

CONKLIN ASSOCIATES
CONSULTING ENGINEERS AND LAND SURVEYORS
P.O. BOX 282
29 CHURCH STREET, RAMSEY, NJ 07446

Hopper Ridge Townhomes Retaining Wall Replacement
Minutes of NJDEP LURP Pre-Application Meeting , June 7, 2017

Attendees

Tom Buda, HRHOA
Joel Schumer,. HRHOA
Nabil Andrews, NJDEP LURP Engineer
Rebecca Grike, NJDEP Environmental Specialist
Tibor Latincisics, PE,PP, Conklin Associates

- 1) Tibor presented an overview of the Hoper Ridge site and plans. Supplemented with photographs.
- 2) Hopper Ridge is a 36 unit Townhouse Project in Ridgewood on 10.28 acres dating to the mid 1980's. A feature of the site is that a headwater tributary of Ho-Ho-Kus Brook flows thru the site. The watercourse was modified so as to provide on-stream detention ponds for aesthetic and storm water management purposes. The plans and photos of the ponds including the detention basin outlet control structure was reviewed. The drainage area to the outlet control structure is on the order of 71 acres.
- 3) The Townhomes are clustered in groups of four about the two on-stream ponds atop landscape tie crib retaining walls. These walls are nearing their functional and practical life span. The HRHOA faces the daunting task of replacing and reconstructing the walls. Daunting on an access, administrative, construction and expense level.
- 4) Considerations;
 - A) This is a "Need-Not a Want". The walls must be replaced. Unfortunate irony here is that among the reasons many townhome residents live in townhomes is to eliminate the challenges and nuisance of property maintenance. The HRHOA needs to address this major project.
 - B) Walls are "Between a Rock and a Hard Place"---or more specifically between the townhomes, a sensitive asbestos concrete sewer pipe (ACP) and the on-stream ponds and their respective riparian zones. Very difficult access and construction. Major concern is not disturbing the ACP sewer line, which is a private sewer under HRHOA ownership.
- 5) HRHOA has commissioned numerous studies so as to be proactive in this matter. Conklin Associates has identified that the most practical alternative is to construct a geogrid reinforced modular concrete block wall in front of the existing tie crib walls. **Optimizes protection to the ACP sewer line.** This would require;

- A) Construction within 25' of top of bank ---although NJAC 7:13-12.13 for retaining walls appears to allow for retaining walls within the 25' zone.
 - B) Riparian Zone Disturbance.
 - C) In the challenging location where the ponds narrows down between Kira Lane and the pool, it may be necessary to place the base of the wall within the ponds with equivalent expansion of the ponds elsewhere onsite.
- 6) Addressing the above may trigger a **"Hardship Exception"** under NJAC 7:13-15.1. If that is the case an alternative analysis is required. Proper Public Notice is required.
- 7) The retaining walls are in the center of the site, remote from the outer perimeter of the 12.3 acre site. The question was asked as if the Public Notice could be to only to property owners within 200' of the actual construction versus 200' of the perimeter of the 10.3 acre site which yields a lengthy service list. Unfortunately the regulations do not provide such a provision for this project.
- 8) The Ho-Ho-Kus Brook is a state studied watercourse. The 71 acre tributary is not included in the state study.
- 9) The ponds although manmade meet the definition of "Channel". See attached definition.
- 10) Nabil Andrews cautioned that the extent of the floodway vs. floodfringe needs to be identified. Several challenges here;
- A) No State study, nor FEMA studies address this small headwater watercourse.
 - B) The manmade detention ponds are controlled by an outlet control structure. Do not function as an open channel which would allow a Hec-Ras Analysis.
 - C) A Detention Basin routing of the two ponds would identify the extent of the 2, 10 & 100 years storms. As the design dates to the mid 1980's, one would expect that the original design only focused on the 100 year storm.
 - D) Typically with manmade ponds and lakes, while perhaps not technically correct, the floodway is taken as top-of-bank.
- 11) Nabil Andrews cautioned that absent a Hardship Waiver, Channel Modification such as the placement of walls within the current limits of the pond is strongly discouraged.
- 12) As per Page 48 of the regulations, the extent of the 50' Riparian Zone is measured from the location of the original channel. This is significant and helpful.
- 13) The Riparian Zone Disturbance will need to comply with the 1000 SF limitation of Category Y of Table 11.2. Presuming that the 1000 SF shall be exceeded, this shall trigger a Hardship Waiver requirement. If approved, a condition of approval would be deed restricted mitigation for the total area of vegetation disturbance.

14) Remains to be determined that if the total disturbance exceeds 1 acre, if the project is classified a Major Project with the resultant fees and requirements.

15) Preliminary listing of application fees;

- A) FHA IP for retaining wall and riparian zone disturbance @ \$ 2000.00
- B) Hardship Waiver for Riparian Zone Disturbance, Structure within 25' if applicable, Wall in Pond @ \$ 4000.00

Possible Fees;

- C) Major Development????????? @ \$ 3000.00
- D) Run-Off Quantity @ \$ 500.00

Minutes compiled by Tibor Latincsics