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STATEMENT OF ENVIRONMENTAL IMPACT

FOR

HEATHROW EXCHANGE LLC and SHARK RIVER HILLS ESTATES

PARK PLACE and VALETTA PLACE
TAX BLOCK 5303, TAX LOTS 15, 16, 19 & 20
TOWNSHIP OF NEPTUNE
MONMOUTH COUNTY, NEW JERSEY

September 24, 2020

David H. Boesch, LLA

File No. 180102

I. SITE AND PROJECT DESCRIPTION:

The property in question is identified as Tax Block 5303, Tax Lots 15, 16, 19 and 20, located between Park Place and Valetta Place in the Shark River Hills neighborhood of Neptune Township. The tract is within the R-2 Residential Zone. It is our understanding that although Lots 15 and 16 appear as separate lots on the current tax map (Tax Map # 53, dated November 2014), that the lots have been consolidated into one lot under the Lot Merger Doctrine, and is designated as Lot 16.

Lots 19 and 16 had each contained a one story masonry structure of approximately 2,000 square feet each. These structures were used for equipment and materials storage for a local contractor. The building on Lot 19 remains, but is to be demolished. The building on Lot 16 was already demolished sometime between 2007 and 2012. Lots 16 and 20 are currently vacant.

Both Lot 19 and 20 have existing zoning bulk non-conformities. Lot 19 has a lot depth of 96.73 feet, where 100 feet is required. Lot 20 has a lot area of 5,434 square feet, where 10,000 square feet is required. Lot 16 conforms to the zoning bulk requirements, but is located on an unimproved road.

The property to the north, Lot 1, contains a commercial building and parking area (John's Cracker Barrel). Properties to the northeast (Lots 2, 3 and 4) are vacant. Valetta Place, to the east, is unimproved. Properties to the south and west contain single family residential dwellings, but are located in the R-3 Residential Zone.

The applicant proposes subdivide the lots, creating two (2) lots from the three (3) existing lots. The proposed lots, designated as lots 19.01 and 20.01, will have total lot areas of 17,270 square feet and 15,362 square feet respectively. Each will have frontage on an improved roadway (Park Place), which also contains available sanitary sewer, potable water, electric and telecommunications utilities.

Both of the proposed lots are 'through lots', containing frontage on both Park Place and Valetta Place.

Although each of the proposed lots exceeds the required lot area, variance approval will still be required for lot width and lot frontage for both lots. Lot 19.01 provides 75 feet of lot frontage and width along Park Place, where 100 feet is required. Lot 19.01 does provide for 100 feet of frontage along Valetta Place (unimproved). Lot 20.01 provides for over 100 feet of frontage and width along Park Place, but only 50 feet along Valetta Place. Variances for lot width and frontage will be required for both lots.

II. SITE INVENTORY:

A. Soils:

On the United States Department of Agriculture, Natural Resources Conservation Service Web Soil Survey (WSS), the majority site is depicted as containing Klej (KkhB) series soil types. This series designation is for an 'Urban Land Complex' with gentle slopes between zero to five percent (0% - 5%). This soil series has a variable Hydrologic Soil Group Rating (A/D), which is greatly influenced by surrounding soil types.

The adjacent properties to the northeast have a Lakewood Sand (LasC) soil series designation. This series has slopes between five to ten percent (5% - 10%), with a Hydrologic Soil Group Rating of 'A'. This indicates a high infiltration rate and low stormwater run-off potential.

B. Topography:

The subject property is described as having a gentle topography, with elevations ranging between 4 and 7 (NAVD 1988). Adjacent properties to the northeast contain steeper topographic features, but those conditions do not appear on the subject properties.

C. Geology:

The subject property falls within the Coastal Plain Geologic Region. These unconsolidated sediments were deposited during past interglacial periods. The project location falls within areas of the Cape May Formation, Unit 2.

The silt loam deposits typical of this specific location should be further evaluated for their ability to provide a stable construction base, as well as aiding stormwater control through ground water recharge.

D. Groundwater Hydrology:

This site is located within the Monmouth Watershed Management Area (Area 12) in the Atlantic Coast Watershed Region (Region 3). Per the NJDEP GeoWeb Map Viewer, this region has a groundwater recharge rank of 'B', with recharge values between 11 and 15 inches per year. However, the disturbed nature of the site may have affected its value as a source for groundwater recharge.

