December 14, 2017

Mr. Alan Hill
Hillcrest Associates
PO Box 1180
Hockessin, DE 19707

Dear Mr. Hill:

The City of Newark’s Subdivision Advisory Committee has reviewed the annexation, rezoning, major subdivision, site plan approval plan you submitted on behalf of the Handloff/Weinberg Trusts for 0 Paper Mill Road, Tax Parcel 08-052.00-012.

We have the following comments:

**Electric Department**

1. Electric Service is available from Paper Mill Road.

2. The developer must pay all costs for material and labor for the electric service to the development including transformer, underground cables, other equipment and meters. Costs to be determined once final design is completed.

3. The developer must pay for all pole rearrangements, including Delmarva, Comcast, and Verizon.

**Parks and Recreation Department**

1. The Landscape ordinance requires any trees that 18” in diameter or bigger be designated as value trees. The code does allow for 25% of such trees to be removed without incurring any tree replacement requirements. Any value trees over the 25% mark shall be replaced at a minimum of two 1 ½ - 2 “caliper trees per 6” of caliper value tree. After walking the property it is hard to tell what trees will remain in open space area and what will be removed. When the area is surveyed it will give us a better idea of what the value tree estimates are.
2. For the proposed plantings, there are many London Plane and sycamore trees along the existing roadway. We suggest changing out 9 of the proposed trees and replace with other variety, we recommend 6 black gum and 3 American Beech.

3. Along Paper Mill Road the planting plan calls for 12 white pines. We suggest changing out 6 of these proposed pines to 3 white spruce and 3 Douglas fir or any combination of the two.

4. We would like to have mulch socks not erosion fencing used along the limit of clearance. With the number of trees that will be along the limit of clearance, the erosion fencing requires trenching that will cut into the root systems of the trees.

5. The developer will need to pay $450 per unit for a total of $8,100 for cash in lieu of land as per chapter 27, appendix VI of the City of Newark Code.

Police Department

1. The police department has no comment or concern with this project.

Planning and Development Department

Code Enforcement Division

1. Comments based on 2012 IBC;

2. The proposed buildings must meet all applicable Building and Fire Code requirements. Complete architectural, structural, plumbing, HVAC, electrical and fire protection drawings are required for review prior to permits. Sprinklers are required for all housing units;

3. The architectural plans submitted lacks diversity in unit design and the Code Division recommends they be updated to show a variety of materials. The architectural plans will need to match the architectural rendering/elevations submitted for the project. Confirmation that the elevations will match the rendering will need to be done at the time of architectural plan review. Code recommends that draft floor plans be presented to avoid issues during site plan review;

4. Please indicate the fire hydrant locations on the site plan and provide a turning template to verify the turning radius will work for fire truck access. In addition to the 2012 IFC, please consult the 2015 Delaware Fire Protection Regulations;

5. The proposed homes will need to meet the LEED standards as per 2012 IECC;

6. Site must comply with all Accessibility Standards;

7. Pre-construction meeting will be required. Proper protection of site and public required during
construction. The sequence of construction to be prepared and submitted by a licensed professional engineer.

*Land Use Division*

1. The department does understand the rationale behind the request for a zoning of RH to provide protection to the city in the event that this proposal would not be built, but in this case, the Water Resource Protection Area designation provides protection against excessive high density development of this site. As the proposed lots are more in line with RS Zoning, the department suggests a proposed zoning of RS. The resulting required variances for Site Plan Approval would be significantly less. If the proposed zoning is changed to RS, the Site Plan Approval Data table should be adjusted appropriately.

2. Please review the definition for lot width, Sect 32-4(a)(72). Any variances required due to the narrow lot frontage on the cul-de-sac curves should be included in the Site Plan Approval Data table.

3. All future plans and correspondence for this project should include reference to PR#17-11-01.

4. Given that the proposed improvements including common areas, and stormwater facilities will be private, a Civic Association or Homeowners Association will need to be established for maintenance of these facilities. Staff recommends that $300 per unit be deposited in an escrow account upon sale to be turned over to the Civic Association or Homeowners Association at such time when said Association is turned over to the residents.

5. Should the applicant wish to utilize landscaping as an element of distinctiveness and excellence per 32-97 Site Plan Approval, then the landscaping will need to be revised and improved in order to meet this threshold.

*Public Works and Water Resources Department*

**GENERAL SITE:**

1. The site is located within a Class C WRPA. Per city code Section 30-54(a)(1), the site uses shall be restricted to one family detached dwellings with a maximum number of dwellings per gross area not to exceed one dwelling per two acres, with a minimum total gross lot area of two acres. The proposed plan does not conform to this section nor does it address the need for the approval of the Director of Public Works and Water Resources.
2. Add the planning number (#17-11-01) to all future submissions.

3. Provide additional spot elevations at high and low points, building corners, tops of structures and any other critical elevations to help determine surface water flow directions.

4. A letter of no objection (LONO) from DelDOT should be submitted concurrently with the first CIP submission.

5. Handicapped ramps are required at the subdivision entrances and at the Paper Mill Road intersection. Proposed handicapped ramps need to be shown on the plans.

6. All proposed street names shall be provided on the plan.

7. A DelDOT “No Objection to Recordation” letter must be furnished to the City prior to recordation.

8. Add the following note to the plan: a. “All open space shall be private and will be privately maintained.”

9. The existing driveway is located partially within the rear of Lot 13. Will the existing driveway be relocated or will there be an easement in this area?

WATER & SEWER:

1. Specify a 16”x8” Mueller H-615 tapping sleeve and valve at the proposed main tie-in.

2. The proposed water alignment will require an unnecessary number of bends to run around the cul-de-sacs as shown. The more bends in the water main, the more chance there is to have leaks in the system. We recommend the water alignment be revisited to simplify the site’s water distribution piping.

