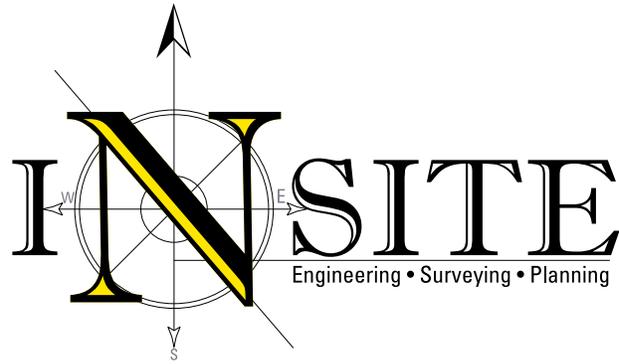


New Jersey Department of Environmental Protection
Division of Land Use Regulation
Attn: Joslin C. Tamagno
Environmental Supervisor
501 E. State Street
Trenton, NJ 08609



May 14, 2020

Via FedEx

RE: **OG North End Development, LLC**
File and Activity No.: 1334-04-0007.2; LUP200001
North End Redevelopment
Block 101; Lots 2, 3 & 4
Township of Neptune
Monmouth County, NJ

Ms. Joslin C. Tamagno,

We are submitting this letter on behalf of the Owner/Applicant in response to the New Jersey Department of Environmental Protection CAFRA Individual Permit & FHA Verification Deficiency Letter, dated 04/15/2020. We would like to clarify that the Applicant is OG North End Development, LLC and the Project Name is North End Redevelopment. The heading of the NJDEP Letter has the information mislabeled. Each comment and response are numbered in accordance with the aforementioned review memo. *Italicized text is taken from the review memo for your ease of reference; non-italicized text represents our responses.*

NJDEP CAFRA Individual Permit & FHA Verification Letter, dated 04/15/2020

- 1. The incorrect flood hazard area design flood elevation of 10-11' NAVD was used to demonstrate compliance with the Flood Hazard Area Control Act Rules. The effective FEMA map shows a flood hazard area design flood elevation of 13' NAVD exists on site and the preliminary FEMA map shows a flood hazard area design flood elevation of 15' NAVD immediately adjacent to the site. As such, the Department considers the flood hazard area design flood elevation to be 15' NAVD. Please provide a demonstration of compliance with the Flood Hazard Area Control Act Rules accordingly. Note that the finished floor elevations of the 1st floor retail must be elevated to 16 feet NAVD and no subsurface enclosures are permitted.*

We evaluated the proposed development on the Effective FIRM and the Preliminary FIRM, as we understand the NJDEP relies on the more stringent of these two maps.

When evaluating the Preliminary FIRM, the subject property is entirely within Zone X (i.e. areas determined to be outside the 0.2% annual chance floodplain). See Preliminary FEMA FIRM Exhibit within Appendix A.

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When evaluating the Effective FIRM, a small portion of the subject property at the northeast corner of the site is split between Zone AE (el. 13) and Zone AE (el. 9). The remainder of the site, its vast majority, is in Zone X (i.e. areas determined to be outside the 0.2% annual chance floodplain). See Effective FEMA FIRM Exhibit within Appendix A.

Accordingly, based on this analysis, the more stringent of the two FIRMs is the Effective FIRM. Our focus then turns towards the affected portions of proposed development at the northeastern corner and along the eastern property line of the subject property. The two prevailing base flood elevations are el. 9 and el. 13.

The existing grade where retail is proposed (i.e. along the exiting boardwalk) varies between 12.63 and 12.97. The proposed grade in this same location is el. 13.10. Therefore, based on proposed topography, the proposed development is not located in a flood zone. Please refer to the FEMA Flood Zone Limit Exhibits, Pre- and Post-Development Conditions within Appendix D.

The existing grade in the small area regulated by base flood elevation 9 varies with the lowest elevation being 11.57. The proposed grade in this same location varies from el. 13.10 to 13.40. Therefore, based on existing and proposed topography, the proposed development is not located in a flood zone. Please refer to the FEMA Flood Zone Limit Exhibits, Pre- and Post-Development Conditions within Appendix D.

