

**Ground-Maker**

**Business Plan**

**2005**

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## **Module 1: Introduction**

## **1.0 Executive Summary**

Composted manure has been used for many decades and has been practical to many gardeners, garden centers, landscapers and even organic farmers. In this study, this venture emphasizes on the feasibility of starting a Saskatchewan-made product which is also beneficial to the consumers of this province. This compost, created by Ground-Maker, comes directly from Pound-Maker, its supplier located in Lanigan.

Ground-Maker is fairly simple to operate, with a minimum staff of less than half a dozen, which includes a manager who is also in charge of marketing, a year-round secretary once the business gets going, and three baggers for seasonal work. The baggers may be local farmers or even high school students to earn extra pocket money.

This company reflects a positive output in revenues and sales as the years progress. To finance the budget, Ground-Maker needs \$131,413 from investors in order to secure 50% of \$262,827 in financing.

This product is meant to be sold within the province in bulk and mini bags of 20kg; the profitability of Ground-Maker over ten years is very stable and consistent. Cash flows are more than adequate to service debts and inventories are at acceptable levels. Based on the results of the financial and risk analysis this venture most definitely appears to be feasible. A big factor that could be risky for the project is how great the demand of the product will be and its total sales volume.

The main goal for this venture is to sell as much of the natural compost across the province and keep the indirect competition in close view. The first two years of production will be slow going, and once the product is known, consumers will hopefully recognize this product as natural and environmentally friendly compost.

During those first two years, the company's manager will focus on getting the product out in the open by traveling from city to city, and distributing pamphlets for better promotion. Also, there will be a web site advertising this product and will show the location site.

Pound-Maker produces an enormous supply of manure, and to dispose of it, they form windrows with a dump truck. A great advantage for Ground-Maker is that the raw compost gets hauled by the supplier, and then it gets screened and bagged on site. This company will be built within five miles of Pound-Maker, which reduces transportation costs.

As a result, Ground-Maker seems feasible given that the main supplier and its location is an extra bonus to the company, and is the only compost producer in Saskatchewan. It has great potential for variability in size of the product to be sold and clients from different provinces, allowing it to grow stronger and renowned across Western Canada over the years. The internal rate of return is 26.2% and external rate of return is 19.2% which makes this project look attractive.

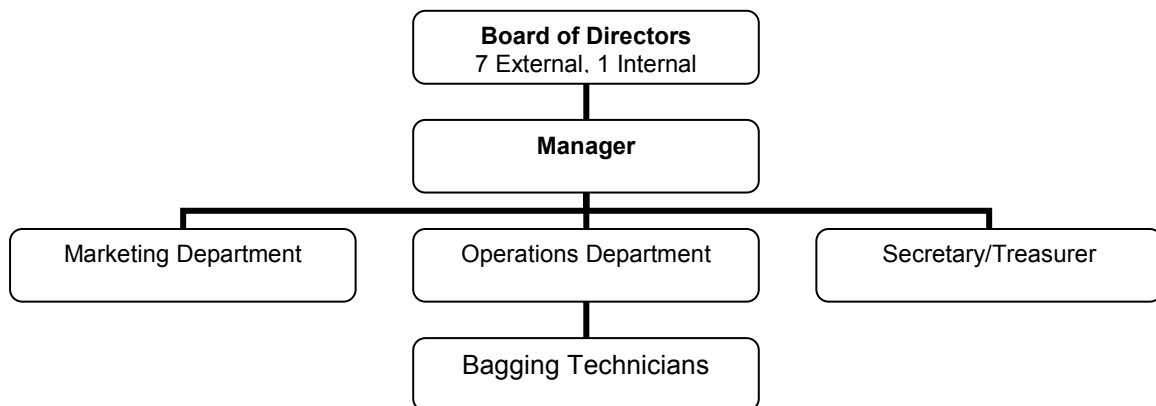
## **Module 2: Operations Plan**

## 2.1 Organizational Structure

Ground-Maker is a corporation which has an elected board of eight directors. Seven are external directors and one is an internal director. This internal director is the manager of the corporation who has two very important roles in the company being the manager of operations and marketing. This organizational structure was chosen for the reason that it would help reduce large bottlenecks in the system while still giving investors a large share in the shape the business takes.

The board of directors consists of the marketing manager and the investors because it ensures that everyone involved with the organization knows what is going on.

