar layout, orientation, setback, scale, form, roof type, and materials as those of existing secondary buildings within the historic areas.
- b. **Attached Garages:** Attaching garages (or sheds) to historic buildings is generally not appropriate.
- c. **Relationship to the Primary Building:** New secondary structures, such as detached residential garages, sheds, and outbuildings should complement the layout, setback, scale, form, roof type, and materials of the primary building.
- d. **Subordinate Relationship:** Design new garages and outbuildings to be visually subordinate to the principal historic or new building in terms of their height, massing, form, and location.



*Built as a garage in Byers (115 Eagle Farms Road, Byers Station Historic District), this outbuilding is appropriately scaled and designed to be compatible with the historic district.*

## MECHANICAL EQUIPMENT

- a. **Visibility:** When possible, do not locate utility boxes, air conditioners, rooftop mechanical equipment, skylights, satellite dishes, and other roof appurtenances on primary facades, front-facing roof slopes, in front yards, or in other locations that are clearly visible from the public right-of-way. Carefully screen mechanical equipment where needed to retain architectural integrity of the historic resource and landscape.
- b. **Building-mounted Equipment:** Paint devices mounted on secondary facades and other exposed hardware, frames, and piping to match the color scheme of the primary building or screen them with landscaping.
- c. **Freestanding Equipment:** Screen service areas, air conditioning units, and other mechanical equipment from public view using a fence, plantings, or other enclosure.
- d. **Roof-mounted Features:** Locate and screen equipment and features mounted on the roof to avoid view from public right-of-way. Where needed, install roof mounted features only on side and rear-facing roofs. Installing equipment or features on the roofs of primary facades facing the street is generally not appropriate. Standard flashed pipe roof vents for bathrooms within the building are an exception.



*Mechanical installations such as electrical boxes and dryer vents should be located on side and rear facades and be minimally visible from the street.*

## SITE FEATURES

The character and appeal of historic neighborhoods are enhanced by the layout and design of site features and landscaping in yards visible to the public.

### General Guidelines

- a. **Site Features:** Design and install new site features that are consistent with the historic character of the building, property, and adjacent properties or historic setting. In

general, simplicity and restraint are preferred.

b. **Visibility:** Site features, fencing, gardens, and landscaping are appropriate in front yards for utility and to enhance privacy and safety but should not visually isolate the historic residence from view.

## Walkways

a. **Historic Walkways:** Where possible, retain historic walkways and circulation patterns. Preserve alignment, widths, and configurations of historic walkways where they are a character defining feature of the landscape.

b. **Historic Materials:** Preserve historic paving materials of walkways where they still exist. When limited replacement of materials is necessary, replace in-kind utilizing materials that are similar in appearance and composition.

c. **New Walkways:** The addition of new walkways may be desirable and necessary to enhance pedestrian access and connectivity. When possible, new pedestrian routes should be compatible with the existing pedestrian circulation patterns.

d. **New Materials:** Traditional paving materials such as stone and brick are preferred for new and existing walkways. Contemporary materials such as pre-cast concrete pavers may be appropriate. Material and texture should be compatible with the character of traditional materials.

## Lighting

a. **Site Lighting:** Lighting of exterior spaces visible from the street should be minimized and limited to locations necessary for safety and visibility, such as gateways, steps, and building entrances.

b. **Fixtures:** New light fixtures should be

pedestrian scaled or ground level and should direct light to the ground and away from surrounding properties. It is preferable that lamps be shielded from direct view. Fixtures and posts should be restrained in design and compatible with the character of the building.

c. **Building Mounted:** In general, installing site lighting on historic buildings is not recommended. If installation on buildings is necessary, minimize damage to the historic building fabric.

d. **Building Lighting:** Flood or spot lighting of building exteriors is not recommended.

## Driveways and Parking

a. **Historic Driveways:** Retain historic driveway configurations where possible.

b. **New Driveways:** Minimize the area and width of new driveways, which should typically be no wider than 10 feet for residential buildings.

c. **Parking Areas:** Design new parking areas to be as unobtrusive as possible. Parking should be located to the side or rear of properties. Do not pave or use front yards as parking areas except where already existing.

d. **Materials:** Traditional paving materials for driveways include asphalt, paving stones, brick, and gravel.



*Contemporary brick pavers within the VPA  
(Isaac D. Frame House, 124 Pottstown Pike,  
Eagle).*

VPA, and particularly within the villages of Eagle and Byers is generally not appropriate.

## Landscaping

The proper use of landscaping should be used to buffer new additions, buildings, and infrastructure improvements which may adversely impact adjacent historic resources or the historic landscapes of Eagle and Byers.

## Decks and Patios

- a. **Location:** Outdoor decks and patios should be located to the side and rear of buildings and should be minimally visible from the street. Ground level paving for patios in front yards may be appropriate as part of garden and landscape design but should not be visually dominant.
- b. **Upper Decks:** Decks on the upper levels of new or existing buildings are not compatible or appropriate. Exceptions include decks or sleeping porches on rear facades, out of the public viewshed, and not overlooking adjacent historic resources.
- c. **Design and Materials:** The design and materials for decks should take inspiration from the existing building and be a compatible extension of and addition to the building. Traditional paving materials such as stone or brick are encouraged for patios.

## Fencing

Fencing is generally not a common feature within the VPA, and particularly within Eagle and Byers. While erecting a fence in the rear of a property may be appropriate, erecting fences in the front yard areas of buildings within the



*East side of Pottstown Pike in the Village of Eagle*

## **CHAPTER 6: SIGNS**

## VILLAGE SIGNAGE

The Historical Commission currently reviews applications for signs in the Byers Station Historic District only (Township Ordinance §200-98). The Township reserves the right to require changes to a proposed sign design, based on the Historical Commission's input.

Signs should be compatible with the scale, proportion, form, and architectural detailing of the associated building. A traditional sign type such as wood with either carved or painted lettering is recommended. For any sign, creative graphic solutions, in which the corporate logo or corporate lettering style is a secondary element, are recommended. Signs should not obscure a historic building's architectural details. Three types of signs are the most suitable:

- a. **Projecting Signs:** these signs are hung perpendicular to the building. A decorative bracket attached to the building usually supports the sign. The sign in front of the Byers Hotel is an example. This type of sign is a recommended type.
- b. **Wall-mounted Signs:** these signs may be recommended when appropriately-sized and unlit. These signs may be rectangular, square, or oval. They are particularly suited for historic buildings where the setback is limited.
- c. **Free-standing Signs:** free-standing signs are appropriate for buildings that are set back from the front lot line and fronted by landscape. Several of these types of signs are found on the east side of Pottstown Pike in Eagle. The design and placement of these signs should be carefully selected to minimize its effect on the streetscape. Their near uniform appearance, size, and materials appear appropriate for the village.

Appropriate colors for signs were traditionally intense versions of building colors – high-gloss bottle greens, olives, golds, and burgundies on a neutral background. Modern fluorescent colors are not appropriate.

On commercial-style buildings with a storefront, signs should be placed in the signboard area (frieze) located above the storefront windows and below the upper-story windows. No building of this type exists in the VPA.

Where lighted signs are necessary, gooseneck or hidden lights are recommended. Internally illuminated signs are generally not appropriate.



This projecting sign on the former Byers Hotel in the Byers Station Historic District is appropriate in size, design, location and materials. It is appropriate for the building type, the dense layout of Byers, and the proximity to Byers Road.



*Commercial signs in Eagle. The permanent sign is appropriately scaled for the village and the building; similar signs are found throughout the village along Pottstown Pike. The smaller temporary signs are not recommended. (Isaac D. Frame House, 124 Pottstown Pike).*



*Appropriately sized sign in Eagle (Butler House, 122 Pottstown Pike)*



*Mount Pickering Masonic Hall, 218 Byers Road*

## **CHAPTER 7: DESIGN GUIDELINES FOR PUBLIC SPACES & FEATURES**

## Design Guidelines for Parking and Public Spaces

Public spaces and associated amenities are social gathering areas that foster a feeling of neighborliness in a community. A given public space might be used for different purposes, even on the same day. People may gather there in the morning for outdoor activities, it may be used for outdoor lunches, for youths playing games after school, or a family picnic in the evening.

New public spaces may be designed in a variety of ways. Passive recreational spaces include greens, plazas, and parks, where people can gather on their breaks or to eat a snack. Active recreational areas include tot lots and ball fields that offer spontaneous activities or organized sports by groups of people.

Locations for new public spaces should be carefully chosen. Sites near existing buildings have the advantage of requiring fewer parking spaces, as they may be reached by walking or biking. Sites on the outskirts of a village can provide an opportunity to create an inviting transitional space between a village and the surrounding landscape.

Optimally, public spaces should serve as flexible spaces, offering avenues for gatherings or special events. Appropriately placed trees, shrubs, and other vegetation enhance these outdoor areas by creating cool spaces in the summer.

## Lighting Standards

The Township has selected lighting fixtures for public spaces in Eagle. These fixtures may be used throughout the VPA; however, they may not necessarily be suitable for all places, such as the Byers Station Historic District. (See the lighting design standards in Appendix D.)

## Outdoor Furniture Standards

Outdoor furniture complements public spaces and promotes the use of the space for daily use as well as for public events. (See Appendix E.)

## Rural Center Design Guide Link

These Guidelines utilize the Landscapes3 Design Guide Series produced by the Chester County Planning Commission. The county-produced guidelines are recommended because they may be appropriate for the VPA. The types of historic landscapes in Eagle and Byers are covered in the county's *Rural Center Landscapes Design Guide*, which can be found at:

<https://www.chescoplanning.org/Municipalities/pdf/RuralCenterDesignGuide.pdf>



*Former Eagle Hotel, 123 Pottstown Pike*

## APPENDICES

## APPENDIX A: HISTORIES OF THE VILLAGES OF EAGLE AND BYERS

### Historic Overview

The historic Villages of Byers and Eagle were significant in the areas of commerce, transportation, mining/processing, and agriculture throughout the much of the eighteenth, nineteenth, and early twentieth centuries. Eagle, the older Village, began in the eighteenth century at the intersection of two heavily traveled roads. Around 1727, an inn was constructed to serve travelers; the Village grew around it. The Village and its road system provided a market for the surrounding farms. Today, many of Eagle's older residential, commercial, and educational buildings remain, and the Eagle Tavern continues to serve customers, though now under a different name, at the intersection of Pottstown Pike and Little Conestoga Road.

