



Board of County Commissioners Agenda Request

5C
Agenda Item #

Requested Meeting Date: November 22, 2016

Title of Item: Hydroponics Study Proposals

<input checked="" type="checkbox"/> REGULAR AGENDA	Action Requested:	<input type="checkbox"/> Direction Requested
<input type="checkbox"/> CONSENT AGENDA	<input checked="" type="checkbox"/> Approve/Deny Motion	<input type="checkbox"/> Discussion Item
<input type="checkbox"/> INFORMATION ONLY	<input type="checkbox"/> Adopt Resolution (attach draft)	<input type="checkbox"/> Hold Public Hearing* <i>*provide copy of hearing notice that was published</i>

Submitted by: Ross Wagner	Department: Economic Development & Forest Ind
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Presenter (Name and Title): Ross Wagner, Economic Development & Forest Industry Coordinator	Estimated Time Needed: 5 minutes
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Summary of Issue:
After advertising for Requests for Proposals for a Hydroponics Feasibility study, Aitkin County received 3 proposals. They are;

- Garden Fresh Farms, Inc, Maplewood, MN \$5,000
- Avolve, Lakewood, CO \$6,500
- Nelson and Pade, Inc, Montello, WI \$4,500

After reviewing the proposals with Mike Hagen, Aitkin Growth, we recommend Avolve. Even though they are the highest cost, we feel that they met the guidelines of the RFP and what we are looking for in the study. We felt that both Garden Fresh and Nelson and Pade were selling their systems as opposed to an unbiased and objective study of all the systems and methods for Hydroponics.

Total budget for the study is \$5,000.00 Blandin Foundation Grant, \$2,500.00 match provided by Aitkin Growth and \$2,500.00 NE Regional Sustainable Development Partnership grant to utilize University of Minnesota research and instructional staff. I will coordinate with Avolve and the U of M research.

Alternatives, Options, Effects on Others/Comments:

Recommended Action/Motion:
Approve request

Financial Impact:
Is there a cost associated with this request? Yes No
What is the total cost, with tax and shipping? \$ 6,500 - 7,500
Is this budgeted? Yes No *Please Explain:*
Costs will be covered by grant funds

Ross Wagner

From: Jim Frasche [jim@coloradoaquaponics.com]
Sent: Wednesday, October 26, 2016 6:55 PM
To: rwagner@co.aitkin.mn.us
Cc: Jd Sawyer
Subject: Aitkin County Hydroponics / Aquaponics RTP
Attachments: Aitkin County Hydroponic Proposal.pdf; Frasche CA resume.pdf

Dear Mr. Wagner,

Please note the attached proposal in response to your RFP. We are confident that we can deliver a very high quality feasibility study/analysis report product for you, and hope to have the opportunity to do business with you.

Please do not hesitate to contact me if I may provide you with any additional information.

Best regards,

Jim Frasche

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James W. Frasche'
Director, Farm and Business Solutions
Colorado Aquaponics
Telephone: +1 720 212 6055
Email: jim@coloradoaquaponics.com



AVOLVE

SUSTAINABLE FOOD SOLUTIONS

**Aitkin County Aquaponic / Hydroponic Feasibility Study
Proposal**

**Prepared by: Jim Frasc e
Director, Farm and Business Solutions**

October 28, 2016

Aitkin County Hydroponic Feasibility Study Request for Proposal

Name, address, phone number and e-mail address of business:

Avolve Corporation, dba Colorado Aquaponics, LLC and/or Flourish Farm.
1560 Glen Dee Drive
Lakewood, CO 80215
Contact: Jim Frasc , Director of Farm and Business Solutions, Tel: 720 122 6055
jim@coloradoaquaponics.com

Years in business: Seven Years (Colorado Aquaponics, LLC was organized 10/28/2009)

Do you operate a commercial aquaponics or hydroponic business or only provide consultation services? Please describe. We operate a 3,200 square foot demonstration aquaponics farm called "Flourish Farm" in North Denver, which produces produce and fish for commercial sale and also provides a platform for R&D, training, and education programs.

Our farm is featured at:

<http://www.coloradoaquaponics.com/announcements/flourishfarms2015inreview>

And:

<http://www.coloradoaquaponics.com/aquaponic-farms>

We are co-located at The GrowHaus, a community service non-profit organization, sharing an additional 3,000 square feet of hydroponic lettuce production, which is sold "live" to local grocers in clam-shell packaging with full HACCP compliance.

We are the contract operator of a new 6,000 square foot tilapia-based aquaponics system which we designed, built, and commissioned for the Mental Health Center of Denver's (MHCD) new Dahlia Campus in North Denver. There is a brief mention of this facility, and our partnership with MHCD at:

<https://mhcd.org/community-celebrates-opening-dahlia-campus-farms-gardens/>

Have you provided services to locations in a similar climate to that found in Northern Minnesota? If so, please describe. Colorado is a high, dry, variable climate environment. We have provided design/build, consulting (including feasibility studies), and advisory services to clients state-wide (and elsewhere in the USA and overseas in other climate zones) in locations where the temperatures can reach over 100F in the summer, and -30F in the winter, and at altitudes ranging from 5,000 ft to over 10,000 ft elevation. Jim Frasc , our Director of Farm and Business Solutions, has done extensive research on high altitude, cold climate aquaponics systems and greenhouses, and managed a small (12' X 40', 480 square feet) demonstration aquaponics system at the Denver Housing Authority Sustainability Park for more than two years which employed proprietary heating and cooling systems, and evaluated methods for minimizing frost line encroachment beneath the greenhouse. While the Minnesota climate will set important limitations on your ability to operate a successful installation, because of your northern location,

seasonal variations in the availability of sunlight will also be an important determinant in operating systems and enclosure design, as well as crop selection.

