



# LOCH LOMOND DREDGE PROJECT

INFORMATIONAL MEETING. JUNE 6, 2018



# Welcome & Introductions

- **Board member introductions**
- **Dragonfly Pond Works manager**
- **Opening remarks**
- **Project status**
- **Financing of project**

# Agenda

- **Why do we need to dredge?**
- **How the Dredge is done.**
- **Alternate paths considered for the equipment movement; impact on residents.**
- **Impact on trails, roads, lake trail.**
- **Impact to homeowners along the lake & Impact on wildlife.**
- **Replanting disturbed areas; homeowner involvement in landscape design.**
- **Estimated Timeline.**
- **Q&A.**
- **Adjourn.**



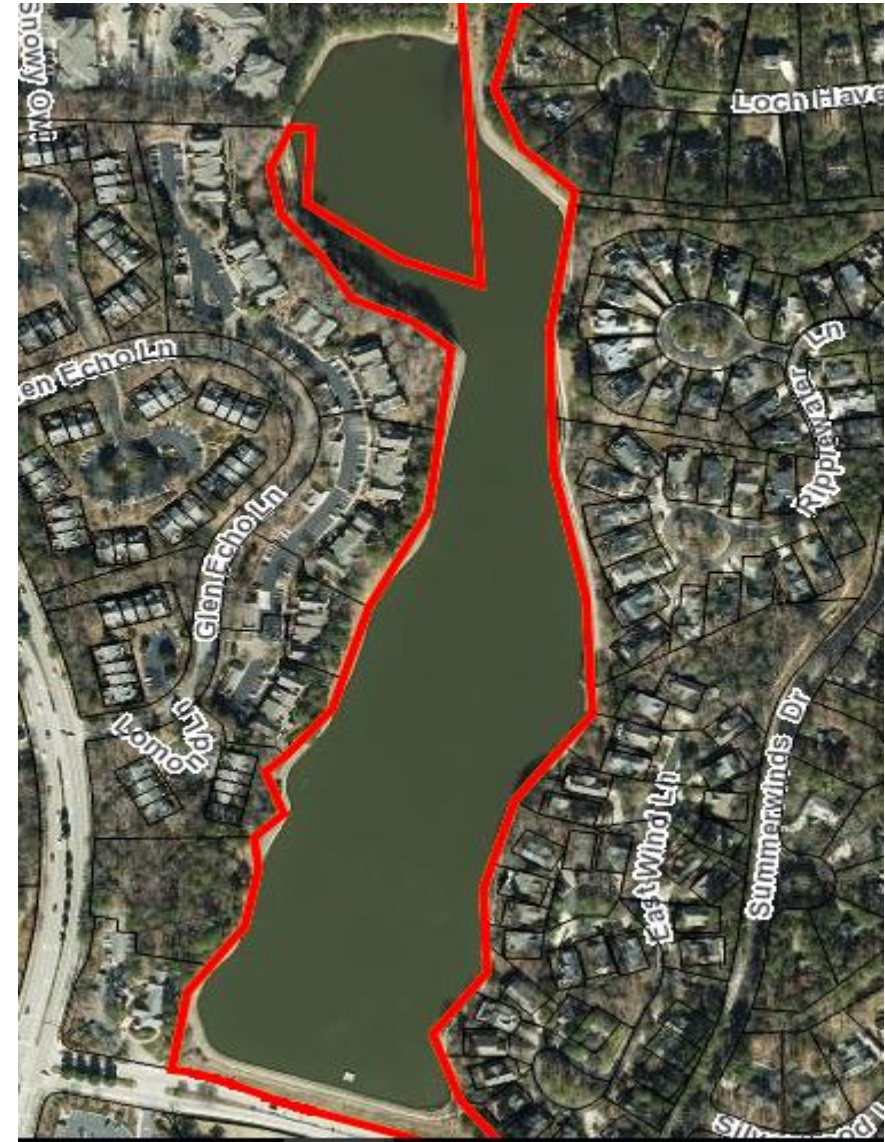
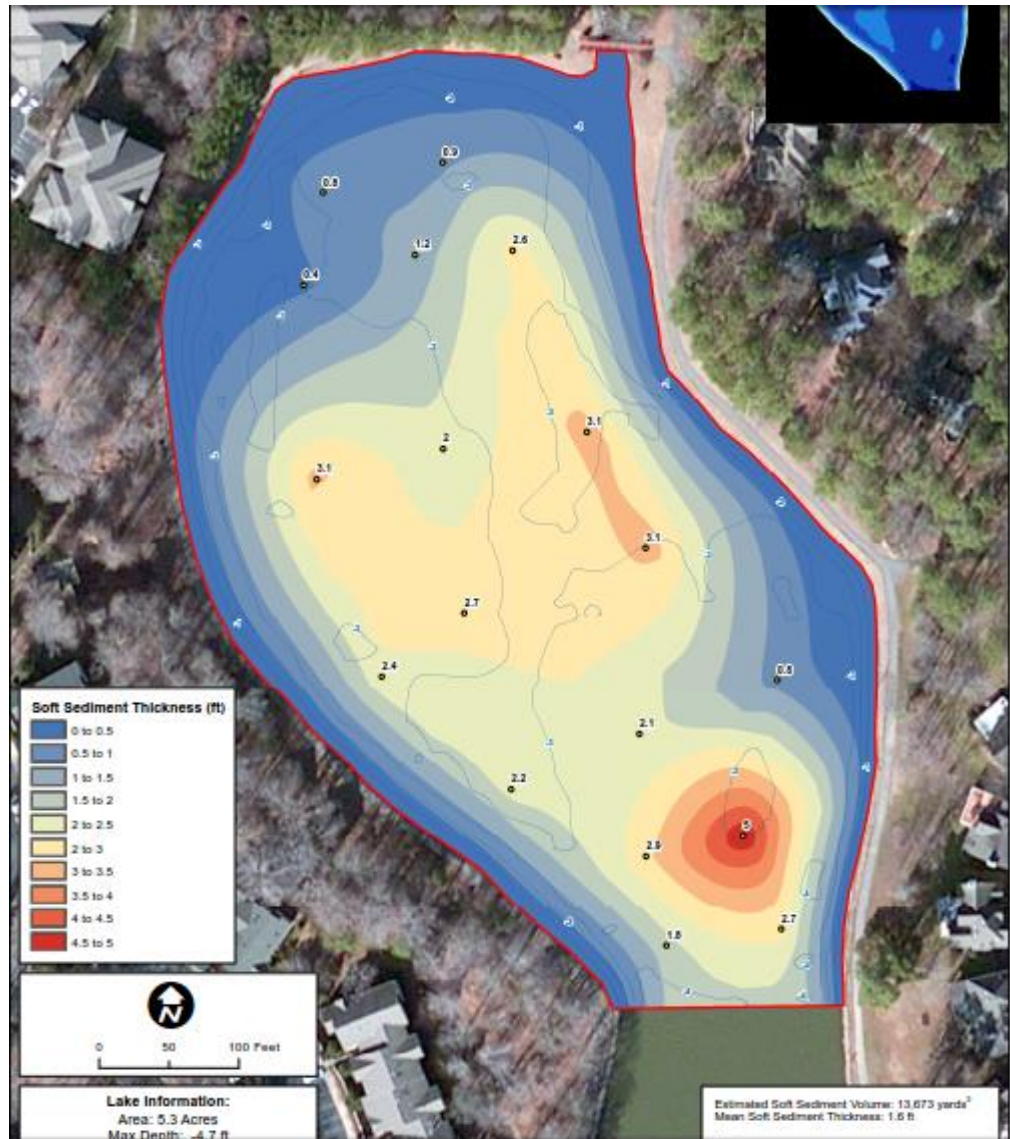
Why do we need to  
dredge?