Byers, meanwhile, began nearly 150 years after Eagle. In the late nineteenth century, a group of businessmen from Eagle helped finance the construction of a railroad, bringing regular passenger and freight service to within a quarter mile of Eagle. The resulting terminus was named Byers Station. A village (Byers) quickly developed adjacent to the station, its growth augmented by the discovery of plumbago (graphite) a few years later. Byers quickly became a thriving village clustered along its main street (Byers Road). The view of the village along Byers Road remains largely unchanged.

Throughout much of the nineteenth century, the Butler, Todd, and Beerbower families controlled much of Eagle's business and real estate activities, and by extension, Byers. Other prominent families included the Sheetz, Stiteler (in Byers), Phipps, and Frame. These names keep reappearing in Boyd's Directory of Chester County businesses from 1870 through 1900. The Villages of Eagle and Byers were listed as one entity. In any event, with a population of just 160 in 1884 (Body's Chester County Directory, 1884–85), businesses within the Villages included general stores, hotels, a

tanner, wagonmaster, two blacksmiths, restaurant, flour mill, post offices, harnessmaker, lumber yard, livestock enterprises, saddler, wheelwright, and a tinsmith. The 1900–01 directory lists several manufacturing businesses, including Byers Lead Mines, Crown Extract Company, and Riddle Chemical Company.

Although close in proximity, the Villages of Byers and Eagle remain physically separated and differ in architectural appearance. They developed at different times for different purposes. Yet, Byers would have not existed without Eagle, and the residents and businesses in Eagle depended on Byers as their lifeline to the larger markets and institutions of Phoenixville and Philadelphia. Though changing economic and transportation forces have altered their historic functions, these Villages are an important part of Chester County's history.

### The Village of Eagle

Eagle lies at the fork of two main Native American paths, now Upper Uwchlan's principal roads. The Allegheny Path ran from the Delaware River at Philadelphia to Paxtang (Harrisburg) and west. The path entered Eagle from the south on what is now Pottstown Pike (Route 100), and turned northwest, along what is now Little Conestoga Road. A major branch path also continued north at this turn and connected with a Native American portage near French Creek. In 1726, this road, now called Pottstown Pike or Route 100, was surveyed and laid out from the Uwchlan Meeting near Lionville, through Eagle, and north towards what became Pottstown. The Little Conestoga Road was recorded in 1738. To capitalize on the traffic on these pathways, a tavern license was granted to an inn operator on August 12, 1727. Situated on the intersection of these busy roads, the Eagle Tavern (now under different name) was and is the center of the community.

During the 1720s, inns and taverns operated throughout Chester County. Taverns often became the social mecca of a community. Also called the John Adams, Presidential Arms, and

Spread Eagle Tavern, the Eagle Tavern also became the social and political center of the Village that grew around it. It was rebuilt between 1859 and 1860 to its present appearance. A newspaper reported that the tavern (then owned by Jacob Beerbower) also contained a general store and post office.

The Village grew around the tavern and became a thriving crossroads serving the agricultural community around it. Building lots were gradually sold along Pottstown Pike by two families. The Nobel Butler family owned the land mainly on the east side of the pike in Eagle from 1737 until 1805. The John Pugh family (John applied for the first tavern license) owned land on the west side. Meanwhile businesses opened to serve farmers and travelers on the busy roads. Early businesses included a general store, a wheelwright shop, and a blacksmith shop. In 1858, Upper Uwchlan Township formed out of the northern part of Uwchlan Township. Eagle, now fully established, became the seat of the new township. In 1859, the one-room Windsor School opened and now serves as the township office. Eagle continued to grow through the nineteenth century.

“Windsor” was also the name of the Village at that time. It was taken from the nearby Windsor Baptist Church. The name was eventually dropped in favor of “Eagle” after the now very prominent Eagle Tavern, which as noted, also contained the post office.

Jacob Beerbower was an influential businessman in Eagle. He was born in 1809 in Vincent Township, Chester County. In 1850, Beerbower purchased the Eagle Tavern and other buildings on 40 acres of land from George Downing, J. C. Strickland, Benjamin Harley, and others. He applied for a tavern license in 1851. For the next 44 years, Beerbower, along with his wife Lidia, operated the Eagle Tavern and the inn. The tavern hosted many notable local events, including the 1858 elections to divide Uwchlan Township. As part of the tavern deal, Beerbower owned several buildings in Eagle through the latter part of the nineteenth century, and thus was influential in both

nineteenth-century economics and the visual appearance of Eagle. In addition, Beerbower also operated the Byers Hotel at the end of the nineteenth century.

After the Civil War ended in 1865, it became evident to Eagle business leaders that a railroad would be necessary to ensure its continued prosperity. Agriculture was booming on the surrounding farms (many of which were owned by these and other business leaders), as were the iron mine operations in nearby Warwick Township. An investment group was formed to raise the necessary capital to finance the construction of the line. Citing the need to bring freight and passenger service to Eagle, Milford, and north to Warwick, in 1869, Jacob Beerbower, Joseph Butler, John Todd (Butler and Todd were on the Board of Directors), and other investors established the Pickering Valley Railroad Company.

With a construction mortgage guaranteed by the Philadelphia and Reading Railroad, the 11.3-mile line from Phoenixville to what became Byers Station was completed in 1871. The Pickering Valley Rail Road began operating in 1875. Service from Phoenixville to the south came within a quarter mile of Eagle. The location of the station had a major effect on Eagle. Eagle now had access to Philadelphia markets for agricultural products and passenger service. Around the station, however, a new village (Byers) emerged. Many decisions affecting Byers were made by the business establishment in Eagle, often at the Eagle Tavern. The Villages relied on one another for employment, transportation, and education, religion, and social opportunities. Eagle was now a railroad town; however, its appearance remained that of a crossroads Village, since the line stopped well short of the Village.

The randomness of Eagle’s architecture makes evident the Village’s growth as a commercial and residential center throughout the mid-1700s to the mid-1900s. Its location at the intersection of Pottstown Pike and Little Conestoga Road ensured its utility long after the railroad ceased running in 1947 (in contrast to Byers, where businesses ceased operating).

The eighteenth-century Eagle Tavern and John Pugh House (1781), the Mansard-roofed John Todd/William Sheetz House (c. 1860), and architectural details of the Pearson House (c. 1875) demonstrate Eagle's growth and stylistic tastes through time. The vernacular is in evidence, as is stylized architecture as demonstrated by the John Todd/William Sheetz House (Second Empire style) and the Pugh/Pearson House (Greek Revival style influences). Several other historic buildings line Pottstown Pike.

Eagle's concentration of buildings mainly oriented to and constructed near Pottstown Pike constitute a well-preserved historic landscape—changes notwithstanding—contrasting sharply with the twentieth- and early twenty-first-century suburban landscape surrounding it. Fortunately, several historic resources remain within the Village Planning Area (VPA) to augment Eagle's historic landscape. Examples include the Windsor Baptist Church and the Funderwhite Farm.

The Village was threatened with major development in the late 1990s by the large shopping center planned for the west side of Pottstown Pike and the CVS store project on the east side. Careful planning and preservation retained or relocated some buildings that were threatened (some were also lost), created new sidewalks, plantings and lighting, opened a bypass around the Village, and developed efficient parking and access on the east side of Pottstown Pike. The improved parking was located behind existing historic buildings to maintain and reinforce Eagle's historic character while improving access to business within the buildings. The latter strengthened the viability of commercial buildings that began as residences. The Village changed as a result, but ultimately retained and even strengthened its historic Village character.

## Village of Byers

Byers Station, aka Byers, was listed in the National Register of Historic Places in 2002.

Much of the architecture here incorporates Italianate and Greek Revival stylistic influences. Perhaps it was a deliberate attempt by the Todd family, who constructed many of the Village's buildings, and/or their builder, B. H. Downing, to develop a distinctly more modern community—which it was—than Eagle. The railroad buildings and graphite factories (except one) are gone; however, Byers retains its intact nucleus of domestic or former commercial buildings. Most of these buildings were constructed within 10 years of the railroad's opening in 1871, and the discovery of plumbago four years later.



*John Todd, a driving force behind the development of Byers.*

The history of Byers is closely linked to the Village of Eagle, which is located approximately one-quarter mile west of Byers. Eagle had been in existence for well over 100 years when, soon after the Civil War, several local businessmen formed an enterprise to establish rail service to Eagle. Agriculture was booming in the surrounding farms (much of which was owned by Eagle's business leaders), as were the iron mine operations in nearby Warwick Township. An investment group formed to raise the necessary

capital to finance the construction of the line. Jacob Beerbower, Joseph Butler, John Todd, and other investors established the Pickering Valley Railroad Company. Mr. Charles E. Byers was named chief engineer. With a construction mortgage guaranteed by the Philadelphia and Reading Railroad, the 11.3-mile line from Phoenixville to what became Byers Station was completed in 1871.

As was sometimes the practice, the station constructed for the Village of Eagle was not located within the Village core. This line stopped at the eastern border of Joseph Butler's farm, located a full quarter mile east of Eagle. The terminus was located on land owned by local farmer and businessperson John Todd. Trains began running in September 1871. At its height, a passenger station, engine shed, and turntable were located at the station, just north of Byers Road. Several trains made the run each day, while the Village grew up around the station. The station was named in honor of Chief Engineer Byers, who died just prior to completion of the line.

The railroad fostered the economic prosperity of the last quarter of the nineteenth century in Upper Uwchlan Township. During this time, Eagle and Byers relied on one another for employment, transportation (freight and passenger), education, religion, social opportunities, and other activities. Byers had a major influence on Eagle, providing passenger service and access to the Philadelphia markets for its agricultural products. Based on railroad technology, Byers became a major economic driving force for Eagle.

The railroad was a direct benefit to the agricultural community around Eagle. It transported fresh produce to markets in Philadelphia far quicker than overland roads. By the late 1800s, silage enabled farmers to feed their livestock stored-

grain all year long, enabling cows to produce a tremendous amount of milk for dairy products. This development nearly coincided with the construction of the Pickering Valley Railroad. By 1872, the railroad shipped 900 gallons of milk daily from Byers Station. The "milk run" was the first run of the day, leaving the station around 5:30 am. The Fairmont Creamery Association was established soon after the railroad opened to coordinate the shipment and production of dairy products.