Please describe the type of consultation your company can provide to assist our planning committee with the information necessary to provide an informed decision regarding the development of a commercial aquaponics program. For the purpose of discussion, we will use the term "aquaponics" to imply both aquaponics and hydroponics, because your RFP refers to both. The outcome of the feasibility study will likely point to one of these systems as being most likely to meet your goals with differing risk factors, depending on your overall project goals, and we will evaluate the relative merits of both for your project.

We have experience in feasibility analysis and business planning for start-ups for both non-profit and for-profit enterprises. Since you mention "commercial business" in your earlier question, our assumption is that your project is to be a profit making enterprise which seeks both a positive operating Profit and Loss Statement as well as the recovery of investment capital.

Our first step is to understand your goals and objectives, the project site, the proposed scale of operations, and the local markets. We use an extensive confidential Questionnaire which we will provide to you to help us understand the current status of your project planning and development.

Based on our understanding of the limited goals expressed in this RFP, we propose our consultation to comprise the following elements, which would require a visit to your location (included in the budget):

- We will review your planning and budgeting documents relating to the project by phone and email, and will respond with our detailed Questionnaire for your completion. We will follow up with your designated project contact to clarify or complete it,.
- One Colorado Aquaponics (CA) staff member (Jim Frasche, whose resume is attached, for your reference) will visit your location to review and clarify any remaining Questionnaire responses with you, conduct site evaluation (if a site has been selected), identify market opportunities, and evaluate fish and crop choices which would be most appropriate for your markets and location.
- We will conduct market research to identify and understand demand for your fish and produce. We will seek to define what products you should produce, what the possible volume is for each product to be sold, who will buy them, at what price per piece or per pound, and at what time of year. We will develop a conceptual growing platform design which will result in estimates of productivity for the selected fish species and crops, and this combined data will provide the basis for the income side of the balance sheet.
- Based on the above, we can develop an initial enclosure and general operating systems design concept budget, including both the structure and general component selection, for developing the operating cost side of the P&L Statement, including labor requirements. Bringing together this income and expense data will give you an understanding of the proposed project's financial operating performance down to EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization).
- Based on the above, we will present a business case that will help you to understand the financial viability and performance of the project.
- We will provide an electronic Final Report .pdf file, and propose that we present the Report to you via teleconference. The report will emphasize:

- a. Comparative Pro-Forma P&L Statements for aquaponics and hydroponics, with an explanation of underlying market, technical, and financial assumptions and risk factors in the proposed business cases,
- b. Identification of information and data which we were unable to complete in the scope of this Report and which will have an impact on the success of the project,
- c. Presentation of comparative risks associated with aquaponic and hydroponic production,
- d. Basic conceptual designs for both aquaponic and hydroponic growing systems,
- e. Recommendations for start-up scale and incremental increases in capacity,
- f. Explanation of required technical and management skills to operate a successful greenhouse based aquaponic or hydroponic food business,
- g. Presentation of greenhouse and other possible alternatives as a growing environment,
- h. Presentation of acceptable chemical and biological characteristics of water resources,
- i. Presentation of electrical requirements and demand,
- j. Basic recommendations for fish and vegetable processing, packaging, and handling,
- k. Identification of support infrastructure requirements and site considerations, and a specific evaluation of your selected site, if you have selected a site, and
- l. Outline recommended next steps for moving to the next phase of decision making.

What are your costs for the development of a feasibility study? Please describe the expected outcomes of your feasibility study.

The cost of the feasibility study is \$6,500, including the cost of one site visit by CA staff. Our normal payment terms are 50% of the contract amount paid on signing our Agreement or Contract, and the remaining 50% to be paid on submission of our Final Report. This will leave \$1,000 from your grant to engage technical assistance, should you wish to proceed to the next phase, to work with a greenhouse manufacturer and understand local site preparation and construction costs under local code requirements, which is not included in the scope of this proposal.

By presenting the specific Report contents listed above, the expected outcome will be your understanding of core financial, technical, and market metrics that influence feasibility and risk, enabling you to make a business- like, analytically- based decision as to whether or not to go to the next stage of business development.

Please provide three references that can be contacted regarding your services.

Ken Armstrong - Owner, Ouroboros Farm ken@ouroboros.com

Dr Lydia Prado - Vice President of Child and Family Services, Mental Health Center of Denver. Lydia.prado@mhcd.org

Coby Gould - Executive Director, The Growhaus. Coby@thegrowhaus.org

Please provide a timeline for the completion of the study. The feasibility study could be prepared over a 30 to 60 day period, depending on when the Contract is signed, deposit payment received, and work is authorized to begin. Scheduling and availability of our staff will depend on business already in progress with other clients. We believe we could complete the work before the end of the year. The completion schedule will also depend on the timeliness and completeness of your Questionnaire responses, and availability of your staff to meet with the CA staff at your location at the time of his visit, and your participation as described below.

At the conclusion of this engagement, the Aitkin County MN Aquaponics Project is requesting a written report that addresses the following questions:

What are the pros and cons of operating an aquaponics business vs. a hydroponics business? What recommendations would you provide to a startup company?