# Dredging

- Land is forming in the lake from silt in the north section.
- This a natural occurrence in all lakes and ponds that are fed by a stream or river.
- If we do not dredge, eventually we will have no lake.
- Dredging was done in 2001. The method used is no longer permitted by ACOE.



# Bathymetry Survey





# How Dredging is Done

**Mechanical dredging. Involves scooping out the silt by machine.**





## Hydraulic dredging. Vacuum up the silt.



Dino 6

**Silt is pumped into dewatering bags & left to dry.  
The water drains back into the lake while the silt stays in the bags.**



- **Loch Lomond Dredge Project proposes to use both mechanical & hydraulic methods.**
- **Hydraulic dredging is best used for organic materials and finer silt.**
- **Mechanical dredging needs to be used when you have rocks, stones, and larger particles to remove that hydraulic dredging would not be able to handle.**
- **Loch Lomond has an area where islands are forming, and these tend to be made up of larger sized materials. These will be mechanically dredged out while the other areas will be hydraulically dredged. Please note that the small island where there are trees and turtles will not be removed.**
- **First we would hydraulically dredge and pump into dewatering bags which will be placed along the shore and trail.**
- **Once this has been completed, there would be a very slow draw down of the lake level to allow mechanical dredging. It is estimated that the lake would be dropped about five feet.**
- **Once the material has dried enough in the bags, they will be cut open and the material hauled off site to be dumped.**
- **Depending on weather it will likely take a month for the bags to dry enough to haul away.**



# Alternative Routes Considered for Access

## Investigation of Possible Routes

- Significant investigations over the years to avoid trucking out material.
- Only choice is to haul material off site.
- Land survey performed to define Lochmere common areas.
  - Loch Pointe
  - Lochmere Drive Trails
  - Summerwinds Dr.
  - Loch Haven Ln.

# Loch Pointe

- Loch Pointe has only a very narrow winding footpath, not a regular-sized trail.
- There is no Lochmere common area in this section.



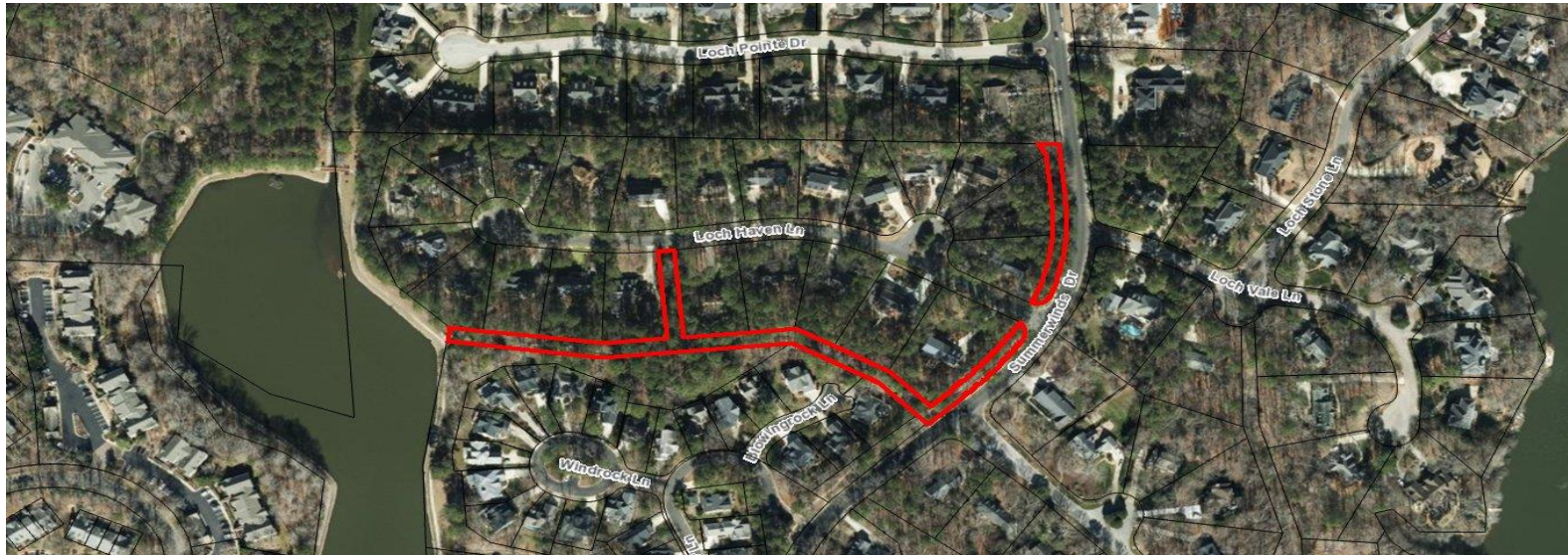
# Lochmere Drive Trails

- The trail running along the lake edge, & behind homes in Windsong & Lochwinds sub associations is too narrow and winding.
- Sub associations irrigation lines & common areas would be severely damaged.