NEAI: 171101

E. Surface Water:

The property contributes stormwater to tidally affected portions of Shark River, which is tributary to the Atlantic Ocean through the inlet between the boroughs of Avon-by-the-Sea and Belmar.

The site itself does not contain any distinguishable drainage features. However, properties to the northeast contain drainage swale features that direct run-off to a drainage pipe located near the northeast corner of Block 5303, Lot 1. That pipe conveys any run-off underneath South Riverside Drive into the Shark River.

There are no documented streams, category one (C1) waterways, or water bodies shown on the property, so the NJDEP has no Surface Water Quality Classification for any of the features of this location.

The subject property does however fall completely within the flood hazard area of Shark River, and has a flood hazard area designation of 'AE-10' depicted on FEMA Preliminary Flood Insurance Rate Map Panel #34025C0333G, dated January 30, 2015. Any new construction will conform to all federal, state, county and municipal requirements for the construction and elevation of buildings within flood hazard areas.

F. Watershed:

The subject site is located within the HUC11 watershed area 12DA (Whalepond Brook/Shark River/Wreck Pond Brook). The HUC14 sub-watershed is area 12DA06 (Shark River ~ below the Remsen Mill gage).

The watershed is comprised of predominantly developed lands. This location contains only 0.75 acres, with developed lands surrounding it.

The site is located in the central reach of the HUC14 watershed. It also located in the central coastal fringe of the HUC11 watershed.

G. Vegetation:

The site in question is a 0.75 acre tract which currently contains a commercial structure, some previously cleared areas that have started to re-vegetate with successional plant material, and some wooded areas. The tree species present in the wooded portions of the site include Black Locust, Black Cherry, Red Maple, Catalpa, Willow, Black gum (Tupelo), Poplar and Pitch Pine. The re-growth areas show a predominance of invasive species such as Japanese Knotweed, Catbriar, Sumac, and Goldenrod. None of the existing vegetation is of exceptional value, and none of the existing trees are of specimen quality.

The proposed Plot Plan and Grading Plan, although conceptual in nature, would result in the removal of only three (3) six inch (6") caliper trees.

III. Impact on Services and Natural Resources:

The services and natural resources available to the property are discussed below, as well as the impact the proposed development may have. Mitigative techniques listed below will be implemented to reduce the environmental impacts of this development to a level which will insure the prevention of environmental degradation. Although not all impacts can be totally alleviated, they can largely mitigated by the implementation of appropriate plans and procedures.

A. Wastewater Management:

The subject parcel is located within the service area of the Township of Neptune Sewerage Authority for sanitary sewer service. It is proposed to create two (2) lots to be developed as single family dwellings. This leads to a total projected daily flow of 600 GPD.

An existing sanitary sewer manhole is located immediately in front of the site in Park Place. The manhole is inaccessible, but surrounding development indicates the presence of a sanitary sewer main located within Park Place.

B. Water Supply:

The subject parcel is located within the service area of the New Jersey American Water Company for potable water service. A water main is marked in the Right-of-Way of Park Place. The minimal water demands of two (2) single family dwellings (600 GPD) should easily be accommodated by existing water services within Park Place.

C. Stormwater Management:

No stormwater management system has been proposed at this time. Once a developer has determined the sized and scope of development for each lot, a specific stormwater management plans and calculations will be provided.

D. Stream Corridors and Flood Plains:

The site itself does not contain any distinguishable drainage features. However, properties to the northeast contain drainage swale features that direct run-off to a drainage pipe located near the northeast corner of Block 5303, Lot 1. That pipe conveys any surface run-off underneath South Riverside Drive into the Shark River.

There are no documented streams, category one (C1) waterways, or water bodies shown on the property, so the NJDEP has no Surface Water Quality Classification for any feature at this location.

The subject property does however fall completely within the flood hazard area of Shark River, and has a flood hazard area designation of 'AE-10' depicted on FEMA Preliminary Flood Insurance Rate Map Panel #34025C0333G, dated January 30, 2015. Any new construction will need to conform to all federal, state, county and municipal requirements for the construction and elevation of buildings within flood hazard areas.

