INTEROFFICE CORRESPONDENCE VILLAGE OF RIDGEWOOD

Department of Public Works Division of Engineering

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TO: Village of Ridgewood Planning Board

FROM: Christopher J. Rutishauser, P.E., Village Engineer,

RE: Retaining Wall Reconstruction

Hopper Condominium Association, Inc.

Block 4104, Lot 3 File No. 20901

SUB: Preliminary Review of Submitted Materials

DATE: September 29, 2020

I have prepared a preliminary review of the recently received materials for the proposed replacement of existing retaining walls at the referenced location.

As satisfactorily demonstrated in the materials submitted, the existing retaining walls are in a state of gradual failure due to age and the environment. Should the retaining walls decline to a catastrophic failure mode, there is a very high likelihood a release of sanitary sewage will occur due to the failure of the complex's sanitary sewer collection system pipes that are behind the retaining walls.

The list of materials submitted for review was detailed in the May 21, 2020 correspondence from Tibor Latincsics, P.E., P.P., of Conklin Associates, P.O. Box 282, 29 Church Street, Ramsey, New Jersey 07446.

The following comments and observations are for the Board's consideration regarding this application.

Existing Site Conditions

- The retaining walls proposed to be reconstructed are all interior to the facility (complex). The
 walls were constructed when the complex was built after being approved February 15, 1983 by
 the Planning Board. A majority of the walls the focus of this project are not visible off of the
 complex.
- There are three (3) small ponds along the natural drainage network of the property. Site runoff
 and storm water runoff from the village's collection system compromise the flow through them.
 This flow eventually reaches the Ho-ho-kus Brook. These ponds provide a moderate amount of
 attenuation for peak runoff flows.
- The project proposes to use the access road into the complex off of Cedar Avenue. This access road will need to be upgraded to handle the demands of the proposed work, particularly with regard to material transport. Additional care will need to be taken to protect the Village's 16-

inch diameter sanitary sewer in the sanitary sewer easement the access road lays on from impact from the proposed work. I recommend a temporary haul road be designed to protect the subsurface utilities during construction. Please submit the design to the Engineering Division for review.

Proposed Site Plan

- The project proposes to create additional storage volume in the detention pond system. This can be considered a positive benefit as that it will further assist in attenuating peak storm water runoff flows through this drainage network.
- The replacement walls are proposed to be Keystone block walls. This type of material has a long service life (longer than timber cribbing type retaining walls) and is acceptable.
- Access to perform the proposed work will be difficult.
- The proposed work will require a Landscaping Plan showing the replacement of all trees and vegetation removed to facilitate the construction work. The plan should also note the riparian buffer conditions that will be impacted and the appropriate remediation proposed for them.
- A restoration plan for the soil and crushed stone stockpile area shall be prepared and submitted. This can be part of the Landscaping Plan

Storm Water Management

- The increase in detention volume in the ponds is a positive benefit.
- The ponds are proposed to be dredged as part of this work. Dredging will remove excess
 accumulated organic material that degrades the water quality that passes through the drainage
 network.

Soil Movement

- The quantity of excavation and/or filling necessary for the proposed project will require a major soil moving permit approved by the Planning Board. For Village soil movement purposes, cut amounts are combined with fill amounts to arrive at a total for permit purposes. The actual quantity for permit purposes is not certain at this time.
- A Bergen County Soil Conservation District permit will be required. A copy of the permit has been received by Engineering and provided to the Board's files.