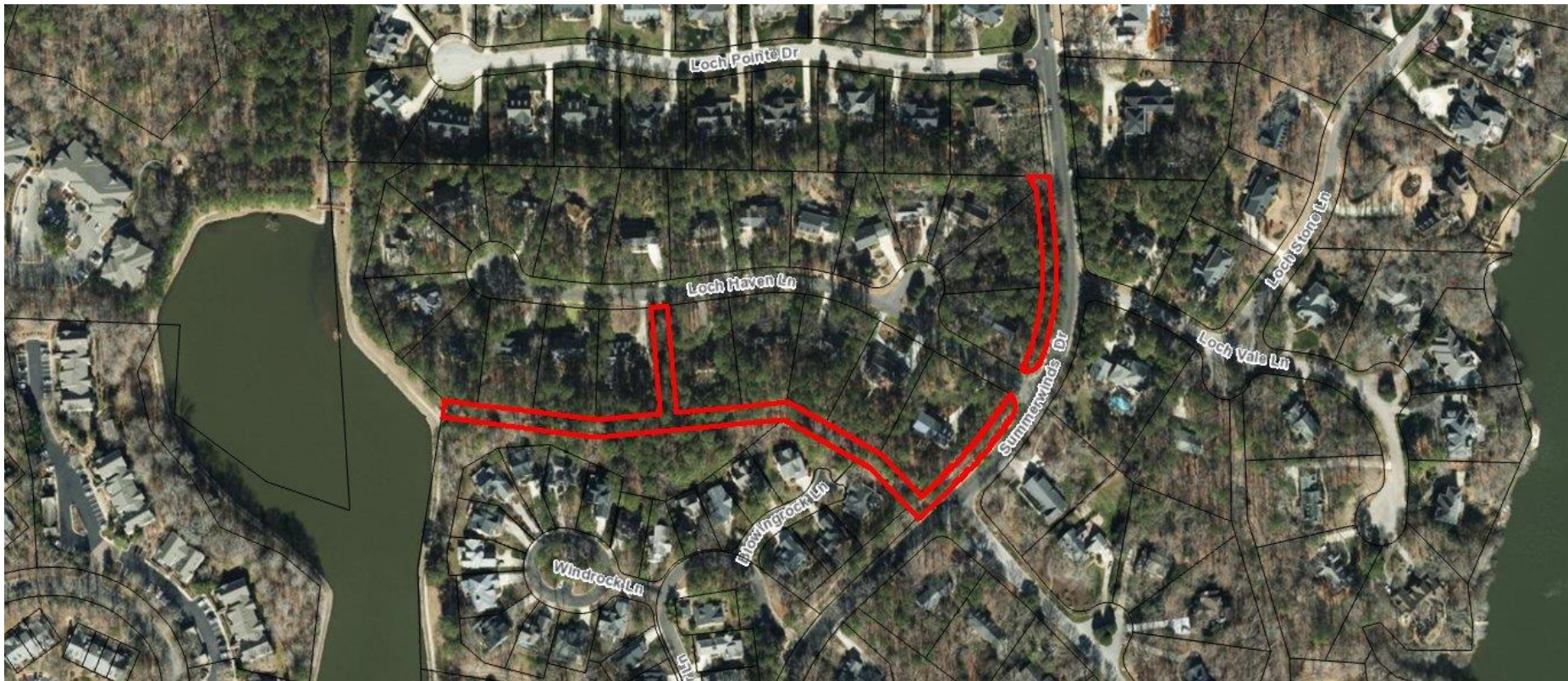
## Summerwinds & Loch Haven Trails

- The trail from the north end of the lake runs between Loch Haven Ln. & Lochwinds Sub Association.
- Lochmere owns 30 feet of common area along the trails.
- The trail running up to Summerwinds Dr. has a large sewer manhole protruding 2 feet above the ground making it difficult to use this section.
- The Town will not let us alter this manhole to accommodate trucks.





- The side trail leading from Loch Haven Lane to the Summerwinds trail, & down to the lake is the preferred route. Stone will be added to widen the trail temporarily.
- Lochmere common area between 109 & 111 Loch Haven is 30 feet wide.
- Smaller trucks will be used for this route than previously planned for.
- A number of trees will need to be removed from this trail.