3. The proposed homes are required to have sprinkler systems. A separate fire service is required for each unit.

4. Water services to new construction are required to have Mueller Thermal-Coil meter pits and standard City meters and transmitters for sewer billing purposes. Show the meter pits on the plan and label them accordingly.

5. The water main is reduced to 4 inches to feed units #1 through #5 and must be a minimum of 8 inches when serving homes with both fire and domestic water service.

6. Add a 2” blow off to the dead end water mains.
7. What type of low pressure sanitary sewer system is proposed? Indicate the proposed pumps, pipe material, and force main size.

8. Proposed air releases for the force main shall be shown on the plans. Air release valves shall be provided on lines at all local high points along the force main profile and shall be located in an open bottom manhole.

9. Minimum effective storage for a residential simplex grinder pump shall be 50% of the average daily volume generated in a two (2) day period.

10. All force mains shall be appropriately sized based upon the design requirements for the pump station or grinder pump. All force mains four-inches (4") and larger shall be ductile iron pipe. Nonmetallic force main shall be AWWA C-900, minimum SDR18, or HDPE DR11 (directional drilling applications) when warranted by the application and approved by PWWR.

11. The Developer shall investigate the capacity of the water system to determine if sufficient capacity exists to handle the proposed development and provide the report to the city for review and approval. Contact the Public Works and Water Resources Department to schedule a flow test at a cost of $300 per test.

12. The Developer shall provide a set of water system drawings in accordance with the State Department of Health Drinking Water Standards for their review and approval. A copy of the approval letter (Approval to Construct) shall be provided to the City prior to CIP approval. A copy of the "Approval to Operate" from the Department of Public Health shall be provided to the City prior to the issuance of any certificate of occupancy.

13. Provide the City of Newark with a signed and sealed copy of the Department of Public Health approved water as-built plans within 30 days of DPH approval. Delaware State Plane Coordinates shall be provided for all fittings, valves, bends and hydrants.

14. Provide size, material, and invert elevations for all proposed and existing sanitary sewer manholes, force mains, and laterals. The existing sanitary manhole at the tie-in location will need to be shown on the plan.

15. Projects that generate more than 2000 gallons per day average sewer flow require a DNREC "Construction of Wastewater Collection and Conveyance Systems" permit. Plans which do not meet the 2000 gallons per day threshold shall be submitted to DNREC but do not need to submit the accompanying permit application and review fee. A copy of the approved permit shall be provided to the City prior to CIP approval.

16. Provide the City of Newark with a signed and sealed copy of the DNREC approved sanitary sewer as-built plans within 30 days of DNREC approval. Delaware State Plane
coordinates shall be provided for all manholes, lateral connections, and cleanouts. Diameter and depth shall be provided for all cleanouts.

17. Add the following notes to the plan:
   a. “Any damage to the City storm sewer, water, or sanitary sewer infrastructure shall be repaired or replaced to the satisfaction of the Public Works and Water Resources Director.”
   b. “Unused water and sewer services shall be terminated at the utility main unless a more suitable location is determined by the PWWR Department during construction.”
   c. “The Developer shall pay fees associated with the new water meters prior to issuance of a building permit.”
   d. “The force main crossing Paper Mill Road and running longitudinally along Wyncliffe Lane shall be the responsibility of the Developer or maintenance corporation. All costs associated with repairs, relocation or replacement of the force main shall be the sole responsibility of the maintenance corporation.”

18. Revise General Note #21 on sheet 1 to reflect that STP fees must be paid prior to receiving any building permits.

19. A 20’ wide sanitary sewer utility easement will be required for the propose force main. Add the easements to the plans.

STORMWATER:

1. The test pits and double ring infiltrometer test locations shall be identified on the plans. Add the infiltration test locations to drawings 2, 3A, and 3B.

2. Redevelopment projects that require a detailed Sediment and Stormwater Management Plan require NPDES permit coverage through submittal of a Notice of Intent (NOI). Proof of the NOI submission to DNREC will be required. There is no record of an NOI Project ID for this project. Add the NOI Program ID to the Plan.

3. Label the size, material, inverts, and slope on all stormwater pipes. Label the size, material and inverts of all stormwater structures.

4. The bio-retention outfall discharges into an existing 12” CMP. The condition of the existing pipe will need to be verified and it is likely that this pipe will need to be replaced with a more suitable pipe material. Further, there should be a structure associated with this tie-in to the existing pipe.
5. There is riprap outlet protection shown in each of the proposed bioretention areas. Pretreatment of runoff entering the bioretention areas is required. Pretreatment shall be located at the pipe inlets to the bioretention areas and sized appropriately.

6. Flow being conveyed through the 12” CMP downstream of Bioretention Area 2B will be increased from pre to post development conditions. How will the downstream end of the pipe and bank beyond the existing driveway be protected from erosion?

7. The section for retaining walls and associated are confusing. Label the retaining walls in the plan view so they correspond to the wall numbering in the retaining wall schedule.

8. The department has some concern with the close proximity of infiltration to the proposed retaining wall separating the two bioretention areas as this may have unanticipated performance issues, specifically at the toe of the wall. How will the saturation of backfill material be addressed? How will shortcutting of water and drainage through compacted stone below and adjacent to the wall be prevented. Additional details are required for the retaining wall in Bioretention Area 2A.

This Subdivision Plan review is solely based upon the information and details provided in the submitted documents. Additional comments may be generated during any future submission or CIP phases.

I hope you find this information helpful. Should you have questions or need more information, please do not hesitate to contact me at 366-7000, extension 2040.

Sincerely,

Mary Ellen Gray
Planning and Development Director

MEG/tf