I [Jeremiah] chose to pursue this project in hopes to learn more about a field within my major, robotics. Programming a robot to perform specific tasks and learning how to problem solve, real and physical problems, have always been an interest of mine that I wish to turn into a skill. This project, I believe, was a great choice for me in the sense that I am going to be able to apply my skills in programming and code to make something move in the physical world, which I find very exciting. I have also decided to take this opportunity to treat my learning environment as a work environment, so that by the end of this project I will have an idea of what it’s like to work with others in the same field, as well as other disciplinaries i.e., mechanical engineers.

The purpose of this project is to assist in the inspection of University of Central Florida’s storm drains. To iterate, the goal is to build a functioning robot which can accomplish a set of objectives, such as inspection, evaluation, and integrity check of the storm drains. Being that the conditions of the storm drains are wet, made of concrete and metal, and are 20 feet below the ground, there are restrictions that need to be worked around and solved. As for must haves, the robot will be tethered, most likely by a steel cable. Also, since the robot will be operating underground, a wireless connection is not possible and will instead be connected via ethernet cable. Due to the conditions that the robot will be operating in, good lighting is needed which in return will allow for good visibility for the cameras that will be mounted on the robot.