WE GROW DREAMS – Aquaponic Food Production

Wolf Pack
SUSTAINABLE
Land Development & Construction

AQUAPONICS

Aquaponics efficiently combines the food production methods of hydroponics and recirculating aquaculture in a natural and sustainable environment. Aquaponics has been shown to have all of the advantages of hydroponics while out performing traditional growing methods, including faster growth, better yield and peak flavor—without using pesticides.

Aquaponics uses a fraction of the water that traditional farming requires. By eliminating the soil, the typical soil borne pathogens and diseases are eliminated. By incorporating the production of fish and potentially other aquatic animals, there is no need for costly mined or manufactured fertilizers.

630 | 964-3117
info@wolfpackdg.com
www.wolfpackdg.com

We Grow Dreams Mission

To provide people with disabilities the opportunity to lead fulfilling lives and to train and work in a supportive, safe and caring environment while producing and providing products and services to the community.

We Grow Dreams Greenhouse & Garden Center opened May 2005 as a site to achieve our Mission. Our Team Members work in the greenhouse, complete landscaping and gardening projects on our grounds, train in office clerical skills, and with the guidance of volunteers, create craft products for sale in our gift area.

AQUAPONICS VENTURE
This exciting program will allow We Grow Dreams to expand current operations and pursue other opportunities to assist Team Members by providing healthy, high-quality food grown in an ecologically sound and sustainable manner. Sales of fish and plants will help existing and future Team Members by reinforcing the We Grow Dreams Mission Statement.

The aquaponic system includes four 4'x8' gravel grow beds (above with tomato plants) that act as the bio-filter. The beds drain to a 40' x 6' raft tank (above with lettuce) which then recirculates back to the fish tanks (above and right).

Goals and Objectives

Our goal is to expand upon the services and products provided by Team Members at We Grow Dreams. A pilot aquaponic operation will provide Team Members with additional training in an environment similar to their current duties at We Grow Dreams. The aquaponic operation and sales of fish and plants will provide the added benefit of educating Team Members in agriculture, science, math, and business.

Aquaponics combines proven technologies from hydroponics and aquaculture into a symbiotic system where the sum is greater than the individual parts. The pilot project will incorporate green technologies to minimize fossil fuel energy and to maximize food production. In conjunction with the proposed aquaponic farm, we propose development of an onsite vermiculture facility which would further enhance the aquaponic farm operation while minimizing the need for purchased fish feed and providing onsite recycling of organic waste.

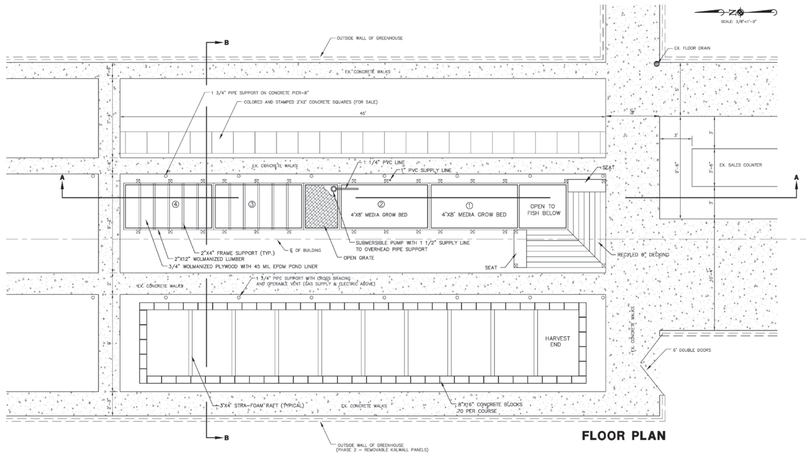
Training and Employment

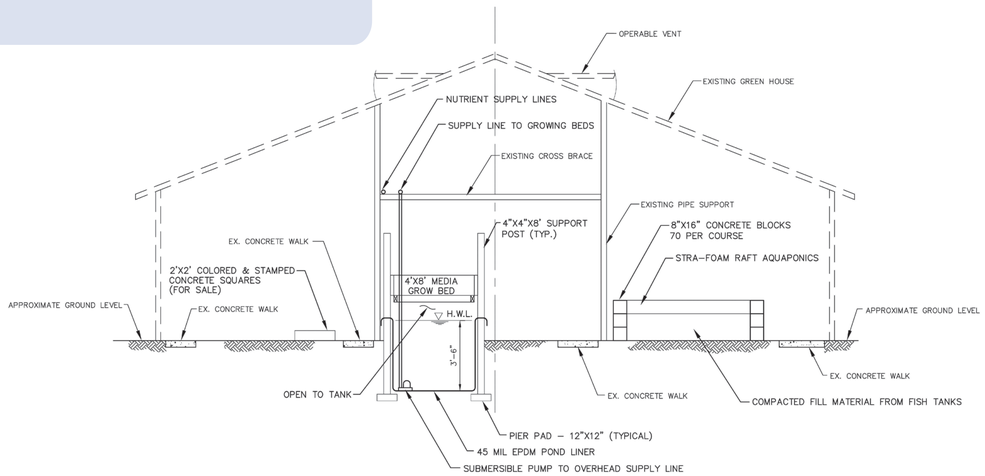
The primary tasks in an aquaponic system include feeding the fish, seeding, transplanting and harvesting, testing and cleaning.

Specific additional tasks relating to aquaponics would include:

- Checking equipment to verify proper operation.
- Visually inspecting fish tanks to assess fish health.
- Feeding the fish, preferably 3 times a day. While this task can be automated, it is especially enjoyed by many people.
- Monitoring water quality, as a minimum water temperature and pH.
- Monitoring plant health.
- Harvesting of outer leaves on plants.
- Harvesting of produce.
- Washing of fruits and vegetables.
- Cleaning tanks and piping.

WE GROW DREAMS
GREENHOUSE & GARDEN CENTER





Green and sustainable business practices are good for the planet. Helping others is good for the soul.