Based on this analysis, the proposed development is not located in a flood hazard area.

- The dirt/sand/gravel area was considered impervious under existing conditions for the purposes of compliance with the Stormwater Management Rules as were areas shown on the survey labeled grass/overgrowth sand area. For the purposes of the Stormwater Management Rules these areas are considered pervious unless it can be demonstrated that these areas are highly resistant to infiltration by water. As such, it appears that the project increases impervious cover by greater than 0.25 acres and must meet the water quality requirements of the Stormwater Management Rules are met. Additionally, the Stormwater Management Report indicates that the increase in "dirty" impervious cover is less than 0.25 acres and therefore water quality is not required. Under the current rules, the 0.25-acre threshold does not differentiate between clean" and "dirty" impervious cover but rather views the total increase in impervious cover. Please revise the Stormwater Management Report accordingly.*

As shown in the Aerial Photos provided within the Appendix A, essentially the entire site was developed or disturbed at one point from the previous hotel use, beach staging operations, and/or reconstruction from Superstorm Sandy. Although aerial imagery from the previous five years shows green vegetated areas, these areas are comprised of mostly grass, weeds, and overgrowth due to neglect, except for the few pine trees at the southern property line. The pine trees are dead or dying from bark beetle infestations and have been approved by the Township to be removed to minimize the risk and to attempt to contain this infestation before it spreads to other pines in the community. Further, it is noteworthy that this area of woody vegetation does not constitute a significant coastal resource in that it is very small in area, isolated and largely comprised of non-native landscaping species subject to pest infestations. Refer to Site Photos 3-7 within Appendix A.

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The soils underneath promote little to no infiltration due to compacted stone and concrete remains. Pervious areas on impervious material are considered impervious for stormwater calculations. Based on the historical photos, the geotechnical investigations, the shovel test, and site visits, the property undoubtedly meets the NJDEP's definition of impervious surfaces.

Per NJAC 7:7 the definition of impervious cover is as follows:

"Impervious cover" means any structure, surface, or improvement that reduces and/or prevents absorption of stormwater into land. Porous paving, paver blocks, gravel, crushed stone, crushed shell, elevated structures (including boardwalks), and other similar structures, surfaces, or improvements are considered impervious cover. Grass, lawns, or any other vegetation are not considered impervious cover.

Per NJAC 7:8 and 7:13 the definition of impervious cover is as follows:

"Impervious surface" means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

Per 7:8-5.6(a)2.:

"A runoff coefficient or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five years without interruption prior to the time of application. If more than one land cover has existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations."

To demonstrate that the existing land cover is mostly impervious, InSite conducted a shovel test on April 29, 2020 to verify the land cover for portions of the site where the survey and aerial imagery show vegetation. For the shovel test, an observer takes a video of an associate dropping a shovel from chest height. Per our previous and recent experiences with the NJDEP relative to other applications, if the shovel bounces, the ground is impervious, and if it shows signs of sinking, the ground is pervious. A shovel test has been accepted by NJDEP on previous applications to better demonstrate land cover conditions. The shovel test locations are shown on the Pre-Development Coverage Map and results are included within the Stormwater Report.

- 3. The area of trees and woody vegetation near the southerly portion of the site do not meet the definition of "urban redevelopment area" and therefore are not exempt from the groundwater recharge requirements of the Stormwater Management Rules. Please provide a demonstration of compliance with the groundwater recharge requirements of the Stormwater Management Rules.*

Please refer to Appendix E for the groundwater recharge spreadsheet which outlines compliance by proposing more groundwater recharge under post-development conditions. The proposed lawn area in front of the hotel provides groundwater recharge within a hydrologic soil group (HSG) A whereas the existing site provides no groundwater recharge.

By way of some additional historic background of the site, kindly refer to the Site Photos located in Appendix A. The area shown within Photographs 3 and 4 is noted as "wooded" on the survey. This area has been neglected over the years and is not truly "wooded". Photographs 3-7 show crushed stone, shells, and construction debris littered on the ground, as well as concrete remains

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protruding from the ground. Nevertheless, the soil type in this area is mapped as Urban Land, which provides no groundwater recharge.

