APPROVED

ROBERT LAGA Chairman

TOWN OF CARMEL ENVIRONMENTAL CONSERVATION BOARD

BOARD MEMBERS

Edward Barnett Vincent Turano Anthony Federice

NICHOLAS FANNIN Vice Chairman

RICHARD FRANZETTI, P.E. Wetland Inspector

ROSE TROMBETTA Secretary

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ENVIRONMENTAL CONSERVATION BOARD MINUTES

FEBRUARY 20, 2020

PRESENT: CHAIRMAN, ROBERT LAGA, VICE CHAIRMAN, NICHOLAS FANNIN,

& ANTHONY FEDERICE

ABSENT: EDWARD BARNETT & VINCENT TURANO

APPLICANT	TAX MAP #	<u>PAGE</u>	ACTION OF THE BOARD
Submission of An Application or Letter of Permission:			
New York City DEP	772-7.2	1 - 5	No Action Taken
Minutes:	10/03/19 01/02/20	5 5	Held Over Held Over

The meeting was adjourned at 8:01 p.m.

Respectfully submitted,

Dawn Andren

NEW YORK CITY DEP (CROTON FALLS DAM) - NEAR 16 SAMANTHA LANE - TM - 77.-2-7.-2 - SUBMISSION OF AN APPLICATION OR LETTER OF PERMISSION/DRILLING OF FOUR (4) BOREHOLES

> Mr. Paul Costa with NYC Department of Environmental Protection appeared before the Board.

Mr. Costa said I'm here to discuss the work we're going to be doing in preparation for a future project which is refacing the Croton Falls Dam. We're in the design phase right now, and we're looking to get some data. One is taking soil borings in front of the dam - probably a depth of about 10 feet which is shallow relative to soil borings, and that will give us properties to help to identify the supporting system that will support this facing on the dam in terms of how it will be sitting in the ground and how it will be supported. That will be four borings. There will also be four cores into the concrete so we can design the anchoring systems and what not. We'll also take a look at some of the conditions of the concrete. We're taking 4 cores within the dam face at different locations; we'll have scaffolding drop down from the top. So, it's 4 cores in the concrete of the face, 4 borings in the soil in front of the dam - all outside as what we see as the wetlands buffer and we explained that in the memo we sent. (Referring to presentation board) - here's the croton falls dam; this area here is not identified as a wetland but it is the drainage area for the dam - sort of a swale system.

Chairman Laga said it's within the 100' buffer.

Mr. Costa continued so outside of this buffer.... I think there was some discussion we had in the write-up in terms of straight across the reservoir (inaudible).

Chairman Laga said so you're doing the four borings in front of the face of the dam just to determine the soil characteristics. Wouldn't it be easier just to determine the foundation of the dam by test pitting it instead of doing borings; do four test pits?

Mr. Costa said I think the idea is to get the full bearing capacity properties and the test pits won't really get us that. Mike is with the sub-consultant Watts.

Mr. Mike Gerber with Watts Architecture and Engineering appeared before the Board.

Mr. Gerber said I'll be the geologist on site for this work. The project proposal by Hatch Associates - Lawrence Zamojski - was the four soil borings. We're going to ASTM engineering methodology.

Chairman Laga said you're going to do split spoon sampling; blow counts - the whole nine yards.

Mr. Gerber they're not sure what exactly is buried in the face of the dam there so they want to make sure they're going to be putting in the foundation in for the facing. They want to make sure in case they're getting into clays, silts, big boulders; they're just not sure what's down there. The way they wanted to do it, to minimize the disturbance, was with the 2" borings.

Chairman Laga said you're not doing sonic?

Mr. Gerber replied we're doing mud rotary. There's concern with our artesian conditions so we'll have a mud tank and they're going to use the mud to keep any kind of water down so there's no artesian conditions and things of that nature.

Chairman Laga said so we're going to need an MSDS on the mud you're going to use.

Mr. Gerber said we have it.

Chairman Laga said you're not going to do any cord drilling into the If you encounter rock; once you hit rock, you're stopping or are you going to core into the rock.

Mr. Gerber replied no; we'll probably bang into it and try to get a piece of it to see what it is: granite, limestone, whatever.

Mr. Gerber replied yes; approximately.

Chairman Laga said is that a day's worth of work or two days' worth of work?

Mr. Gerber replied I think it's actually scheduled for several weeks but I don't think it's going to take that long.

Chairman Laga said for four borings? Okay; you're going to store the rig on site?

Mr. Gerber replied yes.

Chairman Laga continued we're going to need a fueling plan, a spill-kit on site. Are you going to come off the hole at night or are you going to leave the rig on top of the hole at night?

Mr. Gerber replied they're not going to leave the hole open at night; I'm sure it'll be grouted to the surface just because of the water conditions.

Chairman Laga said we need a spill plan, a fueling plan, overnight parking - you'll have to park outside the buffer.

Mr. Gerber said there's a power plant which is here; there's concrete, stage drums - we'll leave all the equipment over there.

Chairman Laga said while you're drilling, you may want to put some silt fence around the rig.

