December 11, 2015

Investment Proposal

By Kemal Talen, Aaron Venema, Matthew Schanck, and Kat Wever
Executive Summary
SI Consulting

Company Leadership
Consulting Engineer - Matt Schanck
Consulting Engineer - Katherine Wever
Receptionist - Kemal Talen

Consulting Engineers (2)
Both engineers have Bachelor’s degrees in civil engineering, a Professional Engineering License, and four years of design experience. The implementation of these design solutions are relatively new, and both engineers have experience designing these systems. These two engineers are knowledgeable about stormwater reuse design and are highly self-motivated to complete assigned tasks. The resumes for these employees is attached and can be seen in the Appendix.

Receptionist (1)
This employee will manage phone calls, clients, paperwork, and handle busy work around the office.

Company Brief
SI Consulting is a start-up consulting firm that focuses on design of storm water irrigation systems and installment through building contractors and developers. The company values sustainability, caring, transparency, and trust.

Market
SI Consulting’s target will be several types of clients. First, the company will market design services to engineering firms. This will allow the company to have a steady inflow of design work as the engineering firms supply the company with projects that require the company’s specialty design service. The company will not have much name recognition initially and being sub-contracted by other firms will help with increasing clientele and name recognition. Next, the company will seek out to be the primary consultant for projects. This means it will design the system then sub contract all of the work. This will require the company to manage the project and all of the subcontractors. Initially, this method will be challenging, but overtime the company will develop name recognition and contractor relationships. Finally, the company will contract out design services to developers who wish to use the company’s specialty designs.

Business Strategies
Several strategies have been developed to ensure the success of the company. The company will create multiple design alternatives to show traditional designs compared to stormwater reuse designs. The initial cost and the return on investment (ROI) analysis will show customers that the product is not only an environmentally friendly option, but also a cost effective method. This will
reassure potential clients that the specialty design service is the correct decision. The company plans to develop good professional relationships, customer relationships, network, and advertisements of their product. Implementing these strategies will give the company a good reputation and name recognition.

**Financials**
SI Consulting is requesting an initial loan of $144,500. This will cover the first 6 months of employee salaries as the company is still establishing a regular client workload, office lease, engineering software, computers, engineering printers, and a printing budget.
Contents

Executive Summary ............................................................................................................................................. 0

Company Leadership ......................................................................................................................................... 1

Company Brief .................................................................................................................................................. 1

Market ............................................................................................................................................................. 1

Business Strategies .......................................................................................................................................... 1

Financials .......................................................................................................................................................... 2

1. Vision and Mission Statement ....................................................................................................................... 6

  1.1 Entrepreneur’s Vision for the Company ..................................................................................................... 6

  1.2 Values and Principles on which the Business Stands .............................................................................. 6

2. Industry Profile and Overview ...................................................................................................................... 7

  2.1 Industry Background and Overview ........................................................................................................ 7

  2.1.1 Major Customer Groups ..................................................................................................................... 7

  2.1.1.1 Agricultural/Industrial Building Contractors ................................................................................. 7

  2.1.1.2 Local Municipalities ....................................................................................................................... 7

  2.2 Industry Background and Overview ........................................................................................................ 7

  2.3 Significant Trends .................................................................................................................................... 7

  2.4 Growth Rate ............................................................................................................................................ 7

  2.5 Barriers to Entry ....................................................................................................................................... 7

  2.6 Key Success Factors in Industry .............................................................................................................. 7

  2.7 Outlook for the Future ............................................................................................................................. 7

3 Business Strategy .......................................................................................................................................... 8

  3.1 Desired Image and Position on Market ..................................................................................................... 8

  3.2 Company Goals and Objectives ............................................................................................................... 8

  3.2.1 Operational ......................................................................................................................................... 8

  3.2.2 Financial .............................................................................................................................................. 8

  3.3 SWOT Analysis ....................................................................................................................................... 8

  3.3.1 Strengths ........................................................................................................................................... 8

  3.3.2 Weaknesses ....................................................................................................................................... 8

  3.3.3 Opportunities ..................................................................................................................................... 8

  3.3.4 Threats ............................................................................................................................................... 8

3.4 Competitive Strategy .................................................................................................................................. 9

