May 26, 2021

Chairperson Georgette Gonzalez Lugo and Planning Board Members
Elizabeth City Hall
50 Winfield Scott Plaza
Elizabeth, NJ 07201

Re: Baker Street Holdings, LLC
P-02-21
Preliminary and Final Major Subdivision & Preliminary & Final Site Plan Approval
827-891 Newark Avenue; 827-907 Newark Avenue, 1001 Newark Avenue
Block 11, Lots 847, 847A, 848
City of Elizabeth
Union County, NJ
Harbor Consultants, Inc. Project Number: 2021001.002

Dear Chairperson Lugo and Planning Board Members:

Our office has reviewed the referenced documents for an application for a Preliminary and Final Major Subdivision and Preliminary & Final Site Plan Approval for the construction of a mixed-use campus.

A. Documents Reviewed and Completeness Review

The following materials were received and reviewed:

- Planning Board Application with submission checklist dated February 8, 2021.
- Proof 2020 and 2021 Taxes are paid dated February 5, 2021 from Elizabeth Tax Assessor.
- 200-foot property owners list for Block 11, Lot 847 and 847A.
- Easement Documents.
- Corporate Disclosure for Baker Street Holdings
- Preliminary and Final Major Site Plan, prepared by Langan Engineering, consisting of 39 sheets, dated February 9, 2021, inclusive of an ALTA.NSPS Land Title Survey (Sheet VL 101, dated May 26, 2020) and a Boundary and Topographic Survey (Sheet VL 201, dated May 26, 2020) and a Final Plat Major Subdivision (Sheet CB 101, dated January 22, 2021).
B. Appendix

I. Table 5 Matrix of Uses in the Baker Center Redevelopment Area
III. Landscape Architecture Review Letter dated March 6, 2021 prepared by Linda Barie, LLA, LEED AP-ND
Table 1: Baker Center Redevelopment Plan Area Properties
City of Elizabeth, Union County, New Jersey

<table>
<thead>
<tr>
<th>Owner</th>
<th>Street Address</th>
<th>Block and Lot</th>
<th>Lot Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAKER STREET HOLDINGS LLC</td>
<td>829-961 Newark Avenue</td>
<td>Block 11, Lot 847</td>
<td>16.25 +/- Acres</td>
</tr>
<tr>
<td>BAKER STREET HOLDINGS LLC</td>
<td>829-961 Newark Avenue</td>
<td>Block 11, Lot 847</td>
<td>16.25 +/- Acres</td>
</tr>
<tr>
<td><strong>Total Area of the Baker Center Redevelopment Plan Area</strong></td>
<td></td>
<td></td>
<td><strong>19.75 +/- Acres</strong></td>
</tr>
</tbody>
</table>

*Information Shown in Table is per Municipal Tax Information Only*
C. Redevelopment History

A Redevelopment Plan was endorsed by the Planning Board on July 28, 2005 calling for a mixture of high-density residential condominiums and retail, commercial and restaurant uses. A significant fire took place on 829-961 and 827-907 Newark Avenue and the 2005 Redevelopment Plan never materialized. Subsequent redevelopment studies were prepared in 2012, 2015, 2016.

On July 28, 2020 the City Council adopted a Resolution to authorize the Planning Board to reexamine the Baker Center Redevelopment Study for 827-907 Newark Avenue (Block 11, Lot 847.A) & 829-961 Newark Avenue (Block 11, Lot 847).

On October 13, 2020 City Council adopted a Resolution rescinding the July 22, 2020 resolution authorizing the Planning Board to reexamine the Baker Center Redevelopment Study and authorized the Planning Board to reexamine the Baker Center Redevelopment Plan for a new mixed-use development on parcels located at 829-961 Newark Avenue and 827-907 Newark Avenue.

On November 5, 2020 the Planning Board approved the Baker Center Redevelopment Plan dated November 03, 2020 which was later adopted by the City Council on December 22, 2020 (City Council Resolution no. 5404). Our project review report is based on the November 03, 2020 Baker Center Redevelopment Plan.

D. Project Description

The Condemnation Baker Center Redevelopment Plan Area (hereinafter referred to as the “Baker Center Redevelopment Plan Area” or the “Plan Area”) is located in Ward 4 of the City of Elizabeth in close proximity to the City of Newark border and the North Elizabeth Train Station. The Baker Center Redevelopment Plan Area is known locally as the former Interbake factory and is located on two (2) contiguous parcels of land comprising of 19.75 +/- acres with approximately 1,290 feet of lot frontage along Newark Avenue. The Baker Center Redevelopment Plan Area consists of Tax Account No. 11-847 (829-961 Newark Avenue) and 11-847.A (827-907 Newark Avenue). Minor site improvements are also being proposed on Lot 11-848, which is presently developed with General Spray Drying and is located in the MRC Zone District. The Baker Center Redevelopment Plan Area is bounded to the west by Newark Avenue, to the east by a New Jersey Transit Rail Line, and to the north by Lot 848 which has also been deemed “An Area in Need of Redevelopment.” The southern end of the Redevelopment Plan Area is bounded by Lot 846 which is currently developed with and occupied by a Stop & Shop grocery store located on neighboring lot 846.
E. **Project Proposal**

The applicant is proposing to construct seven (7) buildings with a total of six-hundred and thirty-two (632) apartments, office space, retail space, a car rental facility, open space consisting of both hardscape and softscape areas and 1292 off-street parking spaces.

The bedroom distribution complies with the redevelopment plan where 42% of the units are one-bedrooms, 53% are two-bedroom units and 5% are three-bedrooms. Table 2 details the breakdown of parking spaces and units per building:

<table>
<thead>
<tr>
<th>Building</th>
<th>1-bed</th>
<th>2-bed</th>
<th>3-bed</th>
<th>Parking Spaces</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Bldg. A</td>
<td>52</td>
<td>64</td>
<td>4</td>
<td>140</td>
<td>120</td>
</tr>
<tr>
<td>Total Bldg. B</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>291</td>
<td>17</td>
</tr>
<tr>
<td>Total Bldg. C</td>
<td>52</td>
<td>64</td>
<td>4</td>
<td>191</td>
<td>120</td>
</tr>
<tr>
<td>Total Bldg. D</td>
<td>52</td>
<td>64</td>
<td>4</td>
<td>35</td>
<td>120</td>
</tr>
<tr>
<td>Total Bldg. E</td>
<td>52</td>
<td>64</td>
<td>4</td>
<td>174</td>
<td>120</td>
</tr>
<tr>
<td>Total Bldg. F</td>
<td>52</td>
<td>64</td>
<td>4</td>
<td>149</td>
<td>120</td>
</tr>
<tr>
<td>Total Bldg. G</td>
<td></td>
<td>10</td>
<td>5</td>
<td>193</td>
<td>15</td>
</tr>
<tr>
<td>Surface Parking Spaces</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>119</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>263</td>
<td>336</td>
<td>33</td>
<td>1,173 structured 119 surface 1,292 Total</td>
<td>632</td>
</tr>
</tbody>
</table>

Buildings B, D and G will front on Newark Avenue (State Highway 27) and Buildings A, C, E and F will be setback from Newark Avenue and accessed by a proposed interior roadway. The rear buildings are proposed to be connected by +/- 6,000 SF connector hallways.

Each building is proposed to have a non-residential component to create a succinct and complete mixed-use campus which activates the Newark Avenue streetscape and the interior roadway streetscape, although to what extent is unclear in some of the buildings. Retail space and a grocery store are proposed to front on Newark Avenue across buildings B, D and G. A matrix of the components of each building floor is located at the appendix of this report, although to be clear this matrix is incomplete as the nonresidential areas are unclear.

Each building is proposed to have a lobby and mailroom. There are amenities in each building varying from fitness centers to movie theaters.

There are three points of ingress/egress to the campus from Newark Avenue, which is State Highway Route 27, and therefore a major highway access permit from the NJDOT is required for this development. The first driveway is on the westernmost part of the site running parallel to Buildings G and F. There is a roundabout which provides access to the internal roadway and a roadway which runs the perimeter of the lot behind buildings A, C, E and F. The second ingress is at the intersection of Durant Street and Newark Avenue which runs between Building G and D and leads to a roundabout in front of building E. The third point of access is on the northernmost corner of the site near the intersection of Newark Avenue and Alina Street which runs parallel to Building B and A. There is a third roundabout which extends onto Lot 848 and provides access to
the internal roadway and to the roadway around the rear buildings and is also noted to provide future access to Lot 848.

