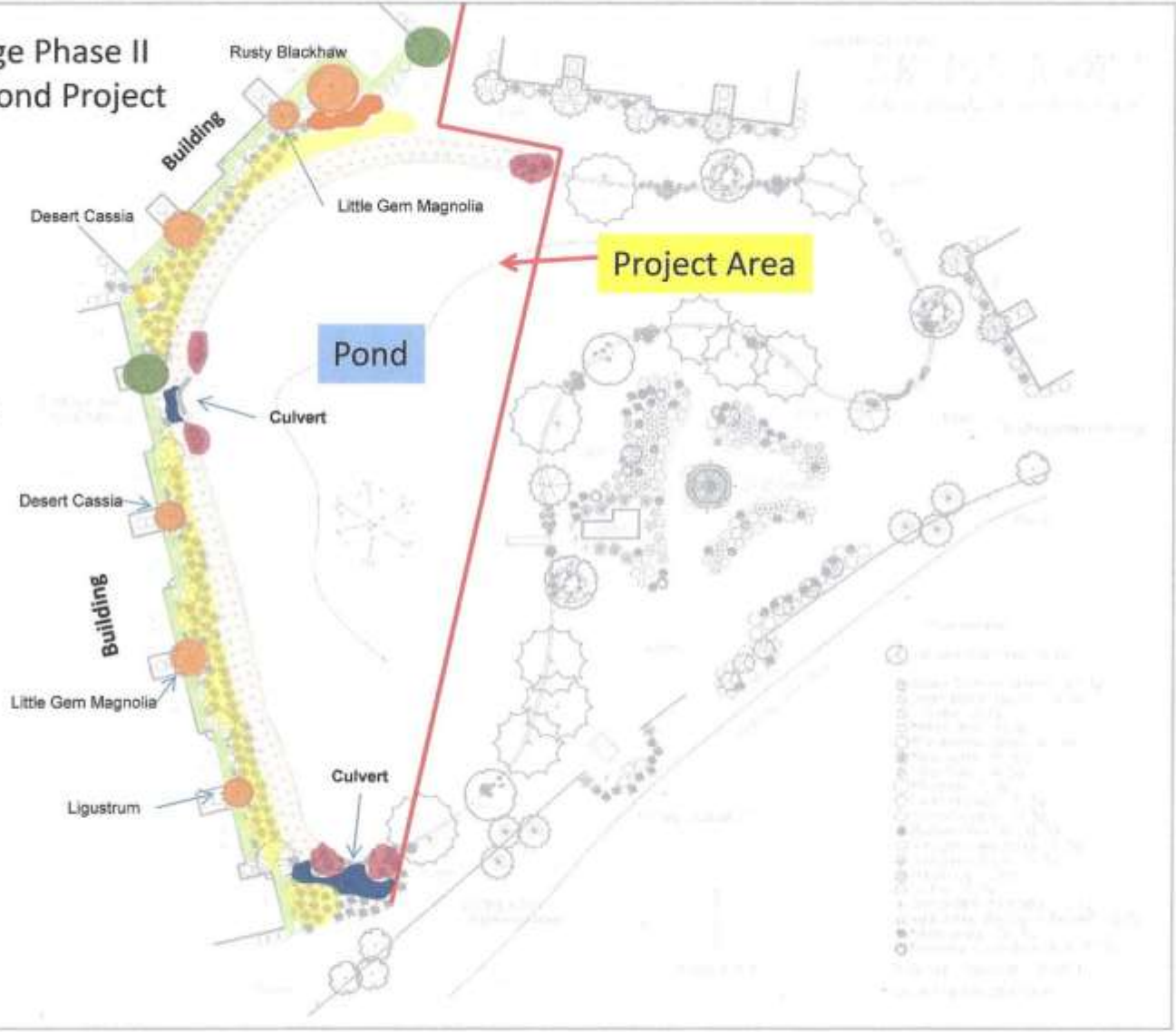


Bird Bay Village Phase II Storm Water Pond Project

Project No. 2012-001-001-001

-  Existing Hedge
-  Existing Ligustrum
-  New Trees as Labeled
-  Muhly Grass above Geo-Tubing
-  Aquatic Plants
-  Butterfly Bush
-  Swamp Ferns
-  Dwarf FireBush
-  Walter's Virburnum



Bank Stabilization Project Using Geo-Tubes

**Invasive and
Diseased Trees
Removed.**





Out goes the First Tube



Stakes are laid out



Down Spouts Extended Out and Under the First Tube





**Stakes Installed to
Attach the Tube to the
Bank for Filling**



**Let the Filling Begin !!
Sediment from the Bottom
of the Pond is Pumped
into the Tube**





The Tube Begins to Take Shape





First Tube Fat and Sassy



Second Tube is Rolled Out



**Three Tubes Bulging With Joy
(Note How Firm the Tubes Are)**



The Cutting of the Sacrificial Tube



Using the Soil in the Sacrificial Tube, The Soil is Spread to Create a More Natural Slope



Spreading of the Soil Complete



Covering of the Bank



Geo-Tube Installed





Lessons Learned
First Hard Rain – 3.5”





Uncovering the Damage





Repairing the damage
Shoveling soil from pond to bank
and wheel barrowing in soil.





