

 PROJECT #2 PROPOSAL

**Names: James MacGregor**

**Team Name: Team MacGregor**

**Part A: Project Ideas & Objectives**

* **3D print a T pipe so I can mount an acrylic air tight tube to the underwater robot for a camera to be placed in.**
* **Install a camera and lights to the front of the underwater robot and wire them to the control box.**
* **replace a broken propeller and secure the propeller guards so they don’t move as much.**
* **find a way to water proof the two light fixtures so nothing will short out.**

**My final objectives for the underwater robot is for it to function properly in water and for it to have a functioning camera and lights for different dives; such as the Miramichi river or local ponds.**

**Part B: Electronic Resources.**

* **Maker bot website(Program for our 3D printer)**

<https://www.makerbot.com/?utm_source=google&utm_medium=cpc&utm_campaign=CAN_EST_|_Brand_Core_-_D&utm_term=makerbot>

* **MATE underwater robotics website**

<https://www.marinetech.org/rov-competition-2/>

* **Tinkercad 3Ddesign software**

<https://www.tinkercad.com/>

* **how to install the camera**

[**http://www.instructables.com/id/Installing-a-reverse-camera-and-monitor/**](http://www.instructables.com/id/Installing-a-reverse-camera-and-monitor/)

**Part C: Materials & Designs**

* **silicone sealant**
* **PVC pipe**
* **Acrylic tube with an end cap**
* **Cameras with LED’s**
* **Electrical wire**
* **propeller**
* **3D printer**