Chapter 19: Irreversible and Irretrievable Commitment of Resources

A. INTRODUCTION

This chapter summarizes the potential impacts of the proposed project on the loss of environmental resources, both in the immediate future and in the long term, and identifies whether the proposed project forecloses future options or involves trade-offs between short- or long-term environmental gains and losses. According to the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, environmental resources include man-made and natural resources.

As described in Chapter 1, "Project Description," the proposed project would result in a new building, the Richard Gilder Center for Science, Education, and Innovation (the Gilder Center), in an addition to the American Museum of Natural History (AMNH or the Museum). The Museum is located in Theodore Roosevelt Park, which is City-owned parkland under the jurisdiction of the New York City Department of Parks and Recreation (NYC Parks). The Gilder Center would be an approximately 203,000-gross-square-foot (gsf) addition on the west side of the Museum complex facing Columbus Avenue. The proposed project would also include approximately 42,000 gsf of renovations to existing Museum space and improvements to approximately 75,000-square feet of adjacent public open space in Theodore Roosevelt Park.

B. ASSESSMENT

The natural and man-made resources that would be expended in the construction and operation of the proposed project are considered irretrievably committed because their reuse for some purpose other than the proposed project would be highly unlikely. The proposed project's commitment of these resources must be weighed against its long-term benefits. For example, seven canopy trees are expected to be removed and one understory tree relocated in Theodore Roosevelt Park as a result of the proposed project. However, any trees that are removed and not transplanted would be replaced, consistent with NYC Parks rules and regulations, including the six new canopy trees and thirteen new understory trees that the Museum anticipates planting as part of the Park improvements. The proposed project would also result in an 11,600-square foot reduction in available open space in Theodore Roosevelt Park, a temporary loss of use of a portion of the Park during construction, and removal of existing landscape materials. However, with the project's proposed landscaping modifications and improvements, park users would continue to have access to areas for gathering, play, and respite, and the overall quality in the rebuilt portion of the Park would be improved. While Museum buildings (Building 15, Building 15A, and the Weston Pavilion) would be removed, there would also be benefits associated with enhancing the Museum's ability to fulfill its mission of encouraging and developing the study of natural science and providing popular instruction with the goal of advancing general scientific knowledge. Although the proposed project would require energy in the form of fuel and electricity consumed during construction and operation, one of the proposed project's goals is to enhance the sustainability features of the Museum, with a commitment to seeking the US Green

AMNH Gilder Center

Building Council's Leadership in Energy and Environmental Design (LEED) Gold certification level. The proposed project would consume building materials for construction, dispose materials from renovated areas that would be removed and not reused, and utilize human effort (i.e., time and labor) to develop, construct, and operate various components of the proposed project. However, jobs would be created during construction and upon completion, and there would be substantial long-term educational, scientific, and economic benefits to Manhattan and New York City.

The commitments of resources described above are weighed against the benefits of the proposed project. The proposed project would integrate the scientific research, collections, and exhibitions of the Museum with its educational programming, provide new innovative exhibition space, improve circulation, and upgrade and revitalize the Museum's facilities. As described in Chapter 1, "Project Description," the proposed project is designed to address critical external and internal needs in furtherance of the Museum's statutory mission of encouraging and developing the study of natural science and providing popular instruction with the goal of advancing general scientific knowledge. The goals and objectives of the proposed project include: accommodating growth in science and education programming and exhibits; improving the Museum's circulation and connections; enhancing and integrating the Museum's science, exhibition and educational programming; providing greater access to the Museum's scientists and scientific resources; providing greater access to library resources; improving and expanding collections storage and visibility; enhancing the sustainability features of the Museum; providing multi-disciplinary and flexible spaces for science and education; providing a new Columbus Avenue entrance; and upgrading visitor and operational services.

Overall, while the proposed project would result in the commitment of certain man-made and natural resources, it would also result in substantial long-term educational, scientific, recreational, cultural, and economic benefits.