**Task Description**

The cooling system transfers heat from the high voltage motor controller and motor to the environment. Currently, Bulldogs Racing uses a poorly designed radiator and pump system to transfer and dissipate heat into the environment. The Cooling System Team will examine existing cooling systems to determine a rough design that fits Bulldogs Racing needs. They will improve upon this rough design and ultimately design and fabricate the cooling system for BR16.

**Responsible Parties**

Craig Wojtala is the principal designer for this project. He is responsible for delivering preliminary, intermediate, and critical design reviews. Ultimately, his success as a team leader will be determined by his ability to manage his team effectively and deliver the final design, product, and supporting documentation on time.

Holden Leslie-Bole will assist Craig in design and fabrication. Craig will determine Holden’s responsibilities.

**Deliverables**

Three designs (preliminary, intermediate, and critical) will be reviewed by the chief engineer. The preliminary design should evaluate a variety of cooling systems and indicate which system is ideal for BR’s needs. Additionally, this design should include a rough idea of how this ideal system will be applied to the vehicle. The intermediate and critical design reviews will present more advanced versions of the basic design presented in the preliminary design review. Once the critical design is approved, the cooling system will be constructed. These three designs, the completed system, and supporting design documentation make up the deliverables.

**Budget**

(Provide as detailed budget information as possible)

**Resources (human and machine)**

(Provide a list of type of resource needed and time with resource)

**Time to complete**

(Provide a description of time to complete major aspects of work package)

**Measures of Success**

(Scales upon which the success of the design can be evaluated)

**Required Inputs**

(Items or knowledge required from a previous step)