

October 26, 2022

Rep. Chandra E. Dillard South Carolina House of Representatives 414B Blatt Building Columbia, SC 29201

Dear Representative Dillard,

The Bridge Tech is a 501(c)3 Science, Technology, Engineering and Mathematics (STEM) educational organization located in the Historic West End of Downtown Greenville. We are positioning ourselves to be one of the premiere advanced STEM organizations that bring the complete engineering lifecycle to our students. Our program concentrates on real world projects and products designed to stimulate our students. The college students that deliver the curriculum and the career advisors (engineers in the industry) are charged with ensuring that it meets and/or exceeds industry standards.

Robotic Mowers provide landscape contractors an opportunity to reduce or alter their labor force, focus, and allow crew members to be put into design and build functions or other areas where there is more significant profit margin. The Objective is to use technology to transform a manual repetitive task into an efficient process. Why, because the appearance and condition of the lawn is important. Golf courses, corporations and governments spend hundreds of thousands of dollars each year for people to ride on lawn mowers. The aesthetics of a well-maintained lawn creates the perception of quality, adding value to the products & services provided. Using Artificial Intelligence, companies will be able to maintain their fairways and lawns effectively and efficiently with consistency and reduce operational costs.

Our project consists of any off-the-shelf 360 mower that we retrofit with our autonomous hardware application which is then operated by our proprietary AI models and controls. The unit is onboarded to our backend system which is used to monitor and provide the latest reinforcement learning model. The models are updated each time the units are used per site. If new obstacles are introduced to the environment, the information is transferred to be used to update the model so any other unit used will have the most up to date information. We have already produced a working prototype, a pre-production build unit, and a design for an electric version (with the assistance of Bob Jones University). These activities will provide meaningful progress for the organization, students, and the community.

The Bridge Tech is requesting seventy-five thousand (\$75,000) dollars to help with material, stipends for the interns, and engineering trips. We are soliciting your assistance in obtaining these financial resources. More information concerning the Bridge Tech and our community partners are available on our website, <a href="https://www.thebridgetech.org">www.thebridgetech.org</a>, or by contacting our offices at 864-335-8858. Your support is greatly appreciated.

Sincerely, Jimmy L. Moore Executive Director