



## **TOWNSHIP of HOPEWELL MERCER COUNTY**

**201 WASHINGTON CROSSING – PENNINGTON ROAD  
TITUSVILLE, NEW JERSEY 08560-1410**

### **PROJECT / APPLICATION**

**BLOCK:**

**LOT:**

**ADDRESS:**

**PROJECT NAME:**

### **REVIEW REPORTS**

### **CONTENTS**



Paul W. Ferriero, PE, PP, CME, LEED AP, CFM  
Robert C. Brightly, PE, PP, CME

Steven B. Bolio, PE, CME  
Mark S. Denisiuk, PE, CME, LEED AP  
Mark Kataryniak, PE, PTOE  
Joseph S. Kosinski, PG, CFM, LEED  
C. Richard Quamme, PE, CME  
Jess H. Symonds, PE

## MEMORANDUM

(via email)

TO: Hopewell Township Planning Board  
FROM: Mark Kataryniak, PE, Township Redevelopment Engineer (MD)  
DATE: August 8, 2023  
SUBJECT: **Completeness Review 2**  
Preliminary & Final Major Site Plan  
Heritage at Hopewell  
2500 Pennington Road  
Block 78 Lot 17, IMF-1 Zone  
Hopewell Township, New Jersey  
FEI Project No.: 23HT203

Our office is in receipt of the documents noted below submitted in support of the referenced application. Updated materials submitted in response to our 1<sup>st</sup> Completeness Review (June 27, 2023) are **highlighted in bold**:

- Hopewell Township Planning & Zoning Board Application, dated May 12, 2023, for Preliminary and Final Site Plan application.
- **Correspondence dated June 17, 2023 from Ian A. Burton, PE, MidAtlantic Engineering Partners, Inc., responding to comments in our office's June 27, 2023 Completeness Review 1 memorandum.**
- Hopewell Township Preliminary & Final Major Site Plan Checklists, dated May 12, 2023, prepared by Jason M. Fogler, PE, MidAtlantic Engineering Partners Inc.
- Preliminary and Final Site Plans of Heritage at Hopewell, Block No. 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, II, PE, MidAtlantic Engineering Partners, Inc., dated May 12, 2023, **revised July 13, 2023**, containing 23 sheets, consisting of:
  - Title Sheet,
  - Existing Conditions & Demolition Plan
  - Overall Geometry, Signage, & Stripping Plan
  - Grading Plans
  - Utility Plans
  - Utility Profiles
  - Landscape & Tree Replacement Plan
  - Lighting Plans
  - Soil Erosion & Sediment Control Plan
  - Construction Details

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□ 180 Main Street • P.O. Box 571 • Chester, NJ 07930 • 908-879-6209 • Fax: 908-879-6597  
■ 17 Model Avenue • P.O. Box 577 • Hopewell, NJ 08525 • 609-466-0002 • Fax: 609-466-2008  
mail@FerrieroEngineering.com

Re: **Completeness Review 2**

Preliminary & Final Major Site Plan  
Heritage at Hopewell  
2500 Pennington Road  
Block 78 Lot 17, IMF-1 Zone  
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- Boundary and Topographic Survey, Block 78, Lot 17, Tax Plate 20, 2500 Pennington Road, Situated in Township of Hopewell, Mercer County, New Jersey, prepared by Suzanne E. Warren, PLS, MidAtlantic Engineering Partners, Inc., dated August 30, 2022, containing 1 sheet.
- Architectural Plans, entitled, Heritage at Hopewell, Townhouse Community, prepared by Joseph M. DeLucia, RA, CPL Partnership, dated May 10, 2023, containing 20 sheets.
- Architectural and Phase 1B Archaeological Survey, prepared by Hunter Research, Inc., dated April 2023.
- Environmental Impact Statement for 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by MidAtlantic Engineering Partners, dated May 11, 2023.
- Fiscal Impact Statement, Heritage at Hopewell, Proposed Multi-Family Inclusionary Development, Block 78, Lot 17, Township of Hopewell, Mercer County, New Jersey, Prepared by Paul A. Phillips, PP, AICP, Phillips Preiss Grygiel Leheny Hughes, LLC, dated May 2023.
- Sanitary Sewer Report for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated May 11, 2023.
- Stormwater Management Report for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated March 28, 2023, Revised May 11, 2023.
- Operations and Maintenance Manual for Stormwater Management Facilities for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated March 14, 2023, Revised May 11, 2023.
- Traffic Engineering Assessment, prepared by Nathan B. Mosley, PE, CME, Shropshire Associates, LLC, dated May 10, 2023.
- Utility Will Serve letters issued by:
  - Comcast, dated June 10, 2022
  - PSE&G Electric, dated June 16, 2022
  - Elizabethtown Gas, dated September, 27, 2022
  - Ewing Lawrence Sewerage Authority, dated October 6, 2022
  - Trenton Water Works, dated November 23, 2022
- Freshwater Wetlands Letter of Interpretation, Line Verification issued by the New Jersey Department of Environmental Protection, dated August 17, 2018.

The subject application seeks preliminary and final site plan approval for the construction of an inclusionary development, containing 55 market-rate, for-sale, three-bedroom townhouse units,

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Preliminary & Final Major Site Plan

Heritage at Hopewell

2500 Pennington Road

Block 78 Lot 17, IMF-1 Zone

Hopewell Township, New Jersey

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and 12 affordable rental units, for a total of 67 units. The market-rate townhouse units will be contained within eight three-story buildings, of varying size to contain 6, 7, or 8 units per building, with each unit containing either one or two car garages. The affordable rental units are proposed to be contained within a single three-story building. The development will be accessed by way of a single, right-in/right-out driveway on NJSR Route 31, and the individual buildings will be served by a series of interconnected internal private roadways, containing right-angle parking to supplement the garages contained within the for-sale units. Additional improvements on the property include the construction of stormwater management facilities, sidewalks, site lighting and an open park area.

The subject property is included in the township's Third-Round Affordable Housing Plan, and is situated within the Inclusionary Multi-Family – 1 Zoning District.

Our office has reviewed the materials described herein for conformance with the Township's requirements for completeness, as outlined in the established Preliminary Site Plan and Final Site Plan Checklists.

Our review is limited to the following portions of the checklists:

- Preliminary Site Plan: Administrative, Engineering, and Landscaping / Lighting sections
- Final Site Plan: Administrative and Engineering sections

We defer to the Township's Health Department and the Board's Planner for review of their respective sections of the checklists.

Attached are copies of the portions of the checklists we have reviewed, updated to reflect the revised materials submitted following the issuance of our Completeness Review 1 memorandum, indicating the response provided by the applicant with their submission and our comments/recommendations on each of the checklist items. Items within the portions of the checklists that require concurrence by the Community Development Office are so noted.

**Checklist Review**

The applicant included a Design Waivers Request Form with the submitted checklists providing descriptions of the requested waivers noted on the checklists. The justifications for the requested waivers are primarily identified as items deferred to conditions of approval for technical items that will be finalized following a detailed technical review as part of the Site Plan process and items related to outside utility and permitting agencies. Items noted not applicable pertain to requirements for well and septic, as the project will be served by public utilities, of which I concur.

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In addition to the specific submission waivers requested by the applicant and described in the Design Waivers Narrative, our office noted additional elements specific to technical requirements of certain checklist items that either do not apply to the project or do not contain all of the specific details required by the checklist. However, the majority of the outstanding or incomplete items are minor in nature and are better addressed as part of the detailed technical review, as further noted on the attached checklists. I recommend that the submission waivers, or deferrals to conditions of any approval be granted as noted for the items included on the attached checklists.

**The revised plan submission, prepared in response to the comments contained in our Completeness Review 1 memorandum, includes the delineation of the township stream corridor buffer as required by Item 23 of the Preliminary Site Plan Checklist. The plan revisions adequately address the deficient items previously identified in terms of determining completeness of the application.**

I defer to the respective professionals for additional items/comments on the Health and Planning portions of the checklists.

From an engineering perspective, I conclude that the subject application be deemed **complete**. A detailed technical review of the application will be submitted under separate cover.

Please contact me if you have any questions on the recommendations or comments contained on the enclosed materials.

cc: Frank Banisch, PP, AICP, Board Planner, [frankbanisch@banisch.com](mailto:frankbanisch@banisch.com)  
Jim Hutzelmann, PE, Township Engineer, [jhutzelmann@hopewelltwp.org](mailto:jhutzelmann@hopewelltwp.org)  
Dawn Marling, Township Health Officer, [dmarling@hopewelltwp.org](mailto:dmarling@hopewelltwp.org)

Heritage at Hopewell  
 Preliminary & Final Site Plan  
 2500 Pennington Road  
 Block 78, Lot 17

Application Date: May 12, 2023, Revised to Reflect Updated (7/13/2023) Plan Submission

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
<b>Administrative</b>					
1	Submitted within published "window for submission."	X		Comm Devel	
2	Completed Application Forms, including Corporation or Partnership Disclosure Affidavit.	X	C		
3	Payment of Required Fees.	X		Comm Devel	
4	Completed Escrow Agreement.	X		Comm Devel	
5	Receipt of Taxes Paid for current tax quarter from Tax Collector.	X		Comm Devel	
6	Completed Consent to Entry Form.	X		Comm Devel	
7	Completed Preliminary Site Plan Checklist.	X	C		
8	Completed "Design Waiver Request" form.	X	C		
9	Certificate of Ownership.	X		Comm Devel	
10	Tree Survey Plan.	X	C		
11	Site Plan(s) folded, collated, bound, signed, and sealed.	X	C		
12	Traffic Analysis - collated, bound, signed, and sealed	X	C		Traffic Engineering Assessment dated May 10, 2023.
13	Environmental Impact Assessment accompanied by a completed Environmental Impact Assessment checklist.	X	C		
14	Storm water management calculations collated, bound, signed and sealed with common preparation and/or revision dates.	X	C		
15	Completed Fiscal Impact Data Sheet.	X	C		
16	Well Water Supply Evaluation - collated, bound, signed and sealed.	N/A			Proposed development to be served by public water and sewer. Submission waiver is appropriate.
17	Existing Septic System Certification - signed and sealed.	N/A			
18	Water Quality Test Reports by NJDEP certified laboratory for existing on-site wells and test wells.	N/A			
19	Soil Test Reports collated, bound, signed and sealed.	X	C		Included within Stormwater Management Report.
20	Consistency with Wastewater Management Plan of the Township of Hopewell.	X	C		Site is contained within the Sewer Service Area, and a Settlement Agreement with ELSA to provide sewer service.