F. **Planning & Zoning Review**

The property is predominantly located in the Baker Center Redevelopment Plan with minor site improvements located on Tax Lot 11-848 which is located in the MRC Zone District. Mixed-use buildings containing no less than 15 residential units in each building and no less than 8,700 square feet of non-residential space in each building are a principal permitted use. A variety of non-residential uses are permitted as follows below from section of the Redevelopment Plan, 3.1.A.A Permitted Principal Uses:

b. Permitted non-residential uses within mixed-use buildings shall be:

i. Eating and drinking establishments, which may include outdoor seating. Examples include restaurants, cafes, coffee shops and bars.

ii. Retail stores and services of goods and merchandise to the general public for personal use or household consumption. Examples include grocery stores, retail clothing stores, bakeries, drug stores and convenience stores.

iii. Production of retail goods for distribution off-site provided the production activities are associated with an on-site retail store and is limited to 75% of the retail space which it occupies on site. For example, a bakery may produce products for distribution off-site provided the facility also contains a retail store open to the general public.

iv. Personal services uses primarily involving the care of a person or a person's personal goods or apparel. Examples include dry cleaners (pick up only, no dry cleaning to be permitted on site), beauty salons, barbershops, shoe repair, tailors, spas and health clubs.

v. Banks and fiduciary institutions.

vi. Rental car agency storefront (in any Building) and associated car storage of approximately 200 vehicles within only the Building B structured parking deck(s).

vii. Offices (medical, professional, or general).

viii. Microbreweries.

ix. Any combination of one or more of the above-listed permitted non-residential uses within one building provided that every building is a mixed-use building containing a minimum of fifteen (15) residential apartment units and a minimum of 8,700 sq. ft. of non-residential uses in any one building and further provided that any building fronting on Newark Avenue (Building B, D, G) shall include residential units that front on Newark Avenue;

Section 3.1.A.B deals with Accessory Uses in the Redevelopment area. It is the intent of the plan to provide both passive and active open space including the following:

a. Approximately 50,000 sf and approximately 15,000 sf of passive open space along Newark Avenue, shall be located between Buildings G & D along either side of the main entry point to the development site.

b. Approximately 40,000 sf of hardscape plaza extending from the interior esplanade linear park to Newark Avenue between Buildings D & B
c. Approximately 8,500 sf interior esplanade linear park extending the length of the Baker Center Redevelopment Plan Area.
d. Active and passive rooftop spaces to support the residential uses.

Table 1 below details the Bulk Requirements in the Baker Center Redevelopment Plan and how the proposed campus complies.

i. **Bulk Schedule**

<table>
<thead>
<tr>
<th>Description</th>
<th>Required</th>
<th>Proposed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Lot Area</td>
<td>19 Acres</td>
<td>19.75 acres</td>
<td>Conforming</td>
</tr>
<tr>
<td>Min. Lot Width</td>
<td>1,000 ft</td>
<td>1,478 ft</td>
<td>Conforming</td>
</tr>
<tr>
<td>Min. Lot Depth</td>
<td>550 ft</td>
<td>652 ft</td>
<td>Conforming</td>
</tr>
<tr>
<td>Max. Building Height (feet)</td>
<td>65 ft (1)</td>
<td><strong>Unclear</strong></td>
<td><strong>Unclear</strong></td>
</tr>
<tr>
<td>Max. Building Height (stories)</td>
<td>5 stories</td>
<td>5 stories</td>
<td>Conforming</td>
</tr>
<tr>
<td>Max. Building Coverage</td>
<td>70%</td>
<td>40.5%</td>
<td>Conforming</td>
</tr>
</tbody>
</table>
| Max. Impervious Coverage (%)       | 80%            | 40.5% - Buildings  
22.3% - Roadway  
16% -Hardscape  
78.8% - Total | Conforming |
| Min. Open Space (hardscape + softscape) | 25%        | 18% - Hardscape  
22.2% - Softscape  
38.2% - Total | Conforming |

**Principal Building Setbacks**

<table>
<thead>
<tr>
<th>Description</th>
<th>Required</th>
<th>Proposed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Sidewalk Width at Front</td>
<td>15 ft (2)</td>
<td>15 ft</td>
<td>Conforming</td>
</tr>
<tr>
<td>Min. Side Yard Setback</td>
<td>15 ft</td>
<td>53.2 ft</td>
<td>Conforming</td>
</tr>
<tr>
<td>Min. Setback from Newark Ave</td>
<td>10 ft</td>
<td>10 ft</td>
<td>Conforming</td>
</tr>
<tr>
<td>Min. Distance between buildings</td>
<td>40 ft</td>
<td>43.7 ft</td>
<td>Conforming</td>
</tr>
</tbody>
</table>

*Pre-existing Non-conformity  
(V) Variance Requested

1. Building height shall be measured from the lowest finished ground level elevation, excluding basements & subgrade parking). Utilitarian appurtenances such as vents, mechanical equipment and utilities may project not more than two feet above the permitted building height unless they are enclosed within parapet walls. Parapet walls may project not more than ten feet and shall be setback at least ten feet from the roof edge. Dormers, penthouses, elevator shafts may project ten feet above the permitted building height provided that any such projection is stepped back a minimum of ten feet from the edge of the roof to provide clearance for stairways or equipment in vertical shafts.

2. A width less than 15 feet is permissible to avoid site or utility obstructions
ii. Subdivision

Section 3.1.C of the Redevelopment Plan addresses the potential subdivision of the property. The bulk standards in Table 2 may not apply to individual lots as detailed in the Redevelopment Plan – “Provided a phasing plan is approved...the bulk requirements set forth in [the bulk table] may not apply to individual lots to be subdivided....the bulk standards shall apply to the Baker Center Redevelopment Plan Area as a whole, provided that all open space areas as described in this Plan are incorporated and maintained starting with the first phase of the development.”

The phasing plan is located on page CS200 of the Site Plan and proposes phase 1 to include all internal roadways and utility infrastructure, frontage improvements and buildings A,C,E and F. Applicant shall testify that the phasing plan conforms to the redevelopment plan Section 3.1.C:

“As part of the first phase of development the developer shall construct all necessary utilities, stormwater facilities, walkways, sidewalks, roadways and all other infrastructure, both on-site and off-site, deemed necessary by the Planning Board for the overall full build out of the Baker Center Redevelopment Plan Area to ensure the orderly development of the Plan Area. The first phase of development must also include the construction of all interior roadway network consisting of the main boulevard entry and the two driveways extending from Newark Avenue and the entire interior spine road as well as the esplanade linear park.”

The applicant is proposing to subdivide the existing lots into four (4) lots. Proposed lots 2, 3 and 4 will front on Newark Avenue and contain buildings B, D and G respectively. Proposed lot 1 will contain buildings A, C, E and F and the majority of the roadway network and utilities. It is our office’s position that each lot should have an easement which provides access to all internal roadways and all applicable infrastructure.

iii. Signage

There is one 24 SF monument sign proposed at the middle driveway across from the intersection of Newark Avenue and Durant Street which conforms with the redevelopment plan. Additionally, a maximum of one sign per business is permitted and proposed, complying with the redevelopment plan.
iv. Parking

Section 3.1.B addresses the required off-street parking in the Redevelopment area. Each use has a ratio for which parking should be provided. Square footages for the proposed non-residential space have not been provided on the plans so we are not able to analyze whether the proposed development complies with the redevelopment plan in terms of parking. The proposed parking has not been broken out by use in the architectural plans.

There are a total of 1,173 structured parking spaces proposed in the seven buildings. There are 119 surface parking spaces located along the internal roadway and behind buildings A, C, E and F. There is a surface parking lot between Building B and D which fronts on Newark Avenue. The redevelopment plan contemplates a 40,000 SF plaza in the space where these 23 parking spaces are proposed.

<table>
<thead>
<tr>
<th>Uses</th>
<th>Standard</th>
<th>Building</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Residential - required</td>
<td>1.0 space/unit</td>
<td>52</td>
</tr>
<tr>
<td>1-bed</td>
<td>1.3 space/unit</td>
<td>64x1.3 = 83.2</td>
</tr>
<tr>
<td>2-bed</td>
<td>1.9 space/unit</td>
<td>4 x 1.9 = 7.6</td>
</tr>
<tr>
<td>Total Residential Required</td>
<td>762.5 spaces</td>
<td>142.8</td>
</tr>
<tr>
<td>EV required</td>
<td>3% per garage</td>
<td>4.2</td>
</tr>
<tr>
<td>EV provided</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total Structured Parking Provided</td>
<td>1,173 spaces</td>
<td>140</td>
</tr>
<tr>
<td>Total Surface Parking proposed</td>
<td>119 spaces</td>
<td>119</td>
</tr>
</tbody>
</table>

Section 3.2.A requires that 3% of each parking garage will be reserved for electric car charging stations. 36 total electric vehicle charging spaces are provided which is 3% of all structured parking spaces, but buildings B and C do not comply with this requirement of the plan which states that each garage must have 3%.

Each building has at least one loading berth or loading dock and it appears at least three trucks can fit into each loading berth, resulting in 21 loading docks which complies with the redevelopment plan.
v. Open Space

Section 3.2.D of the redevelopment plan outlines the open space and amenities requirements. The developer must provide a detailed outline for the uses of the indoor and outdoor amenity space per the redevelopment plan.

The redevelopment plan requires a central interior esplanade throughout the entire midpoint of the development to create a “boulevard” style roadway. A +/- 50,000 SF open space is required between buildings G and D and is shown on the landscape plan, but square footage has not been provided. Another +/- 40,000 SF plaza is required between buildings B and D which may be incorporated as part of a surface parking lot.

It is envisioned in the plan to have an interconnected pedestrian network along the entire campus. The proposed site plan is consistent with this requirement of the plan.

vi. Newark Avenue Improvements

Newark Avenue is classified as an urban principal arterial road by the New Jersey Department of Transportation. The developer shall install a crosswalk across Newark Avenue subject to NJDOT approval. We defer to the engineer’s comments on the improvements for Newark Avenue.

G. Variances and Waivers

Our evaluation to determine whether any additional variances and/or design waivers are necessary can not be completed until the review comments are fully addressed. Information is missing on items such as the nonresidential square footage, building dimensions and parking spaces. Revisions to the site plans and architectural plans are necessary in order to complete our evaluation.

The following variances and/or design waivers have been identified in the Engineering Report prepared by Jose Betances, PE, PP, of Harbor Consultants, Inc. dated May 25, 2021, which is attached in the appendix of this report:

1. In accordance with Section 17.32.060.A.1. of the Land Development Code, each off-street parking area shall have a parking stall depth of 19 feet while 18 feet and 16 feet have been provided. A design waiver is required. Our office does not support parking spaces with a depth of 16 feet.