E. Solid Waste:

Solid waste collection methods for the two (2) proposed single family dwellings will be in the same manner as the existing neighborhood. Collection will be made by the township Department of Public Works, with separate collection days for solid waste and recyclables. It will be the property owners responsibility to bring the waste containers to the street line on collection days, and recover those containers once they have been emptied.

F. Air Quality:

The existing property is currently undeveloped, or unoccupied, and therefore has no current impact on air quality. After construction, the emissions from heating and ventilation systems for the dwelling, and the vehicles entering and exiting the properties will be consistent with the surrounding neighborhood.

Any dust that would be generated during construction can be addressed by implementing the dust control procedures of the Soil Erosion Control Plan.

G. Noise:

The noise emanating from the proposed dwellings will be comparable in quality and intensity as those in the surrounding properties.

H. Traffic:

In accordance with the Residential Site Improvement Standards (RSIS), two (2) single family residential dwellings are expected to generate 10.1 vehicle trips per dwelling per day. This amounts to 20.2 vehicle trips for a 24 hour period. This should have no impact on the capacity of Park Place.

I. Soil Erosion and Sediment Control:

The erosion of soil is constant on-going ecological process which may be accelerated by development. When ground cover vegetation is disturbed during construction, there can be dramatic increase in the amount of sediments transported by surface water run-off to downstream destinations if proper precautions are not taken.

To minimize the damaging affects of this run-off, the developer of the property will be required to prepare a Soil Erosion Control Plan has as part of an application in accordance with the rules and regulations of the Freehold Soil Conservation District. The plans will include a construction time schedule minimizing the amount of land disturbed at any time and the length of time the land is left bare. It will also detail the devises to be used to control the velocity of storm water on site in order to reduce erosion potential and to filter out eroded sediment before it reaches streams, ponds and drainage facility.

The steps used in the plan include:

- 1. Installation of silt fence barriers to filter storm water flowing across the site to settle out suspended particles.
- 2. Installation of filters around inlets to filter out sediments before water the water enters the storm drains. This prevents the siltation and clogging of pipes.
- 3. Implementation of the construction sequence and soil erosion and sediment control structures.
- 4. Temporary seeding to stabilize exposed soils.
- 5. Proper care and watering of introduced plant material to promote maximum rate of growth for optimum positive impacts.

IV. <u>IMPACT ASSESSMENT:</u>

The proposed subdivision plan satisfies most zoning requirements for all bulk requirements in the R-2 zone with the exception of the required frontage and lot width for each lot. The property is adjacent to an improved street within a developed region. There are few conditions that would limit the implementation of this proposal. The site has adequate existing service for sanity sewers, potable water, natural gas, telephone and electric services.

Once a developer determines the scope and scale of development on the proposed lots, a stormwater management system that satisfies the regulatory requirements of the township will be required to be provided.

V. <u>ALTERNATE DESIGNS:</u>

Another subdivision alternative was evaluated that provided for one lot having frontage on Park Place, and the other having frontage on Valetta Place. However, that alternative would require the improvement of Valetta Place to the midpoint of the lot frontage of the proposed eastern lot. This would entail the addition of approximately 7,100 square feet of impervious surfaces for the improvements to Valetta Place.

This alternative would also result in an extremely unusual intersection configuration, where Park Place, Valley Road, Beverly Way, Summit Road and Valetta Place all converge in the same location. This is not a desirable intersection design and can lead to an unsafe operating condition.

It is for the above reasons that the alternative design was removed from consideration.

VI. COASTAL AREA FACILITY REVIEW ACT APPLICABILITY:

The subject property lies within the regulatory area of the Coastal Area Facility Review Act (CAFRA). However, due to its location relative to the mean high water line (greater than 150 feet), intervening development between the parcel and the mean high water line (Cracker Barrel and South Riverside Drive), and the small scale of the project (2 single family dwelling units), it is our understanding that the proposed minor subdivision that reconfigures three (3) existing lots into two (2) single family building lots does not require approval from the NJDEP under the Coastal Zone Management Rules (NJAC 7:7).

More specifically, NJAC 7:7-2.2 (a) outlines and identifies those development conditions that do require a CAFRA permit. The proposed minor subdivision does not meet any of the types of development described, and therefore does not require a CAFRA permit.