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
21	Proof of submission of a request for a wetlands Letter of Interpretation to the New Jersey Department of Environmental Protection a minimum of 60 days prior to submitting this application. Proof shall include acknowledgement of receipt by an official of the New Jersey Department of Environmental Protection.	N/A	W		Applicant is utilizing an 8/17/2018 LOI issued by the NJDEP. Waiver for Completeness is appropriate.
22	Submission of a wetlands report and wetlands delineation.	X	W		Applicant is utilizing an 8/17/2018 LOI issued by the NJDEP. Waiver for Completeness is appropriate.
23	Letter from Utility companies providing electric, telephone, cable TV and other services that underground utilities easements identified on the subdivision plans are acceptable for size and location.	X	C		
<b>Engineering</b>					
1	Designed, drawn, signed and sealed by A.I.A., C.L.A., N.J.P.E., N.J.P.L.S. or N.J.P.P. as appropriate.	X	C		
2	Blue or Blackline reproduction on standard sized sheets 30" x 42," 24" x 36," 15" x 21," 8½" x 13."	X	C		
3	Acceptable title block containing minimum data as prescribed by N.J.S.A. 13:40-1.	X	C		
4	All scales shall be written and graphically identified. Minimum scales for plan preparation shall be as follows:	X	C		
a	Key Maps: 1" - 1000'	X	C		
b	Boundary and Topographic Survey: 1" = 100'	X	C		
c	Environmental Inventory Maps: 1" = 200'	X	C		
d	Grading and Drainage Plans: 1" = 50"	X	C		
e	Site Plans: 1" = 50'	X	C		
f	Plans and Profiles: 1" = 50'-Horizontal; 1" = 5' - Vertical Horizontal to Vertical Ratio of scales being no more than 10.	X	C		
g	Sewage Disposal and Water Supply Plan: 1" = 50'	X	C		
h	Landscaping: 1" = 50' for street tree planting islands. Individual unit, island, or other detailed landscaping being provided at a minimum of 1" = 30.'	X	C		
5	A north arrow with reference meridian.	X	C		
6	A legend identifying symbols and drafting techniques used.	X	C		
7	A border shall be placed on all plans. This border shall be 1/2" for the bottom, right side and top of each plan with a 1½" border on the left side.	X	C		
8	A boundary and topographic survey of the total tract signed and sealed by the preparing NJ. Professional Land Surveyor in accordance with N.J.S.A. 13:40. Topography shall be 5-foot intervals for slopes of 10% or greater, 2-foot intervals for slopes between 3% and 10% and 1-foot intervals for slopes up to and including 3%. Topography within 200 feet from the subdivision boundary shall be shown. All topography shall be based on NGVD 1988 datum. Benchmarks shall be established within 500 feet of the subdivision boundary and shown, together with appropriate references.	X	C		
9	All existing and proposed utility service lines and laterals on site and along the frontage of the site. This shall include storm drainage, water mains, sanitary mains, sump pump connections, and underground electric and phone service.	X	C		

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
10	Site Plan showing the proposed use and site improvements including but not limited to: existing topography; location of all proposed structures with dimensions to boundaries; location of all existing structures to remain or to be removed; proposed access aisles with curb-to-curb dimensions for width; curb radii dimensions; automobile parking stalls with dimensions for width and depth; truck loading and parking aisle and stalls with dimensions for stall length and width; type of truck to use loading area; typical truck radii detail; loading dock locations; all sidewalk locations and dimensions; provisions for handicapped; location of bench mark; flood hazard areas; wetlands boundaries; stream corridor areas; easement areas; traffic warning and regulatory signs; and trees to be removed/remain.	X	C		
11	Drainage and grading plan duplicating all data shown on the site plan (dimensions not required to determine slopes should not be shown). Existing and proposed contours with intervals of one foot where slopes are less than two percent; with intervals of two feet where slopes are between two percent and ten percent; and with intervals of five feet where slopes exceed ten percent; spot elevations at bottom of curb for every point of curvature or tangency, breaks in grade, and handicapped ramps; elevations of drainage inlet grates and manhole rims; storm and sanitary sewer pipe invert elevations; elevations at comers of proposed structures; finished first floor elevations; and elevations at loading ramps. Contours must be based on NGVD 1988 elevations and benchmarks must be shown. Where drainage swales are proposed, the elevation, percent longitudinal slope and typical cross section of the swales shall be shown. Proposed grading shall be designed to provide a balanced cut and fill condition as much as practical.	X	C		
12	Storm drainage profiles for all diversion swales, waterways, storm sewer pipe and any other conduit shall be provided. These profiles may be shown on a separate sheet entitled "Drainage Profiles", the detention basin plan or construction detail plans. Existing elevations shall be shown at 100-foot intervals. Proposed elevations for appurtenances shall be shown at 100-foot intervals, concrete structure elevations shall be shown at 50-foot intervals; Invert elevations; elevations at grade changes. Proposed slopes shall be written.	X	C		
13	A Stormwater Management Plan detailing all existing and proposed grades and contours, outlet structure details, conduit outlet protection details, all inverts of low flow channel with proposed longitudinal slope(s), typical cross section trash rack details, emergency spillway cross sections and profiles to point of discharge, construction details and designations of ultimate ownership of the basin.	X	C		
14	Hydraulic calculations for stormwater detention showing no increase in runoff from the pre-development conditions for the water quality 2, 10, and 100 year storm frequency as determined by "Urban Hydrology for Small Watersheds TR-55" Type III rainfall using the following criteria.	X	C		
a	Pre-development conditions shall be considered as "good."	X	C		
b	Post development conditions shall be considered as "poor" with maximum impervious coverages permitted by ordinance being used in developing post development curve numbers.	X	C		

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
c	Calculations shall include a separate drainage area map for both pre- and post-development conditions with soils types, soil uses and flow patterns, time of concentration flow paths and flow lengths and slopes being identified. A separate drainage area map for inlets shall also be provided.	X	C		
d	Routing of pre- and post-development flows through each basin using the mass storage equation and "Urban Hydrology for Small Watersheds TR-55."	X	C		Drainage methodologies updated to comply with Green Infrastructure Standards. Acceptable for Completeness.
e	Emergency spillways shall be provided. The cross sections shall be designed to pass the 100-year post development inflow plus 50%. The invert shall be set at the crest of the 100-year storage elevation in the basin.	X	C		
f	All detention basins shall be designed to serve as a sediment basin during and after construction in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey References.	X	C		
g	Computations showing Compliance with the Regulations of the D & R Canal Commission and the Mercer County Planning Board.	X	C		
15	Hydraulic calculations for stormwater runoff collection systems shall be submitted. Calculations may use the rational method or Soil Conservation Service method pursuant to the Land Use and Development Ordinance.	X	C		
16	Typical construction details shall be provided on drawings designated as "Construction Details." Details to be shown shall include: typical roadway cross section; storm sewer inlets and manholes (each type proposed); storm sewer headwalls, storm sewer trench; storm sewer flared-end section; underdrain; storm sewer step; curb; curb end treatment, depressed curb; sidewalk, handicapped ramp; street signs; warning and regulatory signs; mailbox, sump pump/underdrain to storm sewer connection; any "poured in place" concrete details and reinforcing schedules; and all retaining wall details. The typical details shown in the site improvement standards are preferred.	X	C		
17	All on-site wetlands shall be field identified by a qualified expert in accordance with NJDEP standards, and surveyed, and located on the plan by the applicant's New Jersey Professional Land Surveyor. A wetlands report identifying all observations and findings of the wetlands expert shall accompany the site plan application. If the lands remaining are 50 acres or larger, and not to be built upon, wetlands will only be required to be identified within 150 feet of the proposed lots or any other on-site or off tract improvements. The applicant shall certify in writing that no construction shall occur upon the remaining lands until all on-site wetlands are identified.	X	W		Applicant is utilizing an 8/17/2018 LOI issued by the NJDEP. Waiver for Completeness is appropriate.
18	Half cross sections, 50 feet on center, shall be provided for all roadways to be widened. Each section shall include the location and NGVD 1988 elevation of all existing and proposed physical centerline; right-of-way centerline; edge of pavements, right-of-way lines, sidewalk centerlines, sidewalk widths. In addition, the existing and proposed contours 25 feet from the proposed right-of-way line shall be shown.	N/A	W		No public roadway improvements proposed as part of the project. Waiver for completeness is acceptable.

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
19	A traffic report and analysis including but not limited to existing and background peak hour traffic volumes and distribution patterns; peak hour onsite generated traffic volumes and distribution patterns; existing and proposed traffic composition; analysis of adequacy of proposed on-site circulation patterns including adequacy of truck and automobile turning radii; analysis of need for number of loading bays; existing and proposed levels of service and volume/capacity ratios; adequacy of proposed sight distances; analysis of need for acceleration/deceleration lanes; analysis of need for roadway striping, signage or reflectorization; need for signalization and a summary recommendation and conclusions for the analysis. The study area shall include the site as proposed by this application; the site as proposed by a master development plan; the existing and proposed roadway frontages of the site, and the nearest intersection of public roadways as measured away from the site in opposite directions. The roadways approaching the site shall be generally reviewed for adequacy to support site generated traffic. This report shall be prepared by a New Jersey licensed Professional Engineer qualified to make the analysis as required herein.	X	C		
20	Compliance with each and every design standard of the Land Use and Development Ordinance.	X	W		Recommend waiver with deferral to Technical Review.
21	Compliance with approved General Development Plan.	N/A			No GDP in place. Waiver for completeness is appropriate.
22	Intermittent and perennial streams, lakes, and waterways with drainage areas 50 acres or larger and the 100-year flood hazard line of each.	X	C		
23	Stream corridor delineation with requisite buffers preserved by easement.	X	C		<b>Revised plans include delineation of the Township Stream Corridor. Preservation by means of easement to be deferred as a condition of approval.</b>
	<b>Landscaping and Lighting</b>				
1	Aerial extent of tree cover for woodland stand 10,000 sq. ft. or greater in area with a brief description of the typical tree species found within the stand, the average size of the trees measured 4-1/2' above grade, the average height of the woodland stand, and the general health of the woodland stand. This information may be combined with other environmental information and shown on the Environmental Resource Inventory Summary Map as part of the Environmental Assessment, instead. If this is done, provide a note referring to the Environmental Resource Inventory Summary Map on the Landscape and Lighting Plan.	X	C		

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
2	The surveyed location of each individual tree 6" or > measured 4-1/2" above grade located inside the Limit of disturbance and extending 25' outside the limit of disturbance. A tree preservation chart showing the species and health of each individual tree located inside the limit of disturbance and extending 25' outside the limit of disturbance, and whether each tree is proposed to remain, to be removed, or to be transplanted.	X	C		
3	Proposed trees, shrubs, groundcovers, and vegetative plants with key, detailing the following information:	X	C		
a	Proposed plant names, both common and scientific.	X	C		
b	Proposed plant sizes in caliper, height, and/or width at the time of installation.	X	C		
c	Type of nursery stock, (i.e. balled and burlapped or container) and size planting.	X	C		
d	Proposed plant spacing and any other comments relating to installation.	X	C		
e	Planting notes, including a specification that the plants shall conform to the American Standard for Nursery Stock, latest revision.	X	C		
f	Delineation showing which areas are to be irrigated.	N/A	W		Design of irrigated areas deferred as a condition of site plan approval. Waiver for completeness is appropriate.
4	Landscape maintenance specifications.	X	C		
5	Planting details conforming with current horticultural practices.	X	C		
6	Pedestrian and bicycle circulation systems, including width proposed and materials.	X	C		Sidewalks provided for pedestrian circulation. Bicycle facilities shared within roadway.
7	Outdoor pedestrian spaces with landscape architectural elements detailed.	X	C		
8	Construction details for pedestrian and bicycle circulation systems, outdoor spaces, and site furnishings.	X	C		
9	Details of all outdoor light fixtures, including building mounted fixtures and illuminated signage. Fixture details shall include:	X	C		
a	Manufacturer's catalog cuts, indicating lamping and including all accessory components.	X	C		
b	Photometric reports with graphic candela curve illustrating vertical distribution from nadir to 180 degrees.	X	C		
c	Lamp catalog cut sheet indicating wattage. For reflector lamps, PAR and MR, also include beam distribution angles.	X			
10	Lighting Plan: Scale of plan shall not be greater than 1" = 50'. Plan shall include:	X	C		
a	Maintained horizontal illumination levels indicated on a maximum grid spacing of 10'.	X	C		
b	Location and mounting height for each fixture.	X	C		
11	Schedule of operation and method used to control each fixture shall be indicated in schedule or by note on Lighting Plan.	X	C		
12	Calculation summary to include:	X	C		
a	Minimum maintained horizontal illumination (fc).	X	C		
b	Average maintained horizontal illumination (fc).	X	C		

