320 North Avenue East Cranford, NJ 07016 tele 908-276-2715 fax 908-709-1738

April 9, 2025

Ms. Debra Varnerin Township of Berkely Heights Recreation Department 29 Park Avenue Berkeley Heights, N.J. 07922

re: Land Surveying, Environmental Investigation, and Conceptual Engineering Design Proposed Soccer/Sports Fields
Columbia Middle School
Lower Fields
Lot 7, Block 1204
Berkley Heights, New Jersey

#### Dear Ms. Varnerin:

Harbor Consultants Inc. (HCI) is pleased to submit this proposal for wetlands delineation, land/drone surveying, environmental Investigation, and civil engineering services. These services are to explore the maximum utilization of the existing grass fields located in the northwest corner of the Columbia Middle School property. These fields exist between Harwood Place, the existing basketball courts, and the woods line along Forrest Avenue Brook.

Victor Vinegra and Harbor Consultants have many years of experience in designing sports facilities for public schools, municipalities, and county park systems. This project will be viewed as a major drainage project and will require special DEP permits for such. The project is also located in an 100-year flood zone which will require a Flood Hazard Permit, (FHA) permit from DEP.

As discussed at our field walkthrough on Friday March 28, 2025, HCI will work with the Berkeley Heights Recreation Department to develop plans for the new fields. This project will include multiple project meetings with the Recreation Department.

## Land Surveying Services, Task #1:

Harbor Consultants shall perform a drone, topographic & location survey for the referenced project. The survey plan shall depict a minimum of one (1) foot contour intervals along with the perimeter spot elevations. Items included within Task #1 are the following.

- ✓ Location of all above ground structures in depicted areas.
- ✓ Location for all items within 20 ft. of proposed improvements.
- ✓ Topographic survey with elevations, spot elevations at all corners plus one-foot contours. This aspect is limited to the area of the proposed sports field.
- ✓ Utilities which are readily visible at the time of survey.
- ✓ Storm and sanitary sewer per City sewer maps.
- ✓ Location of water storm and sanitary sewer which exist along the property frontage.
- ✓ Wetlands lines and buffer zones as located by HCI's environmental consultant.

HCI will not draft the elevations of the entire parcel, only the area in question for the sports fields. The drone survey shall include the entire site so all photographs will depict the entire site. Specific utilities, topography and utilities will only be performed in the area of the proposed sports fields. HCl shall supply the BHBOE will all aerially photographs for future use by the BHBOA. The survey information shall be based on State of NJ datum 1988.

### **Environmental Investigations, Task #2:**

#### Wetlands Delineation & Line Verification:

This environmental investigation will be conducted as part of this phase one. A wetlands expert will delineate the limits of the existing wetlands on-site via physically marking the limits via flags. HCI will locate these flags via GPS and create a plan entitled "Wetlands Verification Plan." This plan will be submitted to DEP for a Wetlands Line Verification. This work must be performed prior to performing the design engineering of the fields, since it affects the location of the fields.

# DEP Flood Hazard Permit, FHA.

Harbor Consultants shall perform an environmental investigation into the permits required to construct the turf fields at the proposed location. The location selected by the Berkely Heights Recreation Department is within the Flood Plain of Forrest Avenue Brook. This project will require a individual permit for work in the floodplain from DEP. The permit is an FHA, individual permit which will require considerable engineering to receive approval. A permit can only be filed with DEP for an FHA after all the design aspects are completed and approved by the municipality. This proposal does not include this permit at this time, but HCI shall begin the engineering design which is required to proceed with this permit. This work will be performed in phase II of this contract when approved by the Recreation Department.

#### Conceptual Layout and Engineering Design, Task #3:

Harbor Consultants will perform Conceptual Designs of the new sports fields. This design requires Tasks #1 & #2 listed above, so as to locate the field within areas which can receive DEP permits.

This office can only perform the final engineering once a specific design is chosen by you the Client and the environmental constraints of the site are established. Once the final conceptual design is chosen, Harbor Consultants will provide an engineering estimate for Phase 2 of this project. Phase 2 will include final engineering design and environmental permitting.

If the soils investigations, drone surveys and environmental investigations yield results that do not meet the needs of the Berkeley Heights Recreation Department then this design phase will not continue.

### **Project Cost Estimates:**

Once a Conceptual Sketch is chosen by the Recreation Department (Task#3), HCI shall prepare a cost estimate of the construction costs to the Recreation Department. This is a vital phase prior to final engineering since we must work within the budgetary constraints established by the Recreation Department. Items which shall be investigated include:

- A full-sized soccer/lacrosse/field hockey turf field.
- Width to accommodate a 7v7 and/or flag football.
- Possible turf baseball outfield.
- Removable pitches mound.
- Full drainage design under and around the site. Must meet DEP requirements.
- Field lighting.
- Possible synthetic track around perimeter of field.
- Improvements in and around the general area.

A cost analysis of the items listed above will be supplied to the Recreation Department. Once the Department choses the path to take HCI shall supply a second proposal for the full Civil Engineering, DEP FHA permitting and Construction Management of the proposed improvements.

## Compensation:

The professional services listed in this proposal will abide by the standard level of care for engineering services in the State of New Jersey. Harbor Consultants shall supply the professional services listed within this proposal for a lump sum of \$32,460.

Harbor Consultants would like to thank the Township of Berkley Heights for this opportunity to solicit this proposal for professional services and to continue our services to the Township.

Sincerely,

Victor E. Vinegra; PE, PP, PLS President Harbor Consultants.

R-25-0992