2. In accordance with Section 17.32.060 of the Land Development Code, the minimum parking stall width for the proposed use should be 10 feet, while 9 feet and 8 feet are proposed. A design waiver is required. Our office does not support parking spaces that are 8 feet in width.

3. In accordance with Section 17.32.060.F.1. of the Land Development Code, each off-street parking space shall maintain an unobstructed area equal to the required length of the space times the minimum width of the space (19’x10’ =190 S.F.). The Applicant is proposing unobstructed parking areas of 162 S.F. and 128 S.F. for parking spaces of 18’x9’ and 16’x8’, respectively. A design waiver is required. Our office does not support parking spaces with a depth of 16 feet or a width of 8 feet.
4. In accordance with Section 17.40.040-A. of the Land Development Code, no obstructions are permitted within proposed parking spaces. If parking spaces are internally located within a structure no columns shall be permitted within the space. A clearance distance of 18 inches must be adhered to from all columns to all parking spaces. The columns must also be protected from being contacted by vehicles via concrete curbing. The required clearance distance of 18 inches and the concrete curbing have not been provided. A design waiver is required.

H. General Comments

I. Architectural Drawings.

a. A cover sheet should be added to the Architectural Drawings which should contain a list of all of the drawings.

b. The Architectural Drawings should include a table and narrative addressing all architectural design requirements outlined in the Baker Center Redevelopment Plan, including but not limited to, Sections 3.2.B., 3.2.C., 3.2.D., 3.3.A., 3.4, bedroom distribution.

c. The Architectural Drawings shall include the square footage of all non-residential spaces on the individual drawings and collectively in a table that demonstrates compliance with the Baker Center Redevelopment Plan along with its associated off-street parking requirement.

d. The Applicant’s Architect shall provide testimony on the proposed use in each of the buildings and specify if the proposed uses and/or square footage of the proposed uses differs from the exhibits in the redevelopment plan.

e. There are 1,173 proposed structured parking spaces within this development. The management and operations of these structured parking spaces should be clearly identified on the drawings. Parking spaces for the non-residential uses should have a symbol labeling them as (N/R) parking space. Parking spaces for any car rental facility should have a symbol (C/R). Parking spaces for the residential uses should have a symbol (R ). Testimony shall be provided on who (residents, visitors, employees, customers, general public) has access to which parking space and if any of the parking spaces will be restricted with gates or times of the day.

f. The symbols used to identify what appears to be paving surfaces are unclear. For instance, what is the symbol on Sheet A-2205 and Sheet A-2209 represent? What does the symbols on Sheet A-2210, Sheet A-2213, 2218, A-2222, A-2225, represent? Please label all surfaces on the drawings.

g. What is the space identified with “?” on Sheet A-2207?

h. Dimensions are missing throughout the drawings. For instance, what is the depth of Retail Space 8646 on Sheet A-2227?

i. The depth of some of the retail spaces is very shallow. The retail space measures 28 feet in depth on Sheet A-2221, 29’ – 7” in depth on Sheet A-2215, 27’ – 3” on Sheet A-2212, and 23’ – 10” on Sheet A-2207. The Applicant’s Architect shall provide testimony on what types of retail uses are expected to occupy a store with these dimensions.
j. Color renderings of the building elevations should be provided to better understand and evaluate the color patterns and use of building materials.

k. Section 3.2.C.2.e. Fenestration: Sheet 05 – View, Visualization (page 15-19) of the Concept Plan represent the level of architectural details required for building within the Baker Center Redevelopment Plan Area. All colors, materials, and architectural features associated with fenestration shall be subject to Planning Board Approval at the time of site plan approval. For the avoidance of doubt, parking garage screening shall be partially enclosed (i.e. partial open air structures) and shall be constructed primarily within the same building materials as the main portion of the building.” The building elevations incorporated in the Baker Center Redevelopment Plan state “Façade Variation to Create Scale & Granite Base (05)”, “Green Terrace” Sheet 05), “Metal with Punch Windows” (Sheet 05)”. It is unclear based on the drawings submitted if the building elevations are designed to the level of architectural detail discussed within and required by the Baker Center Redevelopment Plan.

l. All building elevations shall have overall building height dimensions. It is unclear based on the drawings submitted whether any variances are needed for building height.

m. The dimensions of all parapet walls shall be provided separately, with the setback from the roof line also provided.

n. Architectural drawings (elevations and floor plans with lighting) shall be provided for the connector hallways between Buildings A, C, E and F.

o. A note shall be added to the architectural drawings stating that the improvements and buildings shall be constructed to the National Fire Protection Association (NFPA) 13 Codes and Standards.

p. All mechanical equipment, generators, HVAC equipment and similar equipment should be “conceptually” illustrated on the drawings with the understanding that these items may not be finalized until the construction drawing phase. All of the mechanical equipment, generators, HVAC equipment and similar equipment should be acoustically and visually buffered so that any noise generated by the equipment shall be within the applicable residential sound standards as defined by the City of Elizabeth and the State of New Jersey;

q. The project is adjacent to the New Jersey Transit Rail lines. The Architect shall address any sound attenuation building materials that have been incorporated into the building design.

r. The applicant should discuss whether the amenities comply with the Redevelopment Plan and how access to these amenities will be provided to residents. Will all residents have access to every building’s amenities?

s. Applicant shall discuss the existing use on Lot 848 and how the connection of the Baker Center Redevelopment Plan may be negatively affected by the access easement.
2. *Landscape Architecture Drawings*

   a. The attached review prepared by Linda Barie Landscape Architecture LLC contains additional project review comments on the architectural drawings which shall be addressed by the Project Architect.

3. *Civil (Site Plan) Drawings prepared by Langan Engineering.*

   a. The Zoning Table should be expanded to address all design requirements of the Baker Center Redevelopment Plan.

   b. The impact of providing a cross access easement from Lot 848 onto the main boulevard of the Baker Center property should be evaluated and discussed with the Planning Board. Trucks from neighboring industrial uses should be prohibited from entering the main boulevard of the Baker Center property to avoid a conflict with the pedestrian scale of the boulevard.

   c. A zoning table depicting the existing and proposed conditions for Block 11, Lot 848 shall be added to the site plans. The Applicant shall address whether any variances are necessary for Block 11, Lot 848.

   d. A parking schedule (required & provided) broken down by use for each building shall be added to the drawings.

   e. Testimony shall be provided on the cross-access easement on Lot 848 and the extent of the improvements that are being constructed on Lot 848. Copies of the proposed across access easement should be provided for review.

   f. All parking spaces, loading spaces, fire lanes, and circulation routes shall be striped and signed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). All such striping and signage shall be depicted on the Traffic Circulation Plan.

   g. In the event that any environmental hazards or conditions exist on the Baker Center Redevelopment Area, the developer is responsible for obtaining all necessary permits and approvals from the New Jersey Department of Environmental Protection via the Developer’s Licensed Site Remediation Professional (“LSRP”), including a Remedial Action Order (“RAO”) if applicable, prior to the start of any construction activities. The Applicant should provide the status of any environmental cleanup activities on the site.

   h. Not every building appears to have a trash room, namely buildings B, D and G are not shown to have a trash room on the site plan. Applicant shall discuss how trash will be managed for these buildings. These buildings are also on the proposed subdivided lots.

   i. There is a surface parking lot between Building B and D which fronts on Newark Avenue. The redevelopment plan contemplates a 40,000 SF plaza in the space where these 23 parking spaces are proposed. Applicant shall provide testimony how this surface parking lot will also be utilized as an outdoor plaza.

   j. The Applicant shall address the cut & fill requirements for each building and the project as a whole. Has a geotechnical report been prepared? How will the excavated soil be managed for each phase? A construction schedule consistent
with the redevelopment plan for the staging of material, both on site soils management and construction materials for each phase, shall be added to the plans.

k. Lot Annotation. The proposed lot annotation shall be approved by the City Tax Assessor.

l. The Applicant should provide testimony on the streetscape improvements along Newark Avenue in relation to Section 3.3.A of the Redevelopment Plan.

m. In order to create a pleasant pedestrian environment and provide safe connectivity for pedestrians, the development of the Baker Center Redevelopment Plan Area shall also include streetscape improvements along the southeast side of Newark Avenue along the entire street frontage and a perimeter walking/jogging path.

n. A Streetscape and Landscaping Improvements Plan shall be submitted for review and approval by the Elizabeth Planning Board. The Streetscape Improvement Plan shall be prepared by a Licensed Landscape Architect and shall include detailed construction drawings for all on site landscaping, common areas, recreation areas, and all street frontage improvements, including but not limited to street trees, curbing, ornamental lighting, brick or precast concrete paver walkways, benches, bicycle racks, trash/recycling receptacles, signage and other street furniture as directed by the Elizabeth Planning Board.

o. In order for future residents and customers of the Baker Center Redevelopment Plan Area to safely cross Newark Avenue and for the development to be safely incorporated into the existing surrounding commercial and residential uses, the developer shall install a crosswalk across Newark Avenue subject to New Jersey Department of Transportation (NJDOT) approval.

p. The Applicant shall copy our office on the documents submitted to the NJDOT as part of the Highway Access Permit and any subsequent reports from the NJDOT.