The Pickering Valley Line also provided passenger service. Area residents who worked at the Phoenix Iron Works commuted daily from Byers Station to the plant in Phoenixville. Railroad employee Isaiah March, who lost an arm working on the line, sounded the engine whistle at 5:00 a.m. to wake up the railroad workers who resided in the Village.

For all this activity, one of the most compelling reasons for the continued development and prosperity of Byers was the discovery of plumbago (graphite) under the farm fields that surrounded the Village. In 1875, graphite, or as it was commonly known then, plumbago or black lead, was discovered in the farm fields around Byers. Graphite was the main ingredient in stove polish, farm equipment lubricators, and lead pencils. The discovery attracted additional businesses and people to Byers to extract and process the material. Major graphite companies such as the Penn Graphite Works, Cambria Mining, and the American Graphite Company quickly began operations around the Village.

In a span of 10 years, the opening of the railroad station and mining activities turned what once was John Todd's farm into a thriving Village that rivaled Eagle. Within two years of the opening of the Pickering Valley Railroad, there were several new businesses located in Byers: two lumber and coal yards, two grain

lots supplied by local farmers, a store, and stock yards. Byers Station became a transportation hub for lumber, farm products, cement, chemicals, and piping. People located their businesses and residences there to take advantage of the station.

By the 1890s, the Village had a butcher shop, a post office (transferred from Eagle in 1885), a restaurant, a hotel, a bank, and several houses. The Mt. Pickering Masonic Hall was constructed in 1894 on the south side of Byers Road. The latter hosted a variety of lectures and plays in the summer, functioning much like a lyceum. *Boyd's Chester County Directory, 1884-85* lists the following businesses in Byers: general stores, hotels, a tanner, wagon master, restaurant, post office, lumberyard, livestock enterprises, and saddler. The graphite operations located their administrative offices here and visitors ate and slept at the Byers Hotel. The 1900-01 Directory lists several manufacturing businesses, including Byers Lead Mines, Crown Extract Company, and Riddle Chemical Company. The mining and processing plants were mainly located just outside the Village, by the mines.

The plumbago business was short lived, however. Flooding in the shafts caused the mines to shut down after about 10 years. The Penn Graphite Works and the Cambria Mining operation closed in 1886. The American Graphite Company, which had experienced strikes, riots, and lawsuits, temporarily shut down in 1890. The company resumed production in 1900 but was forced to close for good in 1907 when several company officers were arrested for fraud. Today, just one industrial building, once owned by the United States Graphite Company, remains in the Village. A direct link to Byers's industrial past, the building once processed the black lead mined near Byers. Pharmaceutical products were also manufactured in the building.

The demise of mining hampered economic conditions in Byers. The Farmers' Bank of Uwchlan closed in 1923. The post office, operating out of the former A. M. F. Stiteler

Lumber Yard and Warehouse (a general store), relocated to Eagle in 1937. The hotel, built by Stiteler, closed in 1946. Competition from automobiles forced passenger service to end in 1934; fortunately, the station was saved and relocated west of Eagle off Little Conestoga Road (now heavily modified for residential use). The Reading Railroad Company ended freight service in 1946. Some of its last major freight shipments were cement to construct the present Pottstown Pike.

Despite the mining, farming, and passenger traffic, the railroad was never profitable. The Reading Railroad took over the line in 1896. In the first decade of the twentieth century, graphite mining all but ceased, forcing the railroad to rely mainly on agricultural freight and passenger service for revenue. The closing of the mines signaled an end to Byers's growth; the closure of the railroad determined its eventual fate: from a thriving commercial Village and transportation hub to the small residential Village of today. The heyday of the Village's commercial activity occurred during World War I, when the demand for the region's agricultural and mining products peaked. After the war, freight and passenger service declined sharply. Passenger service ended by 1934 and the tracks were abandoned in 1948. Today Byers is a bedroom community, having lost its transportation-related buildings and almost all of its commercial and industrial buildings. Yet all of its residential buildings and some other buildings remain.

Over the years, the remaining business in Byers closed. The dense collection of formerly nonresidential buildings on the north side of Byers Road, including the former hotel and bank, converted into residences. Byers's architecture demonstrates a cohesive attempt to create a residential Village amidst what was once farm fields, and later, with the advent of the railroad, mines, and factories. Most of the buildings were constructed during the years 1870-1885 and were primarily designed and built by B. H. Downing for the Todd family. The houses and most other buildings along the north side of Byers Road all sit on roughly the same sized Village lot, have approximately the same setback from Byers Road, and exhibit similar architectural details. The design theme

is the Greek Revival style. Most buildings have end-gabled roofs with raking cornices, pedimented gables, and partial roof returns. Clapboard (or German siding) clad the frame walls. Some of the taller buildings contain frieze-band windows, symbolic of the rectangular eyebrow dormers found on the upper floor of many Greek Revival style buildings. Virtually all houses in Byers exhibit a combination of paneled and louvered shutters, and several houses have entablatures over the windows. The Village is depicted in the 1883 *Breou's Atlas of Chester County*. Today's Village remains remarkably close to this depiction, the loss of the train station and tracks notwithstanding.

## APPENDIX B: HISTORIC BUILDING MATERIALS AND TREATMENTS

### OVERVIEW

This chapter augments the *Guidelines* and provides recommended treatments for rehabilitation and maintenance. The treatment of historic building materials is an important part of any maintenance, rehabilitation, or restoration project and may be reviewed in the same way as the design of a new building feature for historic properties throughout the VPA. Exterior building materials used in architecture include wood, stone, brick, stucco, and metals, each of which is discussed below.

The quality of different building materials varied over time as the methods used in their production improved. In the eighteenth and early nineteenth centuries, building materials tended to be locally produced. Wood was cut from local forests and shaped into building materials at saw mills and by hand onsite. Wood was not always properly cured and dried as it is today, and the assorted wood species and quality of lumber varied by project. Bricks were molded and baked using clays from local clay pits, and the use of field stone was common in wall construction. Stones were gathered from nearby fields or quarries. Lime and sand for mortar was locally obtained and varied in quality; cement was not available.

It is important that the quality and condition of materials and systems be evaluated on a case by case basis. Appropriate treatments must be determined based upon the specific conditions observed. General guidelines for the treatment of historic building materials are outlined below.

### WOOD

Wood is the material used in the construction of several buildings in the VPA. Many of the historic residences are built with wood structural systems; wood exterior coverings; wood detailing; and wood features such as

doors, windows, porches, railings, and steps. Wood is also present in historic masonry buildings for interior structural framing as well as doors, windows, flooring, and architectural detailing. Since most buildings contain a significant amount of wood, it is important to understand the general characteristics of wood as a building material.

When used as an exterior building material, wood is vulnerable to weathering and deterioration, and thus most wood-clad buildings in the VPA are additionally clad in vinyl or aluminum siding. The ongoing condition of a wood building and its elements is highly dependent upon the extent and quality of regular maintenance. As versatile as it is, wood can only perform satisfactorily when it is protected from the natural forces that weaken and deteriorate it: weathering, sunlight, rot, animals, and insects. The capacity of wood to resist these forces depends on periodic inspection and immediate response to warning signs. Without routine inspection and prompt remedial action, wood deterioration will accelerate rapidly on a building's interior and exterior. Early detection and repair avoids more extensive and costly repair later.

Rehabilitation projects need to anticipate the need for ongoing maintenance, address vulnerable situations, and avoid creating conditions that will be susceptible to deterioration.

Historically, wood was used extensively for its structural and aesthetic value. In particular, historic wood siding and wood details are highly visible and significant features of a building's exterior. In the VPA, these wood features may include clapboard, shingles, porches, columns, balustrades, shutters, cornices, window and door trim, and doors. Wood was a major building material used during successive historic periods here and is characteristic of many late-nineteenth century vernacular Victorian and early-twentieth century revival styles.

## Condition and Causes of Wood Deterioration

As stated, much of the wood cladding on historic buildings in the VPA is now hidden under manmade siding. For those buildings that exhibit wood cladding, problems such as wood deterioration, water penetration, peeling paint, and weathered surfaces are common in buildings where preventative maintenance is not routine.



*Wood is the predominant material used in the construction of residences in the VPA (Joseph Butler House, 119 Eagle Farms Road).*

Wood buildings of all eras were historically painted – wood finishes exposed to the exterior should be protected from the weather with paint. When properly maintained, wood can be durable and serviceable for many years. Painted surfaces that are damaged or deteriorating may be cause for concern.

The most prevalent problem affecting architectural wood is water penetration from poorly maintained roof drainage systems. Conditions in roof valleys and around chimneys can be difficult to see and monitor. Clogged gutters overflowing with debris, sagging and loose gutters, inadequate downspouts, and damaged eaves, soffits, and fascias can rot wood and cause interior water damage. Large shrubs and trees in close proximity to buildings contribute to wood deterioration and failure by trapping moisture and slowing the evaporative process.

**a. Decay and Rot:** Peeling paint can be an early sign of high moisture content in the underlying wood. Rot is caused by water penetration that softens and breaks down the fibrous structure of wood and supports the growth of various types of fungi. In the forest, rotting is a natural, healthy process, but it can be fatal to

buildings. The growth of fungi is a clear sign that rot is occurring. To survive, fungi usually require wood to have a moisture content of at least twenty percent as well as the correct temperature range.

Keeping wood dry is the best way to prevent rot. Fungi can substantially weaken the structural integrity of wood, diminishing its capacity to carry loads or its ability to withstand crushing. Without these capabilities, a building's wooden frame can be rendered useless.

The presence of rot indicates that moisture is present. Simply attending to the rotted wood is inadequate unless it also addresses the source of the moisture. If this source is not discovered and eliminated, rot will recur and spread.

Moisture penetration most often occurs for one of the reasons listed below:

- Leaking roof or gutters;
- Inadequate or deteriorated flashing;
- Peeling paint;
- Unventilated spaces;
- Improper insulation or lack of a vapor barrier;
- Poor drainage or rainwater removal around the foundation;
- High water table or rising damp; or
- Plumbing leaks.



