



Legend

- Road edge
- Exist. Grade
- Elev.
- Tree
- Proposed**
- Prop. Grade
- High Marsh
- Low Marsh
- Riparian Zone
- Walk/Kayak Launch
- Mean Low W
- Mean Hi W

LIVING SHORELINE DATA

- Soil Borings in the Pond show a layer of muck, about 1 to 1.5 feet thick underlain by sand. Some of the muck may be leaf detritus and other decomposing plant material
- Outfall structure (31A). Outfall pipe flows into Living Shoreline, unprotected.
- Salinity in the Pond generally between 5 and 30 psu, except during high rainfall events.
- Salinity along shoreline is lower at certain times, but data limited
- Shoreline is sunny, low wave action, fetch generally less than 0.5 miles.

POND TIDE DATA collected July-August 2014 (in feet, NAVD88)

	CURRENT PROPOSED	Dual
Mean High Water (MHW)	1.02	1.61
Mean Low Water (MLW)	0.52	-1.1
Mean Tide Level (MTL)	0.75	0.25
Upper Water Level (UWL)	1.53	
Mean Higher High Water (MHHW)	1.11	
Tide range	0.50 feet	2.7

CONSTRUCTION SEQUENCE:

Grading Zone 1:

- Grade shoreline/water zone to create an intertidal zone from mean low water elevation to UWL. The tidal elevations to be determined from new outfall. Slope at about 8:1 to 10:1.

Grading Zone 2:

- Grade up from UWL to create berm at elevation 6.

Outfall:

- Provide outfall protection as appropriate

Access:

- Gravel access to water for public access; kayak/canoe launch

PLANTING PLAN

Low Marsh: Final plant selection based on salinity, with a range of salinity anticipated. Will plant saline, brackish and fresh species as a pilot project. Candidate plants include:

- Spartina alterniflora* (saltmarsh cordgrass) – 12" Spacing from elevation 0.5 to elevation 1. - Saline
- Peltandra virginica* (green arrow arum) – Fresh-brackish

Consider *Spartina cynosuroides* (Big Chord Grass), but height may present a visual barrier to pond.

High Marsh: Final plant selection based on salinity, with a range of salinity anticipated. Will plant saline, brackish and fresh species as a pilot project. Candidate plants include:

- Spartina patens* (saltmeadow hay) – 12" spacing, start two rows below elevation 1 to elevation 1.5. Intersperse with *S. alterniflora* for two rows

Riparian: Final plantings to be determined in conjunction with Spring Lake Borough for aesthetics and access. Shrubs to include:

- Morella pensylvanica* (Bayberry)
- Rosa Virginiana* (Virginia Rose)
- Baccharis halimifolia* (groundsel tree)
- Native plant mixture as understory

Existing trees to remain. Mowed grass strip at the roadway for access/maintenance. Access path to be located in field.

