



**ENVIRONMENTAL IMPACT ASSESSMENT  
PARK DEVELOPMENT  
HILLTOP CONSERVANCY**

**1. DESCRIPTION OF THE PROPOSED PROJECT**

*a. Briefly describe the total development project*

The proposed development project at Hilltop Reservation, hosted by Hilltop Conservancy in partnership with County of Essex, aims to enhance its recreational and ecological value through a series of improvements. The proposed project includes the improvement of a dog park, upgrades to existing walking pathways, and comprehensive trail renovations to improve safety, accessibility, and usability for visitors. Proposed forestry replenishment will restore and enhance the natural tree canopy, supporting local wildlife and preserving the area's ecological balance. Additionally, bank stabilization efforts will prevent erosion and protect the Reservation's natural features. Together, these upgrades will create a more inviting, sustainable, and functional space for the community to enjoy while preserving the natural beauty of Hilltop Reservation.

*b. State objectives of the project*

The objectives of this proposed project include enhanced recreational opportunities, improved safety and accessibility, environmental replenishment, and sustainability.

*c. Fully describe multi-phase projects*

Not applicable

**2. DESCRIPTION OF THE ENVIRONMENT**

*Describe existing environmental features:*

*a. Vegetation*

Hilltop Reservation contains a diverse mix of vegetation that contributes to its ecological and aesthetic appeal. The Reservation is home to a variety of mature deciduous and evergreen trees, including oaks, maples, and pines, which form a dense canopy across much of the area. These trees play a crucial role in supporting local wildlife, improving air quality, and providing shade for visitors. The vegetation in Hilltop Reservation not only enhances its natural beauty but also contributes to the ecological health of the area by maintaining water quality, preventing soil erosion, and supporting a variety of wildlife. Proposed forestry replenishment efforts will further preserve and enhance these features, ensuring the Reservation's natural character is maintained for future generations.

*b. Wildlife, including State and federal threatened and endangered species and critical habitats*

Hilltop Reservation is home to a range of wildlife, including mammals such as deer, foxes, and chipmunks as well as various bird species like blue jays, finches, and owls. The Reservation's forested canopy and open spaces offer shelter, nesting areas, and food sources for these animals. Amphibians and reptiles, including salamanders and garter snakes, also inhabit the Reservation, utilizing the moist and shaded environments provided by the undergrowth. Within the Reservation, there are no known critical habitats for threatened or endangered species that have been identified within the Reservation.

*c. Geology, topography, and soils*

Hilltop Reservation lies on a foundation of sedimentary rock formed over millions of years, creating a place for recreational features. The area features a mix of gently sloping hills and steeper gradients, contributing to its diverse landscape. These variations in elevation provide natural drainage pathways, helping to manage rainwater flow throughout the park. The soils within Hilltop Reservation are predominantly well-drained and nutrient-rich, supporting the park's diverse vegetation. In some areas, particularly along banks and trails, the soil may be prone to erosion due to steep slopes and foot traffic. However, the presence of tree roots and ground vegetation helps to stabilize the soil and reduce degradation in these areas. The planned improvements will preserve these features while making the Reservation more accessible and resilient to environmental challenge.

*d. Water resources/hydrology*

Hilltop Reservation's natural drainage directs rainwater through slopes and low-lying areas, creating seasonal streams and runoff channels after heavy rain. These help recharge groundwater and support small habitats.

*e. Historic/archeological resources*

Hilltop Reservation does not have any officially documented historic or archeological sites

*f. Transportation/access to site*

Hilltop Reservation is accessible by several local roads, including Mountain Avenue and Courter Lane, which provide convenient entry points for visitors. Parking areas near the entrances offer spaces for cars, though capacity can be limited during peak times. Public transportation options are minimal, with no direct transit stops within the Reservation. Pedestrian access is supported by connecting pathways and sidewalks from adjacent areas, and cyclists can use local roads to reach the facility, though dedicated bike lanes are not present.

*g. Adjacent land uses/description of the surrounding neighborhood*

The residential zones adjacent to Hilltop Reservation consist primarily of single-family homes, contributing to a peaceful and family-friendly atmosphere. These neighborhoods are

within walking distance of the Reservation, making it a convenient recreational space for local residents. Nearby community features include schools, small retail areas, and public facilities that support the surrounding population. While the Reservation serves as a natural retreat, its proximity to these amenities ensures it is easily integrated into the daily lives of those who live nearby.