*This siding shows indication of peeling paint. The small metal vent allows interior moisture to escape; retained moisture can eventually lead to interior rot and peeling paint, which can cause the wood siding to also rot.*



*The fascia and soffit boards of this cornice have rot due to moisture drawn from contact with the roofing. The resulting hole in the soffit on the underside of the cornice could serve as an entranceway for squirrels, causing additional damage to the building.*

**b. Animals:** A common problem associated with wood buildings is their attractiveness to animals. Birds, squirrels, mice, and rats are of particular concern, though other species can also be a problem. Birds and squirrels frequently enter a building through small holes in eaves and gables and at other locations where materials come together. The holes are generally visible from the exterior. Older mid-nineteenth century buildings constructed close to the ground over crawl spaces are particularly susceptible to mice and rat infestation.

**c. Insects:** Some types of insects are natural enemies of wood and can quietly but dramatically destroy the structural stability of woodwork in a short period of time. These insects include termites, powder post beetles, and carpenter ants.



*This hole, now sealed with mesh screening, in historic wood siding may have been created by woodpeckers and perhaps widened by chewing animals; nesting material can be seen inside.*

## Wood Treatment

Rehabilitation projects should address issues of water penetration, decay, and rot when they are present. The sections on roofs and wood siding address many of the issues related generally to wood, but for every proposed project:

- a. **Building Assessment:** In conjunction with any new project, undertake an assessment of the building to assess signs of water penetration and decay. Repair any conditions that are identified.
- b. **Causes of Deterioration:** Where deterioration, decay, or rot are observed, determine and address the source and cause of the condition – do not simply repair the deteriorated wood without addressing its cause. Monitor the condition after repairs to assure that the right cause was identified.
- c. **Selective Repair:** In general, rotted wood should be removed and replaced, particularly if it is structural. It is usually not necessary, however, to remove an entire wood element but only the rotted portion.
- d. **Use of Consolidants:** Where limited rot has occurred, commercially available epoxy consolidants can be used to give strength to the existing wood and no removal is necessary.

- e. **Dutchmen:** For more extensive repairs, the deteriorated portion of the wood element can be removed and a small piece of new wood (called a *dutchman*) can be installed as a patch in the original woodwork, limiting the amount of authentic fabric needing to be removed.
- f. **Structural Assessment:** For wood structural elements, a structural engineer should be consulted for the nature and extent of the repair required.
- g. **Painting:** Wood finish material exposed to the exterior should be protected with properly applied paint. Properly applied with high quality paint on a properly prepared surface, painted material can last twelve to fifteen years. Basic guidelines for painting are included in the discussion of wood siding, details, and trim.
- h. **Bird and Squirrel Holes:** Once identified, birds and squirrels should be chased out and the holes repaired. Extensive damage and sanitary problems can be caused by the animals inside the structure, and the holes allow moisture inside the walls causing rot.
- i. **Mice and Rats:** Mice and rats generally enter through holes at grade level and live in basements, crawlspaces, and floor structure. They nest in hidden locations, chewing wood and wiring. Mice and rats should be controlled through periodic inspections by professional pest treatment services.
- j. **Insects:** It is recommended that a professionally qualified firm be retained to inspect and treat vulnerable buildings.

## BRICK MASONRY

Brick is primarily found as a chimney material on buildings within the VPA. Although brick is a material of substantial longevity, it is still vulnerable to deterioration. To remain in good condition, brick must maintain its structural stability and its ability to deal with moisture. Bricks are baked. Like a loaf of bread, they are comprised of an outer crust and a softer inner core. Without the outer crust, the inner core of the

brick is vulnerable to rapid deterioration. Bricks are also porous. Like a sponge, they absorb moisture. Brick walls must be allowed to dry out if they are to remain in good condition.

The quality of the bricks used in historic buildings varies considerably depending upon the quality of the materials being used and the quality of manufacture. Mid-nineteenth century bricks were often produced locally without suitable technological expertise or supervision.

Different quality brick was used for different purposes. Often the interior portions of a wall were laid with inexpensive, poor quality brick. Higher quality brick was reserved for the exterior surface. When stressed or exposed to weathering or deterioration, the poor quality brick on the interior can be a threat to the structural integrity of the wall and the building.

By the early twentieth century, manufacturing standards and techniques had improved, and brick was being produced in large volume by competent manufacturers and shipped long distances by railroad. Issues of poor quality were less common. When undertaking rehabilitation projects, brick walls should be carefully inspected for signs of deterioration. Bricks perform best when they are laid with bricks of a similar type, and when the mortar recipe is carefully matched to the appropriate type of brick.

## Condition and Causes of Brick Masonry Deterioration

Moisture penetration and improper maintenance are the most common causes of the deterioration of brick masonry. When water gets into a wall it can freeze, causing cracking in the wall and spalling of the face of the brick. Moisture penetration can be caused by leaking roofs, flashing, and gutters; deteriorated window sills; wall cracks; missing mortar; and rising damp. Improper maintenance can also damage brick and can include sandblasting or the use of hard pointing and bedding mortars. These conditions are discussed further below.

The treatment and repair of deteriorated brick masonry is an important part of any rehabilitation project involving a brick building or brick feature, such as a chimney, in a wood framed building.



*House in Eagle with a brick chimney (Isaac D. Frame House, 124 Pottstown Pike). The chimney was probably added in the twentieth century for an oil furnace.*

**1. Rising Damp:** Rising damp is a common and serious problem in humid environments and where there is poor drainage. Dampness in the soil or on paving is absorbed by a wall and drawn upwards by capillary action. Since a brick wall “breathes,” moisture within the wall gravitates to the exposed surface, resulting in a moist, clammy feeling near the base of a wall.

**2. Open Joints:** Open masonry joints are among the most common problems observed in historic buildings, particularly older buildings with soft mortar that are not being well maintained. Open joints are particularly dangerous because they allow water to enter the wall or chimney and then freeze in cold weather. When water freezes, it expands causing cracking of the masonry and providing more ways for water to enter.

**3. Cracks:** Cracks are worrisome for two reasons: one, they indicate that a building's walls or

foundations are moving and two, they provide opportunities for moisture penetration and further deterioration. Cracking may be caused by settlement, structural failure, freezing of moisture within the wall, or the rusting of metal within the wall.

**4. Spalling:** Spalling of the surface of a brick can be caused by absorption of water in the brick which then freezes and spalls off the face of the brick. Spalling causes the soft inner core of the brick to be exposed to the weather, continue to absorb water, and rapidly deteriorate within the wall.

**5. Steel Lintels:** In masonry buildings constructed during the twentieth century, it has been common practice to install steel lintels above door and window openings. Frequently, these lintels rust over time. The rusted steel expands, causing cracking and the jacking of the masonry above the opening.

**6. Efflorescence:** Efflorescence is a whitish stain that is prevalent in newly laid brick walls and sometimes occurs on older walls. It results from water-soluble salts that have crystallized and risen to the surface of bricks and mortar. Extensive appearance of this stain may signal a moisture problem in the wall.



*Within the VPA, brick is most often found as the construction material for chimneys, rather than walls. Difficult to access, this brick chimney has open joints which will absorb water.*



*The bricks in this chimney show their age – some are chipped and slightly spalled. They need not be repaired or replaced if they do not threaten the masonry as a whole.*



*The surfaces of these bricks have spalled, but the joints appear to be in good condition.*



*Jacking of a steel lintel at the window to the right has caused cracking of the brick masonry at left.*

## **Brick Masonry Treatment and Repair**

- a. **Sandblasting:** Brick walls should never be sandblasted. Sandblasting removes the protective outer crust of the brick and exposes the softer inner core. This inner core was not meant to be exposed directly to the weather and will deteriorate rapidly. Sandblasting can also break mortar joints, which can lead to moisture penetration.
- b. **Cleaning:** Cleaning should use only the gentlest means necessary, such as a low pressure water and natural bristle brushes. Soap may be used if necessary. Use water pressure at no more than 300 pounds per square inch (psi). High pressure water spray can have similar damaging effects to those of sandblasting.
- c. **Chemicals:** If chemical treatments must be used for cleaning, obtain the advice of a building materials conservator or historic preservation professional on appropriate products, means, and methods. Consult with the manufacturer's representative for any products under consideration for use. Prepare a test panel before treating the whole wall.
- d. **Crack Diagnosis:** Cracks in brick masonry should be properly diagnosed before undertaking repair work. Cracks caused by structural stresses should be investigated by a structural engineer to

determine their cause and appropriate remedial repairs. Any underlying structural problems must be addressed before performing repairs.

- e. **Crack Repair:** Cracking through masonry joints should be repaired by repointing the affected joints. Cracking through brick units may require the replacement of the cracked units with new brick to match that existing. Use mortar and masonry techniques outlined below in the discussion of pointing and mortar.
- f. **Spall Repair:** Remove spalled brick units and replace with new brick to match the existing in size, color, texture, and strength. Use mortar and masonry techniques outlined below in the discussion of pointing and mortar.
- g. **Steel Lintel Repair:** The long-term solution to the jacking of masonry over a window or door by a seriously rusting lintel is to remove the rusting lintel in its entirety. A new lintel should be installed, properly flashed, and where possible the removed brick should be used to reconstruct the masonry facing over the window or door to match its previous appearance.
- h. **Extent of Replacement:** When replacement is necessary, one, replace only individual bricks and small areas of brick masonry that are deteriorated through cracking or spalling, or two, areas that are structurally unsound as determined by a structural engineer. Do not replace wall areas that are not unsound.
- i. **Painted Coatings:** In general, do not paint brick walls that have never been painted. However, a painted coating may be an appropriate treatment where excessive spalling of brick is occurring due to the poor quality of the brick. Use a breathable masonry paint that will not trap moisture within the wall.
- j. **Efflorescence:** When efflorescence appears on an old wall, the source of the moisture should be identified and repaired. Remaining deposits can then be removed with a natural bristle brush or with a solution that neutralizes the salt.
- k. **Sealant:** Waterproof building sealants should only be applied to joints in horizontal wash surfaces such as at sills, water tables, projecting cornices, and steps. These joints are particularly prone to water penetration. Do not use sealant in joints on vertical wall surfaces because it will trap moisture within the wall and lead to deterioration.

## Pointing and Mortar

Mortar mix is extremely important to the functional needs and aesthetics of a brick or stone wall. Pointing mortar for an historic building should closely match the historic mortar in strength, color, texture, and finish.

In historic masonry walls, the mortar joints were soft, absorbing the seasonal thermal expansion and contraction of the wall and allowing moisture within the wall to escape through the joints.

Today's commercial mortars are hard – harder than historic brick. When used in historic brick walls, today's hard mortars force the softer historic brick to absorb the thermal movement causing cracking of the brick wall, and can also force moisture to escape from the wall through the brick causing cracking and spalling of brick units.