What are the practical considerations that should be considered as we determine the next steps in our decision making process?

What type of construction do you recommend for a start-up program? What is an ideal square footage building, and how do you build to ensure continued expansion opportunities?

What is the market potential for the Aitkin area, and how much of the market can be captured?

Please provide examples or realistic profit/loss statements and explain the assumptions used to determine these conclusions.

What type of infrastructure is recommended for ample water supply and electrical needs? Are these better secured with city utilities, or can a rural area offer an adequate supply of water, electricity and other utility needs?

What additional services or resources can your organization provide in the next stages of our planning process?

All of these questions will be addressed in the final report. We will submit a written Final Report, and also can provide a presentation of the Report via online teleconference.

Projects of this nature are typically approached in phases with each major phase being dependent on the results of the previous phase. We can provide support in all these phases:

Phase 1—Project Evaluation, Conceptual Planning and Feasibility

Phase 2—Detailed Design Development of Food Production Systems

Phase 3—Procurement, Construction and Installation Management of the growing systems

Phase 4—Startup, Training, Turnkey Services and Support

We can also provide support in the production of:

- your Quality Manual, including standard operating procedures (SOPs), Operator's Manual and Management Processes
- Fish and Vegetable Processing plans
- Food Marketing and Distribution plans
- Food Safety Plans and SOPs

We offer a 4- day Aquaponics Farming Course four times per year, in Colorado, Florida, Texas, and California. The education and training programs scheduled through the end of this year may be seen at:

<http://www.coloradoaquaponics.com/education>

Concerning your question about the size of the Aitken market, and the possibility for you to control some volume or segment of this market:

It is a great question, and at the core of the income side of a projected Profit and Loss Statement. We advocate a business model based on meeting existing demand, rather than generally trying to create new demand for something new-to-market that you will grow, at least as a startup. Our staff will take the opportunity on his visit to your location to understand local consumption patterns, and therefore demand for your products, by visiting local food stores like Paulbeck's and Grandma's Pantry, for example, to see what is actually on the shelves, what the prices are, and gather additional information about seasonal costs and seasonal preferences, if any. He will also visit restaurants, the casino, tourist facilities, and other operations serving food, and try to interview owners and chefs/cooks as time allows in an effort to identify and understand seasonal consumption patterns. This is important, because both aquaponics and hydroponics are basically production management opportunities, offering the possibility to produce crops that command the highest prices in the "off" seasons, with rapid turnover. We would like to know, literally, who eats salad, for example, and whether it is just a summer dish. What produce do people eat in the winter? What are the relative perceptions of the various fresh water fish species available, and is there an opportunity to grow one of the same species and sell it fresh, rather than frozen, or should we consider a different variety?

We would like to think that we can draw on your resources on your website to introduce us to your community members who know something about what people eat, and what they pay for it. Can you give legitimacy and credibility to our staff by introducing him to local businesses, like grocers, which will benefit as potential customers of your project? As another example, are there seasonal farmers' markets, can we identify the farm stand operators, and are they available and willing to talk about the prices they charge for their produce?

It would be good to know if there are existing studies available through any of the resources listed on your website (or the University of Minnesota, your sponsor) relating to food consumption, dietary patterns, market segmentation by food "quality" descriptors like "local" and "organic", or related issues that would be helpful to us in identifying and targeting the higher profit consumer markets for you. You have a fairly homogeneous population, and any state-wide data would be useful. Clearly, while there is a variety of market segments in your community, ranging from a casino to restaurants and fishing/hunting camps, the range is limited, and we want to identify and evaluate niche markets and opportunities for higher value products.

As a startup, it is unlikely that you would begin operating at a scale beyond the size of the market, or ever reach a scale where you would out-pace demand, unless the chosen crops to produce are not consistent with market preferences. The real questions relate to what you can grow profitably for targeted markets which will buy every piece of every product you produce, day after day, and to design a growing platform and production management strategy that targets this demand in a consistent, high quality way. Hydroponics and aquaponics are basically a type of automated farming- you do not want to accumulate inventory of perishable products. You will want to brand and position your business as a reliable, safe, quality conscious grower that your customers can depend on.

Please note the attached resume, and do not hesitate to contact us if you require any additional information.

Thank you for inviting us to respond to your RFP. We hope to have the opportunity to work with

you.

Other information you should know:

- Proposals are due by October 31, 2016.
- Cost of the study, including any expenses, cannot exceed \$7,500.
- Aitkin County has received a Regional Sustainable Development Partnership Grant for hydroponic/aquaponics information through the University of Minnesota; this information will need to be included in the report and coordination with the University to avoid a duplication of information.
- Aitkin County will be the fiscal agent for this project.