4. Subdivision and Phasing.

a. Testimony shall be provided on the overall phasing and construction of the project in compliance with the Redevelopment Plan. Section 3.1.C. of the Redevelopment Plan states “the bulk standards shall apply to the Baker Center Redevelopment Plan Area as a whole, provided that all open space areas as described in this Plan are incorporated and maintained starting with the first phase of the development.” The Applicant shall amend the Phasing Plans to incorporate the open space areas into Phase 1 of the development.

b. The Table on the phasing plan (CS200) shall be expanded to show all proposed uses by phase (residential and non-residential) and the parking required for each phase and the parking provided for each phase. Insufficient information is provided in the Table.

c. A more detailed Phasing Plan (CS200) shall be provided for all Phases 2, 3, and 4. Section 3.1.C of the Redevelopment Plan requires “All land areas that are not fully developed in the first phase of the development shall be graded, stabilized and maintained as lawn or landscaping with ground cover consistent with the phasing plan.” Individual plans shall be provided for each phase depicting the condition
these proposed individual lots will be in during the construction of Phase 1. The Redevelopment Agreement shall address the future maintenance of the subdivided lots in greater detail.

d. The Phasing Plan shall be revised to state that all off-site improvements shall be constructed within Phase 1, including any off-site improvements required by the NJDOT or any other regulatory review agency. The symbol used for Phase 1 shall be depicted along Newark Avenue representing the streetscape and roadway improvements to be constructed along Newark Avenue.

e. The Final Plat Major Subdivision depicts several existing easements on the site. The Applicant shall address whether these easements are to remain and any impact these existing easements may have on the development.

f. The Final Plat Major Subdivision shall be amended to include cross access easements from one lot to another lot for all future roadway access, parking (as necessary), utilities, walkways, use of open space, and like items.

g. Lot closure documents shall be submitted for the proposed individual lots.

h. The cover sheet of the civil engineering drawings should include “Major Subdivision” in the title of the drawings.

5. Miscellaneous Review Comments.

a. Attached to this Planning Review Report are the following supplemental reports which shall be addressed by the Applicant:
   ii. Linda Barie Landscape Architecture, LLC Review Report dated March 6, 2021;

b. The Applicant shall address all Department Review Letters, including the City Engineering Division Memo dated March 1, 2021.

c. Inspection fees and a performance bond shall be provided in accordance with the requirements of the Municipal Land Use Law (MLUL), the Local Redevelopment and Housing Law, City of Elizabeth Ordinances or any redevelopment agreement.

d. The need for a Redevelopment Agreement for the entire property as well as individual redevelopment agreements for each of the proposed lots acceptable to the City shall be evaluated by the City.

6. Our office reserves the right to provide additional comments upon receipt of revised documents in response to our project review reports. The Applicant should submit a point-by-point letter in response to each comment along with the revised documents.
I. **Regulatory Agency Approvals**

The Applicant is required to obtain the following regulatory approvals prior to the issuance of building permits for this project:

1. Union County Planning Board;
2. Somerset – Union Soil Conservation District Certification;
3. NJ Department of Transportation (highway access and road opening permit);
4. NJ DEP Site Remediation Act;
5. NJDEP Treatment Works Approval (TWA)
6. NJDEP Water Allocation Permit
7. Any other regulatory agency having jurisdiction over or which require an approval or permit to be obtained by the Applicant.

It is the Applicant’s responsibility to secure all required permits and approvals.

It is our recommendation that should the Planning Board grant an approval to this application, that the Planning Board consider granting the Preliminary Site Plan Approval and the Preliminary Subdivision Approval at this time. It is our recommendation that the Applicant address all of the review comments in all of the referenced project review reports by all consultants, City departments and regulatory agencies (NJDOT) prior to resubmitting an application for Final Site Plan and Final Major Subdivision Approval. Any action taken on this application by the Planning Board is made subject to the Applicant submitting revised plans and documents satisfying the review comments within this report, and any testimony before the Planning Board by the Applicant and the Applicant’s professionals.

Please contact our office should you have any questions or comments.

Very Truly Yours,

Harbor Consultants, Inc.

Michael Mistretta, PP, LLA

Jose M. Betances, PE, PE, CME

cc: Moane Whitehead, Board Secretary
Richard Campisano, Planning Board Attorney
Lisa A. John-Basta, Applicant’s Attorney
Appendix
# Appendix I – Table 5 Matrix of Uses in the Baker Center Redevelopment Area

## Table 5: Use and Parking by floor for Baker Center Redevelopment Plan

<table>
<thead>
<tr>
<th>Floor</th>
<th>1-bed</th>
<th>2-bed</th>
<th>3-bed</th>
<th>Parking Spaces</th>
<th>Total Units</th>
<th>Amenities</th>
<th>Non-res space</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bsmnt</td>
<td></td>
<td></td>
<td></td>
<td>92</td>
<td></td>
<td>Trash, storage, bike room</td>
<td></td>
</tr>
<tr>
<td>Floor 1</td>
<td></td>
<td></td>
<td></td>
<td>48</td>
<td>27</td>
<td>Lounge, conference room, lobby</td>
<td>Retail</td>
</tr>
<tr>
<td>Floor 2</td>
<td>10</td>
<td>16</td>
<td>1</td>
<td></td>
<td></td>
<td>Fitness center, lounge</td>
<td></td>
</tr>
<tr>
<td>Floor 3</td>
<td>14</td>
<td>16</td>
<td>1</td>
<td></td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floor 4</td>
<td>14</td>
<td>16</td>
<td>1</td>
<td></td>
<td>31</td>
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<td></td>
</tr>
<tr>
<td>Floor 5</td>
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<td>1</td>
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<tr>
<td><strong>Total Bldg. A</strong></td>
<td>52</td>
<td>64</td>
<td>4</td>
<td>140</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Building B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bsmnt</td>
<td></td>
<td></td>
<td></td>
<td>70</td>
<td></td>
<td>Storage, bike room</td>
<td></td>
</tr>
<tr>
<td>Floor 1</td>
<td></td>
<td></td>
<td></td>
<td>26</td>
<td></td>
<td>Lobby,</td>
<td>Rental Car, Retail, Other space</td>
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<td>Floor 2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>65</td>
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<td>Floor 3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>65</td>
<td>5</td>
<td>Open Office</td>
<td></td>
</tr>
<tr>
<td>Floor 4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>65</td>
<td>5</td>
<td>Open Office</td>
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<tr>
<td>Floor 5</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td></td>
<td>Lounge, fitness center, roof</td>
<td>Open Office</td>
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<tr>
<td><strong>Total Bldg. B</strong></td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>291</td>
<td>17</td>
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<td></td>
</tr>
<tr>
<td><strong>Building C</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Bsmnt</td>
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<td></td>
<td></td>
<td>124</td>
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<td>Trash room, bike room</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>67</td>
<td></td>
<td>Lobby,</td>
<td>Classroom, Coworking, Retail, Other space, Workshop</td>
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<tr>
<td>Floor 2</td>
<td>10</td>
<td>16</td>
<td>1</td>
<td></td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td>191</td>
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<tr>
<td><strong>Building D</strong></td>
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<tr>
<td>Floor 1</td>
<td></td>
<td></td>
<td></td>
<td>35</td>
<td></td>
<td>Lobby,</td>
<td>Retail, Bouncerroom</td>
</tr>
<tr>
<td>Floor 2</td>
<td>10</td>
<td>16</td>
<td>1</td>
<td></td>
<td>27</td>
<td>Fitness center, lounge</td>
<td></td>
</tr>
<tr>
<td>Floor</td>
<td>14</td>
<td>16</td>
<td>1</td>
<td>31</td>
<td></td>
<td></td>
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<tr>
<td>Floor 3</td>
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<td>1</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Bldg. D</strong></td>
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<td><strong>64</strong></td>
<td><strong>4</strong></td>
<td><strong>35</strong></td>
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</tbody>
</table>

**Building E**

<table>
<thead>
<tr>
<th>Bsmnt</th>
<th>109</th>
<th>Trash room, bike room</th>
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</thead>
<tbody>
<tr>
<td>Floor 1</td>
<td>65</td>
<td>Yoga Room, Spa Room, Spin Studio, Mailroom, lobby</td>
</tr>
<tr>
<td>Floor 2</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Floor 3</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Floor 4</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Floor 5</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Bldg. E</strong></td>
<td><strong>52</strong></td>
<td><strong>64</strong></td>
</tr>
</tbody>
</table>

**Building F**

<table>
<thead>
<tr>
<th>Bsmnt</th>
<th>95</th>
<th>Bike room, trash rooms, storage,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor 1</td>
<td>54</td>
<td>Recording studio, Kids room/board, game room, cinema, lobby, mailroom,</td>
</tr>
<tr>
<td>Floor 2</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Floor 3</td>
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<td>16</td>
</tr>
<tr>
<td>Floor 4</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Floor 5</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Bldg. F</strong></td>
<td><strong>52</strong></td>
<td><strong>64</strong></td>
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</tbody>
</table>

**Building G**

<table>
<thead>
<tr>
<th>Floor 1</th>
<th>21</th>
<th>Lobby, mailroom,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor 2</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Floor 3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Floor 4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Bldg. G</strong></td>
<td><strong>10</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>Total Campus</strong></td>
<td><strong>263</strong></td>
<td><strong>336</strong></td>
</tr>
</tbody>
</table>

| 41.6% | 53.2% | 5.2% |
Engineering Review Comments

Rev. May 25, 2021

General Comments

1. In accordance with Section 17.32.060.A.1. of the Land Development Code, each off-street parking area shall have a parking stall depth of 19 feet while 18 feet and 16 feet have been provided. A design waiver is required.

2. In accordance with Section 17.32.060 of the Land Development Code, the minimum parking stall width for the proposed use should be 10 feet, while 9 feet and 8 feet are proposed. A design waiver is required.

3. In accordance with Section 17.32.060.F.1. of the Land Development Code, each off-street parking space shall maintain an unobstructed area equal to the required length of the space times the minimum width of the space (19’x10’ =190 S.F.). The Applicant is proposing unobstructed parking areas of 162 S.F. and 128 S.F. for parking spaces of 18’x9’ and 16’x8’, respectively. A design waiver is required.