  3.4.1 Cost Leadership .................................................................................................................................. 9
8.1 Key Employees .................................................................................................................. 14
8.2 Future Additions ................................................................................................................ 14
8.2.1 Consultants .................................................................................................................... 14
8.2.2 Financial Experts .......................................................................................................... 15
8.2.3 Field Inspectors/modelers ............................................................................................ 15
9 Plan of Operation .................................................................................................................. 15
  9.1 Legal Form of Ownership ................................................................................................. 15
  9.2 Organization .................................................................................................................... 15
  9.3 Decision Making Authority ............................................................................................. 15
  9.4 Compensation and Benefits ............................................................................................. 15
  9.5 Facility .............................................................................................................................. 15
10 Financial Forecasts .............................................................................................................. 16
  10.1 Financial Forecast ......................................................................................................... 16
  10.2 Key Assumptions .......................................................................................................... 16
  10.3 Financial Statements ..................................................................................................... 16
    10.3.1 Income Statement .................................................................................................... 16
    10.3.2 Balance Sheet ......................................................................................................... 16
    10.3.3 Cash Flow Statement ............................................................................................. 17
  10.4 Break-Even Analysis ..................................................................................................... 17
  10.5 Ratio Analysis ............................................................................................................... 17
11 Loan or Investment Proposal ............................................................................................... 17
  11.1 Amount Requested ....................................................................................................... 17
  11.2 Purpose of Uses of Funds ............................................................................................. 17
  11.3 Repayment Schedule .................................................................................................... 17
  11.4 Timetable for implementing plan and launching the business ....................................... 17
1. Vision and Mission Statement

1.1 Entrepreneur’s Vision for the Company
SI Consulting’s vision is to promote environmental stewardship through consulting with building contractors in the implementation of stormwater irrigation systems that help meet runoff standards.

1.2 Values and Principles on which the Business Stands
The company values sustainability, caring, transparency, and trust in everyday business practices. The company strongly believes in the sustainability design norms because the owners want to protect and preserve the environment. The second design norm is caring. This applies to the company maintaining the safety of all of the individuals that interact with the stormwater irrigation system. The third design norm is transparency. Due the high publicity of these types of projects, the company will disclose any information pertinent to the safety and health of any affected communities. The last design norm is trustworthiness. The company will offer a service that people can rely on and trust that it will meet their demands. The company has decided on these design norms to be implemented and upheld in their work. These design norms are strongly tied to the owner’s Christian values and ideals.

2. Industry Profile and Overview

2.1 Industry Background and Overview
Major uses for stormwater harvesting are in irrigation. Stormwater harvesting is becoming more popular with homeowners, institutions, and industrial plants. Overall, stormwater harvesting is used mostly for irrigation and non-potable water (flushing toilets), but some uses even include potable-water. Irrigation accounts for 34% of water use in the world. Making irrigation more renewable through stormwater harvesting is a growing industry in Michigan. In Washington state, stormwater harvesting is being used more frequently in residential homes due to large water bill costs.

2.1.1 Major Customer Groups

2.1.1.1 Agricultural/Industrial Building Contractors
SI Consulting’s end customers will be agricultural/industrial building contractors. The company will work directly with building contractors to implement stormwater irrigation systems into their building plans. The company’s expertise in this area will be highly valued with building contractors trying to meet runoff standards in industrial areas.

2.1.1.2 Local Municipalities
SI Consulting will also work directly with city officials to educate them on the cost benefits of stormwater irrigation. The company will work with city contractors to implement these systems into existing and new constructions. As well as performing case studies for large projects that involve large public funding.
2.2 Industry Background and Overview
The DEQ (Department of Environmental Quality) has placed limitations on construction for new development. The DEQ requires that new development stormwater surface runoff is lower or equal to the pre-development runoff for a 2-year 24 hour storm event or the first 2 inches of rainfall (Location dependent). This requires developers in Michigan to consider stormwater harvesting. Stormwater harvesting provides a way to manage runoff water while gaining an economical gain from the reuse of greywater. Stormwater harvesting means that buildings retain the water that would accumulate from a rainfall. Stormwater irrigation is an additional process that repurposes collected water for non-potable (flushing toilets, irrigation, etc) and irrigation water. The type of buildings that use stormwater irrigation systems range from residential to commercial to agricultural.