Please submit information either electronically or via mail to:

Ross Wagner
Aitkin County Courthouse
217 2nd Street NW #131
Aitkin, MN 56431
rwagner@co.aitkin.mn.us

Contacts for further information:

Ross Wagner
Economic Development & Forest Industry Coordinator
Aitkin County
217 2nd Street NW #131
Aitkin, MN 56431
218-927-7305
rwagner@co.aitkin.mn.us

Michael Hagen
Executive Director
Aitkin Growth
316 1st Avenue NW
Aitkin, MN 56431
aitkingrowth.org
218-927-2172
218-838-6774 (mobile)
mike@aitkingrowth.org

9/23/16

JAMES W. FRASCHÉ

Denver, CO

Cell: (720) 212-6055

e-mail: jim@coloradoaquaponics.com

PROFESSIONAL QUALIFICATIONS

- Results-oriented, experienced executive with proven conceptual, leadership and management skills
- Extensive analysis and decision-making experience in both international and domestic business arenas
- Experienced team leader in multiple product sectors managing 50+ employees
- Creative marketer with proven success in managing companies with up to 100+ distribution, service, and sales organizations in diverse cultures, world-wide, including startups
- 30+ years experience in training and education in a wide variety of technical and management fields
- International Bottled Water Association (IBWA) Certified Plant Operator
- Two certifications in Hazards Analysis Critical Control Points (HACCP) for food safety management
- Trained in CARVER+ Shock (USDA security risk assessment) for food production operations
- Colorado Nursery and Greenhouse Association (CNGA) Certified Greenhouse Grower

RELATED BUSINESS EXPERIENCE

AVOLVE CORPORATION, dba Colorado Aquaponics, LLC, Denver, Colorado

A national leader in aquaponics system design and consulting, education and training, farm management, and retail sales.

Director, Farm and Business Solutions, November, 2013 to Present. Responsibilities include working with aquaponics, hydroponics, and raised bed farming clients to assure sustainability of operations. This includes business financial and market analysis and feasibility studies; design of food growing systems and supporting infrastructure to meet financial, market, food quality and security goals; and multi media integration to optimize system performance around site location and environmental constraints and opportunities.

TURN-KEY AQUAPONICS, LLC, Denver, CO and Kabul, Afghanistan

Startup small business partnership designing and installing proprietary, integrated aquaculture, hydroponic, aquaponic, and raised bed food growing systems and greenhouse structures for high altitude, cold climate locations.

Chief Operating Officer, April, 2011 to Present. Responsibilities in Denver include the design, construction, operation, and evaluation of commercial hydroponic, aquaponic, and raised-bed systems suitable for the Colorado and Afghan markets. Innovated several greenhouse designs and food growing methods which have resulted in proven, integrated, turn-key systems ready for Colorado application, and technology transfer as a franchise-based business in Afghanistan. With excellent projected financial returns and social benefits, these businesses support education, local food security, food quality and safety, and employment opportunities for the private sector and will result in several related spin-off businesses in composting, vermiculture, fertilizers and fish meals, fish food, and food processing, distribution, and service. First applications expected in the Fall of 2016.

AFGHANISTAN NATURAL BEVERAGES, LLC, Kabul, Afghanistan

A leading high-quality sanitary water bottler in Afghanistan.

Chief Operating Officer, April, 2005 to April, 2008. Built and operated this high-quality beverage bottling operation in some of the most difficult social, business, sanitation, and security conditions in the world. Responsible for P&L performance of the Company. About 40 Employees.

- Developed full process design and technology selection for PET bottle production, sanitary filling, and packaging operations for bottled water.
- Retooled and restructured production assets rated at 40,000 bottles per day capacity, to new capacity of 60,000 BPD by implementing innovative training and production management techniques.
- Wrote and implemented Quality Manual and education and training programs, enabling the Company to produce safe, sanitary, and consistent beverages in single-use and multiple-use containers to IBWA and 98/83-EC standards in multi-shift operations.
- Trained local staff to implement all QC, HACCP, and CIP programs to US DOD audit standards.
- Identified all sources, and managed all procurement and logistics supply chains for technology and raw materials from suppliers in USA, Europe, Middle East, and Asia
- Supervised marketing and sales programs, attracting customers including Afghan and foreign government offices, airlines, Kabul Airport, NATO Military units UN Agencies, and Afghan wholesalers throughout the country.
- Successfully positioned Company to take market share from highest quality importers (Nestle', Emirates)

INTERNATIONAL FOUNDATION OF HOPE (IF HOPE), Jalalabad and Kabul, Afghanistan

Non Governmental Organization (Non-Profit NGO) with extensive tree nursery operations in Jalalabad, and a K-8 private co-ed school in Kabul. About 150 employees.

Deputy Director, January, 2006 to April, 2008. Initially worked as a consultant to perform a management audit for the Owner and newly hired Director of the Jalalabad tree nursery operation. Presented and implemented Audit recommendations, and was then retained to perform a comprehensive Security Assessment. The Jalalabad nursery produces more than 2 million fruit, nut, and wood-lot trees per year, and is partially financed by USAID as a counter-narcotics and economic development alternative livelihoods project for opium poppy crop substitution. Assisted in negotiating expanded program scope, redefining monitoring protocols, and setting realistic field performance evaluation criteria. Assisted the Director in daily operations, tightened financial monitoring and control, interfaced with local staff of approximately 150 Afghans on behalf of the Director.

EUROPA DESIGN, INC., Denver, CO

Landscape design, installation and maintenance company serving greater Denver metropolitan area.

Operating Partner and President, June, 2001- April 2005. Purchased tax-distressed company assets from the Internal Revenue Service, restructured, operated, repackaged, and sold the company.

- Year-round operations employing 30 workers.

KNUDSON MFG., INC., Broomfield, CO (1993- 2001)

A world leader in manufacturing mobile roll-forming machinery for the building and construction industry. Privately owned, 60 employees, with global sales through over 100 distributors.

Executive Vice President, June, 1999- May, 2001. Reporting to the Owner, with overall operating responsibility for P&L performance, and direct supervision of all departments.