4. In accordance with Section 17.40.040-A. of the Land Development Code, no obstructions are permitted within proposed parking spaces. If parking spaces are internally located within a structure no columns shall be permitted within the space. A clearance distance of 18 inches must be adhered to from all columns to all parking spaces. The columns must also be protected from being contacted by vehicles via concrete curbing. The required clearance distance of 18 inches and the concrete curbing have not been provided. A design waiver is required.

5. The Applicant shall provide the street intersection triangles in accordance with Section 17.36.130 of the Land Development Code.

6. Sheet CS101, there is a loading dock proposed at the rear face of Building F. The Applicant shall clarify as to the size of the trucks that will be utilizing these loading docks. This raises concern as to possibly having a truck block the flow of traffic along that driveway if it is loading or unloading at these docks.

7. Sheet CS101 and CS102, the Applicant shall provide concrete bollards around the proposed transformers located in the landscaped area between the interior driveways. This will help protect the transformers from vehicles circulating throughout the site.

8. Sheet CS102, the Applicant is proposing a surface parking lot area between Buildings B and D. There seems to be no proposed curbing around this proposed surface parking. The Applicant shall provide curbing or precast concrete bumper blocks within this surface parking area in order to protect the adjacent proposed landscape areas from vehicles. The Applicant shall
provide more dimensions at the setback from the property line regarding this surface parking lot area and verify it meets the required minimum setback.

9. Dimensions have not been provided for the proposed walkways. The width of all walkways, ramps, stairs, islands, etc. should be added to the site plans.

10. Sheet CS102, the proposed surface parking lot area between Buildings B and D show two labels of (4) four proposed parking stalls in the center of the parking lot. However, it is not clear as to how many parking spaces are proposed. The number of parking should be clearly delineated.

11. The Applicant shall depict the proposed parking layout that are within the building footprints and building connectors on the site plan. In addition, the proposed grading and drainage for these parking areas should be provided.

12. Applicant is proposing parking areas within the buildings basements floors. The proposed drainage systems for the basement parking areas should be provided.

13. The Applicant shall provide the line-of-sight distances at all driveways exits in accordance with the current edition of AASHTO’s policy on geometric design of highways and streets. Only one sight distance was provided on Sheet CS100. Also, verify that the proposed trees do not obstruct the line-of-sight.

14. The Applicant shall provide more painted traffic arrows that depict the direction of traffic flow along all proposed driveways on the site, including the missing directional arrows at the driveways exits. Details of all proposed pavement markings and striping should be provided.

15. The Applicant shall provide curb opening dimensions for all proposed driveways connected to Newark Avenue right of way.

16. The existing curbs and sidewalks along the entire frontage of Lots 847 and 848 should be replaced.

17. The limits of proposed pavement restoration, curbs and restriping along public roads should be shown on the plans.

18. Profiles and cross sections of the proposed driveways should be provided in order to review the proposed vertical curves, elevations, cross slopes and drainage.

19. The location of no parking zones for firefighting equipment should be provided. Construction details for the proposed no parking zones and signages should also be added to the plans and verified with the Fire Official.

20. Approval should be obtained from the Fire Official in regard to the adequacy of proposed fire hydrants. The proposed fire hydrants and 150’ hydrants/fire hose coverage radius should be
added to the fire truck circulation plan, Sheet CP100. In addition, the fire department building connections should be shown.

21. The fire/truck circulation plan, Sheet CP100 should include the truck turning radius details.

22. The Applicant is proposing parking spaces for electrical vehicles. Clarification is required as to the location and number of proposed EV charging stations. Details of the charging stations should also be provided.

23. Clarify if any of the existing utility poles along Newark Avenue will be relocated. In general, any utility pole that will be removed and/or relocated should be labeled on the site removal plan, and the relocation should be shown on the utility plans.

24. There is a note on the site plans that refers to the NJDOT roadway plans, prepared by Langan, for the offsite improvements along Newark Avenue right-of-way. Copy of the NJDOT application and plans should be submitted.

25. There are many plants in conflict with the drainage system, utilities, fire hydrants, and existing utility poles. The landscape and site plans should be revised and coordinated.

26. The site plans show an area within the south side of building D that appears to be a concrete slab, while the landscaping plan shows understory trees at this location. All proposed surface materials should be clearly labeled on the site plans.

27. No concrete curbs have been provided along the edge of pavement in front of buildings A, C, E and F. The concrete curbs should be provided.

28. Handrails should be provided to all handicap ramps that exceed 5% slope, except for the curb ramps. Construction details should be added to the civil plans.

29. A note should be added to the plans indicating that all improvements are to be made in compliance with 2010 ADA Standards, etc al.

30. The Applicant is proposing parallel handicap parking spaces along the edge of pavement in front of buildings A, C, E and F. However, it will be difficult for a driver with disabilities to access the sidewalk when the adjacent parking spaces are occupied. A five feet minimum access aisle between the handicap parking and the rear parking space should be provided.

31. A note should be added to the plans indicating that all constructions shall comply with the current rules and regulations or ordinances of the City of Elizabeth and all applicable regulatory agencies having jurisdiction.

32. A note should be added to the plans indicating that any existing curbs or other objects damaged during construction shall be repaired or replaced to the satisfaction of the City Engineer.
33. Pedestrian sings W11-2 and W16-7P should be added within the pedestrian crossings located between buildings B and D.

34. The curb radius for the proposed parallel parking spaces along the driveway should be 5’ minimum. The curb radius of 1’ used in the driveway’s islands around the roundabouts should also be increased. Also, provide the missing curb radius in the site plans.

35. Clarify if a new fence will be added along the perimeter of the site.

36. Indoor bike racks have been provided. Additional outdoor bike racks should be added to the plans. Construction details of the proposed bike racks should also be provided.

37. Sheet LL101, there is a light pole labeled LX-F proposed within the access aisle of the proposed parallel ADA parking space located approximately in the center of Buildings E and F. The Applicant shall relocate this light pole so that it does not interfere with ADA access.

38. The architectural plans should include details of the proposed parking structures that connect each floor.

39. The number of parking spaces in various sheets of the architectural plans do not match with the label shown. The parking spaces shall be labeled by group areas and the label for the total number of spaces shall be revised accordingly. In addition, each parking space should be identified by number.

40. Dimensions should be added to the handicap parking access aisle on the architectural plans. In general, additional dimensions should be added to the interior parking areas and driveways.

**Grading Plan**

1. Sheet CG102, the Applicant is proposing grading on Block 11, Lot 848. However, there are no existing contours to show where the proposed contours will meet. The Applicant shall show existing contours for Block 11, Lot 848.

2. Sheet CG101, the Applicant is proposing a catch basin labeled CB-809 near an existing utility pole located at the rear of the property between proposed buildings E and F. The Applicant shall verify that the installation of this catch basin will not undermine the existing utility pole. The methods of protecting the existing utility pole should be added to the plans.

3. Calculations should be submitted for the proposed retaining walls.

4. The finished floor elevation of building B varies from 30.50 to 34.25. The grading plan should be revised to delineate the various finished floor elevations. In addition, spot elevations should be added at every door in all buildings.
5. The grading plan should include directional arrows with the proposed slopes within the overall grading areas in order to facilitate the review.

6. Additional spot elevations should be added to all handicap parking spaces and access aisle in order to verify that 2% maximum slope is provided in every direction as per ADA requirements.

7. The proposed contours within the three roundabouts should not be crossing the mountable curbs. The grading plans should be revised.

8. The Applicant stated to refer to the landscape architect plans for grading information within courtyard areas. The Applicant shall provide the grading information for the courtyard areas in the grading plans.

9. Catch basin 611 is located against the proposed retaining wall. Provide the top and bottom of wall elevations and verify that the catch basin is not in conflict with the wall.

10. Detailed grading insets should be provided for proposed ramps, stairs, handicap areas and pedestrian crossings.

**Drainage**

1. The labels of the proposed storm sewer inlets should be expanded to include the type of inlet proposed.

2. The minimum storm sewer pipe in the proposed drainage systems shall be 15” diameter. The plans and drainage calculations should be revised accordingly.

3. The location of all proposed storm and utility crossings should be marked on the utility plans. The Applicant shall provide a table format for all utility crossings with corresponding elevations, including light pole footings, in order to verify that there are no underground utility conflicts. Concrete encasement should be provided for all utility crossings of less than 18”. The location of proposed concrete encasements should be shown on the plans and profiles.

4. The inverts and bottom elevations of the proposed StormTraps should be added to the drainage plans. In addition, the StormTrap connections should be added to the drainage profiles.

5. Verify the storm sewer slope from MH-104 to underground detention basin 1. It appears that the slope is 0.47%.

6. The storm layout inset 2 on Sheet CG203 should be revised to show the invert of the proposed 24” HDPE that connects to underground detention basin 2 from MH-201.
7. The Applicant is missing the proposed manhole rim and invert information on Sheet CG201 for two proposed manholes located upstream and downstream from manhole MH-701, and the proposed manhole located north-west from manhole MH-601. All proposed manholes and inlets should be properly labeled with elevations and inverts.

8. The Applicant states that the drainage system within the courtyard will be provided by others. The Applicant shall provide the drainage system and grading information within the proposed courtyard areas.

9. Applicant is proposing to connect three new pipes into the existing manhole located in the sanitary sewer easement near the eastern property line. The condition of this manhole should be investigated in order to verify that the existing manhole is adequate for the new connections, or if a new doghouse manhole will be required.

10. The pipe lengths, inverts and slopes between inlets and manholes of the underground detention basins 5, 6 and 7 should be provided.