### **3. ENVIRONMENTAL IMPACT ANALYSIS OF PROPOSED ACTION**

#### *a. Discuss all affected resources and the significance of each impact*

There may be minor resources affected during this project. The improvements of the dog park and trail may require removal of minimal vegetation but will be replaced if removed. Trail work, bank stabilization, and pathway improvements may disturb the soil, increasing erosion risks, particularly on slopes. Trail closures and construction zones may temporarily limit access to certain parts of the Reservation but will be opened as soon as possible. Although inconvenient, the short-term changes are outweighed by the long-term improvements.

#### *b. Discuss short-term and long-term project impacts*

Construction will create short-term project impacts, causing temporary disruption to the vegetation near work areas, as well as closures, to certain trails and the dog park while being rehabilitated. Once completed, the project will have lasting positive effects. The improvements to the dog park will provide safe a recreational space for pet owners, while improved trails and pathways will enhance safety, accessibility, and usability for all visitors. Forestry replenishment will restore and strengthen the Reservation's vegetation, supporting biodiversity and reducing erosion risks, and the bank stabilization efforts will protect the Reservation's natural features and improve water flow, ensuring long-term ecological health. Overall, the project will make Hilltop Reservation a more inviting, functional, and sustainable resource for the community while preserving its natural beauty.

#### *c. Discuss anticipated increase in recreation and overall use of site over time*

The proposed improvements at Hilltop Reservation are expected to significantly increase recreational use and overall visitation. The proposed dog park improvements will attract pet owners who previously lacked a safe space for their dogs to play. Renovated trails and upgraded pathways will make the Reservation more accessible and enjoyable for walkers, hikers, and joggers, encouraging greater use by visitors of all abilities. Forestry replenishment and bank stabilization will enhance the Reservation's natural beauty, creating a more inviting environment for nature enthusiasts, photographers, and families seeking outdoor activities.

The improved facilities will foster a stronger connection between the community and the Reservation, where events, group outings, and increased daily visits will make the site a vibrant hub for recreation and relaxation. The enhancements will not only boost visitor numbers but also encourage longer stays, as the Reservation becomes a more functional and enjoyable destination for a variety of activities.

#### *d. Identify adjacent environmental features that may be affected by the proposal*

Not applicable.

- e. List any permits required for project and brief status (i.e., waterfront development)*

A Soil Erosion and Sediment Control Permit, as well as other local Zoning and Planning Approvals may be required for this grant application.

- f. For development that would impact an undisturbed portion of the project site, the local government must submit a Natural Heritage Data Request Form*

Not applicable

- g. Discuss if/how the project may be impacted by sea level rise and any related design considerations*

Not applicable

#### **4. ALTERNATIVES TO THE PROPOSED ACTION**

- a. Identify alternative sites*

There are not any other alternatives sites to be identified or considered for this project.

- b. Discuss alternate levels and types of development*

Not applicable at this time

- c. Compare environmental impacts of each alternative*

Not applicable

#### **5. MITIGATING MEASURES**

- a. Describe the measures that will be taken to mitigate adverse impacts*

To reduce potential impacts during the Hilltop Reservation improvements, steps will be taken to protect the environment and maintain visitor safety. Construction areas will be carefully managed to avoid unnecessary disturbance, and any impacted spaces will be restored with native plants to blend seamlessly with the natural landscape. Erosion control techniques, such as stabilizing slopes and securing loose soil, will ensure the land remains intact throughout the project.

Temporary drainage solutions will manage runoff during construction, preventing sediment from affecting surrounding areas. Noise and dust will be minimized by limiting work to specific hours and using methods like water spraying to keep dust levels low. Visitors will have clear pathways and signage to navigate safely around construction zones, maintaining accessibility during the process.

These actions will ensure the project progresses smoothly while preserving the natural integrity of the Reservation and keeping disruptions to wildlife, land, and visitors to a minimum.

## **6. AUTHOR(S) AND QUALIFICATIONS**

Joshua Zaitz  
Business Manager, County of Essex