2.3 Significant Trends
Stormwater irrigation is becoming more common in urban areas where infiltration is not always possible and cost savings from reuse of water are high. It is also becoming more common with commercial buildings that require large amounts of non-potable water. In terms of water treatment, the level of water quality requirements for reuse are determined by local municipalities and state governments and can affect the use of stormwater irrigation systems. In general, when public health is not a safety issue, stormwater irrigation is allowed.

2.4 Growth Rate
Stormwater reuse and irrigation is rapidly growing in popularity across the US. It is especially popular in states that have drought problems and high water utility costs. In states such as Washington, water reuse is becoming more popular in residential homes. In other countries such as Australia, water reuse is being used to overcome water shortages.

2.5 Barriers to Entry
Barriers to entering the consulting business are raising starting capital, developing a project team, finding clientele, utilizing development software, and obtaining legal rights to operate. Barriers to exiting the industry include on-going projects, unreturned starting funds, and binding contracts.

2.6 Key Success Factors in Industry
One key success factor in the industry is utilizing inexpensive, small, above ground space usage. Another pair of factors is utilizing minimal effective filtration for small-scale systems and high effective filtration with large capacity for large scale systems.

2.7 Outlook for the Future
As the years go on, more local governments will establish regulations for stormwater reuse water treatment levels, which will allow the company to expand into new markets.
3 Business Strategy

3.1 Desired Image and Position on Market
SI Consulting desires to be a leader in the residential and commercial stormwater harvesting market. Also well-known and trusted among commercial building contractors and other civil engineering firms. While creating a trustworthy company image by through quality design and maximum return on investment for clients.

3.2 Company Goals and Objectives

3.2.1 Operational
SI Consulting’s operational goal is to design stormwater reuse systems for irrigation in commercial, academic, and some residential areas. The company also wishes to implement these practices in an economically feasible manner. This will be done by developing designs with site specific details as well as generic pre-site development designs to produce fast turnaround time.

3.2.2 Financial
SI Consulting’s financial goal is to make the design and implementation of the stormwater reuse system as cost effective as possible for the clients while still allowing for general profit for the design firm.

3.3 SWOT Analysis

3.3.1 Strengths
One of the main strengths of the SI Consulting is that the service is of high quality and has a low overhead cost. The design for a cleaner and more environmentally friendly system will attract environmentally friendly clients. The company will be specializing in the reuse system designs. This means the company will focus on similar designs and become very effective as they become well versed with the local geography and client needs. Another strength of the company is that the employees are fully invested in the success of the company because they own the company.

3.3.2 Weaknesses
One of the primary weaknesses of the SI Consulting is being dependent on building contractors for work. Another weakness of the company is the size of the company; the company is small (only three employees) and does not have the reach that other consulting firms have to attract customers. One last weakness is that there will be no senior engineer in the company.
3.3.3 Opportunities
The main opportunity of SI Consulting is the growth of the market in the field of consulting. As stormwater reuse becomes more accepted by the general public the company will gain more business.

3.3.4 Threats
The primary threat to the SI Consulting is the potential for no employment. Smaller engineering firms have a potential of not receiving consulting opportunities, while larger firms have a potential of not needing the company’s services in lieu of the larger firms may potentially have departments for this specialized service.

3.4 Competitive Strategy

3.4.1 Cost Leadership
Companies offering stormwater management, and irrigation systems will be the SI Consulting’s primary competitors. The company's price objective will be to offer stormwater reuse design solutions at the same rate as traditional stormwater management. Being able to offer design solutions and project implementation at a competitive price will draw consumers to choose the more environmentally friendly option. This solution also has a return on investment with water saved, making this the long term financially responsible decision.

3.4.2 Differentiation
SI Consulting will strive to have a service to differentiate themselves from competitors. This involves finding methods to stay ahead of the curve with technology and design standards. These two methods are investing resources in research and development, along with staying invested in the new emerging systems globally.

3.4.2 Responsive
The response to customer demand ties directly into what differentiates SI Consulting. The company will constantly look to seek improvements to their design approach, keeping the design team ahead of the curve. Using the latest available design approaches keeps the company highly sought after for design development.

4 Company Products and Services
SI Consulting’s main service is consulting with building contractors on stormwater reuse and irrigation implementation.
4.1 Description

4.1.1 Product Features
SI Consulting provides planning and design services for the storage and reuse of stormwater runoff. This service will include the stormwater calculations required by the DEQ for new construction projects. The company will get the client approved for construction on the new development sites. If the company is hired as the primary contractor for the project, it will take the responsibility of subcontracting and managing the project.

