Deliverable G: Prototype II

GNG1103—Engineering Design

Faculty of Engineering—University of Ottawa

Hydroponic 2:

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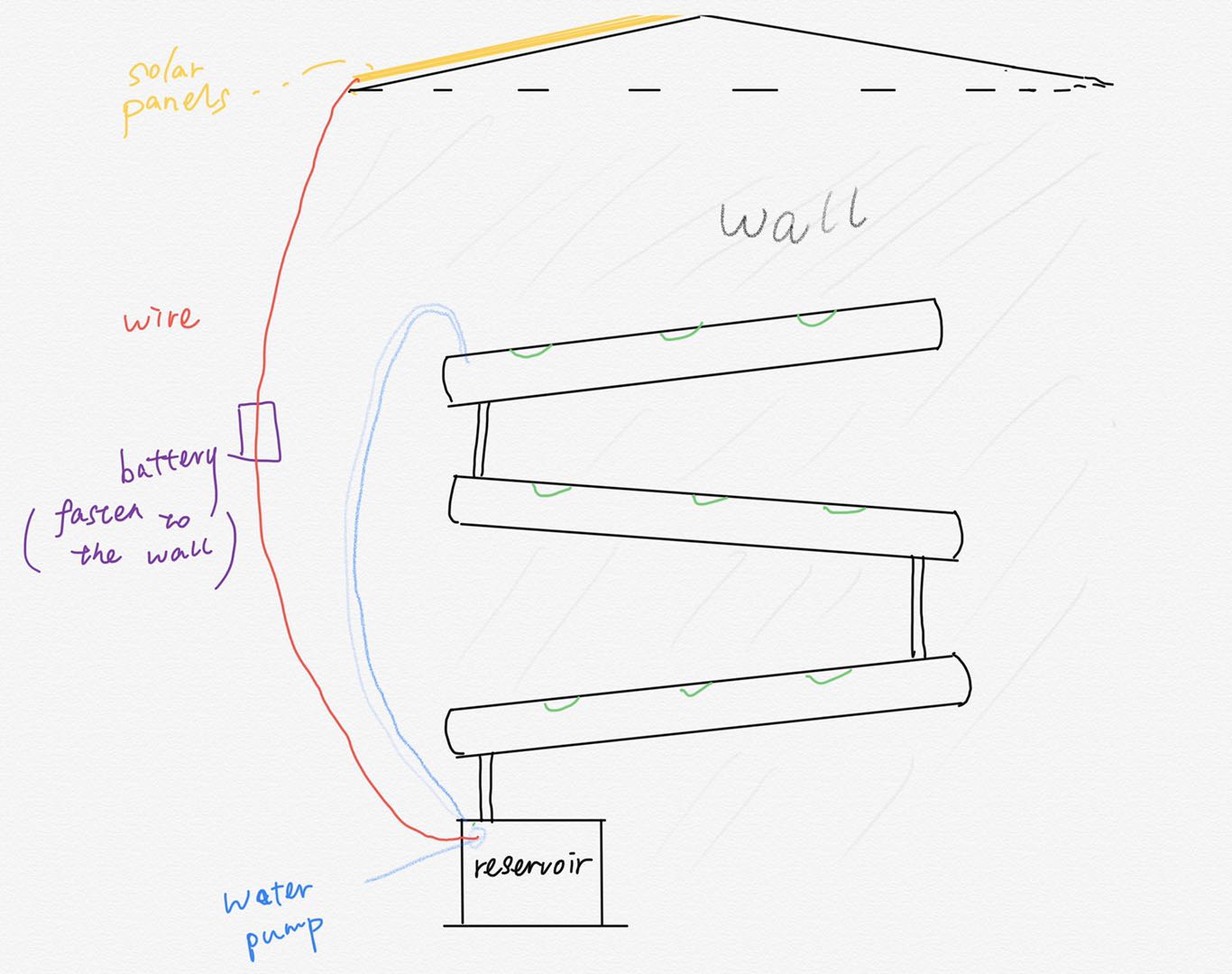
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**Introduction**

As we mentioned in Deliverable F, this design is order to maximizing the space and save cost and time. During client meeting, our costumer found that our idea and overall structure is good, but the customer also offer two issue, improvement, that we can enhance. First is the sources of power that we decide to install a solar panel on the roof after communicated to the construction group. The second issue is the nutrition for plants.

**First Problem**

In order to meet costumer needs, we plan to add an electric system for water pump. Battery are not sustainable that solar panel is the best choice. We discussed with construction group that they can help hydroponic group to install the solar panel on roof, and the battery for storing electricity from solar panel can be fasten on the wall.

**Second problem**

By comparing all the nutritions on the market, powder or dry forms are more economical than solutions because they do not carry water in them like the liquid ones. They also have a longer shelf-life. This kind of powder form nutrition is the best choice for the project by the cost limits, such as the nutrition from General Hydroponics company.

One word of caution is that the nutrition should not premix, just place it into the reservoir, then stir; otherwise, you'll have a precipitation problem.

This nutrition has three advantages:

-Cheaper than liquid nutrients.

-Longer shelf life.

-Easy to follow and use.