VII. CONCLUSION:

As the proposed development is designed in substantial accordance with the zoning and land use requirements, and since measures have been taken to minimize any impact on adjoining properties, Nelson Engineering Associates believes there will be no negative impact resulting from the proposed development of two (2) single family dwellings fronting on an existing improved local roadway.

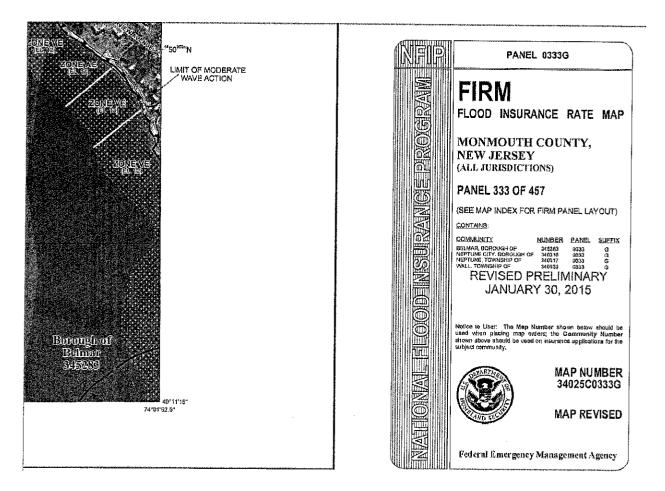
<u>APPENDIX</u>



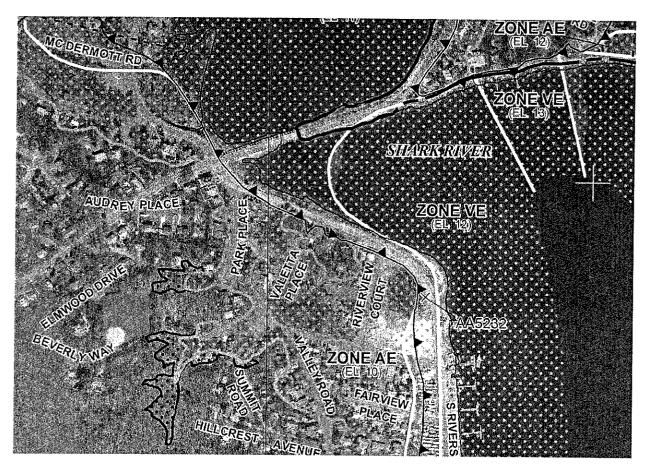
NJDEP - GEOWEB MAP VIEWER - 2007 AERIAL PHOTOGRAPH



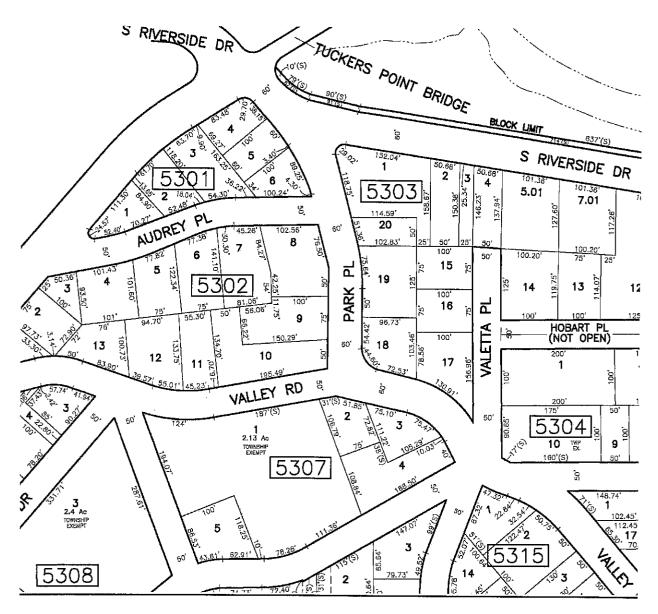
NJDEP - GEOWEB MAP VIEWER - 2012 AERIAL PHOTOGRAPH



PANEL TITLE - F.E.M.A. FLOOD ISNURANCE RATE MAP



P/O FLOOD INSURANCE RATE MAP PANEL # 34025C0333G



P/O NEPTUNE TOWNSHIP TAX MAP # 53