11. Verify the length of the storm sewer pipe from existing catch basin to CB-801.

12. Provide a sewer layout inset on Sheet CG203 to clarify the existing and proposed sanitary and storm sewer connections along the right-of-way between Lots 847 and 848.

13. The size and length of the existing pipe to remain from the building on Lot 848 that connects into proposed doghouse manhole 814 should be added on Sheet CG202. Also, the label of MH 814 that indicates 3 feet diameter manhole should be removed. The doghouse manhole should be 4 feet diameter minimum.

14. Proposed doghouse manhole 814 is in conflict with the proposed 15” HDPE storm sewer pipe from CB-606 to CB-605. The manhole should be relocated or oversized inlets should be used to avoid the conflict.

15. Additional information should be provided for the existing pipe to remain that connects into proposed manhole 818.

16. The limit and location of the recreational walkway, building walls, retaining walls, curbs, etc., should be shown and labeled in the profiles.

17. Sections 2.1 and 3.5.4 of the Stormwater Management Report indicate that the existing 24” combined sewer that runs west to east near the center of the site is RCP, while the Survey shows VCP. The drainage report and plans should be coordinated.

18. Section 3.4 of the stormwater management report refers to the nine Nonstructural Strategies at NJAC 7:8-5.3(b). However, the Nonstructural Strategies are located under Section 7:8-2.4 of the Stormwater Management Rule, last amended March 2, 2020. Section 3.4 of the stormwater management report should be revised to reflect the correct section of the rule.
19. The existing watershed 4B on Sheet DA101 should include additional areas located to the north. The plan and calculations should be revised accordingly.

20. Aluminum orifice and weir trash racks should be provided in all outlet structures to prevent trash from getting into the City waterways during a storm event above the water quality storm. Construction details should also be provided.

21. Many of the pipe slopes and lengths used in the conduit calculations do not match with the plans. The drainage calculations and plans should be revised accordingly.

22. The design and full flow velocities should be added to the storm sewer tabulation. Also, clarify the velocities shown on the calculations.

23. Only the footprints of buildings B and G match with the roof drainage areas on the Tables of Sheet DA103. The drainage plans should be revised to clarify the roof and courtyard drainage areas shown in the Tables and the calculations.

24. The roof leader collection system for each section of the building roofs should be shown on the drainage plan, including cleanouts, inverts and rim elevations. Pipes calculations for each section should be added to the conduit calculations.

25. The invert connection of 32.24 used in the conduit calculations from MH-201 to underground detention basin 2 should be provided on the drainage plan Sheet CG203.

26. The limit of offsite drainage areas cannot be verified. Additional topography and spot elevations should be provided.

27. The inlet/rim elevation for the existing catch basin used in line 14 of the stormwater network 800 does not match with the plans. The calculations should be revised.

28. Clarify the Known flows of 15.20 and 0.01 used in the combined sewer conduit calculations.

29. The combined sewer drainage calculations do not include the existing upstream flows from Newark Avenue, Durant Street, Alina Street and Sherman Avenue, which are required in order to evaluate the capacity and overflow of the combined sewer system. The calculations should be revised.

30. Section 3.5.4 of stormwater management report indicates that per request from the City of Elizabeth, the proposed 30” RCP combined sewer at 0.50% slope match the capacity of the existing 39”x30” brick sewer outfall pipe that has a slope of approximately 0.30%. However, the capacity of the existing 39”x30” brick sewer at 0.30% slope is about 41.2 cfs, while the proposed 30” RCP at 0.50% slope has a capacity of about 29 cfs. In addition, based on the inverts provided, the actual slope of the existing 39”x30” brick sewer living the site is approximately 1.68%. At this slope, the capacity of the 39”x30” brick sewer is about 97.5 cfs. The size and/or slope of the proposed combined sewer should be revised.
31. It is not clear if parking or driveway areas are proposed in the roof. Any parking or driveway areas in the roof should be included in the calculations for TSS removal.

32. Soil testing in the location of the proposed underground basins should be submitted in accordance with the BMP Standards in order to verify that the bottom of the detention basins will be located a minimum of one foot above the SHWT.

33. A portion of existing watershed 1 is tributary to the existing drainage system on Newark Avenue that discharge into the 42” RCP pipe that runs west to east along the northerly property line of Lot 848. However, the Applicant is assuming that all storm events from this area are tributary to the combined sewer without providing supporting calculations, including upstream areas. The drainage areas and calculations should be revised.

34. The proposed project is a major development that requires 80% TSS removal rate in order to comply with the New Jersey Stormwater Management Rules. However, Section 3.2.1 of the stormwater management report indicates that per discussions with the City Engineer a reduction of 50% TSS is provided because the combined sewer will eventually be treated at a treatment plan. Please note that existing combined sewer runs along Alina Street and under U.S. Route 1 where a regulator mode divides it into a 33” RCP interceptor main and a 48” RCP overflow main that discharge near the tributary to the Elizabeth Channel. Therefore, in order to know if the entire stormwater runoff from the site generated by the water quality storm will be treated at the treatment plan, additional investigation and calculations for the combined sewer shall be submitted.

35. The Applicant proposes to replace and relocate the existing combined sewer that runs west to east near the center of the site. However, there is an existing 42” RCP storm sewer that also runs west to east along the northern property line of Lot 848. The existing 42” storm sewer system runs parallel to the existing combined sewer along Alina Street and changes to 72” RCP. This storm sewer system ultimately discharges near the tributary to the Elizabeth Channel in the vicinity of the 48” RCP overflow main of the combined sewer. The plans show that the invert of the 42” RCP pipe for the manhole located on Lot 848 near the north east corner of the site is 16.05’. Therefore, the Applicant should discuss the alternatives to separate the proposed stormwater system from the combined sewer. The drainage design should be revised.

36. Section 1 of the stormwater management maintenance plan should include the telephone number of the responsible party.

37. The stormwater management maintenance plan should be expanded to include the name, address, telephone, etc., of all governmental agencies reviewing this project, including but not limited to soil conservation, Union County, Harbor Consultants, Inc. as City of Elizabeth Municipal Planner and Board Engineer, NJDOT, etc. The following sections and languages should also be included:
• **Evaluation And Revision:** “This manual has been prepared in accordance with the NJDEP Stormwater Best Management Practice Manual dated April 2004, last updated March 2020, and with the City of Elizabeth Chapter 13.24. The plan presented in this manual shall be evaluated for effectiveness at least once annually and revised as necessary. A maintenance report shall be submitted to the Municipal Clerk annually, by February 1 of the following year. The municipality has the right of access for inspection and maintenance.

• **Recording On Property Deed:** “This document and any future revisions shall be recorded on the property deed”.

• **Safety And Response To Emergencies**
  
  For action to an emergency condition contact:
  
  Name:__________________
  Address;___________________
  Tel: ________________________
  Fax: _________________________
  Email:__________________________

  Corrective response to emergency conditions
  A major emergency that is likely to occur at this installation is the blockage of stormwater pipes, inlets or outlets by debris. Should this situation occur, the materials must be removed immediately. The inspection and preventative maintenance schedule should be periodically re-evaluated to assess any necessary changes to avoid re-occurrence of the blockage.

  Safety of inspection and maintenance personnel
  Maintenance and inspection of the stormwater facilities is not expected to pose unusual danger to personnel. However, maintenance personnel are expected to dress in appropriate protective clothing and use the appropriate equipment and safety gear in accordance with OSHA regulations and procedures.

• **Log Maintenance, Deed Filing & Yearly Plan Filing Requirements**
  
  Person or Entity Responsible for Preventive and Corrective Maintenance (Aka Responsible Party):

  Name: _______________________________
  Address: __________________________________
  Phone Number: ________________________________

  The responsible party shall maintain a detailed log of all preventive and corrective maintenance for the structural stormwater management measures incorporated into the
design of the development, including a record of all inspections and copies of all maintenance-related work orders as required by §13.24.100.B.6.

The responsible party shall ensure that the maintenance plan described herein and any future revisions thereto required by §13.24.100 be recorded upon the deed of record for Block ____________, Lots ____________ as required by §13.24.100.B.4.

The responsible party shall evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed. Such party shall report his findings in the form of an annual report in accordance with §13.24.100.B.7, to the Municipal Clerk annually, by February 1 of the following year.

The responsible party shall retain and make available, upon request by any public entity with administrative, health, environmental, or safety authority over the site, the maintenance plan and the documentation required by §13.24.100.B.8.

The responsible party shall permit the municipality the right of access for inspection measures, and for maintenance if required under §13.24.100.B.10.

Should the ownership of the stormwater facilities change, the responsible party noted herein shall update the maintenance plan to include all the updated owner information. The responsible party shall then hand deliver or forward the plan via registered mail to the City of Elizabeth within 90 days of the change of ownership/responsible party.

38. The stormwater management maintenance plan should include the cost estimate for inspections and maintenance tasks.

Sanitary and Utility Plans

1. An engineer report for the sanitary discharge and domestic/fire water demand calculations should be provided.

2. A copy of the NJDEP Treatment Works Approval application should be submitted. Copy of the approval should be submitted when obtained.

3. The Information on the existing underground utilities should be clearly shown on the plans along the entire property frontage.

4. Calculations should be submitted to demonstrate that the existing waterline is suitable for the proposed domestic and fire flow volumes and pressures.
5. Provide domestic and fire flow water distribution system calculations. A minimum of 20 psi of residual pressure should be available for firefighting. Hydrant flow testing results should be submitted to confirm available fire flow (AFF).

6. The location of all sanitary sewer cleanouts should be added to the utility plans, including the rim and invert elevations.

7. The location of proposed gas valves should be shown in the utility plans. Also, the proposed gas meter locations should be shown.