4.1.2 Warranties and Guarantees
SI Consulting will guarantee a structurally sound and functional design. If the company is the primary contractor for the design, it will claim responsibility of ensuring that the subcontractors do a satisfactory job. If the subcontractors are at fault of poor construction, it is the responsibility of SI Consulting to enforce reconstruction at the subcontractor's expense. If the structure fails due to design problems, SI Consulting will take responsibility for reconstruction and recover all the costs. Proper client maintenance must be performed as necessary. If the design fails due to poor maintenance, SI Consulting will not be responsible for the failure.

4.1.3 Uniqueness
Some benefits to the client will be the potential for LEED certification for commercial and institutional clients. For clients installing irrigation systems, they will benefit from the reductions in city water use. For all clients, SI Consulting’s services will help give developers the image of going green for their business, while creating financial savings.

4.2 Description of Service Process
SI Consulting will tailor their work to the needs of each client. Every project consists of different variables such as soil type, topography, local features, site type, and client needs. The design team will begin with retrieving any available information from the client. Then, the company will proceed using Atlas 14 and SCS to find site information. If necessary for the project site the company may have contract someone to determine site contour lines. Using the site information the company’s consultants will perform modeling on HEC-HMS, HEC-RAS and SWWM. Using the modeled information and the client needs, the consultants with design a system specific to the site.

If SI Consulting is the primary contractor for the project they will be in charge of managing the project entirely. This means creating bid proposals, organizing bidding processes, and selecting the subcontractors. From here the firm will manage that the subcontractors construct the system to design specifications.
5 Marketing Strategy

5.1 Target Market
The target markets will be primarily civil engineering firms and building contractors in commercial, agricultural, and municipal building construction. The target markets will also be in regions with intense stormwater regulations.

5.1.1 Problem to be Solved and Benefits to be Offered
The problem to be solved will be the rising need for developers to meet stormwater regulations. The company will work with provided site plan to design and creates a parts list for a cost effective system. The benefits offered by the company is a reduced workload for clients and a robust design.

5.1.2 Demographic Profile
Market demographics for SI Consulting will be other engineering firms, building contractors, and individual clients. The initial goal will be to market design services to other engineering firms. Engineering firms receive large volumes of projects and the company would provide services supplement their specialty design needs for reuse systems. After developing some market presence the company will seek to work directly with contractors and clients.

5.1.3 Other Significant Customer Characteristics
Clients will be concerned with sustainability either by mandates, or by their own desire to build sustainable water systems. Contractors might also be involved with the construction of buildings for non-profit organizations concerned with environmental stewardship. Contractors working for city governments might have available grants for sustainable systems.

5.2 Customers' Motivation to Buy
A customer’s motivation is to meet stormwater regulations for his/her area of development. They are also interested in sustainable irrigation systems because they, or the landowners, are motivated to help the environment. Additionally clients have the benefit of receiving grants through the EPA, GLRI, wege foundation, DEQ, and GR community foundation.

5.3 Market Size and Trends
The market is relatively small, only serving a handful of states in the United States. However, the size is continually growing as state governments establish standards for stormwater reuse, costs of water continue to increase, and more states establish grants for sustainable building systems.

5.3.1 Market Size
The market is mostly in industrial building projects, but also includes buildings that require LEED certification. As SI Consulting gains recognition they will be able to perform business with many developers that may reach into new markets, such as institutional and agricultural.
5.3.2 Market Trends
Based on research, there is a growing demand for stormwater reuse. The market is growing because more building complexes want to become LEED certified. By using LEED (a voluntary, market-driven green building certification program) buildings have greater zoning allowances, save money through tax rebates and demonstrate environmental stewardship.

5.4 Advertising and promotion

5.4.1 Media
The target market of SI Consulting primarily includes engineering firms and developers. Because of this, using media such as TV advertisements or social media advertisements will not be appropriate. SI Consulting will have a website to promote the stormwater reuse projects this company has worked on. The site will also display case comparisons between the traditional methods and the reuse systems, along with a detailed description of the benefits of stormwater reuse. The company will initially underbid projects to get their foot in the door. As the company's consulting service receives good reviews, the clients will spread these good reviews by word-of-mouth. In turn as more engineering firms and developers use the company’s services the company will a good reputation.

