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November 12, 2024

Inland Wetlands & Watercourse Commission 27 Main Street Post Office Box 0548 Salisbury, Connecticut 06068

**RE: SWSA Pond** 

Dear Commission Members,

This letter addresses the concerns and comments made in R.R. Hiltbrand Engineers & Surveyors, LLC letter to the Commission dated November 6, 2024. Numbering reflects the original letter.

- 1. Clearing limits are shown for both the pond work and fill work
- 2. The total estimated volume removed is 3,530 CY which is 10% more than the inplace volume. Estimated dewater stockpiles are 950 CY for organics (2' depth plus 10%), and 2,933 CY for the sand and gravel (balance material plus 10%).
- 3. Existing access roads are used for hauling excavated material to its final destination and is shown on the dewatering sheet
- The pump to be used for dewatering are capable of 250 to 300 gpm. This rate roughly ½ of what the filter bag is capable when new (15'x15' max flow is 500gpm). They will be swapped-out on an as needed basis
- 5. Existing access roads will be used. Temporary stockpiles are shown on the plan. A proposed limit of disturbance line for all areas (LDT) is shown.
- 6. A different location for the final material location is proposed. It is an area where material was borrowed when the 65 meter jump was built. Proposed contours are capable of fitting 5,900 CY. This location will require brush removal and small trees removed that have grown in the 14 years since construction. Fill depth will be under 20 feet at full capacity. Only 66% of the volume will be used. A supplemental area capable of holding 2,230 CY is shown on the Fill Plan. It would require the base area to be cleared of trees and brush (0.26 acres). There are no plans to reuse this area since refill the borrow area has excess capacity.

Fill depth is kept under 20 feet. A 110' shelf at 5% is shown at the primary fill destination.

- 7. Fill will be compacted to 12" maximum lifts.
- 8. All areas that are not access or parking with be seeded, loamed, and covered with erosion control blankets.
- 9. The erosion and sediment control notes have been augmented to include the sequence.
- 10.
- a. Pond Excavation will be done using a large excavator and haul truck. A dewatering pit will be used to pump water out of the pond excavation. A filter bag (15' x 15' max 500GPM) will be used to remove sediment and swapped out when required. The captured sediment will be mixed with the organics removed from the pond excavation for final cover use.
- b. There is ample electric to run a dewatering pump 24-7. The existing well tile can be used until there is a location where a vertical perforated 12"
  HDPE can be placed and backfilled with crushed stone. While dewater progresses, local well static elevations will be monitored as part of the process.
- c. The two piles to the west of the pond are underlain with coarse sand and gravel. There will be good infiltration into this layer.
- d. The organic layer shall be removed prior to any excavation of the sand and gravel. There will be no need to separate materials. Sufficient organics may be left around the perimeter to be used for final grading.
- e. Material will be conveyed from the dewatering stockpiles by using the existing road system shown on Sheet 7. A triaxle truck can be used in conjunction with the haul truck.
- f. There is no need for any proposed access roads. There may be a temporary haul access to the dewatering stockpiles if needed. Typically a woven geotextile is placed on the ground (lawn) and 6" of stone on top makes for a safe access.
- g. The internal coefficient of friction of the sand and gravel is greater than the final slope angle. No buildings are proposed above or below the fill area. Compaction will be done using the bucket of the machine. In the event this does not yield a high enough compaction, an excavator with a compactor head shall be used. Another benefit of the Sand and gravel is the high permeability and potential to maintain a low phreatic surface, the qualities of a stable slope.
- h. Equipment potentially used are:
  - Excavator Large and small

- Haul Truck
- Triaxle
- Bulldozer Large and small
- Electric Pumps
- Seed spreader
- Staple machine
- Post hole digger or auger
- Miscellaneous small tools
- i. As mentioned in response 10.a, a filter bag will be used. A maximum discharge flow rate of 250 gpm is estimated, which is half the maximum flow rate for a 15' x 15' silt bag. Silt collected shall be mixed with the organic material.
- j. After loam, seeding and blanket placement, the final areas shall be sufficiently watered to grow a vegetative cover. See sheet 8 for plantings and seeding at the pond.

In addition to your comments, we go on record that the pond area has never been the site of an industrial activity. It had been a farm 100 years ago before SWSA started using the land.

Observations will be made during construction and dewatering to confirm hydrogeology, aquifer-recharge potential and anticipated operational water-levels in the pond

Nearby groundwater and surface-water receptors will be monitored during construction and dewatering process to assure there are no significate impacts.

I am available to answer any questions the Commission may have.

Sincerely. Pat Hackett