



Friends of the Old Croton Aqueduct, Inc.

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VIA EMAIL: Beth.Cumming@oprhp.state.ny.us

Beth Cumming
Historic Site Restoration Coordinator
New York State Office of Parks, Recreation and Historic Preservation
Field Services Bureau
Peebles Island Resource Center
P.O. Box 189
Waterford, NY 12188-0189

RE: High Bridge Project
Section 106 Consultation
Initial Meeting, Feb. 8, 2011

Dear Ms. Cumming:

I am writing on behalf of both the Friends of the Old Croton Aqueduct and the Historic Districts Council to comment on the Preliminary Plan Submission Drawings, dated January 6, 2011, and the February 8, 2011, presentation organized by the New York City Department of Design and Construction, Lichtenstein Consulting Engineers and Ellen Macnow of the New York City Department of Parks and Recreation.

The High Bridge project is anticipated to be one of the most significant NYC preservation projects in recent years and the most ambitious rehabilitation of a component of the National Historic Landmark Old Croton Aqueduct. Comparable to the High Line in southern Manhattan, this project promises to enhance adjacent communities *and* parks, by bolstering tourism in northern Manhattan and by re-introducing the High Bridge as the popular destination it was a century ago. It will also promote the use of the Old Croton Aqueduct railway in both Manhattan and the Bronx as a recreational trail linking regional trail networks.

In general, the restoration and conservation methods proposed for the High Bridge are exemplary and reflect a thoughtful and knowledgeable achievement by the design team. We support the approach to the masonry restoration of the stone walls, walkway paving and waterproofing. We also endorse retaining the existing tie rods and providing supplementary tie rods, although we request clarification of how the new tie rods will be anchored at the sides of the vault – we assume there will not be existing iron skewbacks to drill into, though these were indicated in the January 6 drawings (based on the Feb. 8 presentation, the design appears to have evolved beyond what was indicated in the drawings). We also

support the proposed passive ventilation system in the masonry vault areas. The use of natural cement mortar is a great precedent for other Croton system repointing projects.

For the steel span, it was encouraging to hear that much of the work required is lead paint abatement and conservation of existing materials, and that the condition of a large percentage of existing rivets is considered good.

Adverse Effects

The most challenging areas for the project are modifications on the bridge deck to allow wheeled access ramps; the addition of supplemental lighting and associated changes; and safety fencing. These are adverse effects, discussed below. The first cannot be eliminated. We believe the others are not satisfactorily resolved and require substantial further refinement to be successfully minimized or mitigated.

(The proposed changes from the historic configuration of the elements on the bridge deck and their impact on the integrity of the High Bridge are difficult to visualize without “existing” and “proposed” sections, elevations and renderings geared to describe the changes to reviewers. The drawings in the set provided are technical contract drawings. The Feb. 8 presentation provided more information, but lacked clear “before and after” views.)

Wheeled access ramps. The access ramps are an inevitable aspect of the project, an adverse effect that cannot reasonably be avoided. In our opinion the design solution proposed minimizes the adverse effects as well as is possible, removing only short sections of original railing, minimizing ramp visibility from the bridge deck, making the ramps as unobtrusive as possible from adjacent parks, and avoiding irreversible damage. It appears that minor refinements such as color selection are ongoing, and that the design has progressed beyond the drawings. For example, Drawing M-1 (sheet 77) shows concrete paving on the bridge deck that we understand has been eliminated.

Lighting of bridge deck. The design calls for moving the light posts from their historic locations on the coping of the projecting pilasters at the piers to a location on the centerline of the historic guardrail. *This interrupts the historic guardrail, causing it to appear as a decorative accessory feature rather than a continuous railing.* The design also calls for doubling the number of light posts to achieve the required lighting level. Whereas the light posts were originally located only over the piers, they would now be located over the arches as well. It is our understanding that the light posts are being relocated to where they interrupt the historic railing because these added, intermediate fixtures cannot align with those on the projecting pier copings. This means the historic light post locations are being altered to align with light posts that are a new intervention, resulting in an adverse effect to the historic railing.

The proposed scheme also results in the light posts being closer together across the bridge deck. This makes the space feel more constricted – the spacing is roughly two to three feet closer together than the historic configuration – a substantial change when the width of the bridge deck from railing to railing is less than twenty-one feet. In the historic configuration, the light posts were mounted outside the railing, creating an expansive and linear experience of the space that opens away from the visitor while simultaneously beckoning the visitor forward. By contrast, the proposed layout is likely to constrict the pedestrian experience, an effect further compounded by the proposal for a tall safety fence lining each side of the bridge.

The existing bridge section detail on Drawing B-2, sheet 28, should show the original light post locations (if there is an existing and proposed section elsewhere in the set missed it). The appearance of the bridge

from the exterior would be compromised by having additional light posts located over the arches rather than in their original location: solitary posts alternating on each side of the bridge.

We support achieving adequate, modern lighting levels but believe that alternatives taking a different approach should be explored to mitigate this adverse effect. Alternatives should maintain the original light post locations, which date back at least to the 1880's. One approach would be to use intermediate posts that look completely different from the historic type of light post. These intermediate fixtures could be physically integrated with the safety fence posts: instead of tall posts, there could be a greater number of smaller, lower fixtures, modern in design, mounted somewhat low on the fence posts. They should be unobtrusive during daylight hours to retain the original character of the bridge as much as possible. Alternately, additional historic-type light posts could be added on piers that did not originally have a light post but could equally host one, as at the 50-foot arches.