5.4.2 Promotion Costs
Since the majority of the advertising will be done by the website and word-of-mouth, website developer will not be necessary since the team members have experience with website design. The cost of maintaining the domain of the website will be $10 per year.

5.5 Pricing

5.5.1 Desired Image in Market
SI Consulting wants to be portrayed as a company that values sustainability, caring, transparency, and trust in everyday business practices.

5.5.2 Comparison Against Competitors' Prices
Compared to other consulting firms, this consulting cost offers competitive design prices. Although the customer experiences savings in the implementation and use of the design.

5.5.3 Discount Policy
Initially the firm will offer services at a lower rates to establish relationships with larger engineering firms and developers. After the company has shown that they offer a quality product with a quality service the company will charge standard rates. Low discount pricing will be used for establishing business and working relationships.
5.5.4 Projected Gross Profit Margin
The projected gross profit margins for the first three years is $317,444.

5.6 Distribution Strategy - Channels of Distribution
SI Consulting will produce designs for engineering firms, developers and clients. The company will receive projects from connected engineering firms as well as seek out bids from developers and clients.

6 Location Layout
The company will be based in Grand Rapids, Michigan. Since SI Consulting is a consulting firm and very little space is needed, the company will rent out office spaces to fulfill the space requirement for the company.

7 Competitor Analysis

7.1 Existing Competitors
The current market consists of companies that use traditional stormwater management design practices. The primary method is to eliminate the excess runoff water through detention to slowly release back into the environment, through infiltration practices to put the water back into the ground, or focus on conveyance to allow high storm flows to pass through.

7.1.1 Existing Company’s Strengths
Existing companies have the advantage of being the market norm. Developers currently expect to use the systems implemented in traditional consulting firms’ designs. The name recognition and developed relationships with the developers will help the existing companies maintain market control. Also, traditional stormwater management, depending on the site requirements, can sometimes offer less expensive design alternatives.

7.1.2 Existing Company’s Weaknesses
Existing design methods of conveyance and detention come with a few weaknesses, including no potential return on investment and lacking the “going green” aspect, which has less appeal to the environmentally conscious customer. While infiltration methods have the “going green” aspect, they lack any potential return on investment. Additionally, these methods are not always a feasible option, since construction sites may not have space for an open detention pond, and a submerged concrete detention pond would be too expensive. Regional code may prevent conveyance as a solution due to regulations to reduce flooding downstream of the development or a requirement of retaining the first 2 inches of rainfall for new developments.
7.2 Potential Competitors
Because of the relatively new acceptance of reusing greywater, this is an emerging market. As the use of environmentally friendly tactics become industry standards, new consulting firms will emerge, and existing firms will modify their site development tactics to be competitive in this market.

Project bidding competition will increase as a result of new consulting firms entering the market. The company will have to develop good client relationships by providing quality service in a timely manner. This will allow the consulting firm the continuation of obtaining new construction bids, even at times when others bid lower.

8 Description of Management Team

8.1 Key Employees
Consulting Engineer - Matt Schanck
Consulting Engineer - Katherine Wever
Receptionist - Kemal Talen

Consulting Engineers (2)
Both engineers have Bachelor's degrees in civil engineering, a Professional Engineering License, and four years of design experience. The implementation of these design solutions are relatively new, and both engineers have experience designing these systems. These two engineers are knowledgeable about stormwater reuse design and are highly self-motivated to complete assigned tasks.

Receptionist (1)
This employee will manage phone calls, clients, paperwork, and handle busy work around the office.

8.2 Future Additions

8.2.1 Consultants
As workload increases, SI Consulting will seek more consulting engineers with a minimum of a Bachelor’s degree in civil engineering and related design experience. This will give the company the ability to work with more clients at a given time.
8.2.2 Financial Experts
As SI Consulting gains more consultants and projects, the amount of bidding proposals, salary expenses, project payments, and general financial hassle will increase. The need for an employee to handle this will increase. This employee will assist in project bidding, and take responsibility for overarching financial work for the company. This employee will have a Bachelor’s degree in business or finance and at least 4 year of related work experience.

8.2.3 Field Inspectors/modelers
As SI Consulting becomes more developed and becomes the primary contractor for projects, they will need to supervise the construction of the projects. This will require the company to hire employees for inspection. These employees will also be trained in drafting and basic modeling software to assist in the office when there are currently no construct jobs.