- Re-staffed the accounting department, leading to timely and accurate financial reporting and inventory reduction
- Re-staffed the Production Management Department, leading to fully documented manufacturing practices resulting in production of the Company's first Quality Manual for manufacturing and support of complex product line
- Supervised development of systems for accurate inventory management and production cost-control
- Maintained responsibility for all business relationships in Europe and Asia
- Organized a company-wide participatory planning process, producing the Company's first strategic business plan

Director of Marketing and Sales, January, 1993- May, 1999. Restructured distribution, sales, and service channels, increasing gross sales from under \$4 million to over \$9 million.

- Conceptualized and implemented plan increasing international sales from 4% in FY 1993 to over 55% in FY 2000
- Restructured pricing strategy, increasing gross margins dramatically across the product line
- Redefined Company and product placement through adoption of internationally recognized UL and CE testing and quality standards
- Redefined product mix to increase market share and growth for highest profit product lines
- Downsized and reorganized sales department, & reintroduced organization, discipline, and motivation to sales force

PREVIOUS EXPERIENCE

- World Technology Group, Inc., and World Network Trading, Inc. Import/Export operations management.
- Denver Research Institute, University of Denver. Management Scientist. Management consultant to research institutes under USAID contracts in Pakistan, Egypt, Indonesia, Thailand, Venezuela, and Colombia.
- RCA Globcom Systems, Inc., Teheran, Iran. Curriculum development, instructor, and training center management for Iranian Army communications training center.
- University of Pennsylvania Museum, Iranian Azerbaijan. Field expedition photographer.

EDUCATION

MIM, American Graduate School of International Management
BA, Anthropology, Colorado State University

COMMUNITY INVOLVEMENT

World Trade Center- Denver, Board of Directors (1988-90)
University of Colorado Medical Center, Cancer Cure Community Advisory Board (1996-2001)
Byrne Foundation (now Denver Urban Scholars), Mentor to inner city youth and families (1999- 2005)
University of Denver High School, Advisory Board Member (2001-2003)
French-American Business Association (Denver), Founding Member
Afghan International Chamber of Commerce, Kabul, Member (2006 to 2008)
International Bottled Water Association, Member (2006- 2009)
International Code Council, Member (2008- 2009)
Construction Specifications Institute (2008- 2009)
Colorado Committee on Foreign Relations, Member
Colorado Nursery and Greenhouse Association, Member
Colorado Fruit and Vegetable Growers Association, Member

Ross Wagner

From: Dave Roeser [droeser@gardenfreshfarms.com]
Sent: Friday, October 21, 2016 2:27 PM
To: rwagner@co.aitkin.mn.us
Subject: RFP
Attachments: Garden Fresh Farms XXXXXXXXXXXXXXXXproject 2016.docx; Feasibility Study Request for Proposal -Aitkin County.pdf

Ross,

Thank you for the opportunity to submit a RFP for the project.

I have attached a document with answers to the questions from your letter.

Also enclosed is a sampling of the awards we have won, our product line and our sustainability compass. I have also included a second document that briefly describes a 3P, Public Private Partnership farm that we will start building next month.

I look forward to a favorable reply regarding the RFP, and being able to help Aitkin County with the Regional Sustainability Development project.

Regards,

Dave Roeser
Garden Fresh Farms, Inc
www.GardenFreshFarms.com



Winner 2013 CleanTech Open



Division Winner 2013 Minnesota Cup



CONFIDENTIALITY

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Garden Fresh Farms™
Sustainable Agriculture

Feasibility Study Request for Proposal

October 2016

Garden Fresh Farms
1065 Hwy 36 E
Maplewood, MN 55109

Dave Roeser
droeser@gardenfreshfarms.com
612-741-7747 cell

Established March 2010

Operate from two locations: Maplewood and St. Paul. St. Paul farm is Aquaponic and grows herbs which are sold under the Garden Fresh Farms brand at Lund's and Kowalski stores.

In November we will be starting installation of a new farm in Connecticut and have proposals for Minnesota and South Dakota.

We have a complete business package.

- Consulting and feasibility study up front.
- CAD design a farm to the building with our patent pending equipment and methods.
- We install the equipment and provide training
- Manuals with job descriptions, HAACP plans, GAP certification plans, marketing process, etc.
- Licensing and support with Garden Fresh Farms brand and help in getting products sold through existing approved vendor list.
- Proforma P&L statements
- Use of Funds statements
- Suppliers of packaging, fertilizers, media, seed and other farm related items.

A feasibility study is \$5,000 but can increase if the customer has additional requirements. Travel is additional. The study will involve the market, budget, weather, distribution, jobs created, energy study, products to be grown, plant and aquaculture species selection, site selection, re-use or build evaluation, and CAD designs.

References:

Dr. Wayne Dorband
New Tech Haven
New Opportunities Inc.
CleanTech Open
Minnesota Cup
Dr. Phelps – Aquaculture Professor @ the U of M
AURI

Time Line: Depends on travel schedules, but normally takes a couple weeks for the first proposal.

Recognition and Awards

Garden Fresh Farms has been featured in both the Minneapolis Star-Tribune, and the front page of the St. Paul Pioneer Press, as well as magazines such as Minnesota Monthly, Delta's Sky Magazine, Minneapolis-St. Paul magazine, Food Service News, Twin Cities Business, Finance & Commerce, Midwest Energy News and UPSIZE magazine. Dave Roeser, the founder, has been on numerous talk shows, and has been a featured speaker at a number of events.