8. Excavation for utility/drainage connections will be conducted in close proximity of some of the existing utility poles. For example, catch basin CB-809 between proposed buildings E and F at the rear of the property is located near an existing utility pole. Details and notes should be provided for protection of existing utility poles. In addition, the distance between the proposed underground system and the existing utility poles should be provided.

9. Service location should be modified so that no trees or utility poles are within 10 feet of water line.

10. Sprinkler system calculations for the proposed buildings should be provided.

**Construction Details**

1. The Applicant shall provide a concrete pad construction detail for the proposed transformers. Also, dimensions should be added to all concrete pads on the site plans.

2. The Applicant shall provide the construction details for the proposed hotboxes that will be used for the domestic and fire water supply.

3. Detail of the proposed backflow prevention valves indicated in the drainage plans should be provided.

4. The manhole frame and cover detail should include the word storm, sanitary or combined sewer as appropriate, and the year. Manhole frame and cover located within the City right-of-way should include the word “City of Elizabeth”.

5. The NJDOT inlet type “A”, type “B” and type “E” details on Sheet CS502 refer to details and notes that have not been provided. In addition, the thickness and concrete strength of the structures should be provided.

6. The asphalt pavement section detail on Sheet CS501 should have 2” surface course, and 4” base course.
7. The proposed concrete curb and flush curb details should be revised to be 7” wide on top and 9” at bottom in accordance with the City standard detail. The concrete strength should be class B concrete, 4,500 PSI.

8. The applicant is proposing various oversized inlets. Construction details of the oversized inlets should be provided.

9. The Applicant has provided one generic detail for the proposed 4’ and 5’ high StormTraps. Specific details of the proposed StormTraps should be provided in order to verify the dimensions and volumes used in the drainage calculations.

10. All proposed dimensions should be added to the outlet control structures details on Sheet CS503.

11. The NJDOT curb ramp type details applicable to the proposed development should be added to the plans. Also, ADA detectable warning surfaces should be provided at every curb ramp throughout the site. Detail of the detectable warning surfaces should be added to the plans.

12. Construction details of the proposed concrete sidewalk steps and handrails should be added to the civil plans.

13. Construction detail for the proposed loading areas should be provided.

14. Construction details of the proposed monument sign should be added to the civil plans. Clarify if additional outdoor signs are proposed.

15. Construction details of the proposed post mounted yellow delineator shown on the site plans should be provided.

**Survey and Final Map**

1. The sum of areas in the Final Plat does not match with the areas in the Alta survey and the boundary survey.

2. Concrete monuments should be added along the property frontage. A legend should also be added for the existing and proposed markers and monuments.

3. The width of the right-of-way of Newark Avenue is not verified.

4. The final plat needs to include the area of Lot 848 and total up in the lot area table.

5. The new subdivision lines need to be labeled.
6. A coordinate needs to be added at the northwest corner of Lot 848.

7. The total length of 197.14’ along Newark Avenue needs to be changed to 383.10’ to include Lot 848.

8. The coordinate at the southeast corner of the site along the Amtrak property has to be changed from E:573289.4312 to E:573829.4312.

9. Note 1 of the final plat., there is a typo “is” that should be changed to “this.”

10. The length of the 496.02’ line on the north side of Lot 848 should be changed to 496.03’ to agree with the boundary survey.

11. The ALTA survey shows the area of Lot 847A as 150,622 sf, but the subdivision plan shows it as 150,625 sf.

12. A dimension of 189.96’ should be added along the line from the northeast corner of Lot 848 to the concrete monument found.

13. A concrete monument is also needed along the Newark Right of way line at the southwest corner of Lot 848.
Appendix III - Landscape Architecture Review Letter dated March 6, 2021 prepared by Linda Barie, LLA, LEED AP-ND
MEMORANDUM

To: Tony Gallerano, PE Harbor Consultants
Copy: Mike Mistretta, PP, LLA
From: Linda B. Gumeny, LLA, LEED AP-ND
Date: March 6, 2021
Subject: Baker Center Redevelopment – Plan Review
Preliminary & Final Site Plan Submission
Elizabeth, NJ

This office has reviewed the Baker Center Redevelopment Preliminary and Final Site Plan Submission, including landscape architectural plans prepared by HM White (undated), civil engineering plans prepared by Langan Engineering and Environmental Services, dated 2/9/21, and architectural plans prepared by Woods Bagot, dated 2/9/21. The following comments are offered for your consideration.

General
1. The Zoning Schedule in the Civil Plans regarding number of residential units per building contradicts the architectural plan set. The architectural plans shall provide a comprehensive schedule on one sheet of residential units per building, with a total proposed unit count to demonstrate how the proposed plan complies with the Redevelopment Plan. A maximum of 632 residential units are allowed per 3.1 of the Redevelopment Plan.
2. The Zoning Schedule in the Civil plan set indicate a total of 136,562 square feet of non-residential use under the off-street parking calculation. a schedule describing the proposed square footage of retail/commercial uses per building. In accordance with 3.1 of the Redevelopment Plan, “the non-residential component of the Plan envisions approximately 134,000 +/- sf of non-residential uses…” Section 3.1.A stipulates that “All buildings shall contain … no less than 8,700 square feet of non-residential uses…” The schedule shall provide a descriptive list of proposed non-residential uses per building with associated square footage to demonstrate that the proposed plans comply with the Redevelopment Plan.
3. Section 3.1.A.B of the Redevelopment Plan describes the intent to provide common outdoor public and private open space areas throughout the design of the development, “consisting of an approximately 8,500 +/- sf esplanade linear park as illustrated on Sheet 04, together with open space to the north of Building G and south of Building D (approximately 50,000 sf & 15,000 sf) along either side of the main entry boulevard, an open plaza space between buildings B and D of approximately 40,000 sf and active and passive rooftop spaces…” Section 3.1.B further describes the
requirement for a minimum open space of 25%. A plan diagram within either the civil or landscape plan set shall be prepared to demonstrate compliance with this open space requirement, and illustrate what percentage is vegetated vs. hardscape.

4. The architectural and landscape plans do not provide any information on the roof amenity terrace or rooftop programming, which appears to include a solar array. Per section 3.2.D, “At the time of site plan approval, the developer shall provide a detailed outline of the uses for the indoor and outdoor amenity areas in addition to including these areas on submitted site plans.”

5. One of the 2.2 Redevelopment Goals and Objectives is to “incorporate green building technologies, green infrastructure, and sustainable energy systems into the site improvements and the building design to the extent practicable.” Most of the site is occupied by buildings and pavement. Virtually no low impact development strategies have been incorporated in the stormwater management system, and an excessive amount of impervious area is proposed that could be converted to porous planted areas. A mere 0.8% of porous pavement is proposed. Zero vegetated channels to filter runoff, and no indication of the percentage of building roof to be vegetated.

6. According to the Zoning Schedule, 1,123 parking spaces are required, and 1,346 spaces are provided, including the 200 rental car spaces. An excess of 23 spaces should be reduced to incorporate more porous planting areas.

7. In accordance with Section 3.1.C, “All land areas that are not fully developed in the first phase of the development shall be graded, stabilized and maintained as lawn or landscaping with ground cover, the design and details of which shall be shown on the phasing plan to be approved by the Planning Board, and maintained and lawn or landscaped areas until that phase of the development is constructed.” Notes and details demonstrating compliance with 3.1.C shall be added to the phasing plan.

8. The survey indicates a gas easement along the rear (eastern) property line. It is unclear what restrictions, if any, are associated with the easement. A great deal of planting is proposed within this easement. Confirm that there are no restrictions to such planting.

Civil Plans
1. The civil set should indicate the height and number of stories for each building, not only square footage.

2. Lighting levels within the site seem excessive. Poles are spaced 20 feet apart, resulting in extremely high footcandle levels of 2–3fc; in some areas 5 fc. Reconsider placement of bollards, which create visual clutter, often overlap with pole lights, and contribute to the excessive light levels. Provide a point–by–point diagram with revised lighting plan to facilitate legibility.

3. No pedestrian scale lighting is provided within the Newark Ave. R.O.W., and existing cobra head lights that will be removed for driveway construction, are not shown to be relocated, likely resulting in insufficient roadway lighting, and reduced pedestrian safety.
4. Chain link fencing should not be used in this development. Revise detail to a higher quality material compatible with the architectural finishes proposed for structures.

Architectural Plans
1. The architectural plans require additional detail to fully describe the proposed work, including but not limited to, façade treatment, exterior building finishes, colors, roll-down screen doors, and railings. Provide images and details for all finishes.

2. The architectural plans shall provide a comprehensive schedule of residential units per building, with a total proposed unit count to demonstrate how the proposed plan complies with the Redevelopment Plan. A maximum of 632 residential units are allowed per 3.1 of the Redevelopment Plan.

3. Per the Redevelopment Plan bulk standards, section 3.1.b, Table 3, the maximum building height is 65 feet, 5 stories. Most of the buildings proposed comply with this standard. However, the rear (east) side of buildings A, C, E, and F exceed the maximum height by 7.5 feet. Because the natural grade falls dramatically from the front (west) side of these buildings to the rear, the basement level garage is in fact exposed, at grade. The exterior grade along the rear of these buildings, which include roadway, parking, and pedestrian walkway, is roughly elevation 26.0 and exposes nearly 28 vertical feet of flat, blank, ill-defined garage “vertical louver, perforated metal panel” cladding, for a length approximately 1,100 feet.