9 Plan of Operation

9.1 Legal Form of Ownership
The company will be owned by the original consulting engineers. Ownership of the company is 50% owned by Matthew, and 50% owned by Katherine.

9.2 Organization
Matthew and Katherine are dual owners that have their own clients. This is initially a small organization where Matt and Katherine both have equal responsibilities and rights. So both consultant/co-owners will be responsible for leadership and project responsibility.

9.3 Decision Making Authority
Each owner makes their own decisions concerning projects for their clients. Any decision involving the company itself such as capital expenses or hiring of another employee will be agreed upon by both Matt Schanck and Katherine Wever.

9.4 Compensation and Benefits
Because the company is run by its owners, there are no compensation and benefits packages.

9.5 Facility
The office will be located in Grand Rapids, MI. The office will be located in a relatively inexpensive region of town. There are many locations with inexpensive lease agreements and close proximity to the booming construction business surrounding Grand Rapids, and in West Michigan in general. Because of the limited amount of employees there is a limited amount of office space
needed. The office will have enough space for a receptionist, printing equipment, two offices, a storage room for project files, and additional space for future employees.

10  Financial Forecasts

10.1 Financial Forecast
The financial forecast for SI Consulting is the Project Financials in Appendix A. The detailed statement shows the company's cash flows for predicted first 3 years of business. The projection shows the break even analysis, ratio analysis, debt repayment schedule, and possible but unlikely exit strategy.

10.2 Key Assumptions
The key financial assumption for this company is that the business experiences a healthy amount of clientele work. The company has accounted for a lack of initial work. Over the first year the company expects to expand their foothold in the market. The company plans to have an average of 40 total billable consulting hours a week for 50 weeks the first year, and 60 total billable consulting hours a week for 50 weeks the second year. The assumption would be the consulting firm may work slightly longer hours during the summer when construction is booming and less hours during the winter months. With the variation the company still assumes that within the seasons the company will be able to evenly distribute the workload over the course of the season. Another main key assumption is that the two co-owners of the company are credible. The consultant owners will be licensed professional engineers with 4 years of greywater reuse system design experience. The company can initially gain subcontracting under engineering firms, as well as work periodic work from small consulting firms. The credibility and assumed workload load will allow the company to charge $100 per hour service charge. The company will therefore have a total sales charge of $200,000 the first year and $300,000 the following years.

10.3 Financial Statements

10.3.1 Income Statement
The key points of the income statement is the sales revenue, fixed operating cost, and net income. The company’s profitability is based upon the amount of consulting hours the engineering firm is capable of obtaining. Apart from employee pay, the company has relatively low operating costs.

10.3.2 Balance Sheet
The company assets are its equipment, office space, and cash. The equity is equal to the initial loan amount. The liabilities are its loan payments and retained earnings.
10.3.3 Cash Flow Statement
The company will take out a $144,500 loan in the first year, and invest $25,000 of its own money as well to cover a portion of the initial fixed costs. Then, debt repayments of $30,000 will be made at the end of each year.

10.4 Break-Even Analysis
The break-even analysis uses hours of consulting as the unit. Based on the yearly fixed operating costs of $258,000 and a total variable cost of $500, the break-even amount of consulting hours worked at $100 per hour is 2,585 hours. This equal to about 25 hours a week for 52 weeks.

10.5 Ratio Analysis
A ratio analysis was not performed due to the only source of revenue being wage hours.

11 Loan or Investment Proposal

11.1 Amount Requested
SI Consulting is requesting an initial loan of $144,500. This initial loan will be combined with an invested capital of $25,000 from the two company co-owners.

11.2 Purpose of Uses of Funds
These initial funds will be used to cover 6 months salary for all employees, engineering printer, printing budget, lease expense, engineering software and computer equipment for engineering purposes.

11.3 Repayment Schedule
SI Consulting plans to pay off the borrowed debt at the rate of $30,000 a year. This will allow the company to easily repay the debt while retaining capital for potential company investment. If the company reaches the intended goal of achieving 3,000 project hours a year, then the company will have no issue repaying the debt while achieving financial gain.

If the company does not achieve desired project hours, the consultant engineers will take a reduction in pay, allowing the company to pay off debt. If the co-owners wish to exit the business they will work on severely cut pay and sell all of the equipment, and use all of the money to pay off the debt. If the company can’t pay the debt, then they will declare bankruptcy.