Garden Fresh Farms was the Minnesota Cup 2013 winner of the Energy and Clean Tech Division Award. The company was also the winner of the 2013 Midwest Regional Clean Tech Open Competition and won the Sustainability Award by near unanimous vote in October and then went on to win the National Clean Tech Open Global Forum in San Jose, California where the company won the National Sustainability award. At that same Forum Garden Fresh Farms also won the People's Choice Award. In 2014 we have been honored with Progress Minnesota, Eureka Award, the Green Products award from the City of St. Paul and recently the Sustainability Award from the City of Maplewood.



Products Grown and Sold



Our business model has **sustainable benefits** that are all-encompassing

Environment

- Reduce water use 90%
- Reduce energy 50%
- Reduce land use 100:1

Consumer

- All-natural, no pesticides
- Fresher, tastier, higher nutrient value
- Competitive price
- Year-round quality



Economic

- Investors achieve solid return on investment
- Real estate investment trusts (REIT)

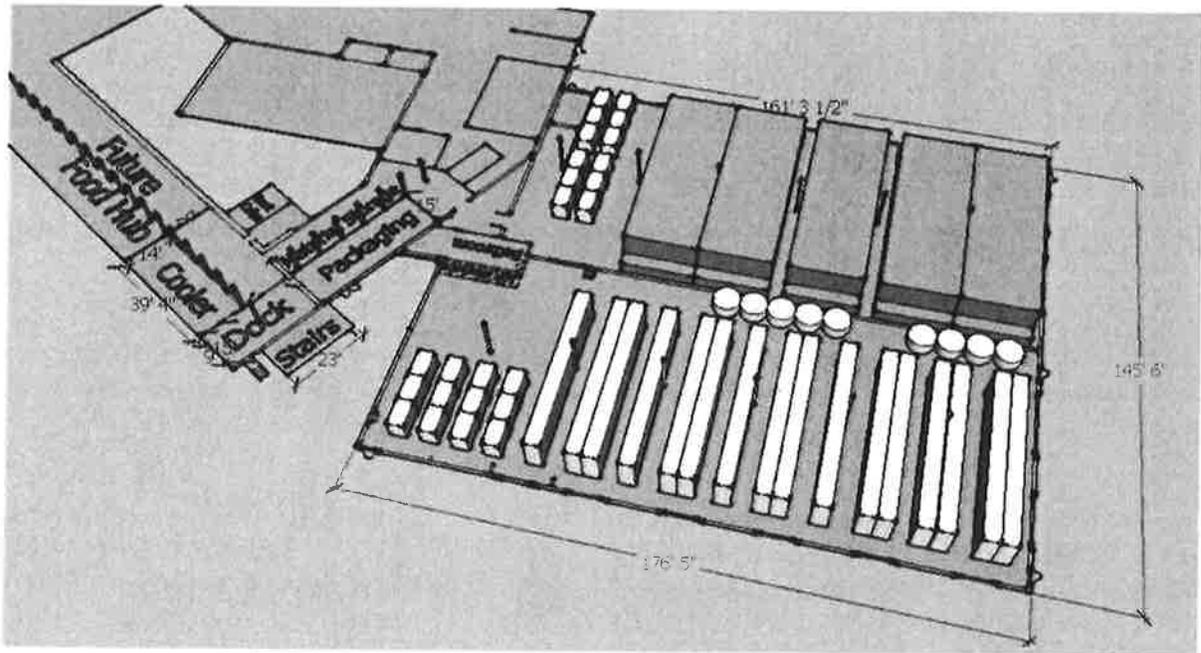
Social and community

- Revitalizes neighborhoods
 - Local access to healthy food through CSAs
 - Creates jobs
-

Garden Fresh Farms New England Farm

Garden Fresh Farms, Inc. has recently entered into a Letter of Intent with a large non-profit agency, to develop a commercial farm in a brownfield redevelopment site. This is a private/public partnership (3P) that will create jobs, training center, increased access to healthy food, local farmer food hub, education and university research opportunities. Other partners include the State of Department of Social Services and Economic Development, the City's Mayor's office, Landlord, and the Chamber of Commerce.

The project is to build an indoor farm within an old warehouse using Garden Fresh Farms equipment, methods, trademarks, distribution partners and ongoing support. Operational profits will be used to fund the social impact initiatives in the City.



Michael Hagen

From: Oliver Baysinger <baysinger@aquaponics.com>
Sent: Friday, November 04, 2016 3:53 PM
To: Mike Hagen
Subject: RE: Feasibility Study Proposal
Attachments: Aitkin Project Plan Consulting Agreement - Merge Template1.docx

Mike

I am attaching our project planning agreement. Not as a contract but as a description of the phases of the project planning process with fee notated in the text. (\$4500 total)

Also please follow the link to the website information. <http://aquaponics.com/business-opportunities/project-planning/>

Please let me know if this helps.