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
c	Maximum maintained horizontal illumination (fc).	X	C		
d	Maximum-to-minimum Uniformity Ratio.	X	C		
e	Maintained vertical illumination at 5' above grade, facing inward at parking lot perimeter where minimum horizontal illuminance occurs (fc).	X	W		This item not applicable, as no parking lots are proposed. Waiver for completeness is appropriate.
f	Maximum maintained vertical illumination at 5' above grade at edge of property line (fc).	X	C		
g	Average maintained vertical existence of signage (fL).	X	C		
13	Foundation construction details for light poles.	X			Not provided. Design detail to be deferred to technical review or condition of approval. Waiver for completeness is appropriate.

Heritage at Hopewell  
 Preliminary & Final Site Plan  
 2500 Pennington Road  
 Block 78, Lot 17

Application Date: May 12, 2023, Revised to Reflect Updated (7/13/2023) Plan Submission

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
	<b>Administrative</b>				
1	Submitted within published "window for submission."	X		Comm Devel	
2	Completed Application Forms, including Corporation or Partnership Disclosure Affidavit.	X	C		
3	Payment of Required Fees.	X		Comm Devel	
4	Completed Escrow Agreement.	X		Comm Devel	
5	Receipt of Taxes Paid for current tax quarter from Tax Collector.	X		Comm Devel	
6	Completed Consent to Entry Form.	X		Comm Devel	
7	Completed Final Site Plan Checklist.	X	C		
8	Completed "Design Waiver Request" form.	X	C		
9	Certificate of Ownership.	X		Comm Devel	
10	Final Site Plans(s) folded, collated, bound, signed, and sealed with a common date of issue and revision.	X	C		
11	Copy of resolution of Preliminary Site Plan approval.	N/A	W		
12	Certification that all conditions of preliminary site plan approval have been satisfied and Preliminary Site Plans have been signed by and are on file with the Hopewell Township Planning Board. For any project seeking relief from this item, an itemized description detailing any and all outstanding items and the status of each.	N/A	W		Simultaneous application for Preliminary and Final Site Plan approval. Waiver for completeness appropriate.
13	Letter from Utility companies providing electric, telephone, cable TV and other services that underground utilities easements identified on the subdivision plans are acceptable for size and location.	W	W		Will serve letters provided. Final utility letters/approvals deferred to a Condition of approval. Waiver for completeness is appropriate.
14	Written documentation addressed to the Planning Board from all agencies guaranteeing utility service to the site (including electricity, telephone, gas and cable TV). Such documentation shall indicate any and all conditions for obtaining such service.	X	W		Will serve letters provided. Final utility letters/approvals deferred to a Condition of approval. Waiver for completeness is appropriate.

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
	<b>Engineering</b>				
1	Compliance with any and all conditions of preliminary site plan approval and the preliminary site plan checklist. All documents submitted for preliminary site plan approval shall be appropriately revised, retitled, dated, and all documents submitted shall bear the same date.	N/A	W		Simultaneous application for Preliminary and Final Site Plan approval. Waiver for completeness appropriate.
2	Architectural elevations - front, left side, right side, and rear signed and sealed by a New Jersey Licensed Architect. All plans to bear a common date of issue with final site plan.	X	C		
3	An estimate of all construction quantities for all on-site and off-tract improvements to public property or improvements which shall be dedicated to the public or planned to be maintained by a Homeowners Association.	X	W		No public on-site improvements proposed. Off-tract public improvements not quantified/finalized. Defer to a condition of approval. Waiver for completeness is appropriate.
4	Metes and bounds descriptions for all right-of-way dedications, sight triangle easement; drainage; detention; or conservation easements; and common driveway easements.	W	W		Final easement descriptions requested to be a condition of approval. Waiver for completeness is appropriate.
5	Detailed project phasing plan including proposed construction sequences, routes to and from site, construction methods, hours of operations, construction traffic control plans, temporary construction office locations, and any other construction-related plans.	X	W		Defer final detail of construction phasing to technical review. Waiver for completeness is appropriate.
6	A Developer's Agreement approved and executed by the Hopewell Township Committee when improvements to public property or improvements which shall be dedicated to the public or a Homeowners Association are part of the approval.	W	W		Final easement descriptions and other developer agreement details requested to be a condition of approval. Waiver for completeness is appropriate.
7	Detailed site plan showing location of proposed construction trailers and sales facilities; design of parking, access, grading drainage, soil erosion and sediment control and landscaping at a scale of not smaller than 1" = 50' each facility location.	X	C		
8	All project identification sign sizes, mounting details, lighting, and lettering type and sizes.	X	C		
9	Block and Lot numbers approved by Tax Assessor.	X	W		Defer to a condition of approval. Waiver for completeness is appropriate.
10	Copies of all Federal, State, County and local permits obtained as part of preliminary approval.	W	W		Defer to a condition of approval. Waiver for completeness is appropriate.
11	Details of all outdoor light fixtures not included with Preliminary Site Plan	X	C		

		Indication by Applicant	Confirmed / Complete	Defer	Comment / Recommendation
	Approval, including building mounted fixtures and illuminated signage. Fixture details shall include:				
a	Manufacturer's catalog cuts, indicating lamping and including all accessory components.	X	C		
b	Photometric report with graphic candela illustrating vertical distribution from nadir to 180 degrees.	X	C		
c	Lamp catalog cut sheet indicating wattage. For reflector lamps, PAR and MR, also include beam distribution angles.	X	C		
12	Lighting Plan: Scale of plan shall not be greater than 1" = 50'. Plan shall include:	X	C		
a	Initial horizontal illumination levels indicated on a maximum grid spacing of 10'.	X	C		
b	Maintained horizontal illumination levels indicated on a maximum grid spacing of 10'.	X	C		
c	Location and mounting height for each fixture.	X	C		
d	Schedule of operation and method used to control each fixture.	X	C		
13	Calculation summary to include:	X	C		
a	Minimum maintained horizontal illumination (fc).	X	C		
b	Average maintained horizontal illumination (fc)	X	C		
c	Maximum maintained horizontal illumination (fc).	X	C		
d	Maximum-to-minimum Uniformity Ratio.	X	C		
e	Maintained vertical illumination at 5' above grade, facing inward at parking lot perimeter where minimum horizontal illuminance occurs (fc).	X	C		
f	Maximum maintained vertical illumination at 5' above grade of property line (fc).	X	C		
g	Average maintained vertical existence of signage (fL).	X	C		
h	Average initial horizontal illumination (fc).	X	C		

# T O W N S H I P of H O P E W E L L

## MEMORANDUM

TO: Hopewell Township Planning Board

FROM: Dawn Marling, Health Officer

SUBJECT: **Completeness Review**  
Heritage at Hopewell  
2500 Pennington Road  
Block 78, Lot 17

DATE: June 26, 2023

---

The applicant (American Properties Hopewell II LLC) proposes to develop 67 residential dwelling units on an 11.08 acre property. The 67 proposed units will include 55 market rate three-bedroom townhouse units and one affordable housing apartment building, with 12 units.

The Health Department has reviewed the applicant's Preliminary Site Plan Checklist and Final Site Plan checklist. The applicant has requested waivers of Health items, and has indicated that all proposed residential units will be served by public water and public sewer utilities.

Regarding Preliminary Site Plan Checklist Health items #1 and #8, please be advised that the applicant will need to ensure any existing onsite sewage disposal system(s) and any existing on-site well(s) are located and properly abandoned. However, this requirement can be addressed during our Technical Review.

The Health Department has no objections to the waivers requested waivers.



# HOPEWELL TOWNSHIP FIRE DISTRICT NO. 1

## Board of Fire Commissioners

MERCER COUNTY

201 Washington Crossing-Pennington Road  
Titusville, New Jersey 08560-1410

December 18, 2023

Jim Hutzelmann PE, PPE, CME  
Director of Community Development/Township Engineer  
Township of Hopewell  
201 Washington Crossing-Pennington Rd  
Titusville, NJ 08560-1410

VIA ELECTRONIC MAIL

RE: Block 78, Lot 17 – 2500 Pennington Rd. Pennington, NJ 08534  
Heritage at Hopewell Development  
Planning Board Application

Mr. Hutzelmann:

The Office of Fire Safety in conjunction with The Pennington Fire Company have reviewed the application documents and offer the follow comments for consideration by The Board.

The Financial Impact Statement submitted with the application packet and prepared by Phillips Preiss Grygiel Leheny Hughes LLC, Planning and Real Estate Consultants 70 Hudson Street, Suite B5 Hoboken, NJ 07030 does not include an analysis of the impacts to fire and EMS services. It fails to include or identify what the estimated tax revenue generated by the project for Hopewell Township Fire District No.1. (Fire District) There is no information on per capita costs for residents to the Fire District. These figures should be provided to the Fire District and Planning Board prior to any approvals for this project.

It is unclear if the road network will be public or private? Will the fire hydrants be public or private? If they are to be public, the Hopewell Township will need to pay the annual maintenance costs for the fire hydrants and liner foot charges assess by Trenton Water Works, the water supply for the area. The Fire District cannot absorb the additional costs of this water system.

The proposed development poses many challenges for fire department access and water supply. There is no vehicle access to the rear of the buildings. The roadways are narrow and dead end. There is only one way in and out off the development, with no secondary emergency access road. The height of the buildings and limited vehicle access will cause the fire company to have to work from 50-foot ground ladders to affect any rescues from the third floors of the buildings. This is cumbersome and labor-intensive operation. The attached detailed review of the plans prepared by MidAtlantic Engineering Partners, LLC, dated 8/31/2023 and signed 9/1/2023 by William J Parkhill II, P.E. details these challenges.

Please see the additional eight comments from Pennington Fire Company:

1. Proper access to the rear of all structures by a fire apparatus.
2. All roadways sized to a minimum of 24' for proper apparatus placement
3. The site requires a second entrance. An emergency entrance would suffice but one access point off of Rt. 31 is not sufficient.
4. All FDC connections must be on the Alpha side of the building.
5. All FDC connections must be within 50' of a hydrant
6. The dead-end lanes need to be extended past the building corners to allow apparatus placement outside the collapse zone. Reinforced lawn is fine for this condition provided it is properly maintained and plowed.
7. The first left hand turn in after the entrance needs to be modified as the turning radius is too tight for the ladder tower or other aerial device.
8. It is difficult to discern where they are proposing hydrants. There appears to be one at each of the dead ends but only one to the left of the entrance. We need a hydrant within 50" of the FDC and at least one more by the detention basin.