Safety fence. *The safety fence will be a primary determinant of the visitor experience.* We agree there needs to be a new safety railing. The proposed railing represents progress in its departure from the standard DOT fencing, and the relatively open, stainless steel cable mesh material is far better than chain link, but we believe the current design is an adverse effect that can be further minimized. It bears noting that in its official resolution, Manhattan Community Board 12 has rejected the High Bridge renovation plan only because of the safety railing, and states that it would approve the overall plan if the issues of fencing height and design were satisfactorily addressed.

Height. The proposed height is eight feet along the entire length of both sides of the bridge. The reason given for this tall enclosure is the "history" of the bridge, yet there appears to be little or no documentation of untoward acts on or from the bridge. Since the bridge was padlocked in 1970, such incidents would have occurred in the 1960s, when crime was surging around the city. A few bad incidents fifty years ago, in the life of a 163-year-old bridge, do not justify an eight-foot-high fence today. Great, unimpeded views on the High Bridge will draw more people, the best way to increase safety.

We recommend a 54-inch-high safety railing along the entire bridge. As an example of a low railing in the city, we cite the guardrail on the East River Promenade near Gracie Terrace, including on a pedestrian bridge over the FDR Drive. As another important standard of comparison, we cite Walkway Over the Hudson State Historic Park, which opened in October 2009 to enormous popularity (800,000 visitors instead of the anticipated 350,000 in a year). This is a 19th century railroad bridge adaptively renovated as a pedestrian bridge connecting Poughkeepsie and Highland. It is 212 feet high. Over infrastructure, it has higher fencing, but over water the railing is 54 inches high, offering marvelous, unimpeded views. One has to question why the High Bridge, at nearly half the height (120 feet), should have a railing nearly twice as high. (See photos.)

Design. We believe the straight-up fence posts, combined with the eight-foot height, give the bridge an oppressive feel. Aesthetically, the blocky posts seem unrelated to the bridge's graceful historic design. Alternatives should be developed as part of the Section 106 consultation to retain the original expansive feel of the walkway, and the elegant exterior appearance of the bridge. We also request a full-scale mockup at a representative portion of the bridge, which would not require actual fabricated fence posts.



East River Promenade near Gracie Terrace, including pedestrian bridge over FDR Drive.

Walkway Over the Hudson State Historic Park
(Poughkeepsie-Highland, New York)



Additional Elements of the Plan

Seating. Sitting areas with benches are clearly required. We believe the proposed three viewing platforms with benches are logical and minimize any potential adverse visual effects, while affording viewing areas with proper side slope to visitors in wheelchairs. We support mounting these reversible platforms over the restored brick paving to avoid irreversible damage. We look forward to seeing this item developed in the drawings. Based on the presentation, it is our understanding that the benches would be limited to three such viewing platforms, although Drawings M-1 thru 4 (sheets 77 to 80) appear to indicate more benches along the walkway. We believe these should be eliminated.

Pipes. We support the proposed treatment of the large wrought-iron pipe and the 36-inch pipe remnants. An issue to be developed further is the potential for visitors to observe the pipe. There has been some consideration of providing a “periscope” on the bridge deck. Another, more practical possibility is a webcam project. There could be several webcams at inaccessible locations in the bridge, viewable online and perhaps at a monitor somewhere on-site, such as one of the gatehouses. Views could show the interior of the large pipe, the vault with the three pipes, perhaps a straight-down look at river traffic from a catwalk, and so on. We strongly support the concept of rehabilitating the existing doors into the vault for occasional, limited tours of the vault interior. This would be similar to the tours given by the Friends of the water tunnel inside the Croton Aqueduct weir in Ossining.

Vault lights and medallions. We support the proposal to re-establish the original vault light locations, refurbish and reinstall extant cast iron vault lights, and replace the brick around the vault light openings with matching brick. We also support installing cast metal medallions in the remaining vault light openings. We would like the opportunity to comment on the medallion designs as they are further developed. Based on the preliminary designs, we would recommend something in higher relief than what the preliminary graphic indicates.

Gatehouse areas. For the areas around the gatehouses we recommend that alternatives be considered to reduce the visual impact of multiple layers of safety fencing, which - compounded by access/security gates - would be visually obtrusive. It is desirable to minimize the extent to which fencing detracts from the existing sense of place and authenticity of the areas around the gatehouses and the small plazas with unique octagonal stone ventilators.

Trash receptacles. This item that was not addressed at the Feb. 8 meeting. It is our hope that there would not be any trash receptacles located on the bridge deck, and that they be confined to the parks on both sides. We strongly recommend that the bridge be a “carry in – carry out” destination, to avoid a cumulative adverse effect from objects alien to the historic character of the bridge (e.g., benches, ramps, safety fencing, etc.). A carry-in, carry-out policy would also lessen the frequency of Parks Dept. vehicles on the bridge and avoid the litter of overflowing receptacles.

To summarize, the current proposal for the High Bridge is a significant first step in the rehabilitation of a key contributing resource of the nationally significant Croton Waterworks. As noted, the technical restoration and conservation aspects of the project are excellent. However, there are outstanding design issues concerning the introduction of new lighting and fencing that need to be resolved in order to minimize any potentially adverse effects under Section 106 and to conform, to the greatest extent possible, to the Secretary of the Interior *Standards for the Rehabilitation of Historic Properties*. Taken together, these outstanding issues have the potential to affect the overall character of the bridge and the experience of both a pedestrian on the bridge deck and someone not on the bridge but viewing its exterior face.

We appreciate the opportunity to comment on this project and are available to respond to any comments or questions you may have regarding our review.

Very truly yours,

A handwritten signature in black ink that reads "Robert J. Kornfeld, Jr." with a stylized flourish at the end.

Robert J. Kornfeld, Jr. AIA
Vice President, Friends of the Old Croton Aqueduct
Board Member, Historic District Council

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