

**Harbor Consultants Inc.
Engineers, Surveyors & Planners**

**320 North Avenue East
Cranford, NJ 07016
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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.

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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. HCI 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 Certification. 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.

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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 chooses 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 Berkeley Heights for this opportunity to solicit this proposal for professional services and to continue our services to the Township.

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Sincerely,

A handwritten signature in black ink, appearing to read 'V. Vinegra', with a stylized flourish at the end.

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

R-25-0992

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Revised December 11, 2025

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

re: Final Engineering Design
Sports Complex at Lower Columbia Park
Columbia Middle School
Lots 17 & 19, Block 1204
Berkley Heights, New Jersey

Dear Ms. Varnerin:

Harbor Consultants Inc. (HCI) is pleased to submit this proposal for Final Engineering Design & Construction Documents for the bidding of the Sport Complex at Lower Columbia Park. This proposal includes the following design items:

1. Final Design of the grass/sod soccer field.
2. Regrade and sod the outfield of the baseball field.
3. Redesign the entrance to the Field Area.
4. Replace the structure known as the Lego Hut.
5. Replace the structure at the entrance to the Camp Area.
6. Relocate the lighting at the field entrance.

Harbor Consultants has completed the design items listed below in its previous design contract dated April 10, 2025. The items completed in the first engineering phase include:

1. Land/Drone Surveying of the area, Task #1.
2. Wetland Investigation, Task #2.
3. Conceptual Layout, Engineering Design and Project Cost Estimates, Task #3.

The above listed design items were performed to give the Township of Berkeley Heights a better understanding of the hurdles and costs associated with constructing sports fields at the

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Lower Columbia Sports complex. The Township of Berkeley Heights has chosen to move forward with the final design of the following.

Phase 1, Final Engineering Design and Specifications:

Harbor Consultants has completed the Conceptual Design of the Lower Columbia Sports Complex under a separate contract and will begin the final phase, the Construction Documents and Construction Management. HCI has not invoiced the entire amount of the original contract. HCI has only invoiced Berkley Heights for a portion of this contract, and shall apply any remaining funds of the original contract towards the Final Design fee.

Lower Columbia Soccer Field, Division #1.

Harbor Consultants presented to the Township of Berkely Heights, the Conceptual Designs of the existing soccer field. The Township has decided to move forward with the design of a new “grass/sod” playing surface. The surface shall be constructed of a sports specific sod over a layer of organics, sand, crushed stone and a underlying drainage piping system. A complete drainage system shall be designed beneath the playing surface. The new field shall be surrounded by a drainage swale to collect any overland flow coming from uphill and prevent such from flowing across the playing surface. This swale shall be located along the eastern and southern edge of the field.

The soccer field shall be illuminated via a sports lighting assemblage with a timer and remote-control box attached to the poles. An irrigation system shall be included within the design.

Baseball Field, Division #2.

HCI shall design the regrading and sodding of the existing baseball field. This field will remain in place but receive a new surface. This design shall include illumination, not full illumination but enough for small practices. The Township has discussed this illumination design being bid as an alternate.

Entrance and Lego Hut Redesign, Division #3:

We shall design a new entranceway and gazebo near the Lego Hut.

Resurface Existing Basketball Courts, Division #4:

An asphalt leveling course and new topcoat shall be specified and bid documents prepared for the existing basketball court. New “adjustable height” backboards shall be specified for this area.

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The Final Design Documents shall include all four Divisions listed above. Components of the Bidding Documents include.

1. Complete Engineering Design of all aspects required to construct the facilities listed in all four Divisions.
2. Design of underground drainage systems for the sports fields and the perimeter drainage system.
3. Design of the soil substrata and type of fill to be imported.
4. Design of a perimeter swale and water relief system.
5. Design of the perimeter berm with material removed from the existing field.
6. Design of a new soccer irrigation system. An alternate shall include the baseball field.
7. Design of a new lighting system for the sports fields.
8. Re-design of the existing baseball field outfield.
9. Re-design of the existing basketball courts.
10. Re-design of the existing Lego Hut.
11. Re-design of the existing entrance way.

Project Presentations:

- a. Township Recreation Project Manager.
- b. Township Mayor and Council.
- c. Board of Education

Presentations shall be limited to eight meetings.

Phase 2, Public Bidding and Construction Services.

Harbor Consultants shall prepare the public bidding specifications and design documents via paper and electronically. HCI shall supply 10 sets of paper copies and a FTP (Cloud) Bidding Site for all Bidders to access. HCI shall attend a pre-bidder meeting to go over the project and also attend the bid opening.

Other construction services include:

1. Shop drawing and vendor drawing reviews and approvals.
2. Construction observation.
3. Contractor drawdown payment requests and approvals.
4. Completion review and release of all funds.
5. Construction As-Built Documents

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Professional Fees:

Phase 1	\$ 69,000
Phase 2	\$ 42,000

Less remainder of original contract (-) 14,000

The specifications and drawings to be prepared will be intended to accompany standard bid contract documents currently in use by the Township of Berkley Heights. Such bid documents generally include the following:

Invitation to Bid	Insurance Requirements
Bid Form	Scope of Work
Bid Bond	Construction Safety
Instructions to Bidders	Additional Requirements
General Conditions	

Construction Contract Administration:

Harbor Consultants shall supply a full-time construction management staff for this project. This staff would consist of a licensed engineer, construction inspector and project manager.

During the construction phase of this project, HCI shall administer the Construction Contract along with the project engineer and the design team. Daily site visits along with weekly progress meetings shall be arranged by HCI. These meetings are to monitor the work and ensure that the work is being performed in accordance with the design intent of the documents. Services performed will include the following.

- Review and sign off of all shop drawings and submittals.
- Arrange and attend all weekly construction meetings.
- Taking of meeting notes and assisting with project scheduling.
- Meeting with construction code officials for the Township of Berkeley Heights.
- Review Contractor's applications for payment.
- Perform on-site field observations.
- Perform daily inspections of work area.
- Prepare punch lists of unfinished items at completion of each phase.
- Certify the Contractor's applications for payment and payment drawdown.
- Close out of project for the Township.


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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 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,

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President Harbor Consultants.