- a. **Repointing:** Repoint open or unsound mortar joints. Match historic mortar joints in color, texture, strength, joint size, and tooling. Work to achieve visual continuity between surviving historic material and new patches. Do not repoint sound historic mortar joints.
- b. **Unsound Mortar:** Remove unsound mortar to a depth of two-and-one-half times the width of the joint or to sound mortar, whichever is greater. Remove unsound mortar joints with hand tools that are narrower than the mortar joint. Do not use power tools, because they can scar adjacent masonry.
- c. **Saw Cut:** Under special circumstances and careful supervision, a thin saw cut may be run down the center of a horizontal joint with the remainder being removed by hand. However, masonry saws should never be used on vertical joints.

d. **Mortar Strength:** Match repointing mortar to the strength of the existing mortar of the historic building.



*The repointing below the window in this historic wall does not match the color, texture, or tooling of the historic mortar to the right and left.*



*Detail of repointed joints showing modern grey mortar to the right that does not match the rich brown color and texture of the historic sand mortar to the left.*



*Repair of a structural crack caused by building settlement between the lintel of the window below and the sill of the window above.*

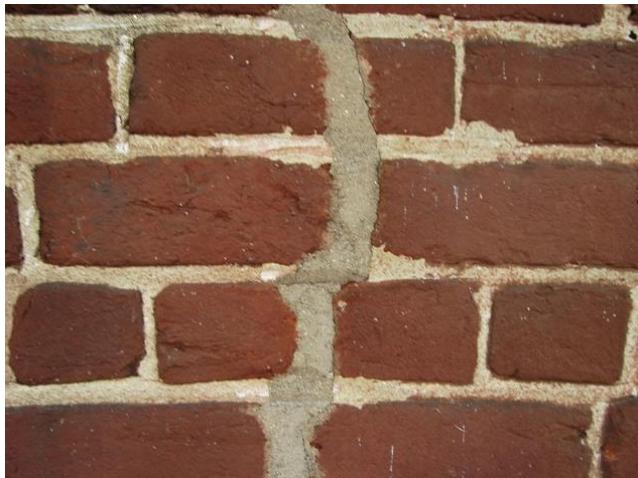
e. **Mortar Analysis:** If possible, have a mortar analysis undertaken of a sample of the historic mortar to determine its composition and strength. Such an analysis can be performed by a building conservator for a modest cost. Use the mortar analysis to prepare a custom specification for the new mortar matching the materials and mix proportions of the historic mortar.

f. **Commercial Option:** If matching the historic mortar mix is not feasible, a commercially available "Class N" cement mortar may be used. Type N mortar mix is an industry standard general purpose mortar mix preferred for soft brick or stone masonry. A type N mix is composed of one-part Portland cement, one-part lime, and six-part sand, and has a medium compressive strength.

g. **Color and Texture:** Pointing mortar for a historic building should match the historic mortar in color and texture. Sand should be used as the coloring agent wherever possible, as opposed to commercially available tints. Standard grey colored mortars are generally not appropriate.

h. **Test Panels:** Matching the color, texture, and appearance of the historic mortar should be achieved through trial and error using test panels. Multiple test panels are usually needed to achieve the right color and texture match.

- i. **Mask Grouting:** Mask grouting is the practice of applying a skim topcoat of mortar over existing joints and is essentially a cosmetic fix. Not only does it hide any underlying existing mortar problems, it alters the appearance of the entire building. This practice is not recommended and should be avoided.



*The crack repairs in the two photos above use mortar that differs in color and texture, not matching adjacent historic mortar. Additionally, cracked brick units were not removed and replaced before their cracks were repointed. Though not preferred, this treatment may be appropriate when matching bricks cannot be obtained, such as in the extremely old wall at top; but in general is not recommended.*

## STONE MASONRY

Stone is one of the strongest and most enduring building materials. The abundance of fieldstone in and near the VPA made it easy to acquire and its properties made it an excellent building material. Stone was used for the construction of building foundations and sometimes also for the walls of houses.

### Condition and Causes of Stone Masonry Deterioration

The issues and recommended treatments for stone are similar to those that are recommended for brick masonry. Both stone and brick are resilient when properly maintained, but can quickly succumb to water damage when mortar joints deteriorate.

Joints, however, are not the only locations where water can enter a masonry wall. Although stone is often thought to be impermeable, many types of stone are actually porous and can absorb water through their face. Like brick, stone must be allowed to breathe or water vapor can become trapped inside the wall, causing weathering and deterioration of the body of the stone and causing cracking when it freezes.



*Stone foundation of a wood framed vernacular building (219 Byers Road, Byers Station Historic District). Note: the building is clad in pressed tin.*

**1. Open Joints;** When mortar joints fail in a stone wall, they allow water to flow into the wall, creating a chain of events that can weaken the entire wall. Variations in pressure caused by water and ice can cause individual stones to move. Cracking along the

mortar joints is one indication that the stones are in motion.

**2. Cracks:** Cracks in masonry should be properly diagnosed before undertaking any maintenance or repair work. Cracks caused by structural stresses should be investigated by a structural engineer to determine the cause and appropriate remedial repairs. Any underlying structural problems must be addressed before performing repairs.

Masonry joints on the wash surfaces of sills are exposed to weathering, and the mortar often deteriorates leaving open joints. Water enters the wall through the open joints causing movement and cracking when it freezes.

Not all cracks in stone masonry require repair. Cracks may simply be a part of the natural weathering process for some stone masonry. Small, hairline cracks on vertical surfaces of stone masonry should not be repaired unless they are deep enough to allow water to infiltrate into the masonry wall. However, such cracking on horizontal wash surfaces should be patched with a knife-grade patching compound

**Delamination** – Surface deterioration and delamination through the body of stones are problems caused by water infiltration into masonry. Saturation of porous limestone or sandstone caused by water infiltration from above or from the ground can result in surface deterioration in which layers of stone flake away.

Sodium, calcium, and magnesium chloride based de-icing salts can damage foundation masonry as well. The salts are absorbed into the masonry with the water. As the masonry dries, the salt residue forms deep within or on the surface of the masonry causing internal stresses and damage.

*A stone foundation wall within the VPA (218 Byers Road, Byers Station Historic District).*

## Stone Masonry Treatment and Repair

In general, for treatment of stone masonry, follow the recommendations outlined above for brick treatment and repair.

- a. **Resetting and Replacement:** Minimize the removal and replacement of historic stone masonry. Only remove or rebuild substantial portions of stone masonry walls when such rebuilding is crucial to maintaining a building's structural integrity. When resetting or replacing a stone wall, replicate the existing pattern of stone. Rubble stone is laid randomly, and ashlar (rectangular) stone is laid in neat rows.
- b. **Repointing:** Cracks and deteriorated mortar in joints should be filled with new mortar that matches the color and texture of existing historic mortar joints. The width and profile of existing mortar joints should be replicated as closely as possible. Work to achieve visual continuity between surviving historic material and new mortar.
- c. **Unsound Mortar:** Remove unsound mortar to a depth of two-and-one-half times the width of the joint, or to sound mortar, whichever is greater. Use hand tools that are narrower than the mortar joint. Avoid the use of power tools, which can scar adjacent stones. Repoint only those joints that are no longer sound; do not remove sound mortar from existing joints.
- d. **Patching:** Where appropriate, patch small pieces of lost masonry with cementitious patches. Commercially available patching compounds can be either Portland cement-based or natural hydraulic lime-based. It is important to choose a patching compound that is compatible with the compressive and flexural strengths and permeability characteristics of the masonry to be repaired. The use of overly hard material – such as Portland cement – can result in further damage to the stone.





*This chimney has a custom stone cap with a terra cotta flue cap.*



*Stone or masonry exterior steps are compatible with the character of the VPA.*

- e. **Dutchman:** Damaged areas of stone that are too large to patch may be repaired by installation of a “dutchman.” The deteriorated portion of the stone is cut away and a new piece of stone or dutchman is installed matching the existing stone. Dutchman repair is a much more durable repair than a cementitious patch repair and should last as long as the masonry itself. Dutchman repairs require skill to install correctly and should only be undertaken by experienced masons.
- f. **Limited Repairs:** Fine masonry details exposed to the weather at some locations have experienced some chipping and spalling of their corners and edges. While visually detracting, such

conditions may not threaten surrounding masonry. It may be advisable to leave such details as is. Repairs may not hold up to the severe conditions that caused the chipping in the first place.

- g. **Consolidation:** Consolidation is a common remedy for surface disintegration in silicate-based masonry such as sandstone. Consolidation material is penetrated into the stone to strengthen cohesion between grains at a microscopic level. Consolidation should only be considered in situations where the masonry is friable (prone to crumbling) and exhibits surface disintegration and should only be undertaken by qualified professionals.
- h. **Sealant:** Sealant should be installed in the horizontal wash surfaces of stone masonry such as sills, water tables, parapets, and steps. Sealant should never be installed on vertical wall surfaces, as it will trap water within the masonry wall, forcing the water back into the masonry units.
- i. **Coatings:** Do not apply waterproof coatings, paint, or stucco as a substitute for repointing and general maintenance. Such coatings will trap moisture within the wall and cause deterioration.

## STUCCO

Stucco is a plaster-like substance used to give walls a smooth, finished appearance and protect them from deterioration caused by exposure. Historic stucco walls can be found on buildings throughout Upper Uwchlan Township. Stucco was traditionally applied in two or three coats directly to the underlying substrate, usually masonry. Buildings that have historically been covered with stucco should remain so. The underlying masonry, including stone walls, may have been of inferior quality and not meant to be exposed to the elements. In the twentieth century, stucco began to be installed over metal lath nailed to the substrate for better adherence.

Stucco should not be installed on buildings that were never historically stuccoed and should never be used as a substitute for maintenance of the masonry substrate. Masking problems with a surface coating solves nothing. In some rare cases, however, stucco may be an appropriate protective surface treatment for masonry buildings where the building’s underlying

brick or stone material is of poor quality and is severely deteriorating.

Stucco requires cyclical maintenance and reapplication. Stucco is composed of a binder of mortar or cement, sand and often a reinforcing fiber. It is applied in two to three coats. The first coat is called the brown coat, the second is the scratch coat, and the final coat is the finish coat. Stucco was traditionally composed of lime-based binder materials. Modern stuccoes are usually composed of Portland-cement and hydrated lime.