Removing existing sod around Pond

Smoothing the Transition between the existing land and the Geo-tubed area.





Re-installing the covering on the Geo-tubing and installing weed matting up to shrub line to limit erosion.



Filling in eroded areas between units, installing weed matting to limit erosion from Gutter overshoot in down pours.



Protected and Ready for Plants



Plants Arrive!!!





First Row Goes In





**And the Next and The
Next And...**



More...





More...



And Trees And Ferns

**Note our new Friend
above!**



Note: Septic Stone was added to area between units to disperse the force of the water falling 30 feet downward when rain is heavy.





**Swamp Ferns, Walter's Viburnum,
and Lots of Muhly Grass.**



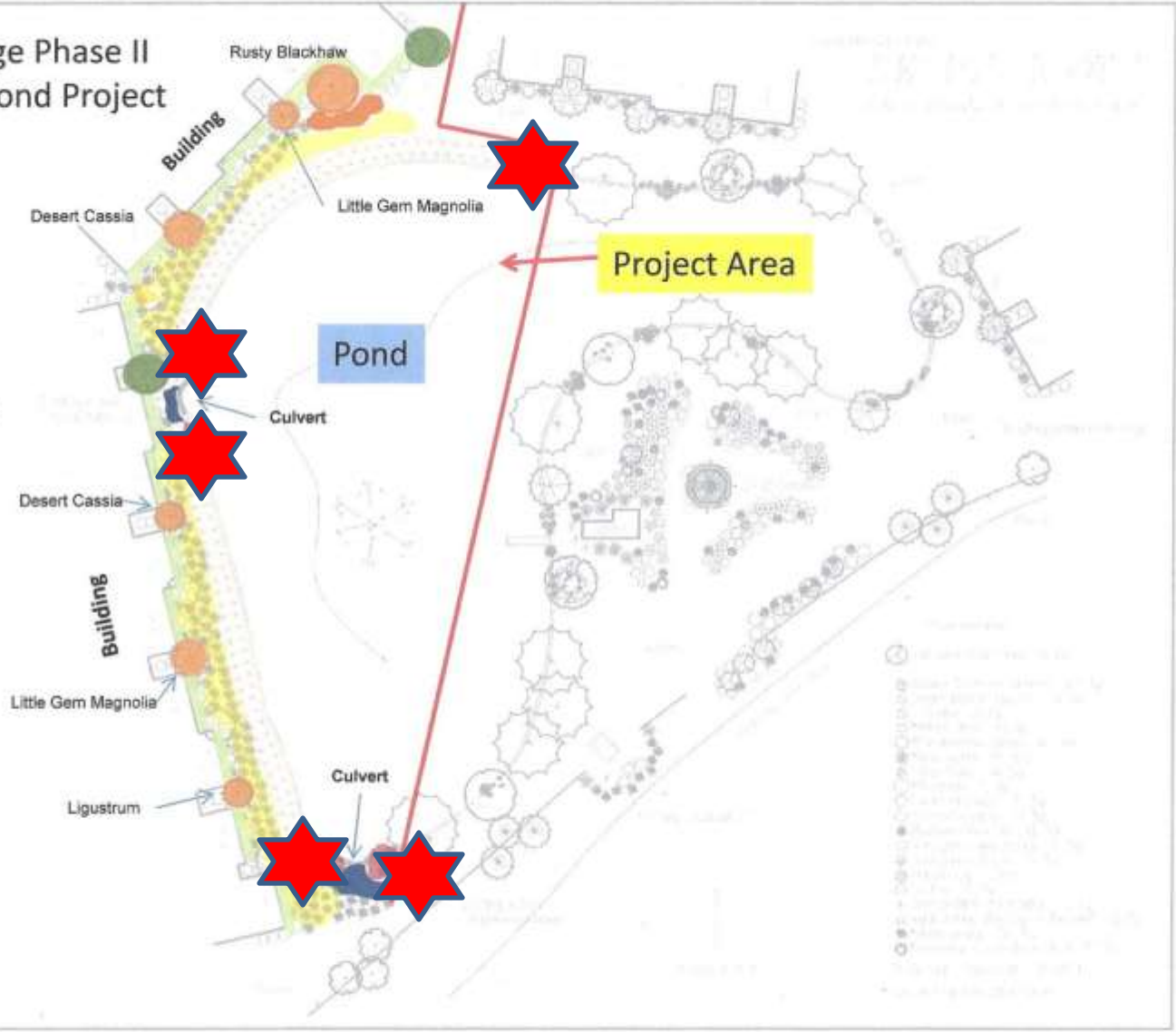


Aquatic Plants to be installed in the Spring

Bird Bay Village Phase II Storm Water Pond Project

Project No. 2014-01-001

- Existing Hedge
- Existing Ligustrum
- New Trees as Labeled
- Muhly Grass above Geo-Tubing
- Aquatic Plants
- Butterfly Bush
- Swamp Ferns
- Dwarf FireBush
- Walter's Virburnum



Bank Stabilization Project Using Geo-Tubes