- 4. Please revise the site plans to show that Wesley Lake has a 50-foot riparian zone adjacent to it. Additionally, please address the riparian zone section of the Flood Hazard Area Rules at N.J.A.C. 7:13-11.2.*

The riparian zone adjacent to Wesley Lake extends 50 feet landward from the face of the Wesley Lake wall and perpendicular to the outlet pipe from Wesley Lake into the Atlantic Ocean. The riparian zone can be classified as an “actively disturbed area”. Compliance with section 7:13-11.2 is outlined within the Stormwater Report.

The existing riparian zone is essentially entirely impervious cover with no significant vegetation to serve as habitat or improve water quality. The riparian zone is comprised of the Wesley Lake wall, a very limited area of low volunteer grass and the invasive Japanese knotweed at the east end, the macadam promenade and areas of tile, concrete, gravel, and remains from the demolition of the previous development. Besides the vegetation noted above and shown within the photographs, there are no stands of native vegetation, trees or shrubs. Please refer to Site Photographs located within Appendix A for a better illustration of the riparian zone along Wesley Lake, specifically Photographs 15-18.

The existing promenade runs along the entire frontage of Wesley Lake within Ocean Grove and provides access to the boardwalk and beach. As part of the Redevelopment Ordinance, the existing 30’ wide promenade along Wesley Lake is required to be reconstructed for public use and enjoyment. As shown on the site plans, the first 16’ from the Wesley Lake wall is proposed to be a concrete walkway for public use as well as emergency vehicles access, if necessary. All other portions of the riparian zone within 25 feet of the top of bank are replanted to the extent feasible with stabilized turf, native grasses, and shrubs, as shown in the Landscape Plans prepared by Melillo and Bauer. In addition, drainage improvements are proposed within the promenade along Wesley Lake.

- 5. Please provide the calculation described at N.J.A.C. 7:7-13.18(a)2, in order to demonstrate that the required area of herb/shrub plantings has been provided.*

The site is located within the CAFRA Coastal Metropolitan Planning Area. Per 7:7-13.18(a)2, impervious coverage is calculated per 7:7-13.18(d), and the impervious cover limit is the higher limit of (d)1 or 2 as specified. For this application, the highest amount of impervious coverage is shown on the 95-97 imagery, in compliance with 7:7-13.18(g)2. The amount of existing impervious coverage per CAFRA is 95.5 percent.

Per NJAC 7:7 the definition of impervious cover is as follows:

“Impervious cover” means any structure, surface, or improvement that reduces and/or prevents absorption of stormwater into land. Porous paving, paver blocks, gravel, crushed stone, crushed shell, elevated structures (including boardwalks), and other similar structures, surfaces, or improvements are considered impervious cover. Grass, lawns, or any other vegetation are not considered impervious cover.

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Per 7:7-13.5(b)2., the site is not considered forested because there is less than one acre of trees. For Coastal Metropolitan Planning Area, no trees are required to be preserved or planted per Table I. Therefore per 7:7-13.18(a)2, the project is required to plant 4.5 percent of the property area of herb/shrub plantings.

Per the Post Development Coverage Map and Landscape Plan prepared by Melillo and Bauer, 19.2 percent of the site (0.59 acres) is covered in shrub plantings, therefore complying.

In addition to the above, the following items need to be addressed in order for the Division to complete its review:

1. *The application for a coastal permit in a tidal flood hazard area does not require a Flood Hazard Area Verification. As such, the applicant may request a withdrawal of the Verification and request a refund if the application is withdrawn within the timeframe specified under N.J.A.C. 7:13-21.8.*

The Applicant will withdraw the Verification and request a refund.

2. *The stormwater management analysis uses a Type III rainfall distribution. Please revise the analysis to use the NOAA Region D rainfall distribution.*

The stormwater management analysis has been revised to use the NOAA Region D rainfall distribution.