## Condition and Causes of Stucco Deterioration

Moisture and water infiltration is the main cause of stucco deterioration and failure. Problems with roof drainage systems can accelerate stucco deterioration. Excessive water runoff over a stucco surface will lead to disintegration of the stucco. Water splashing up from the foundation, or moisture penetration through rising damp, can cause the stucco to lose its bond to the substrate.

Wet stucco is vulnerable to freeze/thaw deterioration in cold weather. Water moving through the stucco leaches out carbonate material which builds up in areas where the water evaporates on the surface. Salts from the ground may accelerate stucco deterioration through salt crystallization.

**1. Cracking:** Several mechanisms cause cracking in stucco. Shrinkage cracks can form if the stucco has dried too quickly during installation. Building settlement can cause cracking in the stucco finish. Metal elements, such as metal lath or metal corner beads, expand at different rates than the stucco, causing cracking. A major cause is water infiltration beneath the stucco, which can crack and/or spall the material.

**2. Stucco On Lath:** Later stucco applications that have been applied over metal lath is particularly vulnerable over time. Often, the metal lath or lath nails have been inadequately sized and are not strong enough to hold the applied stucco.

The stucco on metal lath may have no expansion joints, which are required to absorb the movement of the lath during thermal expansion. Water infiltration into the stucco and metal lath system will cause the lath to corrode and fail.

Finally, the metal substrate can rust and thus expand, possibly cracking the attached stucco as it expands.

## Stucco Treatment and Repair

- a. **Preservation:** Retain, repair, and maintain stucco surfaces that are historically significant to an existing building.
- b. **Extent of Repair:** Where existing stucco is deteriorated, it should be repaired to match adjacent surfaces. Remove only the deteriorated stucco.
- c. **Stucco Hardness:** It is important to repair existing stucco with similar materials. Dissimilar materials will have problems bonding to the existing material. Portland cement-based stucco mixes are too hard and dense for soft, permeable historic masonry.
- d. **Compatible Stucco:** Natural hydraulic lime-based stucco mixes will require more care during installation, but provide a flexible breathable coating that is compatible with historical masonry.
- e. **Test Panel:** Before applying the replacement material to a large wall area, use a test panel to determine if the color and finish are appropriate. Once a proper recipe has been determined, it should be recorded for any future repairs to the building.
- f. **Match Existing:** When repairing stucco, make sure that areas of patched stucco match the strength, composition, color, and texture of the original to the greatest degree possible.



*Details of stucco walls (Sheetz House, 102 Pottstown Pike, Eagle).*

- g. **Tinting:** Stucco patch recipes should be tinted to match the weathered appearance of the existing material.
- h. **Stucco Repair:** In stucco repair, remove all of the loose or severely cracked stucco to expose the masonry substrate. The area to be patched should be cleaned of all debris. Masonry joints may need to be raked out 5/8-1 inch to ensure good bond between the substrate and the new stucco. Stucco should be applied directly to masonry whenever possible.
- i. **Application:** In applying stucco, begin from the top of the wall. Application should be smooth. Surplus stucco should be washed off with a light stream of water. Allow the stucco to set for 30 to 60 minutes. Using a fine spray of water, etch the surface to match the texture of the earlier stucco.
- j. **Thickness:** Carry out stucco repairs so that the surface thickness of the repaired stucco matches that of adjacent historic stucco.
- k. **Crack Repair:** Cracks in stucco should be repaired with cementitious materials similar to those found in the original mix. Hairline cracks can be filled with a slurry made of the finish coat mix. Larger cracks must first be cut to provide a groove or "key" for receiving the new work. A groove can be cut by using a knife to open up an existing crack. The edges should then be undercut with a hammer and chisel. After applying stucco, it should be kept moist for three to four days to allow curing.
- l. **Sealant:** Sealant should never be used to repair cracks in stucco.



*Stucco has been used as a protective coating over vulnerable masonry foundation walls*

## METALS

Metals were in limited use as original historic materials and are found on the exterior of buildings today most frequently in hardware, flashing, roofing, railings, and decorative features. Where original historic doors, windows, and shutters are present, their historic metal hardware is usually present as well. Metal was often used as a roofing material for shallow pitched roofs, such as for entrance porches, but most original metal roofing has been replaced over time due to weathering.

The metals most commonly used in architecture are alloys containing lead, tin, zinc, copper, nickel, aluminum, and iron. Iron and its alloys, including steel, are particularly prevalent in buildings because of the increase in quality and lowering of production costs brought about by technological breakthroughs in manufacturing in the late nineteenth century. Metal elements are inherently durable if properly maintained.

### Condition and Causes of Metal Deterioration

Corrosion is the major cause of deterioration of architectural metalwork and is exacerbated by. Corrosion can be caused by structural stress, electrochemical reaction with dissimilar metals, or corrosive environments, such as salt-laden water. It is accelerated wherever water collects against metal elements, such as at the base of metal posts.

Corroding metals are slowly reverting to their natural ores, such as iron oxide. This process involves significant expansion of the corroding metal, which can cause extensive cracking when the metal is embedded in masonry or concrete. (See the discussion of steel lintels under Brick Masonry, above.)

Architectural metals can also deteriorate from mechanical failures, such as overloading or fatigue. For example, operable metal hardware installed with doors and windows can deteriorate over time due to metal fatigue. The constant use of metal handrails can result in sections working loose at their anchors, causing damage to the wood or masonry to which they are connected.



*Vestigial historic metal features such as this pintle from a late nineteenth century shutter hinge point to the building's appearance in earlier years.*

## Metal Treatment and Repair

The architectural metalwork of historic buildings can be maintained through proper surface preparation and application of protective coatings where appropriate. Some metals must be painted for protection while others should be left unpainted

- a. **Iron and Steel:** Cast iron, steel, and tin should be painted to protect them from corrosion.

- b. **Other Metals:** Copper, bronze, aluminum, and stainless steel should be left exposed. Historic copper and bronze are present to a limited extent. Aluminum and stainless steel are modern materials used for new, non-historic features. Modern aluminum often has a baked factory finish that should not be painted.
- c. **Maintenance:** Ongoing maintenance can help prevent weathering and deterioration and the need for replacement of metal features.
- d. **Paint Deterioration:** Deteriorated paint on painted metal surfaces should be removed using appropriate methods, including wire brushing for non-decorative elements exhibiting light rust, or chemical paint removal for heavier built-up paint.
- e. **Removal for Repair:** Severe corrosion of historic metal features may require that entire sections or features of metalwork be removed and carefully repaired in a shop before reinstallation.



*When installing metal handrails within the VPA, be mindful that their posts are susceptible to deterioration where they anchor into concrete or masonry. This can in-turn damage the surrounding concrete or masonry.*

- f. **New Paint:** Newly cleaned metal should be immediately protected with a rust-inhibiting primer. Alkyd-based enamel paints are recommended for finishing iron alloys. Latex and other water-based paints are not recommended.
- g. **Replacement:** Replacement of historical metal elements should be undertaken as a last resort, when the element is deteriorated beyond repair. Most original metal elements in historic buildings may be character defining features, and replacement in-kind could be expensive.

h. **New Metal Features:** Where new or replacement metal features are required, their design should be sympathetic to the historic character of the building. Most modern stock handrails, for instance, are not appropriate for historic buildings. Sympathetic modern profiles should be found. Usually, simplicity is preferred over new metal features that are highly decorative, especially for vernacular residential buildings.



*Decorative metal features such as this light and house numbers are generally modern installations within the VPA (Byers Hotel, Byers Station Historic District).*

## APPENDIX C: ARCHITECTURAL GLOSSARY

**Awning window:** A window in which the opening sash is hinged at the top; when the window is open, the bottom of the sash projects out at an angle.

**Baluster:** One of several small columns or rods that support a railing or balustrade.

**Balustrade:** A railing with upper and lower rails, balusters, and pedestals.

**Bracket:** A projecting and sometimes decorative supporting element found below the eaves of a roof.

**Casement window:** A window with one or more sashes that are hinged on one side so that the sash opens by swinging in or out; the most common type of window in North America until the early eighteenth century.

**Character-defining Feature:** A prominent or distinctive aspect, quality, or physical component of a property that contributes significantly to its historic character.

**Cornice:** The projecting moldings forming the top band of an entablature, wall, or other element. The architectural details that decorate a roofline.

**Cresting:** Decoration in the form of a series of ornate pointed shapes located at the top of a parapet or roof ridge.

**Cupola:** A small structure projecting above a roof that provides ventilation or is used as a lookout, especially with a hemispherical roof on a circular or polygonal drum.

**Dormer:** A small structure that projects from a sloping roof with a window in the down slope end; used to light an attic space and to provide headroom; may have a gabled, shed, or other shaped roof.

**Double-hung window:** A window with two sashes that slide past each other vertically; typically hung with cord, pulley, and counterweights on each side.

**Eave:** The projection of a roof beyond the wall; most often used to refer to the edge and underside of a roof.

**Entablature:** In classical architecture, the entire band of horizontal elements above the column capitals; from bottom to top, the entablature is composed of the architrave, frieze, and cornice. Locally this area is usually above a main or formal entrance.

**Fanlight:** A window in the arched opening over an entry door.

**Fascia:** A flat, wide, horizontal band on a wall surface, especially the bands of an architrave, cornice, or above an eave.

**Fenestration:** The arrangement of windows in a building façade.

**Finial:** A pointed ornament typically used at the peak of a roof.

**Fixed window:** Any type of window held in a frame or sash that does not open.

**Flashing:** Sheet metal or other flexible material formed to prevent water from entering a building or structure at joints or intersections, such as where a roof intersects a wall or chimney.

**Gable Roof:** A pitched roof with two inclined planes that meet at a peak in the center and terminate at a vertical grade.

**Glazing:** The clear or translucent material, usually glass, through which light passes into a building.

**Low Pressure Wash:** A cleaning method using water that does not damage historic material, typically defined as ranging from 100 to 400 psi as registered on cleaning equipment fitted with an adjustable pressure gauge.

**Mansard:** A two-pitched roof with a steep lower slope that rises from all of the formal facades of a building, hipped when used on a detached building.

**Massing:** The overall composition of the exterior of the major volumes of a building.

**Proportion:** The relationship of the size, shape, and location of one building element to all the other elements; each architectural style typically has its own rules of proportion.