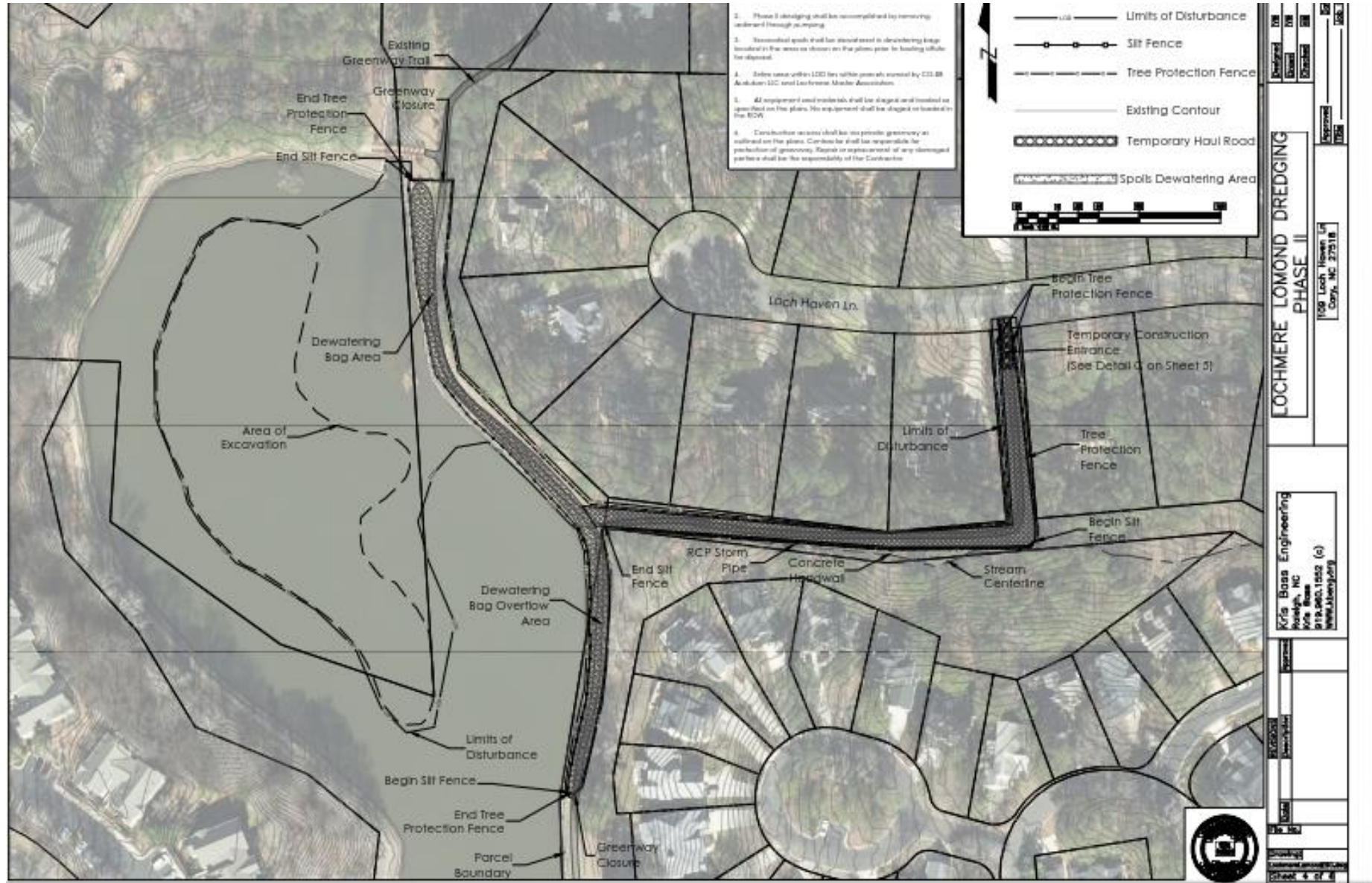
## Trail between 109 & 111 Loch Haven Ln.



## Trail between 109 & 111 Loch Haven Ln.



# Engineering Plan





# Resident & Wildlife Impacts

Final Repairs and Replanting



## Trails

- During the project the trails leading from Loch Pointe & Summerwinds will be closed.
- Walkers will be able to access the trails leading from Lochmere Drive.
- Walkers will be able to make a horse shoe trip, but not a full circulatory trip during the project.
- Due to the number of trucks entering and leaving the project site we expect the trails down to the lake to be damaged requiring resurfacing once the work is completed.