We request that the Planning Board, take no final action on this application until all of the fire services concerns are fully addressed by the applicant and our office.

Please feel free to contact me at any time directly at (609) 537-0212 with any questions that may arise. On behalf of the Board of Fire Commissioners I would like to thank you for your assistance.

Regards,



Andrew J. Fosina, Jr., BS, CFPS  
Fire Official – Hopewell Valley Bureau of Fire Safety

CC: Hopewell Township Board of Fire Commissioners  
Matthew Martin – Chief of Emergency Services  
Jonathan Moore – Deputy Chief of Emergency Services  
Pennington Fire Company  
File

# Heritage at Hopewell

## Site Plan Review

2500 Pennington Rd  
Pennington, NJ 08534

Block 78 Lot 17

Review of site plans dated 8/31/2023 and signed 9/1/2023.

Memo prepared by

Andrew Fosina, Jr. BS, CFPS

Fire Official Hopewell Valley Bureau of Fire Safety

October 7, 2023

### **Summary:**

The scope of the fire services review comments in this document cover emergency services access, fire water supply, fire sprinklers, fire alarms and other life safety improvements to the development. The detailed review notes and comments provided are based on the International Fire Code 2018 Edition Appendices B, C, D, E and the practice established in other townhome developments.

The proposed community will consist of a total of 67 units. The 55 for sale, market rate units will all be 3-bedroom townhouse units. The construction is of type V wood-frame with enclosed garages on the ground floor of each unit. There will be 12 affordable units, which will be rental apartments in one building situated at the rear of the development. The development will have only one access road off of Pennington Road. There is no secondary emergency access. The proposed development provides very limited or no access to the rear of buildings. There are two dead-ends that do not extend far enough past the buildings to provide access for the fire department on all sides of the buildings. Off street parking (garages and driveways) is provided for the townhomes and on street parking for visitors and the COAH building. There is no planned clubhouse or other community commons type buildings noted on the proposed plans.

The proposed water service does not connect to the Trenton Water Works network in a fashion that will be provide a lopped connection. Rather, the domestic and fire water enter the site from Pennington Road and dead end in the site. The water main serving the development is proposed to be constructed of 8-inch PVC pipe. With two 8-inch mains tying into the existing 16-inch main in the area of Pennington Road and Diverty on the East side of the Pennington Rd. As proposed, there are three fire hydrants planned in the development. It is unclear if these will be public or private fire hydrants. The plans note a two-inch fire water service line to the COAH building and no fire water lines to the townhomes. The submitted site-plans and elevations do not indicate what if any fire sprinkler coverage will be in each building and dwelling unit.

## Fire Department Access

1. The main entrance must be able to support fire apparatus approaching the entrance traveling in the southbound lanes of Pennington Road and turning left into the development. There are no Township fire apparatus stationed to the south of the development that would be entering from the northbound lanes and making a right turn into the development.
2. Is the entrance roadway a divided boulevard or just striped to give that appearance.
3. There is limited fire road access to each building. There is no roadway access to the rear of any buildings on the property. Buildings 1, 2 4 and 5 only have fire road access from one side. Building 5 is a 3-story multi-family COAH building. The indicated overall height from grade is 45-feet with a set back from the drivable surface of approximately 32-feet.
4. Roadways are 24-feet curb to parking or curb to curb. This does not provide for aerial truck operations. Aerial trucks require approximately 26-feet of clearance to setup and operate.
5. The fire truck turning/access sheet provided does not show the truck moving completely through the development. It shows it entering and making 3 left turns. These are not the only movements fire apparatus will be required to make. Please provide a sheet that demonstrates Tower 51 can fully access, navigate and exit the entire development. The truck will also need to make the first left once on the property to access the homes along Pennington Road.
6. All roadways shall be identified, striped and signed as Fire Lanes – No Parking. Design of these markings shall be approved by the Fire Official.
7. There can be no trees, vegetation, infrastructure, signs or other vertical objects that will interfere with the turning of fire apparatus near the roads.
8. Vertical clearance of 13-feet is required over the roadways. There shall be minimum trees and other vertical plantings between the buildings and the roadways.
9. Title 39 (traffic laws) should be enforceable in the development and a condition of approval.

## Fire Water Supply and Fire Hydrants

1. The proposed water service to the development is supplied via two parallel 8-inch water mains entering the development from Pennington Road. The water service does not connect in a looped fashion to the Trenton Water Works network and creates dead-end fire mains. The water supply should be looped into and out of the development from two directions to ensure maximum water flow and reduce the possibility of total water service impairment to the development.
  - a. Connecting to the existing water main on Westminster Court would provide a fully looped system. Sanitary sewer is proposed to connect to the existing sewer on Westminster Court. (see sheet 9 of 23)
2. The applicant needs to provide the Needed Fire Flow (NFF) for all buildings in the development to our office. The NFF is required to ensure that there is sufficient fire water capacity supplied to the development.
3. The fire hydrants shall be of the approved standard from Trenton Water Works for a Storz fire pumper connection. (Specification Sheet Attached)
4. Currently there are three fire hydrants proposed in the development. Two of the three fire hydrants are at the end of a dead-end roadway and their position is not optimal for fire department access and use. They are also on dead-end mains that will limit their water flow capacity. Furthermore, the location of these hydrants is such that during snow conditions they will routinely be blocked by plowed snow. These fire hydrants should be relocated out of the dead-end section of the roads and place at the intersections of the roads.
5. We are requesting an additional fire hydrant to be located at the end of Road 'A' on the Northwest Corner.
6. We are requesting a fire hydrant be installed on the Southeast corner of Pennington Rd and the entrance to the development. This fire hydrant will be used to service the properties along Pennington Rd. The water main extension north on Pennington Road to the entrance of the development calls for two 8-inch parallel mains rather than one larger main. The single larger main would provide better capacity for a fire hydrant located on the corner of the development and Pennington Road.

## Fire Sprinklers and Fire Alarm Systems

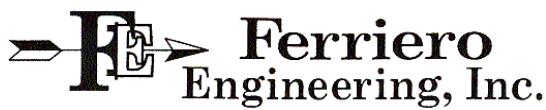
1. It is not noted on the site plans or the elevation plans provided if any of the buildings will have fire sprinklers. We are requesting that the entire development be constructed with fire sprinklers.
2. Townhomes:
  - a. We are requesting that all townhomes be suppressed in accordance with NFPA-13D or higher standard if required in the New Jersey Construction Codes. If the townhomes are to have mechanical equipment in the attics, the sprinkler system should be extended to the attics.
  - b. A monitored (auto-dialer) fire alarm system shall supervise the fire sprinkler systems.
3. Apartment building:
  - a. We are requesting that the apartment building have a full NFPA-13 (commercial) sprinkler system with standpipes. This will include full attic suppression.
  - b. The fire department connection (FDC) to be located on the front of the building in close proximity to the fire hydrant that serves the building. The FDC shall be a 5-inch Storz type connection.
  - c. The FDC identification signs are to be approved by the Fire Official.
  - d. A fire alarm system complaint with NFPA-72 and monitored by a third party via an auto-dialer or other approved means.
  - e. There shall be a fire alarm annunciator panel in the main entry/lobby of the building.

## Landscaping

1. No vegetation shall be planted or permitted to grow within 3-feet in all directions of
  - a. Electric meters
  - b. Gas meters
  - c. Photovoltaic equipment
  - d. Fire Hydrants
  - e. Fire Department Connections (FDCs)
2. There shall be no vegetation, plantings or other vertical obstructions that will interfere with the ingress/egress or operation of fire apparatus along the roadways.
3. The New Jersey Uniform Fire Code is nearing the end of a cyclical update and adoption process. One of the proposed code additions is for Mulch to be at least 18-inches away from all combustible construction. This provision will be effective in 2025 and will apply to new and existing buildings when it goes into effect. At the time this document is being prepared the final code language is not available. The applicant should plan to keep all mulch and vegetation at least 18-inches from the exterior of all the buildings.

## General Note:

1. Prairie building is not permitted. Prior to vertical construction and the arrival of the combustible construction materials the following conditions must be satisfied:
  - a. All roadways shall be paved with base paving.
  - b. All planned fire hydrants shall be installed and in-service for fire department use
  - c. Code compliance with N.J.A.C.5:70-3, Chapter 33 Fire Safety During Construction and Demolition
2. A Knox cabinet (model 1306) will be required outside the main entrance door of the apartment building. The cabinet will contain the following:
  - a. 5-sets of building master keys and fobs if electric locks are to be used
  - b. The fire alarm control panel and annunciator lock keys
  - c. Manual pull station reset keys
  - d. A binder containing the following:
    - i. 24-hour emergency contact information for building management
    - ii. Fire alarm reset codes and passwords
    - iii. Floor plans showing the location of all utilities, mechanical, electrical rooms/closets.
    - iv. Floor plan identifying the location of all fire alarm input devices
    - v. Floor plan showing the location of all fire sprinkler components including any sectional control valves and fire pump room if applicable.
3. Fire Department Information Signs
  - a. Truss Roof/Floor signs to be on all buildings in locations determined by the Fire Official.
  - b. Fire Department Connection (FDC) signs shall be installed in locations as required by the Fire Official.
4. Addressing for the property should follow the same system as the other townhome developments in the Township. (Hopewell Parc, Collections and Woodmont)



Paul W. Ferriero, PE, PP, CME, LEED AP, CFM  
Robert C. Brightly, PE, PP, CME

Steven B. Bolio, PE, CME  
Mark S. Denisiuk, PE, CME, LEED AP  
Mark Kataryniak, PE, PTOE  
Joseph S. Kosinski, PG, CFM, LEED  
C. Richard Quamme, PE, CME  
Jess H. Symonds, PE

## MEMORANDUM (via email)

TO: Hopewell Township Planning Board  
FROM: Mark Kataryniak, PE, Township Redevelopment Engineer  
DATE: December 12, 2023  
SUBJECT: **Engineering Review 2**  
Preliminary & Final Major Site Plan  
Heritage at Hopewell  
2500 Pennington Road  
Block 78 Lot 17, IMF-1 Zone  
Hopewell Township, New Jersey  
FEI Project No.: 23HT203

(MK)

Our office is in receipt of the documents noted below submitted in support of the referenced application. Updated materials submitted in response to our 1<sup>st</sup> Engineering Review (October 20, 2023), and supplemental materials submitted by the applicant, are **highlighted in bold**:

- Letter, dated November 27, 2023, prepared by Jason M. Fogler, PE, MidAtlantic Engineering Partners, LLC, transmitting updated application materials and providing itemized responses to the comments contained in our 1<sup>st</sup> Engineering Review report.
- Hopewell Township Planning & Zoning Board Application, dated May 12, 2023, for Preliminary and Final Site Plan application.
- Correspondence dated June 17, 2023 from Ian A. Burton, PE, MidAtlantic Engineering Partners, LLC, responding to comments in our office's June 27, 2023 Completeness Review 1 memorandum.
- Hopewell Township Preliminary & Final Major Site Plan Checklists, dated May 12, 2023, prepared by Jason M. Fogler, PE, MidAtlantic Engineering Partners LLC.
- Preliminary and Final Site Plans of Heritage at Hopewell, Block No. 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, II, PE, MidAtlantic Engineering Partners, LLC, dated May 12, 2023, **last revised November 22, 2023, except for the Lighting Plans, sheets 15 through 17 of 23, bearing a latest revision date of November 2, 2023, and containing 24 sheets. The revised plans also reflect updates and plan revisions made by the applicant on a November 6, 2023 plan revision.** The subject plans consist of:
  - Title Sheet,
  - Existing Conditions & Demolition Plan
  - Overall Geometry, Signage, & Stripping Plan
  - Grading Plans

• • •

□ 180 Main Street • P.O. Box 571 • Chester, NJ 07930 • 908-879-6209 • Fax: 908-879-6597  
■ 17 Model Avenue • P.O. Box 577 • Hopewell, NJ 08525 • 609-466-0002 • Fax: 609-466-2008  
mail@FerrieroEngineering.com

Re: **Engineering Review 2**

Preliminary & Final Major Site Plan

Heritage at Hopewell

2500 Pennington Road

Block 78 Lot 17, IMF-1 Zone

Hopewell Township, New Jersey

FEI Project No.: 23HT203

- Utility Plans
- Utility Profiles
- Landscape & Tree Replacement Plan
- Lighting Plans
- Soil Erosion & Sediment Control Plan
- Construction Details

- Boundary and Topographic Survey, Block 78, Lot 17, Tax Plate 20, 2500 Pennington Road, Situated in Township of Hopewell, Mercer County, New Jersey, prepared by Suzanne E. Warren, PLS, MidAtlantic Engineering Partners, LLC, dated August 30, 2022, containing 1 sheet.
- Architectural Plans, entitled, Heritage at Hopewell, Townhouse Community, prepared by Joseph M. DeLucia, RA, CPL Partnership, dated May 10, 2023, containing 20 sheets.
- Architectural and Phase 1B Archaeological Survey, prepared by Hunter Research, Inc., dated April 2023.
- Environmental Impact Statement for 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by MidAtlantic Engineering Partners, LLC, dated May 11, 2023.
- Fiscal Impact Statement, Heritage at Hopewell, Proposed Multi-Family Inclusionary Development, Block 78, Lot 17, Township of Hopewell, Mercer County, New Jersey, Prepared by Paul A. Phillips, PP, AICP, Phillips Preiss Grygiel Leheny Hughes, LLC, dated May 2023.
- Sanitary Sewer Report for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated May 11, 2023.
- Water Service Connection Report for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated May 11, 2023.
- Stormwater Management Report for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated March 28, 2023, **last revised November 22, 2023**.
- Operations and Maintenance Manual for Stormwater Management Facilities for Heritage at Hopewell, 2500 Pennington Road, Block 78, Lot 17, Hopewell Township, Mercer County, New Jersey, prepared by William J. Parkhill, PE, dated March 14, 2023, last revised July 28, 2023.
- Traffic Engineering Assessment, prepared by Nathan B. Mosley, PE, CME, Shropshire Associates, LLC, dated May 10, 2023.
- Utility Will Serve letters issued by:
  - Comcast, dated June 10, 2022

Re: **Engineering Review 2**

Preliminary & Final Major Site Plan

Heritage at Hopewell

2500 Pennington Road

Block 78 Lot 17, IMF-1 Zone

Hopewell Township, New Jersey

FEI Project No.: 23HT203

- PSE&G Electric, dated June 16, 2022
- Elizabethtown Gas, dated September, 27, 2022
- Ewing Lawrence Sewerage Authority, dated October 6, 2022
- Trenton Water Works, dated November 23, 2022
- Freshwater Wetlands Letter of Interpretation, Line Verification issued by the New Jersey Department of Environmental Protection, dated August 17, 2018.
- Fire Truck Turning Plan, prepared by MidAtlantic Engineering Partners, LLC, dated May 11, 2023, containing one sheet.
- Tree Location Survey, prepared by Suzanne E. Warren, PLS, MidAtlantic Engineering Partners, LLC, dated May 5, 2023, **last revised November 22, 2023**, containing 1 sheet.
- **Soil Erosion and Sediment Control Plan Certification, dated November 9, 2023, issued by the Mercer County Soil Conservation District.**

The subject application seeks preliminary and final site plan approval for the construction of an inclusionary development, containing 55 market-rate, for-sale, three-bedroom townhouse units, and 12 affordable rental units, for a total of 67 units. The market-rate townhouse units will be contained within eight three-story buildings, of varying size to contain 6, 7, or 8 units per building, with each unit containing either one or two car garages. The affordable rental units are proposed to be contained within a single three-story building. The development will be accessed by way of a single, right-in/right-out driveway on NJSR Route 31, and the individual buildings will be served by a series of interconnected internal private roadways, containing right-angle parking to supplement the garages contained within the for-sale units. Additional improvements on the property include the construction of stormwater management facilities, sidewalks, site lighting and an open park area.

The subject property is included in the township's Third-Round Affordable Housing Plan, and is situated within the Inclusionary Multi-Family – 1 Zoning District.

We have reviewed the submitted materials, and offer the comments and information contained herein to assist the Board in the review of the subject application.

**The updated materials submitted by the applicant, and the itemized responses, provided in their November 27, 2023 response, address many of the comments contained in our prior report. Comments satisfactorily addressed have been eliminated as noted, and remaining comments are highlighted in bold in the following report.**

Re: **Engineering Review 2**

Preliminary & Final Major Site Plan  
 Heritage at Hopewell  
 2500 Pennington Road  
 Block 78 Lot 17, IMF-1 Zone  
 Hopewell Township, New Jersey  
 FEI Project No.: 23HT203

**I. Zoning:**

The property is located within the Inclusionary Multi-Family – 1 (IMF-1) Zoning District, and is required to comply with §17-173 of the Hopewell Township Land Use and Development Ordinance (LUDO). Compliance with the applicable sections of the zoning district is as follows:

<b>§17-173</b>	<b>Bulk Requirements</b>	<b>Required</b>	<b>Existing</b>	<b>Proposed</b>
d.1	Min. Lot Area	10 Ac.	11.08 Ac.	11.08 Ac.
d.2	Min. Lot Frontage	150 ft.	563.65 ft.	563.65 ft.
d.3	Min. Lot Width	300 ft.	563.65 ft.	563.65 ft.
d.4	Min. Lot Depth	200 ft.	806.88 ft.	806.88 ft.
d.5(a)	Min. Front Yard	45 ft.	292.6 ft.	46 ft.
d.5(a)	Indiv. Unit from Curb/Sdwk. (Frt. Yard)	20 ft.	n/a	20 ft.
d.5(b)	Side/Rear Yard	40 ft.	246.6 ft.	40.48 ft.
d.5(b)	Indiv. Unit from Curb (Side Yard)	10 ft.	n/a	11 ft.
d.5(c)	Min. Bldg. to Bldg. separation	20 ft.		20 ft.
d.6	Max. Building Coverage	30%	0.42%	14.45%
d.7	Max. Impervious Coverage	60%	1.62%	26.07%
d.8	Max. Density	8 Units/Ac.	1 Unit/Ac.	6 Units/Ac.
d.9	Max. Building Height Townhouse Affordable Unit	3 Stories / 45 ft.	n/a	3 Stories / 40.96 ft. 3 Stories / < 40 ft.
d.10	Drive Aisle Width	24 ft.		24 ft.
	<b>Parking Requirements</b>			
d.11(a)	Spaces / Unit (per RSIS)	157 Spaces		189 Spaces
d.11(b)	Setback from Property Line	20 ft.		91.44 ft.
d.11(c)	Distance from Bldg.	10 ft.		16.50 ft.
d.11(d)	Stall Size	9 ft. x 18 ft.		9 ft. x 18 ft.
d.12	Min. Landscape Buffer Front Yard Side Yard	25 ft. 20 ft.		25 ft. 20 ft.
e.1	Affordable Housing	15%		18%
f.3	Min. Open Space	20%		>20%
f.1(b)	Max. Building Length	225 ft.		169.67 ft.

**II. Variances**

A. The proposed development does not seek variance relief from any of the bulk requirements of §17-173. **The revised plans remain compliant with the bulk zoning requirements of the IMF-1 Zoning District.**

Re: **Engineering Review 2**

Preliminary & Final Major Site Plan  
Heritage at Hopewell  
2500 Pennington Road  
Block 78 Lot 17, IMF-1 Zone  
Hopewell Township, New Jersey  
FEI Project No.: 23HT203

B. The following is noted with respect to compliance with Article VI, Design Standards, of the LUDO based on the current proposal depicted on the plans:

1. §17-89.c.2: The applicant should provide a calculation to demonstrate that the proposed landscaping meets or exceeds the ratio of 10 shrubs and one (2-1/2 inch minimum caliper) per each 1,000 square feet of development is met or exceeded. We recommend that the applicant provide the necessary planting to meet this requirement, alleviating the need for the board to grant relief from this requirement. **The applicant is seeking relief from this requirement with respect to the minimum number of shrubs to be planted. The proposed tree replanting plan exceeds the required replanting based on both the one tree per 1,000 SF of disturbance requirement, per §17-89.c.2, and the total caliper inches of trees to be removed.**
2. ~~§17-106.d.7& 8: The proposed site identification sign is located within the NJSH Route 31 right of way, approximately 14 feet from the highway edge of pavement. The placement of the sign proximate to the Route 31 roadway will require relief for placement within the right of way, subject to approval from the NJDOT. The relocated sign conforms to the requirements of the LUDO.~~
3. §17-106.f. 8: The applicant will require relief from this requirement, which permits development signs when the number of units exceeds 150 dwelling units. In addition, this standard requires the sign structure to be outside of any public right of way. **The applicant continues to seek relief from this requirement, and will be required to provide testimony to support the request.**

C. We defer to the Board's Planner for additional relief from the LUDO that may be required.

### **III. Site Plans**

A. Title Sheet (Sheet 1)

1. The revision dates listed for the individual sheets within the sheet index should be revised to match the latest revision dates published on the individual sheets. Several of the revision dates on the individual sheets are obscured with double text and should be clarified. A uniform revision date for all of the sheets is recommended for recording/documentation purposes. Sheets with no changes for a specific revision date can be noted as such. **The updated plans reflect a common revision date. The reference to Resolution Compliance should be revised to note Response to Review Comments.**
2. ~~The applicant's and property owner's information should be indicated on the Title Sheet.~~