**Reflective Glazing:** Window glass which has been coated on the outside with a transparent metallic coating to reflect a significant fraction of the light and radiant heat which strikes it.

**Sash:** The part of a window frame that holds the glazing (glass), especially when movable.

**Sidelight:** A narrow window adjacent to a door or wider window that is the same height as the door or window; most often one of a pair flanking an entrance door.

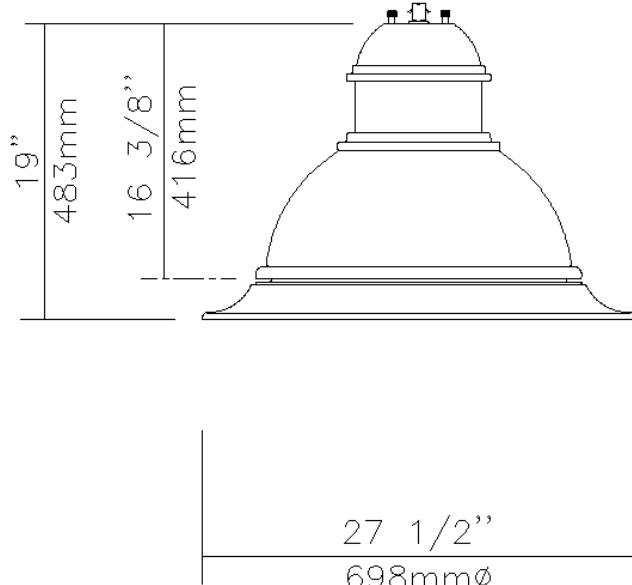
**Streetscape:** The distinguishing character of a particular street as created by its width, degree of curvature, paving materials, design of the street furniture, and forms of surrounding buildings.

**Turret:** A small, projecting tower at the corner of a building, or above the roof; typically circular or octagonal in plan.

**Vertical Circulation:** Term used to describe any method of moving from one floor to another within a building, such as stairs, elevators, or escalators.

# Appendix D: Street Lighting (2011 Village Design Guidelines)

Note: The following is the street lighting that currently exists in Eagle. If this specific make and model is not available in the future, the design and style should be replicated via a Township-approved equivalent. The lighting type used in Eagle may not be appropriate for use in Byers.



EPA: 1.42 sq ft / weight: 42 lb (19.1 kg)

**Note:** 3D image may not represent color or option selected.

Qty	1	Luminaire	DMS50-55W32LED3K-T-LE3F-120-DMG-RD2TX
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## Description of Components:

**Hood:** A die cast A360.1 aluminum dome complete with a cast-in technical ring with latch and hinge. The mechanism shall offer tool-free access to the inside of the luminaire. An embedded memory-retentive gasket shall ensure weatherproofing.

**Housing:** In a round shape, this housing is made of cast 356 aluminum, c/w a watertight grommet, mechanically assembled to the bracket with four bolts 3/8-16 UNC. This suspension system permits for a full rotation of the luminaire in 90 degree increments.

**Light Engine:** **LEDgine** composed of 5 main components: **Heat Sink / Lens / LED Module / Optical System / Driver** Electrical components are RoHS compliant.

**Heat Sink:** Heat Sink: Made of die cast A360 aluminum optimising the LEDs efficiency and life, complete with a cast in skirt and technical ring. Product does not use any cooling device with moving parts (only passive cooling device)

**Lens:** Made of soda-lime clear tempered flat glass lens, mechanically assembled and sealed onto the lower part of the heat sink.

**LED Module:** LED type Philips Lumileds LUXEON T. Composed of 32 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

**Optical System:** (LE3F), IES type III (asymmetrical). Composed of high-performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Street side indicated.0% uplight and U0 per IESNA TM-15.

**Driver:** High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. **Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class 1, THD of 20% max.** Maximum ambient operating temperature from -40F(-40C) to 130F(55C) degrees. **Driver comes with dimming compatible 0-10 volts.**

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

**Driver Options: (DMG)**, Dimming compatible 0-10 volts. For applicable warranty, certification and operation guide see Lumec dimmable luminaire specification document for unapproved device installed by other. To get document, click on this link: [Specification document](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf) or go on web site on this address: [https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7\\_d.pdf](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf)

**Surge Protector:** Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

**Luminaire Note:** Please note this pendant fixtures is made to be used with the appropriate Lumec adaptor. For other applications please contact your sales rep.

## Miscellaneous

### Description of Components:

**Wiring:** Gauge (#14) TEW/AWM 1015 or 1230 wires, 6" (152mm) minimum exceeding from luminaire.

**Hardware:** All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

**Finish:** Color to be **burgundy textured (RD2TX)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with  $\pm 1$  mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**LED products manufacturing standard:** The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

**Quality Control:** The manufacturer must provide a written confirmation of its ISO 9001-2008 and ISO 14001-2004 International Quality Standards Certification.

**Vibration Resistance:** The DMS50 meets the **ANSI C136.31, 2010**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100 000 cycles)

**Web site information details:** / [cULus Certification](#)

### LED Wattage and Lumen Values: 4000K Domus luminaire

Flat lens					Type LE2F			Type LE3F			Type LE4F			Type LE5F		
Ordering Code	Total LEDs	LED Current (mA)	Average System Watts <sup>1</sup>	Color Temp.	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating
35W32LED4K-T	32	350	37	4000K	4,039	109	B1-U0-G1	3,934	106	B1-U0-G1	3,895	105	B1-U0-G1	3,925	106	B3-U0-G1
55W32LED4K-T	32	530	55	4000K	5,808	106	B1-U0-G1	5,657	103	B1-U0-G1	5,602	102	B1-U0-G2	5,644	103	B3-U0-G1
72W32LED4K-T	32	700	73	4000K	7,312	101	B2-U0-G1	7,122	98	B1-U0-G2	7,052	97	B1-U0-G2	7,105	98	B3-U0-G2
55W48LED4K-T	48	350	54	4000K	6,041	113	B1-U0-G1	5,883	110	B1-U0-G1	5,826	109	B1-U0-G2	5,870	110	B3-U0-G1
80W48LED4K-T	48	530	80	4000K	8,641	108	B2-U0-G2	8,417	105	B2-U0-G2	8,335	104	B2-U0-G2	8,398	105	B3-U0-G2
108W48LED4K-T	48	700	106	4000K	10,852	103	B2-U0-G2	10,570	100	B2-U0-G2	10,467	99	B2-U0-G2	10,546	100	B4-U0-G2
70W64LED4K-T	64	350	69	4000K	7,856	113	B2-U0-G1	7,709	111	B1-U0-G2	7,697	111	B1-U0-G2	7,643	110	B3-U0-G2
110W64LED4K-T	64	530	105	4000K	11,261	107	B2-U0-G2	11,050	105	B2-U0-G2	11,034	105	B2-U0-G2	10,955	104	B4-U0-G2
145W64LED4K-T	64	700	141	4000K	14,148	101	B3-U0-G2	13,883	99	B2-U0-G2	13,862	99	B2-U0-G2	13,763	98	B4-U0-G2
90W80LED4K-T	80	350	86	4000K	9,806	114	B2-U0-G2	9,623	112	B2-U0-G2	9,608	112	B2-U0-G2	9,540	111	B4-U0-G2
135W80LED4K-T	80	530	131	4000K	14,008	107	B3-U0-G2	13,745	105	B2-U0-G2	13,724	105	B2-U0-G2	13,626	104	B4-U0-G2
180W80LED4K-T	80	700	174	4000K	17,483	100	B3-U0-G2	17,144	98	B3-U0-G2	17,269	99	B3-U0-G3	17,115	98	B4-U0-G2

### LED Wattage and Lumen Values: 3000K Domus luminaire

Flat lens					Type LE2F			Type LE3F			Type LE4F			Type LE5F		
Ordering Code	Total LEDs	LED Current (mA)	Average System Watts <sup>1</sup>	Color Temp.	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating
35W32LED3K-T	32	350	37	3000K	3,641	98	B1-U0-G1	3,547	96	B1-U0-G1	3,512	95	B1-U0-G1	3,538	95	B2-U0-G1
55W32LED3K-T	32	530	55	3000K	5,237	95	B1-U0-G1	5,101	93	B1-U0-G1	5,051	92	B1-U0-G1	5,089	93	B3-U0-G1
72W32LED3K-T	32	700	73	3000K	6,592	91	B2-U0-G1	6,421	88	B1-U0-G1	6,358	87	B1-U0-G2	6,406	88	B3-U0-G1
55W48LED3K-T	48	350	54	3000K	5,446	102	B1-U0-G1	5,305	99	B1-U0-G1	5,253	98	B1-U0-G2	5,292	99	B3-U0-G1
80W48LED3K-T	48	530	80	3000K	7,791	97	B2-U0-G1	7,589	95	B1-U0-G2	7,515	94	B1-U0-G2	7,571	95	B3-U0-G2
108W48LED3K-T	48	700	106	3000K	9,784	93	B2-U0-G2	9,530	90	B2-U0-G2	9,437	89	B2-U0-G2	9,508	90	B4-U0-G2
70W64LED3K-T	64	350	69	3000K	7,083	102	B2-U0-G1	6,951	100	B1-U0-G2	6,940	100	B1-U0-G2	6,891	99	B3-U0-G2
110W64LED3K-T	64	530	105	3000K	10,153	96	B2-U0-G2	9,963	95	B2-U0-G2	9,948	94	B2-U0-G2	9,877	94	B4-U0-G2
145W64LED3K-T	64	700	141	3000K	12,756	91	B3-U0-G2	12,517	89	B2-U0-G2	12,498	89	B2-U0-G2	12,409	88	B4-U0-G2
90W80LED3K-T	80	350	86	3000K	8,842	103	B2-U0-G2	8,676	101	B2-U0-G2	8,663	101	B2-U0-G2	8,601	100	B3-U0-G2
135W80LED3K-T	80	530	131	3000K	12,629	97	B3-U0-G2	12,392	95	B2-U0-G2	12,374	95	B2-U0-G2	12,286	94	B4-U0-G2
180W80LED3K-T	80	700	174	3000K	15,817	91	B3-U0-G2	15,521	89	B2-U0-G2	15,497	89	B2-U0-G3	15,387	88	B4-U0-G2

1. System input wattage may vary based on input voltage, by up to +/- 10%, and based on manufacturer forward voltage, by up to +/- 8%.