## Roads

The Town of Cary has been sent the engineering plans for the project including a traffic plan. The Town will let us know of any concerns over the route and the Town maintained roads.

## Wildlife

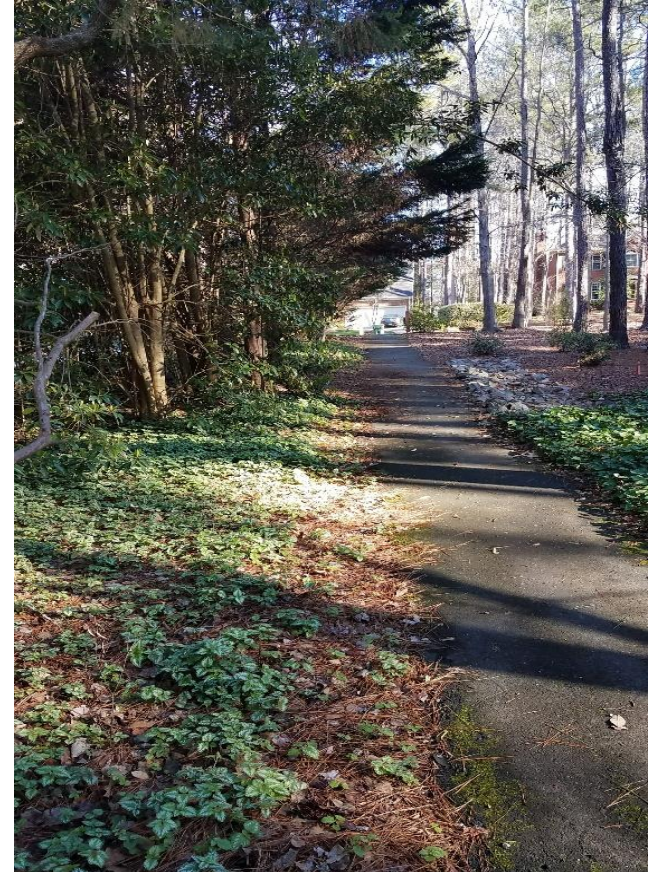
The fish, turtles, and waterfowl will keep their distance during the dredge especially when the machines are running, and they will migrate away from the work.

## Residents

- **There will be disruption during this project to residents living on the lake, residents living adjacent to the trail, Loch Haven Lane. & Summerwinds Drive.**
- **The number of truck loads needed to remove the sediment is estimated at 210 truck loads.**
- **At an estimated 10 truck loads per day we anticipate 21 days of trucking. This will not be every day for 21 days but broken up based on the hydraulic and mechanical dredging schedule.**
- **The residents at 109 & 111 Loch Haven will be most impacted with trucks and equipment coming in between their properties. A line of trees (mostly older trees that are nearing the end of their lifecycle) next to 111 will be removed and making this aesthetically unpleasant for some time.**

# Replanting Disturbed areas

- Areas that need to be replanted with shrubs or trees will be done so in consultation with those neighbors directly affected.
- Areas along the trails and lake will be repaired after the project is completed.





## Estimated Timeline

- Permitting Application & Approval. **Sept. 2018**
- Contract Approval by Board. **Oct.**
- Installation of tree protection & silt fencing. **Town inspection required. 2-3 days to install, would be done in late Oct. Or Nov.**
- Tree removal along trail common areas as needed. **After fencing installed.**
- Temporary trail widening & bolstering of soft surfaces using rocks. **2-3 days with a skid steer and a couple loads of gravel. Late Oct. or early Nov.**
- Mobilization of equipment & materials. **Early to Mid Nov.**
- Hydraulic dredging (. A month of dredging). **With Thanksgiving & Christmas/New Year, it would extend into Jan most likely.**

**Lake lowering.** Begin lowering lake slowly in Jan as directed by engineer, rate is unknown but maybe a foot every few weeks or so. Dewatering bags opened up & hauled away (trucking). Begin once material was dry enough. Would like about 30 days of drying before attempting to haul to reduce impacts on community and to reduce material weight. Would begin late Feb, early March

**Mechanical dredging.** - Late Feb, early March once hydraulic dredge material was hauled out. About a 10-12 day process depending on material dryness. Might have to be left for 10-15 days until drier.

**Final cleanup & removal of fencing.** Town inspection required.

**Restoration of landscaping & trails.** Late March, early April before spring.

# Q & A

# Adjourn