Oliver E. Baysinger
Business Manager
Nelson and Pade, Inc.
www.aquaponics.com
608-297-8708

From: Michael Hagen [mailto:mike@aitkingrowth.org]
Sent: Friday, November 04, 2016 11:55 AM
To: Oliver Baysinger <baysinger@aquaponics.com>
Subject: RE: Feasibility Study Proposal

Thank you for your update. As we are working with a small group of individuals within our community I will share with them the information I received regarding the details outlined in the Project Plan Development outline. As we look at the various proposals I would like to get some idea of what the range of consultation would be for a project proposal. I know you do this in three phases and not sure if the costs are for all three phases or if these are broken down my Phase 1, 2 and 3. We are looking at a commercial venture similar in size to the Nelson + Pade 6-800 specifications. I know that any projected fees are based on more variables than I have provided but would like to give our committee some perspective of what your range of fees may be to ensure that Nelson + Pade will be considered.

Thanks Oliver.

Michael Hagen
Executive Director
Aitkin Growth
316 1st Avenue NW
Aitkin, MN 56431
aitkingrowth.org
218-927-2172
218-838-6774 (mobile)

From: Oliver Baysinger [<mailto:baysinger@aquaponics.com>]
Sent: Friday, November 04, 2016 8:03 AM
To: Mike Hagen <mike@aitkingrowth.org>
Subject: RE: Feasibility Study Proposal

Mr. Hagen,

Thank you for the note. In meeting about your feasibility study we came up with a couple answers. To do a real feasibility study our firm would have to become very familiar with sales and marketing trends in your area plus a host of other factors. While we can look at your geographical area and point out where we would see possible purchasers of aquaponic produce, to do a real feasibility study taking into consideration all variables required is a bit out of our scope. We do offer project planning services that helps you through all the set up and implementation of an aquaponics facility including a spreadsheet specific to your project, equipment, and projected production of produce. Additionally it gives you initial costs, operating costs, percentage of profits, and return on investment. There is a fee for this service however, but the vast majority of our larger growers engage us to do this for them. It is useful tool when dealing with local zoning authorities, possible funding sources, and any state's department of natural resources. All that being said we would be honored to be involved in your project and I am confident you would find us to be responsive, knowledgeable, and thorough in our approach to your goals and concerns. I am afraid however, that your community would need to engage a professional marketing firm to conduct a true feasibility study. I am sure you will find that there is a place for aquaponics in your city and surrounding areas. We stand ready to assist your group to make that place rewarding, educational, and profitable.

Please let me know about anything I can do to help.

Sincerely,

Oliver E. Baysinger
Business Manager
Nelson and Pade, Inc.
www.aquaponics.com
608-297-8708

From: Michael Hagen [<mailto:mike@aitkingrowth.org>]
Sent: Tuesday, November 01, 2016 10:04 AM
To: Oliver Baysinger <baysinger@aquaponics.com>
Subject: Feasibility Study Proposal

Oliver

I very much enjoyed the Business and Investment Opportunities workshop that I attended on October 22nd. Nelson + Pade received a request from Aitkin Growth and Aitkin County for a feasibility study that is being sought to determine if

an aquaponic/hydroponic commercial business is feasible for our area. I believe you mentioned that you were going to submit material to us and I have not seen this yet so let me know so I can include your name in our review process. You may either send via mail or electronically. I believe all correspondence is being sent to Ross Wagner at: rwagner@co.aitkin.mn.us.

Please let me know if you have other specific questions or need further clarification.

Thanks.

Michael Hagen
Executive Director
Aitkin Growth
316 1st Avenue NW
Aitkin, MN 56431
aitkingrowth.org
218-927-2172
218-838-6774 (mobile)

Agreement for Consulting Services

1. Names

This agreement is between «First_Name» «Last_Name», (Client), and Nelson and Pade, Inc., a Wisconsin corporation (Consultant).

2. Services to be performed

Consultant agrees to perform the following services for Client:

Consultant will conduct a project plan for the purpose of planning, designing and organizing the construction of an integrated aquaponic system to be located in the «City», «State» area. The proposed greenhouse will be approximately «Square_Footage» square feet. The purpose will be for the production of fresh fish and vegetables in an aquaponic system. The proposed facility will include a primary aquaponic growing system for commercial crop production, a crop packing area, fish nursery and plant propagation area.

In addition to offering recommendations on the environmental control and aquaponic culture systems, issues such as power, water source, existing infrastructure, market demands, labor required and business potential will be addressed. A written project plan report will be delivered to the Client upon completion of the project planning services.

The written Project Plan Report will include the following topics: Introduction and Project Overview; Industry History; Facility Overview; Proposed Aquaponic System; Environmental Control Requirements, Greenhouse Recommendations; Crop Recommendations; Marketing Considerations; Bio-Security and Food Safety; Site

Considerations and Recommendations; Infrastructure Considerations; System Installation Requirements and Time Frame; Staff and Labor Requirements; Estimated Project Costs (aquaponic systems, materials, specialists, contractors, etc); Estimated Income and Estimated Operating Expenses; General Comments; Conclusions;

Nelson and Pade, Inc. will perform the project planning and prepare the project plan.

Areas that Client will need to research and pursue include;

Infrastructure issues, permitting and zoning

Client will need in pursue quotes from local specialists, including an electrician, heating and cooling specialist, plumbing contractor, and contractor for installation of cold storage, contractor for any related structures, offices, storage, restrooms or other locally-required infrastructure. Client will provide photos and details of the proposed site and information related to local issues and costs to Consultant.

3. Time for Performance

Consultant will perform the services according to the Schedule of Work set forth below. This timeline is based on the execution date. The timeline might vary depending on site evaluations, discussions, input from the Client and quotes from manufacturers and contractors.