2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

Note: Some data may be scaled based on tests of similar, but not identical, luminaires.

# Appendix E: Street Furniture

Note: The following, as depicted in earlier village design guidelines, is the street furniture that currently exists in Eagle. If this specific makes and models are not available in the future, the design and style should be replicated via a Township-approved equivalent. The street furniture type used in Eagle may not be appropriate for use in Byers.

## Upper Uwchlan Township Village Design Guidelines

### Site Furniture

#### Village Standard Details

1. DuMor Bench 58, 6-feet long with back, polyester powder finish, textured, color 3007 Red.
2. DuMor Bench 92, 6-feet long without back, polyester powder finish, textured, color 3007 Red.
3. DuMor Receptacle 84, 32-gallon capacity, polyester powder finish, textured, color 3007. Recycling receptacles, color blue.
4. Décor or CycleSafe bike rack, polyester powder finish, textured, color dark burgundy

CycleSafe bike rack



Décor bike rack



DuMor Receptacle 84



DuMor Bench 58



DuMor Receptacle 102



DuMor Bench 92





## UPPER UWCHLAN TOWNSHIP

Planning Commission

May 9, 2024

6:00 p.m. Workshop

7:00 p.m. Meeting

Minutes

**Draft**

LOCATION: Township Building, 140 Pottstown Pike, Chester Springs PA 19425

### Attendees:

Sally Winterton, Chair; Joe Stoyack, Vice-Chair; Chad Adams, David Colajezzi, Jim Dewees, Steve Fean, Jeff Smith

Anthony Campbell, Zoning Officer (Workshop)

Mary Lou Lowrie, P.E., Gilmore & Associates (Meeting)

Gwen Jonik, Planning Commission Secretary

Absent: Jessica Wilhide, Taylor Young

Sally Winterton called the Workshop to order at 6:00 p.m. There was 1 citizen in attendance.

### C1, C3, LI Zoning District Uses Ordinance Amendments

The Commission is reviewing a draft dated April 22, 2024, prepared by Kristin Camp, Esq., Township Solicitor, which addresses the Commission's recommendations from the April meeting, as well as the County Planning Commission's comments. The question this evening is where to allow passive and active recreation. Discussion included: that passive recreation be allowed by-right in C1, C3, and LI; active recreation should be allowed by-right in C3 and LI, and by conditional use in C1; is this for township-owned recreation areas or private property owners; would be private property owners; we'd like businesses, for tax base.

Jeff Smith moved that the revisions to date are accepted by the Commission and that passive recreation be allowed by-right in the C1, C3 and LI Districts and active recreation be allowed by-right in C3 and LI and by conditional use in C1 District. Jim Dewees seconded. The motion carried unanimously.

Jeff Smith moved to recommend that the April 22, 2024 draft ordinance with the recreation-related amendments voted upon this evening be forwarded to the Board of Supervisors for approval as amended. David Colajezzi seconded. The motion carried unanimously.

### Short-term Tentals Ordinance Draft

Anthony Campbell explained that the Board was interested in regulations for short-term rentals, such as AirBnBs. A draft ordinance was prepared by the Township Solicitor proposing short-term rentals could be allowed via conditional use in the R1 and R2 Zoning Districts, include minimum standards for safety, parking, occupancy, annual registration and safety inspections, and licensing for AirBnBs. These regulations would be enforceable by the Zoning Officer; he'd verify minimum safety standards.

Discussion included:

1. Add "upon reasonable notice periodic inspections can occur in between";
2. would these need a temporary signs allowance (they'd have to meet sign regulations for residential zones and HOAs);
3. would number of guests per bedroom include sofa beds (no, it's not in a bedroom)
4. is this for primary residence, accessory buildings (primary residence / principal use)

The Commission would like to discuss this more at the June Workshop.

The Workshop was adjourned at 6:55 p.m.

### 7:00 p.m. Meeting

Sally Winterton called the meeting to order at 7:00 p.m. There were 3 citizens present.

#### 301 Park Road – P.J. Reilly Headquarters ~ Revised Preliminary Land Development Plan

Joe Mongeluzi of Wilkinson Apex noted the project was first before the Commission in December 2022. The engineering firm who began the project, Wilkinson, merged with Apex Engineering, and the engineer working on the project has since left the company. Mr. Mongeluzi and Steve Bocker have been working on it. The project also needed zoning variance(s). That Hearing was conducted in August 2023. The revised plans set is dated March 28, 2024. The project is to combine P.J. Reilly's shop and office to one location.

They are seeking 2 waivers: to not install sidewalks and relief from tree planting requirements. Due to the size of the existing stormwater basin and size of the site, there isn't enough room to plant all the trees and shrubs required. There is a trail across Park Road from the project.

Discussion included: provide adequate screening to protect Heather Hill neighbors and passersby from seeing the storage area; locations for the required number of trees/shrubs; the light poles will be 15-20' tall, 15' preferred, and the plan will be revised to correct spillage at Heather Hill intersection; they can comply with most of the consultants' comments; they'll remove the portion of the retaining wall that is in the Township right of way; they're not planning to store vehicles other than what is inside the garage; the storage yard is for materials; they meet the required parking for employees and the use; a chain link fence is proposed for the storage area – slatted fencing is preferred by Commission; the first floor will be parts and such for the equipment and the second floor is the office – is second floor ADA accessible?; the existing rancher will be demolished and materials would be hauled off site; the aesthetic of the proposed building is a pole barn with no integration of the surrounding character; the business is a site construction company – dump trucks, low-boy for hauling backhoes and bulldozers, contained in the building; there is a fuel storage area, above-ground dual-contained tanks to the rear of the building, enclosed partially with concrete to contain spills; unsure if building will be sprinklered; where will vehicles be stored overnight if there's no room in the garage?; concern with the 70' long low-boy making turns in/out, doesn't have maneuverability from each direction; usual start time @ 6:00 or 6:30 a.m.; the consultant had suggested in lieu of the required plantings, perhaps native species could be planted in the sedimentation basin, however, the Commission doesn't favor that idea, preferring the trees and shrubs be planted along the front of the property to block the site from view; they've reduced the 4 stormwater management measure to 2 – underground system with manholes at the surface – 1 in the front, 1 in the back; some stormwater structures are in the setbacks so they should request a waiver.

Leah Seace, Lila Lane resident, commented on the impact of the large equipment on Park Road, noise at 6:00-6:15 a.m. at the trucks start up, employees vehicles will be parked there, the shipping containers for storing the materials won't be adequately screened with fencing – it won't be tall

enough, the truck/trailer combination pulling on to Park Road looks like it would cross the center line, and some of the information this evening conflicts with the Zoning Hearing testimony. Gerry Stein, Greenridge Road resident, asked to see the building architecture.

Mr. Mongeluzi and the Commission will request Mr. Reilly attend the June Planning Commission meeting to answer the questions raised this evening. Commission members request the Fire Marshal provide comment on the fuel tanks, and the architecture is unacceptable.

#### Byers Station Parcel 5C Lot 2B Commercial ~ Amended PRD Plan

Alyson Zarro, Esq., Chris Puzinas – Bohler Engineering, and Guy DiMartino – TPD, were present. Ms. Zarro advised the Applicant has been actively marketing the property but has revised the previously approved Plan to just 2 buildings – a 10,500 SF daycare center in the same spot with play area relocated to the north end (5,500 SF play area) and a 10,500 SF 6-store pad, 80 parking spaces plus 8 in reserve. They withdrew the previously approved phased plan – the proposed drive-through restaurant on the northern portion of the parcel is removed and there is nothing else planned on the parcel at this time. If they want to further develop the parcel in the future, they'd have to come back for another approval.

The Commission suggested they expand the play area for the daycare center. Discussion included: the retail building has fewer bays - only 6 now; the architecture of the school remains the same as approved with the initial land development approval; protect the playground from Route 100 traffic – add bollards; the fencing around the play area is probably a nice vinyl fence and State licensing for the daycare will dictate the height of fence; the master stormwater plan already exists; minor grading is needed; they'll comply with the consultants' comments; they'll put the curbing in where Iris Lane was supposed to extend to Route 100; there's no longer a left turn in to the development from southbound Route 100; Begonia will remain a private road and there's already an agreement for that between the Villages at Chester Springs, the Enclave at Chester Springs, and Parcel 5C 2B owners; there are a few tenants interested in the retail spaces, including Jersey Mike's; trash and recycling area doesn't seem adequate for 10,500 SF school and a restaurant – they'll look at adding a second trash and recycling area.

Jeff Smith moved to recommend approval to the Board of Supervisors of the Plan as submitted with the addition of protective bollards between the playground and Route 100/Pottstown Pike and inclusion of another receptacle for trash/recycling disposal. Joe Stoyack added another condition of withdrawing the prior plan for this Lot including the Route 100 ingress/egress. Jeff Smith accepted the amendment, Joe Stoyack seconded and the motion carried with 6 in favor and 1 abstention (Deweese).

#### Meeting Updates ~ Reports

Environmental Advisory Council (EAC). There was no report. Sally Winterton noted the EAC had a successful Earth Day celebration.

Historical Commission (HC). David Colajezzi mentioned the "Know Your Barns" lecture May 22 at Upland Farm Park and the County Town Tour/Walk is June 27 at Upland Farm Park – volunteers are needed.

Village Design Guidelines / Village Concept Plan (VDG/VCP). Sally Winterton noted the next meeting is late May.

Comprehensive Plan Update (CompPlan). Sally Winterton advised that the consultant is working on the mission/vision.

Approval of Minutes

Jim Dewees moved, seconded by Jeff Smith, to approve the April 11, 2024 Meeting minutes as presented. The motion carried unanimously.

Sally Winterton announced the next meeting is scheduled for June 13. A Workshop will be held at 6:00 p.m. to review the short-term rental ordinance draft and potential amendments to the landscape design ordinance.

Open Session

Joe Stoyack requested the traffic engineer attend the next CompPlan meeting to discuss the transportation chapter in regard to traffic studies and recommendations.

Steve Egnacyk made comment that some traffic studies don't seem to represent the reality.

Gerry Stein commented on sign regulations.

Sally Winterton commented on the timing of the light at Ticonderoga Boulevard.

Adjournment

Jim Dewees moved, seconded by Chad Adams, to adjourn at 9:03 p.m. All were in favor.

Respectfully submitted,

Gwen A. Jonik

Planning Commission Secretary