B. Existing Conditions and Demolition Plan (Sheet 2)

Re: **Engineering Review 2**

Preliminary & Final Major Site Plan

Heritage at Hopewell

2500 Pennington Road

Block 78 Lot 17, IMF-1 Zone

Hopewell Township, New Jersey

FEI Project No.: 23HT203

1. ~~A number of trailers and portion of a gravel path on the easterly portion of the property, within the stream corridor buffers, are identified on the plan as existing with no notations to indicate if they will be removed as part of the development. The treatment of these features needs to be clarified.~~
2. ~~The plan does not indicate the location of the well and septic system that served the prior dwelling, and should be indicated on the plan.~~
3. The removal/abandonment of the septic system and decommissioning of the well will be subject to the approval of the Township Health Department. **These requirements have been acknowledged by the applicant, and should be included as a condition of any approval granted by the Board.**
4. ~~Demolition notes 7 & 8 refer to cutting back sanitary sewer laterals and utilities to the property line and should be revised, as applicable, to reflect the on-site water and septic services.~~
5. ~~The demolition plan depicts a total of 97 trees that will be removed to accommodate the proposed development. Ten of the trees are either dead or under the 10" caliper requirement to qualify under §12-4, Forest Management and Tree Removal, of the township's tree ordinance. The applicant will be required to obtain a Tree Removal Permit, and meet the tree replacement requirement with the proposed planting schedule. See additional comments under the heading Tree Removal Plan~~
6. Several trees within the regulated areas on the easterly side of the property are labeled as dead, and are not identified for removal. The applicant should clarify if all dead trees within the environmentally regulated areas will be removed. **The applicant has indicated that dead trees within the limits of disturbance will be removed as part of the project, and dead trees outside the limits of disturbance will remain. Based on the applicant's response, we note the following:**
  - a. **The number of dead trees to remain should be quantified and discussed with the Board. While the currently-issued permits may restrict activity outside the disturbance limits, it may be necessary to remove additional dead vegetation for safety reasons. The applicant should demonstrate to the Board that keeping specific vegetation will not detrimentally affect the safety of the proposed or neighboring community.**
  - b. **The limits of disturbance and tree protection measures, as illustrated on the certified Soil Erosion and Sediment Control Plans, should be illustrated on the demolition plan to clarify the boundaries of allowable disturbance on the property.**

C. Overall and Detailed Geometry, Signage & Striping Plan (Sheets 3, 4 & 5)

Re: **Engineering Review 2**

Preliminary & Final Major Site Plan

Heritage at Hopewell

2500 Pennington Road

Block 78 Lot 17, IMF-1 Zone

Hopewell Township, New Jersey

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1. ~~The side yard setback dimension to Building No. 2 should be adjusted to be dimensioned from the edge of the covered porch on the northern end of the unit, as front and side yards are measured from all open roofs and porches, as per §17-181 of the LUDO.~~
2. ~~Building to building dimensions should be shown, where applicable, as measured from the open roofs/porches.~~
3. Provide setback dimensions from the footprints of the various buildings to the nearest curbline. **The revised plans address this comment, except for:**
  - a. **The setback dimensions for Buildings 8 & 9 are measured to the back of the sidewalk.**
  - b. **Setback dimensions for Building 5 are not shown.**
4. ~~The configuration of the parking access for the temporary sales trailer relative to the dividing island on the main site access drive prevents vehicles from directly exiting the site.~~
5. The applicant should discuss the adequacy of three parking spaces for the sales trailer area. **The applicant shall provide testimony to support the proposed layout of the sales trailer area.**
6. ~~The access walks to the gang mailboxes are required to be handicapped accessible. The applicant should modify the width and layout of the access as necessary to verify that ADA requirements are met.~~
7. The plan depicts an area of permeable pavement at the easterly end of Proposed Road "C," directly in front of the proposed refuse enclosure. The permeable pavement is generally not recommended in areas of heavy vehicle loading. The applicant should consider utilizing conventional pavement in areas subjected to frequent heavy vehicle loading. **The revised plans retain the proposed porous pavement in front of the trash enclosure area. We recommend the applicant evaluate increasing the thickness of the porous pavement in this area to provide additional structural stability, while maintaining the current stormwater management design and conformance to the permits issued by the NJDEP.**
8. The plans illustrate two encroachment areas into the NJDEP-regulated lands at the easterly end of the property. One is intended for the stormwater discharge pipe from the site, and the other is intended for the proposed utility connection to the sanitary sewer. With respect to the two encroachment areas:
  - a. Easements will be required to be established for each of the encroachments to enable access for maintenance of the utilities. **We recommend the applicant be required to comply with this requirement as a condition of any approval granted by the Board.**

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- b. A stabilized access should be provided between the constructed improvements on the site and the utility extensions within the regulated areas. **We recommend the applicant be required to comply with this requirement as a condition of any approval granted by the Board.**
- c. ~~A gate should be provided at the access to the stormwater drainage extension for maintenance access.~~
- d. The configuration of the trash enclosure access does not provide space for refuse trucks to turn around without encroaching parking spaces or the driveway adjacent to the enclosure area. **The applicant should provide testimony on the anticipated frequency and timing of pick-ups for both the trash enclosure servicing the affordable unit, and the curbside pick-ups for the townhouses. The roadway configuration within the development will require refuse trucks to back-up on the two dead end road segments, approximately 125 feet long each, to service the residents.**
- e. The encroachment into the Township Stream Corridor Buffer will require approval under §12-4 of the Ordinance. **We recommend the applicant be required to comply with this requirement as a condition of any approval granted by the Board.**
9. While the overall parking provided on the site exceeds the RSIS and ordinance requirements for the number of required parking spaces, there is a limited number of parking spaces adjacent to the affordable housing building. We recommend that a minimum of one space for each affordable unit be provided adjacent to the building, with the additional required resident and visitor spaces located on proposed Road "B". **The applicant has revised the plans to provide one spaces per ach affordable unit, for a total of 12 parking spaces, immediately adjacent to the building, with the balance of the required parking in the central portion of the site. The applicant should describe the overall parking and circulation to the Board in testimony.**
10. ~~Setback dimensions for the proposed site identification sign should be added to the plan. As shown, the sign is currently encroaching the NJSI Route 31 right of way.~~
11. The applicant should indicate if the single trash enclosure, located near the extreme easterly end of the proposed development, is intended to serve the entire development. The applicant should provide testimony on how trash and recycling will be managed on the project. **The applicant shall provide testimony on trash and recycling management on the property.**
12. The applicant should demonstrate that emergency and refuse vehicles can safely and efficiently circulate through the site. **The applicant should confirm that the**

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**updated plans, revised through November 6, 2023, have been reviewed by the township's fire official.**

13. Sidewalks should be extended along NJSRH Route 31 to the limits of the property frontage. **The applicant has included the extension of the sidewalks along the property frontage within the Route 31 right of way. The proposed improvements shall be subject to approval from the NJDOT.**
14. The proposed site driveway and site improvements within the NJSRH Route 31 right of way will require an access permit from the New Jersey Department of Transportation. **Proof of obtaining the required access/occupancy permit from the NJDOT shall be a condition of any approval by the Board prior to the authorization of any construction.**
15. ~~The proposed site lighting pole located within the NJSRH Route 31 right of way should be removed.~~
16. The proposed street names should be provided to the Planning Board for review [§17-108.m], and the location of street name signs should be indicated on the plans. **We recommend this item be a condition of any approval granted by the Board.**
17. The plans indicate the Letter of Interpretation has expired. An updated LOI should be provided. **The applicant has provided updated permits that were issued by the NJDEP prior to the expiration of the prior LOI on file.**

D. Overall and Detailed Grading Plan (Sheets 6, 7 & 8)

1. ~~Grate and elevation information for the outlet control structure within Bioretention Basin #2 should be shown on the Grading Plans.~~
2. ~~Grades and invert elevations should be provided for HW-5A and the scour hole at the drainage discharge point adjacent to the stream.~~
3. ~~The limits of the stream bank should be shown in the vicinity of the proposed drainage discharge pipe (HW-5A). The proposed location appears to require disturbance to the bank which should be avoided.~~
4. The ramp and stair access to Building #5 should be reconfigured, if possible, to eliminate the need for the steps adjacent to the public sidewalk. As configured, the ramp and stairs will require the installation of handrails to comply with ADA Standards. A configuration that would eliminate the need for handrails is preferred. **The plans have been revised to provide an access walk with a running slope of less than 5%. The applicant should clarify if handrails remain proposed at this location.**
5. ~~Grades should be provided at the access points to the gang mail boxes to demonstrate compliance with the ADA Standards.~~
6. The proposed grading at the northerly end of Building No. 2 results in an excessive slope on the walkway and should be revised to be no greater than 2% across the

Re: **Engineering Review 2**

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width of the sidewalk. **This area was modified through regrading and the introduction of a small retaining wall. The applicant should confirm that the proposed wall does not conflict with the proposed storm drainage pipe proposed directly under the proposed wall.**

7. ~~The stabilized entrance to Bioretention Basin No. 1 is situated on a slope and contains a manhole structure at a critical bend in the access road. The access should be reconfigured to eliminate the crossing through the manhole if possible and be situated on a flatter slope.~~
8. ~~The proposed construction materials for the retaining wall defining the perimeter of Bioretention Basin No. 1 should be identified. A foundation design for this wall will be required based on the proposed height of the wall.~~
9. **Conduit outlet protection, stabilization etc. is subject to approval/certification from the Mercer County Soil Conservation District. Plan certification from the Mercer County Soil Conservation District has been provided by the applicant.**

E. Overall and Detailed Utility Plans (Sheets 9, 10 & 11)

1. ~~The general notes on Sheet 9 that reference the construction standards for the sanitary sewer mains should reference the Hopewell Township Sewer Standards. Any notes in conflict the Township Standards should be corrected.~~
2. ~~Verify the proposed pipe materials for the pipe running along the westerly side of Buildings #1 & #2. The materials are either not listed or conflict with the material labeled on the utility profiles.~~
3. ~~Proposed B-Inlet CB-3A, located near the trash enclosure appears to be in conflict with the fence enclosure. The proximity of the drainage structure to the trash collection area should be reconsidered to minimize the potential for debris and contamination from the trash area into the stormwater system.~~
4. ~~The proposed electric and gas service extensions into the property should be shown on the plans.~~
5. **The proposed underdrain pipe segments, between drainage structures OCS-1.1B to CB-1B'B', and between drainage structures OCS-2.2B to MH-2.1A, should be labeled as "perforated" underdrain pipe to be consistent with the updated utility profiles and stormwater design calculations.**

F. Utility Profiles (Sheets 12 & 13)

1. ~~Several discrepancies are noted comparing the published rim and invert elevations on the profiles sheets when compared to the information published on the Grading Plans. The published information needs to be verified.~~
2. ~~No utility profile is provided for the pipe run from CD-5D to HW-6D.~~

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G. Landscape & Tree Replacement Plan (Sheet 14)