The project planning will be conducted in three parts:

1: One - three weeks after consultant receives the signed agreement and payment: Project discussions; exchange of information relating to the building, environmental needs, growing systems, etc.

2: One - three weeks after part 1: Preliminary Report. Consultant will prepare a

preliminary report based on the communications and information gathered to date. The purpose of the preliminary report is to provide a project overview, concepts and early cost estimates. Fine tuning of the project plan will result from this preliminary report.

3: Two - four weeks after part 2. Completion of the Project Plan Report. Consultant will prepare and deliver the complete Project Plan Report. Consultant will be available to meet with Client in person or by phone to discuss the details of the report.

4. Payment

Client will pay Consultant \$4500 for said services. Integrating technologies in addition to aquaponics or drastically changing the direction, scale or focus of the project will require additional time and effort by Consultant. Changes of this type will result in additional costs to Client. System assembly, installation guidance, commissioning of equipment, training and other services offered by Consultant will be quoted separately.

5. Terms of Payment

This agreement can be initiated with a payment and the signed Consulting Agreement.

6. Limited Liability

Every attempt will be made to ensure the accuracy of the information provided by the consultant. Designs will be based on current technology and equipment. Labor needed, time of construction and other areas can vary, depending on quality and availability of labor and materials and cannot be guaranteed by Consultant. Actual production levels may vary. Consultant recommends manufacturers and suppliers based on quality, past history and price competitiveness. Consultant is not responsible for manufacturer's quality of work or product. Consultant is not responsible for the hiring of or payment to said manufacturers or contractors. Consultant is not responsible for back-orders, mis-

shipments, defects, or other quality issues with the manufacturers. Consultant is not responsible for contractor's quality of work, workers or related liabilities. Consultant is not a general, electrical or plumbing contractor and does not assume the role, responsibility or liability of a contractor.

Neither party to this agreement shall be liable for the other's lost profits, or special, incidental or consequential damages, whether in an action in or contract or tort, even if the party has been advised by the other party of the possibility of such damages.

7. Expenses

Consultant will be responsible for all expenses required for the performance of the contractual services, except for the following, which will be paid for by Client:

Travel expenses, if required, including: airfare, lodging, local transportation, daily per diem for meals and incidentals (\$80).

Consultant shall submit an itemized statement of these expenses. Client shall pay Consultant within 10 days from the date of each statement.

8. Terminating the Agreement

This agreement will become effective when signed by both parties and will terminate on the earlier of the date Consultant completes the services required by this Agreement or the date a party terminates the Agreement as provided below.

With reasonable cause, either party may terminate this Agreement effective immediately by giving written notice of termination for cause. Reasonable cause includes:

- a material violation of this Agreement, or
- Client's failure to pay Consultant's fees as provided in this agreement, where Consultant has demanded payment, in writing, and has not received payment.

In addition, either party may terminate this Agreement at any time by giving 30 days written notice of termination.

Consultant shall be entitled to full payment for services performed prior to the date this Agreement is terminated.

9. Intellectual Property Ownership

Consultant shall retain all copyright, patent, trade secret and other intellectual property rights Consultant may have in anything created or developed by Consultant for Client under this Agreement ("Work Product"). Consultant grants Client a limited, nonexclusive license to use the Work Product for the purpose of pursuing funding and developing this project. Content of the Feasibility Study Report and Project Plan can be used for the client's project only. It cannot be sold, made public or shared with others. The information provided by the Consultant to the Client cannot be used by Client in a business enterprise that competes with the Consultant.

Consultant will not share information specific to this project with other clients, potential clients or others who would be potential competitors to the Client.

10. No Partnership

This Agreement does not create a partnership relationship. Neither party has authority to enter into contracts on the other's behalf.

11. Entire Agreement

This is the entire agreement between the parties. It replaces and supersedes any and all oral agreements between the parties, as well as any prior writings.

12. Successors and Assignees

This agreement binds and benefits the heirs, successors and assignees of the parties.

13. Notices

All notices must be in writing. A notice may be delivered to a party at the address that follows a party's signature or to a new address that a party designates in writing. A notice may be delivered: in person; by certified mail or by overnight courier.

14. Governing Law

This agreement will be governed by and construed in accordance with the laws of the state of Wisconsin.

15. Counterparts

This agreement may be signed by the parties in different counterparts and the signature pages combined will create a document binding on all parties.

16. Modification

This agreement may be modified only by a written agreement signed by the parties.

17. Waiver

If one party waives any term or provision of this agreement at any time, that waiver will be effective only for the specific instance and specific purpose for which the waiver was given. If either party fails to exercise or delays exercising any of its rights or remedies under this agreement, that party retains the right to enforce that term or provision at a later time.

18. Severability

If any court determines that any provision of this agreement is invalid or unenforceable,

any invalidity or unenforceability will affect only that provision and will not make any other provision of this agreement invalid or unenforceable and such provision shall be modified, amended or limited only to the extent necessary to render it valid and enforceable.

CLIENT

Name: «First_Name» «Last_Name»

Address: «Address_Line_1»

City, State, Zip: «City», «State», «ZIP_Code»

Dated: _____

By: _____

Name: _____

CONSULTANT

Nelson and Pade, Inc.,

A Wisconsin corporation

PO Box 761

Montello, Wisconsin 53949

Taxpayer ID: 26-1375556

Dated: _____

By: _____

John Pade

Chief Technology Officer

Dated: _____

By: _____

Rebecca Nelson

Chief Branding Officer