3. *The use of the Delmarva Unit Hydrograph in the stormwater management analysis does not appear to be appropriate due to the urbanization of the watershed and the previously developed nature for the majority of the site. Please revise the analysis to use the Standard Unit Hydrograph (SCS).*

The stormwater management analysis has been revised to use the Standard Unit Hydrograph (SCS).

4. *The soil mapped as "Urban land" does not have an assigned hydrologic soil group (HSG) and as such the use of HSG D is not appropriate for stormwater management purposes. Assignment of the appropriate HSG may be determined by the use of default hydrologic soil groups (existing HSG A and proposed HSG D) or through adequate permeability testing, of which both methodologies are described in Appendix E of the Department's Stormwater Best Management Practices Manual.*

As stated previously in the report, due to the developed nature of the site and current impervious surfaces and compacted gravel, the onsite soils promote little to no infiltration and were classified as hydrologic soil group (HSG) D.

The area shown on the Web Soil Survey as BEADV is listed as HSG A/D. According to Web Soil Survey, "If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes." The area of BEADV on the site contains remnants of debris, asphalt pavement, and compacted gravel, and is not a drained condition, and is therefore classified as HSG D.

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The area shown as HorBr is listed as HSG A and is currently compacted gravel and was used as a storage area for beach operations and Public Works. Despite being previously developed, this area will be restored to lawn area under the proposed conditions. Land covers within this area are classified as HSG A.

Nevertheless, per NJDEP's recommendation, the soil area shown as Urban Land will be classified as HSG A under existing conditions and HSG D under proposed conditions.

Please submit electronic copies of the requested revisions within thirty days of receipt of this letter. All site plans must be signed and sealed by a licensed professional engineer, architect, or land surveyor, as appropriate, and include a revision date. Please note that this letter does not include comments that NJDEP Green Acres and the State Historic Preservation Office may have regarding the subject project. Those comments will be shared with you once they become available.

In accordance with the above, Please use the link [HERE](#) to access the Microsoft OneDrive folder containing the electronic files regarding this submission. Please find enclosed the following information:

- Site plans prepared by InSite Engineering, LLC entitled, "NJDEP Permitting Plan For North End Redevelopment, Block 101, P/O Lot 2 and Lots 3 and 4, Tax Map Sheet #1, Township of Neptune, Monmouth County, NJ", dated 05/06/20;
- Stormwater Management Report prepared by Insite Engineering, LLC entitled, "Stormwater
- Appendix D maps and exhibits from the Stormwater Management Report, full size.
- Videos of Shovel Test referenced within Stormwater Management Report
- Survey prepared by Gallas Surveying Group, titled "ALTA/NSPS Land Title Survey, Lots 3, 4 and Part of Lot 2, Block 101, Spray Avenue & Ocean Avenue Boardwalk, Ocean Grove, Township of Neptune, Monmouth County, State of New Jersey", dated October 4, 2019
- Landscaping plan set prepared by Melillo and Bauer Associates, INC. entitled, "North End Redevelopment, Ocean Grove, New Jersey, Landscape Architectural Plans", dated July 8, 2019
- Geotechnical report prepared by Melick-Tully and Associates, P.C. entitled, "Report Soil and Foundation Investigation for Proposed Residential Development in Ocean Grove for Wesley Atlantic Village Enterprises, LLC" dated April 23, 2007
- Geotechnical report prepared by Melick-Tully and Associates, P.C. entitled, "Findings of Geophysical Survey for Wesley Atlantic Village Enterprises, LLC" dated August 20, 2015
- Geotechnical report prepared by Melick-Tully and Associates, P.C. entitled, "Findings of Soil Testing for Wesley Atlantic Village Enterprises, LLC" dated February 12, 2016

If you have any questions or require further information, please feel free to contact this office anytime.

Sincerely,
InSite Engineering, LLC



Jason L. Fichter, PE, PP



Stephen G. Musto, P.E

InSite Engineering, LLC

OG North End Redevelopment
1334-04-0007.2; LUP200001
Township of Neptune

18-1160-01
SGM/jw

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May 14, 2020
Monmouth County, NJ

cc:

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Client (w/o attachments)
(Via Email)
The Lomax Consulting Group
(Via Email)

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