1. ~~The applicant should provide a summary of the total tree planting on the property to demonstrate that the total tree replacement meets or exceeds the replacement requirements of §12-4 of the Ordinance.~~
2. ~~The proposed supplemental plantings located along the southerly border of the property do not appear to be included in the planting schedule.~~
3. ~~The proposed plantings within the drainage pipe extension into the easterly portion of the property appear to be blocking potential maintenance access.~~
4. ~~Additional plantings are recommended between Building 6 & 7 to provide some privacy screening between the back patios of each of the units.~~
5. The wetlands mitigation plants are subject to view and approval of the NJDEP. Approval from the NJDEP for any plantings within the regulated areas should be a condition of any board approval. **As a condition of any approval granted by this Board, we recommend that the applicant be required to revise the Landscaping and Tree Replacement Plans to include a reference to the permits issued by the NJDEP and identify the areas on the site where the tree planting is part of the regulated and permitted activities on the property.**
6. ~~A note should be added to the plans indicating that the seed mixtures and sod types are subject to the approval of the Township Engineer [§17-89.1.e.5]~~
7. We defer to the Environmental Commission for additional comments on the proposed planting plan. **Continuing comment.**
8. ~~The plans do not depict any landscaping or other amenities within the area labeled "Park Area" adjacent to Building 5.~~
9. ~~A note should be added to the plan requiring all areas within the limits of disturbance not mulched for planting to be seeded with grass.~~

H. Lighting Plans and Details (Sheets 15, 16, & 17)

1. ~~We recommend removing the proposed light pole from within the NJSH Route 31 right of way.~~
2. ~~The wall mounted and ceiling mounted lights, units B, C, D as depicted on the plans, should be revised to a 2,700 Kelvin color temperature as per §17-90.3.b.1.~~

I. Landscaping Details (Sheet 18)

1. ~~A note should be added to the plan indicating that the planting requirements shall conform to §17-89.1.g and i.~~

J. Soil Erosion & Sediment Control Plan & Details (Sheets 19 & 20)

Re: **Engineering Review 2**

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1. ~~Snow fencing should be added to the two utility extensions through the regulated areas to ensure that no construction encroaches the environmentally sensitive areas.~~
2. ~~The proposed installation locations for tree protection should be added to the plans.~~
3. ~~The plan depicts the construction tracking pad at the property entrance constructed over the dividing island. The applicant should identify the sequencing of the construction elements at the driveway entrance, and identify when the island will be constructed.~~

**K. Construction Details (Sheets 21 through 23)**

1. ~~The ADA curb ramp details should be modified to define the transition between concrete curb within the flush depressed curb and the Belgian block curb for the balance of the site.~~
2. ~~The location of the proposed bike rack(s) included on the details should be indicated on the plans.~~
3. ~~The location of the proposed block retaining wall section included on the details should be indicated on the plan.~~
4. ~~Clean outs are recommended on the detail for the roof leader downspout connection detail.~~
5. ~~The detail of the proposed spillway should be modified to match the proposed basin configuration. The perimeter of the proposed basins is defined by retaining walls on this project. A detail of the emergency spillway at the wall should be shown.~~
6. **The flood elevations within the bioretention basins should be labeled on the inspection ports, and shown on the detail. The inspection ports should contain a marking indicating the 100-year water surface elevation that is visible in the field. The detail should reflect the proposed marking on the inspection port riser.**
7. **Details should be provided for the Street Signs, which shall conform to §17-109. The applicant shall confirm the colors of the street name signs with the township.**
8. **The detail for the Gabion Wall should be revised to include the dimensions of the side walls.**
9. **The detail for the proposed No Parking Fire Zone sign should be added.**

**IV. Architectural Plans**

- A. The applicant should provide the board with a color palate for the proposed buildings within the project. **Continuing comment.**

**V. Fire Truck Turning Plan**

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- A. The applicant should verify the coordinate with the Township Fire Official to confirm that the truck template is consistent with the township's equipment. **The applicant should provide testimony to the Board confirming approval by the Township's Fire Official.**
- B. ~~The truck turning plan does not depict vehicle circulation through the entirety of the site.~~

**VI. Tree Survey Removal Plan**

- A. The summary of the total tree removal on the property should include a calculation of required tree replacement per §12-4 of the Township Ordinance. **The requested information has been provided on a supplemental Tree Location Survey.**
- B. The tree removal will require a Permit from the Township as per §12-4 of the ordinance. **We recommend this be a condition of any approval granted by the Board.**

**VII. Stormwater Management Report**

Since the issuance of our first engineering report, the applicant has obtained approval from the NJDEP on the stormwater design depicted on the revised plans. The comments pertaining to the stormwater design are essentially addressed except as noted below:

- A. ~~The soil logs were not conducted during the wet season (high water time of year). Direct observation of groundwater needs to be performed during the wet season (January through April).~~
- B. ~~The correct nomenclature needs to be used to describe the soil logs. See Chapter 12 of the NJDEP BMP Manual. The soil color, using the Munsell system of classification which includes an alpha-numeric symbol together with a descriptive color name; Estimated soil textural class, using the USDA system of classification; Estimated volume percentage of coarse fragment, if present. Abundance, size, and contrast of mottles, if present; Soil structural class (soil profile pits only); and soil consistency.~~
- C. ~~The soil hydraulic conductivity testing presented does not appear to comply with the requirements of Chapter 12, Section 3 of the NJDEP BMP Manual. The testing identified in the report (Flexible Wall Permeability Test) does not indicate the method used (A,B,C,D,E or F), as required. The samples do not appear to be undisturbed, as defined by the parameters in the manual. The samples were taken on November 9, 2022 from the test pits and the date shown on the testing is 5/23.~~
- D. A summary of the permeability testing results was provided in the report but the actual test calculations that the summary was based upon was not included, and should be submitted for review. **The requested calculations should be submitted for the township's file.**

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- E. ~~The soil exploration indicated the groundwater was believed to be perched. Additional testing in accordance within Chapter 12 needs to be provided to determine whether the water table is perched.~~
- F. ~~The estimated seasonal high groundwater table, ESHGWT, extends into the gravel layer of under-drained bioretention basin #2. Separation to groundwater needs to be provided in accordance with the NJDEP BMP Manual. The applicant should indicate the proposed separation between the gravel layer and the seasonal high water table.~~
- G. ~~Additional soil testing in accordance with Chapter 12 needs to be provided to determine whether it is feasible for the groundwater recharge to be provided onsite. The applicant shall either demonstrate compliance with Chapter 12 of the BMP Manual for determining the feasibility of providing groundwater recharge on site or request a variance from NJAC in accordance with the provisions of §17-82.4 b & c if the Township Ordinance.~~
- H. ~~The source of the 24 rainfall totals being utilized should be provided. The new rainfall totals need to be utilized in accordance with the rule adoption by NJDEP that became effective on July 17, 2023. The applicant has confirmed that the permit application had been deemed administratively complete prior to the July 17, 2023 Inland Flood Rule updates and therefore qualify under the Department's Legacy provisions.~~
- I. ~~A copy of the NOAA Type C storm distribution should be provided in the report.~~
- J. ~~The Tc calculations provided for the impervious areas in both existing and proposed conditions utilized the Tc flow path for the pervious areas. Separate impervious and pervious Tc calculations need to be provided for each area.~~
- K. ~~The Tc sheet flow length used for the drainage areas within existing conditions are less than 100 feet. Chapter 5, page 24 specifies "For the pre-construction condition, the user assumes a sheet flow length of 100 ft. Only when there is something physically in contact with the flow of stormwater runoff to prevent sheet flow from occurring, such as a swale, curb or inlet, should the value used be less than 100 ft." Based on the drainage area map provided, a 100 foot sheet flow length needs to be utilized for each existing drainage areas.~~
- L. ~~Chapter 5, page 24 specifies "For the post construction condition, the maximum sheet flow length should not exceed the McCuen-Spiess limitation or 100 ft, whichever is shorter."~~
- M. ~~Some of the post developed drainage areas use a 1.0 minute Tc. Chapter 5, page 27 specifies "There is no longer a minimum or default value that may be used for the time of concentration. Tc for pre- and post construction conditions must be calculated based on the aforementioned requirements."~~
- N. ~~The routing of the water quality design storm needs to be provided in the report. The water quality storm distribution should also be included.~~
- O. ~~Drainage area map sheet 3 of 3 was not included in the report.~~

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P. The ~~post development drainage areas map~~ needs to include the individual drainage areas tributary to the two bioretention basins and the two permeable pavement areas.

Q. An ~~additional analysis point should be provided to the storm sewer system in Route 31 since the entrance/exit roadway drains to the system (verses drainage to design point #1 as indicated in the design)~~. The ~~drainage boundary (DA#2)~~ should be extended to ~~Building 9~~ based on the proposed grading. All aspects of demonstrating compliance with the rule (quantity, quality, recharge) needs to be provided.

R. Based on the proposed grading, the area along the east side of buildings 4 and 5, and bioretention basin #2, will bypass the drainage system. Revise as necessary.

S. The following items are noted relative to the proposed permeable pavement system:

1. The ~~nomenclature for the permeable pavement areas~~ should be revised to be consistent between the plans and report.
2. The ~~contributing drainage area boundaries for permeable pavement NE (#1)~~ should be verified. The proposed grading depicts the majority of the drainage area directed to only a portion of the permeable pavement, which would violate the maximum 3:1 ratio of additional inflow contributory drainage area to surface area of the pervious paving system limitation in the BMP manual.
3. The ~~limits of permeable pavement area # 2~~ should be confirmed. The plan indicates the surface area as 3,275 sf, while the routing calculation indicates the surface area as 3,024 sf. The drainage area to permeable pavement system SE (#2) would exceed the 3:1 maximum limitation if a surface area of 3,024 sf is used based on an inflow drainage area of 0.30 acres (+/ 13,068 sf).
4. Permeable pavement system SE (#2) is designed to be partially constructed in Road A. The engineer should provide testimony on whether it is suitable for use in the roadway ~~verses~~ limiting its use to the parking area.
5. ~~Correct the gravel bottom layer within the basin cross section detail chart. Based on the graphic depiction of the basin cross section, the invert of the gravel layer would be a minimum of three feet below the basin floor.~~
6. The ~~permeable pavement detail indicates a 12" stone depth in the main bed area while the stage storage in the routings indicate a 2 foot depth. It does not appear the permeable pavement thickness has been accounted for in the detail to obtain 2-foot bed depth. An extra column in the permeable pavement cross section table should be added to include the stone invert below the main bed and the stone invert in the 4' trench. The surface elevation of the porous pavement areas also varies which should be accounted for in the table elevations depicted. The invert of the stone bed and stone trench should be level (consistent with the routings) to ensure~~

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~~the storage volume in the bed will be achieved. Based on the grades currently shown area #1, the inlet grate elevation at the lowest corner of the porous pavement system is too low resulting in overflow before the full storage is achieved in the permeable pavement.~~