11.4 Timetable for implementing plan and launching the business
SI Consulting is planned to start after both of the engineers Katherine Wever and Matt Schanck obtain a Bachelor’s in civil engineering and four years of experience. The company will launch in 2020.
### Appendix A

#### Pro-Forma Statement of Income

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales revenue</th>
<th>Variable Cost of Goods Sold</th>
<th>Fixed Cost of Goods Sold</th>
<th>Depreciation</th>
<th>Gross Margin</th>
<th>Variable Operating Costs</th>
<th>Fixed Operating Costs</th>
<th>Operating Income</th>
<th>Interest Expense</th>
<th>Income Before Tax</th>
<th>Income tax (40%)</th>
<th>Net Income After Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>200,000</td>
<td>500</td>
<td>-</td>
<td>2,429</td>
<td>197,071</td>
<td>-</td>
<td>258,000</td>
<td>(60,929)</td>
<td>5,058</td>
<td>(65,987)</td>
<td>(26,395)</td>
<td>(39,592)</td>
</tr>
<tr>
<td>Year 2</td>
<td>300,000</td>
<td>500</td>
<td>-</td>
<td>4,306</td>
<td>295,194</td>
<td>-</td>
<td>258,000</td>
<td>37,194</td>
<td>9,065</td>
<td>28,129</td>
<td>11,252</td>
<td>16,877</td>
</tr>
<tr>
<td>Year 3</td>
<td>300,000</td>
<td>500</td>
<td>-</td>
<td>3,361</td>
<td>296,139</td>
<td>-</td>
<td>258,000</td>
<td>38,139</td>
<td>6,965</td>
<td>31,174</td>
<td>12,470</td>
<td>18,704</td>
</tr>
</tbody>
</table>

#### Pro-Forma Statement of Cash Flows

<table>
<thead>
<tr>
<th>Year</th>
<th>Beginning Cash Balance</th>
<th>Net Income After Tax</th>
<th>Depreciation expense</th>
<th>Invested Capital (Equity)</th>
<th>Increase (decrease) in borrowed funds</th>
<th>Debt Outstanding</th>
<th>Equipment Purchases</th>
<th>Ending Cash Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>-</td>
<td>(39,592)</td>
<td>2,429</td>
<td>25,000</td>
<td>144,500</td>
<td>144,500</td>
<td>(17,000)</td>
<td>115,337</td>
</tr>
<tr>
<td>Year 2</td>
<td>-</td>
<td>16,877</td>
<td>4,306</td>
<td>-</td>
<td>(30,000)</td>
<td>114,500</td>
<td>(1,000)</td>
<td>105,521</td>
</tr>
<tr>
<td>Year 3</td>
<td>-</td>
<td>18,704</td>
<td>3,361</td>
<td>-</td>
<td>(30,000)</td>
<td>84,500</td>
<td>(1,000)</td>
<td>96,586</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Fixed Costs</th>
<th>Contribution Margin %</th>
<th>Break Even Sales Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>265,487</td>
<td>100%</td>
<td>266,152.18</td>
</tr>
<tr>
<td>Year 2</td>
<td>271,371</td>
<td>100%</td>
<td>271,824</td>
</tr>
<tr>
<td>Year 3</td>
<td>268,326</td>
<td>100%</td>
<td>268,774</td>
</tr>
<tr>
<td></td>
<td>Equipment Purchases</td>
<td>Depreciation</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 3</td>
</tr>
<tr>
<td>Equipment Purchases Year 1</td>
<td>17,000</td>
<td>2,429</td>
<td>4,163</td>
</tr>
<tr>
<td>Equipment Purchases Year 2</td>
<td>1,000</td>
<td></td>
<td>143</td>
</tr>
<tr>
<td>Equipment Purchases Year 3</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2,429</td>
</tr>
</tbody>
</table>

MACRS Rates (7-year recovery period) 0.1429 0.2449 0.1749

Interest Expense:
Annual interest rate on debt 7%

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average debt balance</td>
<td>72,250</td>
<td>129,500</td>
<td>99,500</td>
</tr>
<tr>
<td>Interest expense</td>
<td>5,058</td>
<td>9,065</td>
<td>6,965</td>
</tr>
</tbody>
</table>