4. Building B garage faced treatment is monotonous and needs additional articulation to provide visual relief.

5. Provide details for the proposed “green walls”, including proposed plant material, irrigation, and maintenance.

6. No details, or dimensions aside from square footage, are provided for the proposed building mounted signage. Per section 3.1.D.c. “Max. Height: No sign shall project above the roofline. The overall vertical dimension of a wall sign shall not exceed four feet.”

7. Proposed building light fixtures are not provided.

Landscape Architecture Plans
1. The landscape plan set requires additional details and dimensions to fully describe the proposed work, including but not limited to, proposed site furnishings, play areas, walls, pavement colors and patterns, and fences, Civil plans refer to the landscape plans for much of the finish site work, and the details are not provided therein.

2. Per the Redevelopment Plan section 3.2.B.5, “The developer shall reconstruct and provide streetscape improvements along the Baker Center Redevelopment Plan Area Right of Way (ROW) of Newark Avenue, including, but not limited to, ornamental street lights, street trees, brick or precast concrete paver sidewalks, brick or precast concrete paver crosswalks, bicycle racks, trash/recycling receptacles, and benches and other seating options to the satisfaction of the Planning Board Engineer;” No streetscape details within the R.O.W. are provided aside from a plain concrete
walkway shown on the civil plans, and trees in lawn panels. It appears that the existing utility poles with cobra head lights and overhead wires will remain.

3. The majority of tree and shrub species are native, however ornamental grasses and groundcover are not. Encourage greater use of native grasses, groundcover, and perennials. Minimize monocultural planting schemes and introduce more sustainable, diverse native planting.

4. The plan set should be better coordinated between the landscape and civil set, particularly regarding easements, utilities, transformers, lighting and retaining wall location/conflicts. All of which should be shown on the landscape plans.

5. Re-evaluate quantity, spacing and use of certain species in locations where soil volume is limited, and irrigation not provided, where planting conflicts with pedestrian use, and where a plant species is unsuitable. For example:
   a. Tulip tree is a large tree that requires adequate space for an extensive root system. Planting on structure seems ill-advised.
   b. Will the columnar Armstrong Gold maple be limbed up to allow seating amidst this bosque?
   c. Along the perimeter circulation route, pine trees are squeezed between the walkway and retaining wall/fence, rending the walkway impassable in a short period of time.
   d. Thorny Winter King hawthorn trees should be placed twenty feet from pedestrian walkways.
   e. Consider Thuja occidentalis for moister bottom of slope, and Juniperus virginiana in drier top of slope locations.

6. The north side of the Building B garage is extremely monotonous and would benefit from a dense planting of trees that grow taller than the Armstrong Gold Maple to screen the view.

7. Review building shade studies to finalize courtyard planting.

8. Provide trellis details for vine planting in courtyards.

9. Confirm that specified trees are available as noted. Trees such as the Tulip tree, which is often the tallest and straightest tree in the forest, is unlikely to be available in “clump-form.”

10. Reconsider use of lawn along the Newark Avenue retail frontage.

11. Reconsider use of lawn in islands within vehicular circulation areas.

12. Provide plan indicating limits of irrigation.

13. Indicate limits of structural soil on the landscape plan.
14. Considering the site consists of Urban Fill, conduct soil testing to determine pH and soil moisture retention before finalizing planting plan. Many of the species chosen are moisture-loving plants.

15. Indicate if and where tree grates are proposed.

16. The roadway circles and islands appear to be entirely paved to accommodate fire truck movement. However, considering fire trucks will not likely be visiting the site daily, consider incorporating grass block pavement such as Techo-bloc Aquastorm, to increase permeability and green vegetation. Do not use pedestrian grade pavers where truck traffic is anticipated.
May 24, 2021
Via Email: tonyg@hcicg.net

Anthony G. Gallerano
Harbor Consultants, Inc.
320 North Avenue East
Cranford, NJ  07016

Re: Traffic Engineering Review #1
Baker Street Holdings, LLC
Block 11, Lots 847 and 847A
Elizabeth, Union County

Dear Mr. Gallerano:

As requested, Dolan & Dean Consulting Engineers, LLC (D&D) has completed a preliminary review of the Traffic Impact Study and Site Plans for the proposed Baker Center Redevelopment located along Route 27 northbound. The materials provided for our review include:

- Traffic Impact Study prepared by Langan Engineering & Environmental Services, Inc., dated November 5, 2020
- Preliminary and Final Site Plan Application prepared by Langan Engineering & Environmental Services, Inc., dated February 9, 2021
- Landscape Plans prepared by HM White
- Architectural Plans by Woods Bagst dated February 9, 2021

Regarding the submission, we offer the following traffic engineering comments for the Board’s consideration:

**November 5, 2020 Traffic Impact Study**

T1. Existing Roadway Conditions
   a. The report indicates the County Route is 642 at the intersection with Route 27 and North Avenue. This should be corrected to County Route 624 per NJDOT Straight Line Diagrams.

T2. Existing Condition
   b. Figure 2 indicates volumes depicted are the 2019 existing volumes, where the counts were conducted in 2018. Please indicate if the volumes adjusted for 2019. If so, provide factor utilized to establish the 2019 volumes.
   c. Please provide justification for not balancing the roadway network where consecutive intersections are counted.
   d. It appears some of the peak hour volumes shown on Figure 2 do not match the count data provided in the appendix. Provide justification for discrepancy of volumes.
   e. Please provide signal timing directives utilized for the analysis.
f. At the Route 27 & Durant Street intersection, there is no red clearance interval for the minor approach in the Synchro analysis. Please revise.

g. The heavy vehicle percentages do not include buses. As there is a bus route that runs along Route 27, please include buses in the calculation of the heavy vehicle percentages. This change also applies to the No-Build and Build condition analyses.

T3. No-Build Condition

h. No-Build growth rates indicated on page 12 differ from the NJDOT April 2019 published background growth rates. For example, the study indicates urban principal arterials in Essex County have a growth rate of 2.0% whereas the NJDOT rates indicate a growth of 1.0% and urban minor arterials have a growth of 2.0% where the report states its 1.75%. The growth rates utilized in the report result in higher volumes and yields a conservative analysis. Therefore, the analysis does not need to be revised.

i. Peak hour factors and heavy vehicle percentages do not match the count data shown in appendix for the intersection of Route 27 & North Avenue/CR 439 for the No-Build PM condition. Please revise.

T4. Scope of Study

j. Census tract 232 in Newark does not show the correct 2010 population. It should be 3,453 as shown on the US Census Bureau’s published data. Please revise the gravity model and trip distribution to incorporate the correct total population.

k. The gravity model shows no traffic entering the site via Alina Street. All traffic entering from the north and west is shown to enter via Durant Street and North Avenue intersections. Please provide justification for no traffic being routed through the Alina Street intersection.

T5. Trip Generation/Distribution

l. As noted in the study, internal capture credit was taken, but the worksheets were not contained in the Appendix. Please provide.

m. On Figure 9, retail trips entering the site does not match Table 3 for the Saturday peak hour.

n. It is noted the pass-by trips are not equal for the enter and exit movements. Carry the negative values through the study intersections to balance the roadway network.

o. Figure 5 percentages do not match the trip distribution as calculated in the scope of study report. Please revise or justify the change in distribution.

T6. Build Condition

p. Please provide a discussion within the report indicating if the 95th percentile queue at each driveway can be accommodated without impacting the operations of the adjacent garage driveways and on-site roundabouts.

q. Please provide clearance calculations for the Route 27 intersection with Durant Street and Alina Street.

r. Please provide correspondence regarding the application review with NJDOT as it pertains to the Department’s feedback on the outstanding Level of Service and v/c ratio violations.
Please confirm how the signal modifications at the Route 27/North Avenue/CR-624 master intersection impact vehicular flow at the adjacent signals in the coordinated network.

Based on a review of the Synchro output for the Saturday peak hour, it is proposed to modify the timing from a 90-second cycle to a 92-second cycle at Route 27 & North Avenue/CR 439. If this is accurate, please confirm if it is proposed to eliminate the coordination with the adjacent signals and how will this impact flow along the arterial.

At the unsignalized driveway intersection along Route 27, the heavy vehicle percentages should match that of the upstream through movement. Please revise from the default 2%.

The Build PM v/c ratios summarized in table in the appendix are not consistent with Synchro output for Route 27 and Alina Street. Please revise.

At the intersection of Route 27 and North Avenue/CR 439 during the Build AM condition, the analysis shows the southbound left/through lane operating as a de-facto left-turn lane. Please utilize SimTraffic simulations to depict how does this impact the processing of southbound through vehicles at the intersection. Please provide performance and queueing reports as part of the revised traffic study.

February 9, 2021 Site Plan

SP1. Has NJDOT agreed to three State highway driveways?

SP2. Has the owner of Lot 848 agreed to the access easement/shared access?

SP3. Does the NJDOT application include Lot 848?

SP4. Sight distances should be evaluated for vehicles exiting the buildings. The buildings plus parallel parking may limit sight distance.

SP5. Evaluate the ability of a vehicle exiting Building A to see vehicles traveling eastbound and then southbound at the roundabout between Buildings A and B.

SP6. Evaluate tractor trailer queuing on the driveway approaches to Route 27, to ensure that the roundabouts will not be blocked.

SP7. A parking summary should be provided indicating all small spaces, electric vehicle spaces, “on street” parallel spaces, as well as parallel spaces within the buildings.

February 9, 2021 Architectural Plans

A1. How will vehicles maneuver into and out of the parallel spaces where there will also be columns?
A2. All “small” spaces will have to be labeled so that drivers differentiate between regular stall sizes and small spaces.

Very truly yours,

DOLAN AND DEAN
CONSULTING ENGINEERS, LLC

Rianna S. Kirchhof, P.E.

Elizabeth Dolan, P.E.