7. ~~The 4' long weir used in the routing of porous pavement system #1 (elevation 203.70') is above the grate elevation at CB-3A (202.86). The 4' weir elevation (203.85') in system #2 is above the grate elevation at CB-1B.~~
8. ~~Based on the proposed grading, the 100 year routed water surface elevation will be above the pavement surface in both porous pavement areas. The systems should be designed so they do not overtop during the 100 year storm event.~~
9. ~~The permeable pavement systems should be provided on the utility profile sheets. A portion of each of the permeable pavement system is downstream of the control structures and therefore will not be adequately accounted for in the storage beds.~~
10. ~~The permeable pavement detail needs to include the requirement that the minimum tested infiltration rate of the surface course must be at least 20 inches per hour.~~
11. ~~Drain time calculations need to be provided for the permeable pavement systems.~~
- T. ~~The pond hydrographs should depict smaller time increments so that the peaks are captured.~~
- U. ~~It is not clear how the predeveloped runoff within the project disturbance in table 3 on page 6 is being determined. Clarification is required.~~
- V. ~~The outlet pipe inverts are more than 5' deeper than the emergency spillway crest elevations for bioretention basins #1 and #2, and would therefore meet the NJDEP classification of a dam. Under the dam safety requirements, the basins would have to be modified to route the 100 year storm plus 50% through the spillway.~~
- W. ~~Bioretention Basin #2 does not contain the minimum one foot of freeboard above the emergency spillway storm.~~
- X. ~~The storm sewer system has been designed for a 25 year storm event. Since the stormwater management design is based on mitigating runoff from a 100 year design storm, the storm sewer system should be designed for a 100 year storm event to ensure design assumptions will be achieved. Any effect of tailwater needs to be accounted for in the analysis.~~
- Y. ~~The applicant should provide an update on the status of the verifications and confirm whether the project needs to meet the new flood hazard area control act rules that were adopted on July 17, 2023.~~

**VIII. Stormwater Operations and Maintenance Manual**

Re: **Engineering Review 2**  
Preliminary & Final Major Site Plan  
Heritage at Hopewell  
2500 Pennington Road  
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- A. The O&M manual submitted contains the requisite elements recommended by the NJDEP Best Management Practices Manual, BMP, Chapter 8, subject to any revisions as a result of final amendments to the stormwater management design. **Continuing comment.**
- B. The O&M Manual will need to be recorded with the Mercer County Clerk's Office. **Continuing comment and recommended condition of approval.**
- C. The Board shall condition any approval granted on a requirement that the designated party responsible for maintenance of the stormwater management system provide copies of the annual maintenance records to the Township Engineer on or before January 31, of each year or on a mutually agreeable annual date. **Continuing comment and recommended condition of approval.**

**IX. Sanitary Sewer Water Report**

- A. No comment.

**X. Traffic Engineering Assessment**

- A. The traffic volume projections are consistent with a residential development.
- B. ~~The assumptions and conclusions in the report are consistent with standard industry practices.~~
- C. The proposed driveway construction within the NJSR Route 31 right of way will require an access permit from the NJDOT. **Continuing comment and recommended condition of approval.**

**XI. Environmental Impact Statement**

- A. Section O of the report, pertaining to Solid Waste should be revised to address the specifics of the proposed development. **Continuing comment and recommended condition of approval.**
- B. Tree replacement should be discussed in the report and any non-compliance with the Ordinance requirements for tree replacement, if proposed, should be reconciled. **Continuing comment and recommended condition of approval.**

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Preliminary & Final Major Site Plan  
Heritage at Hopewell  
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## **XII. Outside Agency Approvals**

The applicant shall be responsible, as a condition of any approval granted to submit proof of obtaining the following outside agency approvals prior to advancement of any construction on the site:

1. NJDEP Freshwater Wetlands and Flood Hazard Area Permit – **Permit issued**.
2. NJDEP Treatment Works Approval – **Outstanding item**.
3. NJDOT Access Permit – **Outstanding item**.
4. Delaware & Raritan Canal Commission - **Outstanding item**.
5. Hopewell Township Health Department approval (abandonment and decommissioning of the existing on-site well and septic) – **Outstanding item**.
6. Mercer County Soil Conservation District – **Certification received**.
7. Hopewell Township Tree Removal Permit – **Outstanding item**.
8. Hopewell Township Stream Corridor Activity Permit – **Outstanding item**.

I trust the enclosed information is helpful to the Board in the review of the subject application.

cc: Frank Banisch, PP, AICP, Board Planner, [frankbanisch@banisch.com](mailto:frankbanisch@banisch.com)  
Jim Hutzelmann, PE, Township Engineer, [jhutzelmann@hopewelltwp.org](mailto:jhutzelmann@hopewelltwp.org)

# T O W N S H I P of H O P E W E L L

## MEMORANDUM

TO: Hopewell Township Planning Board

FROM: Dawn Marling, MPH, Health Officer

SUBJECT: **Technical Review**  
Heritage at Hopewell  
2500 Pennington Road  
Block 78, Lot 17

DATE: October 24, 2023

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The applicant (American Properties Hopewell II LLC) proposes to develop 67 residential dwelling units on an 11.08 acre property. The 67 proposed units will include 55 market rate three-bedroom townhouse units and one affordable housing apartment building, with 12 units.

As noted in the Health Department's memo of June 26, 2023, all proposed residential units will be served by public water and public sewer utilities.

The Health Department requested and has reviewed a Phase I Environmental Site Assessment conducted by EcolSciences, Inc. Their assessment notes the presence of an existing on-site well and septic system, serving a house intended to be demolished. As noted in the Phase I report, the applicant must obtain permits from the Health Department for abandonment of the well and septic system.

The Phase I report recommended further investigation of an area-of-concern (AOC-7) fill materials, consisting of a linear mound located along the edge of the woods at the southeast corner of the site. On May 17, 2023, EcolSciences issued a report regarding their subsequent investigation of AOC-7, which included excavation of test pits and soil sampling following New Jersey Department of Environmental Protection protocols. Final analysis found that the soil meets DEP's Residential Soil Remediation Standards.

# Memorandum

To: Hopewell Township Planning Board  
From: Francis J. Banisch III, PP/AICP  
Date: October 25, 2023  
Re: Preliminary and Final Major Site Plan  
Heritage at Hopewell/American Properties Hopewell II, LLC  
Block 78; Lot 17  
2500 Pennington Road  
IMF-1 Zone

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## 1.0 MATERIALS REVIEWED FOR THIS REPORT

- Planning Board and Zoning Board Application
- Checklists for Preliminary and Final Site Plan
- Preliminary and Final Major Subdivision and Preliminary and Final Site Plan Set, prepared by William Parkhill, P.E. dated 3/28/23, revised through 8/8/2023, consisting of 23 sheets.
- Architectural Elevations and Floor Plans, prepared by Joseph DeLucia, RA, for The Heritage at Hopewell, dated 5/8/2023;
- Tree Survey & Removal Plan, Prepared by Suzanne Warren, PLS, dated 5/5/2023
- Architectural Survey Report prepared by Hunter Research, dated April 2023
- Environmental Impact Assessment entitled, “Environmental Impact Statement for 2500 Pennington Road,” prepared by MidAtlantic Engineering, dated May 11, 2023;
- Traffic Engineering Assessment, prepared by Nathan Mosley, PE, CME, dated May 10, 2023;
- Fiscal Impact prepared by Paul Phillips, PP, AICP, dated May 2023;

## 2.0 NATURE OF APPLICATION

2.1 Block 78, Lot 17 consists of approximately 11 acres and is currently developed with a single-family dwelling and associated site improvements. The property includes wooded areas, especially to the rear, a stream corridor, wetlands, and associated wetland and riparian buffer and transition areas.

2.2 The proposed development will be located in the front, west, portion of the lot, outside of the stream corridor, and constrained areas to the rear.

2.3 The project consists of 55 market-rate, for sale, 3-bedroom townhouse units to be developed in 8 buildings. 12 affordable units will be provided in a separate building in the rear, east, portion of the development. The townhouse buildings range from 6 to 8 units per building. A looping driveway will provide access to the site and parking areas and will be accessed through one entrance along Pennington Road. Other site improvements include landscaping, stormwater management basins, lighting, signage and other typical improvements.

### **3.0 VARIANCES REQUESTED**

3.1 The applicant is not seeking use or bulk variances.

### **4.0 PLAN REVIEW COMMENTS**

4.1 The site plan identifies sidewalks for each building, which is a requirement under the ordinance. The ordinance also requires recreational areas, which for developments under 90 units, requires that a tot lot be provided (17-173.f.5). The site plan does not show a tot lot or other playground area. The applicant should provide testimony regarding the overall recreation opportunities provided on-site and the location of any proposed playground areas.

4.2 The affordable housing units are located in one building to the rear of the development. The applicant should provide testimony regarding the total number of affordable units and the bedroom mix to ensure compliance with the redevelopment plan and UHAC bedroom distribution.

4.3 The proposed landscaping includes shade trees, ornamental trees, evergreen trees, and shrubs and groundcover which line the parking areas, residential units, and driveways. The interior of the site shows typical residential development landscaping with shade trees, foundation plantings, ornamentals and shrubs. Larger evergreen trees are located around utility areas and along the road frontage. The applicant should provide testimony regarding the total site landscaping. In particular, if the proposed landscaping will provide adequate buffer between the adjoining properties.

4.4 The affordable housing building does not show any garbage collection area such as a dumpster enclosure. The applicant should provide testimony regarding garbage collection for the building.

4.11 The proposed lighting is typical for this type of development. The applicant should provide testimony regarding the lighting impacts, in particular, how lighting of the parking lot areas will affect adjoining properties.

4.12 One monument sign is proposed at the main entrance of the site. The applicant should provide testimony regarding signage to ensure they comply with the ordinance.

4.14 The applicant should provide testimony regarding the parking. Are the number of spaces provided adequate to meet the needs of the townhomes and apartment areas?

Will there be adequate parking for all units including visitor spaces? The townhouse development areas include off-street parking, however, it is assumed overflow and visitor parking for those units will be located on-street with some dedicated in parking areas along the roadway. We defer to the engineer for compliance with the parking regulations.

- 4.15 Any approval by the Planning Board should be conditioned on approval by any other agency having jurisdiction.

cc via email: Linda Barbieri, for distribution to Planning Board members, Professionals and applicant

**TOWNSHIP OF HOPEWELL**

**MEMORANDUM**

**TO:** Planning Board Members

**FROM:** Environmental Commission Members

**DATE:** September 19, 2023

**RE:** Block Lot: Block 78 Lot 17 American Properties Hopewell II LLC  
Address: 2500 PENNINGTON ROAD  
Zoning District: IMF-1  
Application Type: Preliminary/Final Site Plan

We are writing to inform you of our comments regarding the subject application, which is scheduled to be reviewed by the Planning Board.

During our Environmental Commission meeting on September 19, 2023, members Paul Kinney, Rex Parker, Vanessa Sandom, Andrew Plunkett, Mark Bean, Mike Aucott and Uma Purandare reviewed and discussed the subject application together with Jim Hutzelmann.

We have the following environmental concerns for the proposed project:

1. Please request the applicant to consider revising the lighting plan to utilize the minimum required light consistent with the township lighting ordinance.
2. Ensure the plan explicitly accommodates Make Ready NJ state regulation to provide prewired EV infrastructure.
3. Ensure landscaping complies with the Township's tree ordinance and update the landscape plan to replace non-native with native plants as specified by the township native plant ordinance 17-89, for example replace Viburnum.
4. Maximize walking access to the shopping center to the south, as well as nearby trails, and recreational areas. One consideration is to collaborate with NJ DOT to extend the planned sidewalk along Rt 31 south to the shopping center.

Please consider our comments during your review.

Respectfully submitted: Paul Kinney, Chair

cc: J. Hutzelmann, U. Purandare, EC Members