MEMORANDUM

DATE: April 28, 2023

TO: Diane Williamson, AICP, CFM, Director of Community Development

FROM: Robert J. Sykes, P.E.
Derek Hug. P.E., PTOE

RE: **Master Plan Application**
Bristol Yarn Mill Redevelopment
AP 10 Lot 41, 42, 43, 44, 49, 50, 60, 61, 62, 68, 71, 73, 74, and 76
Owner/Applicant: Brady Sullivan Properties
Pare Project No. 98166.00, Task 102

Pare Corporation has completed our review of the Preliminary Plan and Stormwater Analysis Report submissions for the Bristol Yarn Mill Redevelopment prepared by Fuss & O'Neill for the construction of improvements to the Robin Rug Mill complex and adjacent parcels. The documents received for review include:

- Enclosure Volume II:
  - Bristol Yarn Mill Preliminary Plan dated December 2, 2022
  - Architectural Drawings dated August 8, 2022
- Enclosure Volume IV:
  - Stormwater Analysis Report dated December 2, 2022
  - Soil Erosion & Sediment Control Report dated December 2, 2022
  - Long-Term Operations & Maintenance Report dated December 2, 2022
- March 20, 2023 Response to Pare's December 13, 2022 Comments
- Revised Traffic Impact Study submission dated March 17, 2023

Pare offers the following comments pertaining to the reviewed submissions:

General:

- Rhode Island Coastal Resource Management Council (RI CRMC) – The project proposes a subdivision, cooperative, other multi-ownership facility, or creation of 40,000 square feet or more of parking, where a portion of which extends onto the most inland shoreline feature or 200-foot contiguous area requiring submission to RI CRMC for Council Assent.
- Submission of a Stormwater Construction Permit will be required.
  i. The project disturbs greater than one (1) acre, requiring submission for authorization under the RIPDES Construction General Permit to be reviewed by RI CRMC.
  ii. The project proposes flow alterations and possible fill in waters of the U.S requiring submission of a Water Quality Certification (WQC) to be reviewed by the Rhode Island Department of Environmental Management (RIDEM).
- US Army Corps of Engineers (USACE): The project proposes construction of a utility line outfall, including associated excavation, backfill and bedding requiring submission for authorization to the USACE.

- Federal Emergency Management Agency (FEMA)- The project proposes construction within FEMA Zone VE. Review and implement the applicable FEMA technical bulletins, planning tools, and design guidelines for construction.

Enclosures Volume II:

- Site Plan:
  - A trench is proposed along Thames Street for approximately 330 feet to install a new 30-inch drainage pipe. The pipe is proposed between the eastern curb line and an existing water main. The restoration limits for pavement and curbing are not defined on the plans and should be confirmed with the Town. Installation of the pipe will likely disturb the existing curb.
  - Sec 28-251. – General Requirements (4) "All driveways shall be a minimum of 12 feet in width for each lane of traffic using such driveway". Review dimensions of the southern entrance into the off-site parking area.
  - Location of dumpster enclosures should be reviewed to ensure truck access.
  - Review number of accessible parking spaces for conformance with ADA requirements.
  - Confirm loading space location.
- Site Circulation Plan:
  - Ensure larger vehicles can reach the designated loading area, dumpster locations, and other areas in which larger vehicles than the vehicle type on the plan would need to access.
- Drainage Plan:
  - It is recommended that drainpipes have a minimum slope of 0.005 FT/FT
  - Minimum pipe cover for constructability and pipe material should be reviewed. For shallow pipe, frame depth and alternate top slab depths should be accounted for during review of minimum cover at structures.
- Grading Plan:
  - Transformer Pad is located approximately 7 feet above the adjacent grade. Confirm whether this is to be a cast-in-place slab, and aesthetically how this will be look in the final condition. Stairs along with a landing pad will be required for access.
- Basement Parking Plan:
  - Review number of accessible parking spaces for conformance with ADA requirements.
  - Compact Space dimensions show 8 feet between striping. Column width will reduce effective width of space below 8 feet. Confirm column widths.
  - Group of tandem compact spaces within Building 5 basement shows columns in conflict with parking spaces not identified for removal.
  - Traffic circulation within the basement parking area appears to be obstructed by the existing column orientation. Confirm drive aisles widths and parking vehicle turning radii are not obstructed.

Enclosures Volume IV:

- Section 3.2 Stormwater Management System: The Water Quality Volume required is 6,348 cubic feet and the design provides 4,381 cubic feet.
- HYDROCAD Reports:
  - Pre-Development and Post-Development Watersheds should be equivalent. The Pre-Development Watershed is 222,316 square feet. The Post-Development Watershed is 219,398 square feet. Review and revise accordingly.
  - Summary for Pond DMH1: DMH-1 on Drainage Plan does not have a 12.0" culvert as part of its system. Revise HydroCAD or Plans to reflect intended design.
  - Summary for Pond DMH10: DMH-10 on Drainage Plan does not have an 18.0" culvert as its outlet device. Revise HydroCAD or Plans to reflect intended design.

    - Summary for Pond DMH3: DMH-3 on Drainage Plan does not have an 18.0" culvert as its outlet device and does not have an invert of 5.09'. Revise HydroCAD or Plans to reflect intended design.
    - Summary for Pond DMH4: DMH-4 on Drainage Plan does not have an 8.0" culvert as part of its outlet device. Revise HydroCAD or Plans to reflect intended design.
    - Summary for Pond DMH6: DMH-6 on Drainage Plan does not have an 8.0" culvert as part of its outlet device. Revise HydroCAD or Plans to reflect intended design.
    - Summary for Pond DMH9 Diversion Structure: DMH-9 on Drainage Plan has different slopes for its outlet devices. Revise HydroCAD or Plans to reflect intended design.
    - Summary for Pond OWS2: OWS2 on Drainage Plan has a different slope for its outlet device. Revise HydroCAD or Plans to reflect intended design.
- Groundwater elevations should be reviewed for buoyancy of the lined underground systems. Groundwater is likely tidal due to the proximity to the coast and should be monitored.

Traffic:

- Comments 1 through 16:
    - These comments appear to be satisfactorily addressed and Pare has no further comment.
- Comment 17:
    - Vehicular Distribution: we believe at least a small percentage of the vehicles oriented toward the north will cross Hope Street with the intent of accessing the retail corridor along Metacom Avenue. However, by concentrating the north-oriented vehicles to the Thames Street/Hope Street intersection, it will present a more conservative analysis of possible impacts to the side streets that feed traffic to Hope Street. No additional comment.
    - Based on the additional analyses conducted, there is an anticipated decrease in the LOS for left-turning vehicles from Thames Street onto Hope Street from LOS D to LOS E. However, this assumes all traffic oriented toward the north from the development will turn left at this intersection. It is likely that residents and patrons of the development will access Hope Street from multiple locations, which will result in less impact at this specific location. No additional comment.
- Conclusion:
    - Based on the scope of the assessment conducted and the revisions and additions made in the updated March 17 study, we concur that the development will not likely have significant impacts to traffic operations within the study area.

We are available to review these comments with you at your convenience.