Mr. Gerber said silt fence, hay bales; we'll have erosion controls.

Chairman Laga said you're just going to have to show us details on that.

Mr. Costa said what we do is put together a comprehensive boring plan which lays this all out.....

Chairman Laga interjected but I don't have it here.

Mr. Costa said we'll share that with you; it's one complete package so it may be more information than you need but it will cover all of these issues.

Chairman Laga continued that's fine; silt fence around the work area and are you going to grout those holes up?

Mr. Gerber and Mr. Costa both replied yes.

Chairman Laga said you're going to grout them with non-shrink whatever; need the MSDS for the mud and the concrete - it's all environmentally sound. We need a copy of the driller's license; that would be DEC driller's license. You're not putting monitoring walls - right; strictly going to be geo-technical borings?

Mr. Costa replied yes; in and out; nothing left behind.

Chairman Laga said so that takes care of the soil borings. For the wall borings, you're going to use a core drill machine I assume?

Mr. Costa replied right; concrete core.

Chairman Laga said you're going to drill with water - right? I envision this as you're going to use the lift on the face of the dam, put the core drill into the wall to the dam - 6' core - how thick is that dam?

Mr. Gerber replied it ranges from 40' to 50' thick.

Chairman Laga said what are you going to do with the mud?

Mr. Costa replied it's collected.

Mr. Gerber asked the mud from the drilling?

Chairman Laga responded no; the mud from the coring because you're coring with water.

Mr. Gerber replied there should be minimal amount of material generated; it'll only be a tiny bit. The whole cores are going to be (inaudible).

Chairman Laga responded I understand that but you're going to be coring with water. So, the coring water creates a lot of concrete juice.

Mr. Costa said we'll be collecting that but you want to see the plans on how we....

Chairman Laga interjected yes; I want to see how you're doing that. I want to see the plan on the drilling on the dam. I understand it's construction; I get it but we're trying to limit.......

Mr. Costa interjected we have all of the same concerns.

Chairman Laga said worst case scenario: you could use a shop vac while they're coring. You just have to figure out a way to empty it. So, plan on drilling the dam and collecting spoils. Even though you're working within the 100' buffer, I'm not going to make you put in silt fence but I basically want to see a plan on the drilling and the restoration; what are you going to do? Grout it?

Mr. Costa replied yes; the cores.

Mr. Gerber replied yes; the cores will be grouted; they're 3" tubes and 6'. So; there will be a core......

Chairman Laga interjected just give me the MSDS and the concrete mixture plan that you'll use on that.

Vice-Chairman Fannin asked is there any concern about a turbidity curtain.

Chairman Laga replied no; if they were on the wet side - yes. They're on the dry side.

Mr. Gerber added the downstream side.

Vice-Chairman Fannin said the bore holes are going to be on the lake side then?

Chairman Laga replied no and showed him where they were going to be drilling.

Vice-Chairman Fannin asked where are the......

Mr. Gerber interjected (and showed on display) here. Here's the reservoir, the downstream side; the borings are going here and the cores are going into the dam face on the downstream side.

Vice-Chairman Fannin said we really need a sequence of construction as well on this. Are you going to be doing both of these projects at the same time?

Mr. Costa replied yes.

Chairman Laga said just give us a sequence of construction.

Vice-Chairman Fannin said and that will need to include our wetlands inspector going out; when you install any erosion controls - we're putting in some silt fence or not?

Chairman Laga responded this is what I'm thinking. I think this is just a Letter of Permission. This is not a detriment to the......this does not require full wetland permit as long as they meet the criteria.

Vice-Chairman Fannin said fair; I think you're right on that. Who owns the actual property.

Chairman Laga replied DEP.

Vice-Chairman Fannin asked if they would possibly be able to get a copy of the deed showing it's owned by the DEP. Part of our Code says we need to include it in the files.

Chairman Laga said just get us a letter on DEP letterhead saying that the dam is owned and operated by NYC DEP and that's fine. So; I'm not going to rule on this today. You wrote down the stuff we're looking for - just give us the information that we're looking for. I'm not going to make you go for a full-blown wetlands permit. We'll go with a Letter of Permission on this. As long as the information you give us is correct, we'll be good to go.

Chairman Laga asked who are you using for your drilling? ADT?

Mr. Gerber replied Jersey Boring.

Mr. Costa said we'll be sending you a very comprehensive plan that'll answer all your questions; we'll have silt fencing out there anyway.

Chairman Laga said yes; all I am saying is that if you're setting the drill rig up over a hole or you've got the tail end of the rig, just go from the wall of the dam, around it just to keep............. Or a boom or hay bales just to prevent if the mud pit breaks and you'll be able to isolate it. It's only bentonite so you pick it up with a shovel anyway.

MINUTES:

- 10/03/19 held over
- 01/02/20 holdover

Chairman Laga said we can't vote on them. We need Vince to come back for them.

> Mr. Federice moved to close the meeting; seconded by Vice-Chairman Fannin with all in favor.

Respectfully submitted,

Dawn Andren