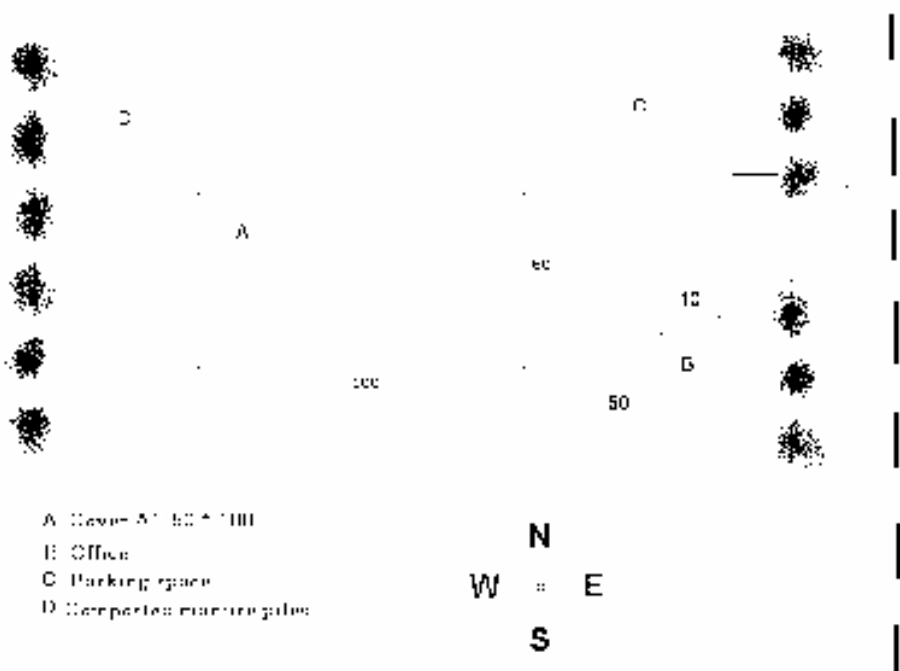
*Figure 2.1.1 Organizational Structure*



The manager is in charge of the day-to-day decisions, but if a strategic decision arises, the board of directors is called upon to make sure that everyone can contribute as the company progresses.

## 2.2 Site Plan & Five Year Development Plan

Figure 2.2.1 Site Plan

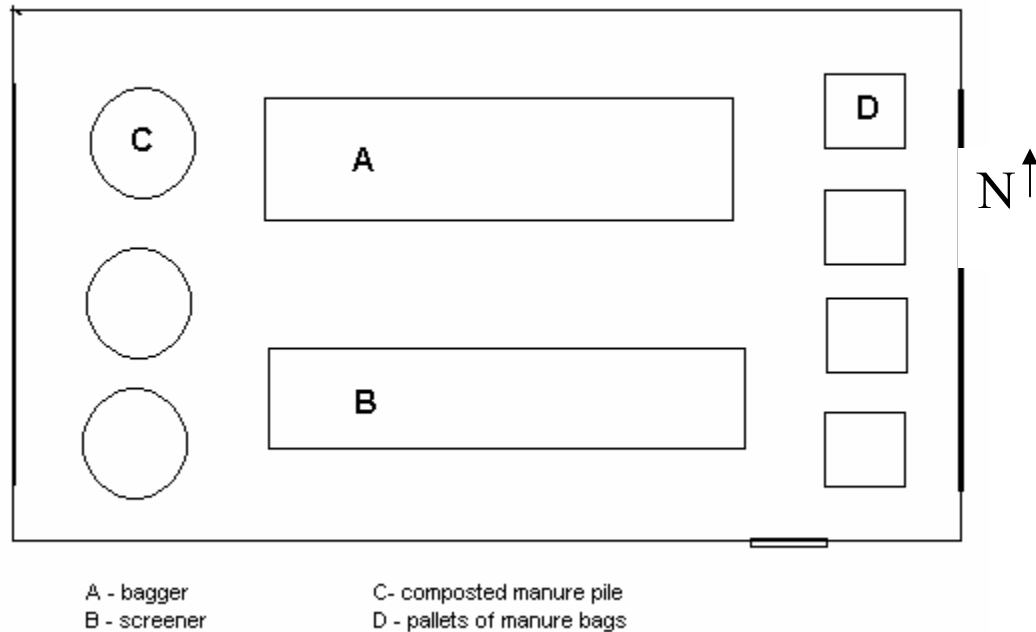


### 2.2.1 5 Year Development Plan:

The first two years will be spent focusing on marketing procedures and developing a sound operation. During the first year the secretary will only be staffed for half the year as production will not be in full swing until fall. There are no plans at this point to expand production or hire any new employees. If the market demand for the compost is strong there may be opportunity to expand production. There appears that there may be potential for the bulk compost market.

## 2.3 Floor Plan

Figure 2.3.1 Cover All Floor Plan



The floor plan is set up with two big sliding doors on the east and west end to facilitate shipping and handling. The composted manure piles go through the screener after which it will be piled and sold in bulk or it will be bagged. After bagging, the end product will be set on pallets and stacked. The pallets are at the west end of the building. A simple floor plan will facilitate movement for both the employees and the equipment.

## 2.4 Work Plan and Flow of Work

Processing will begin in late summer and end in early fall. The compost will be hauled from Pound-Maker starting in September. Half the compost will be processed in the fall and the other half will be processed in the spring. Seasonal employees will be hired during the processing and distribution periods and the manager and secretary/treasurer will be full time.

The first step in processing is hauling the compost from Pound-Maker to the facility. Pound-Maker will load the compost onto tandem dump trucks owned by a local custom trucking company which will be hired. All the compost must be hauled before freeze up and is piled in batches according to which windrow it came from.

Prior to processing each batch must have a complete nutrient analysis done at EnviroTech Laboratories in Saskatoon. This will be done in the fall. The piles can then be blended during the screening process to ensure each batch of finished product meets minimum nutrient requirements.

The next step in processing is screening. A two wheel drive tractor with a front end loader, which is rented due to the short amount of time it is required during the year, is used to load the compost. A Sittler Trommel Screener then screens out any debris from the compost and helps to break up any large clumps. The screened compost can then be sold in bulk form or bagged in 20 kg plastic bags.

The bulk compost is loaded onto the customer's truck and is weighed on a large truck scale.

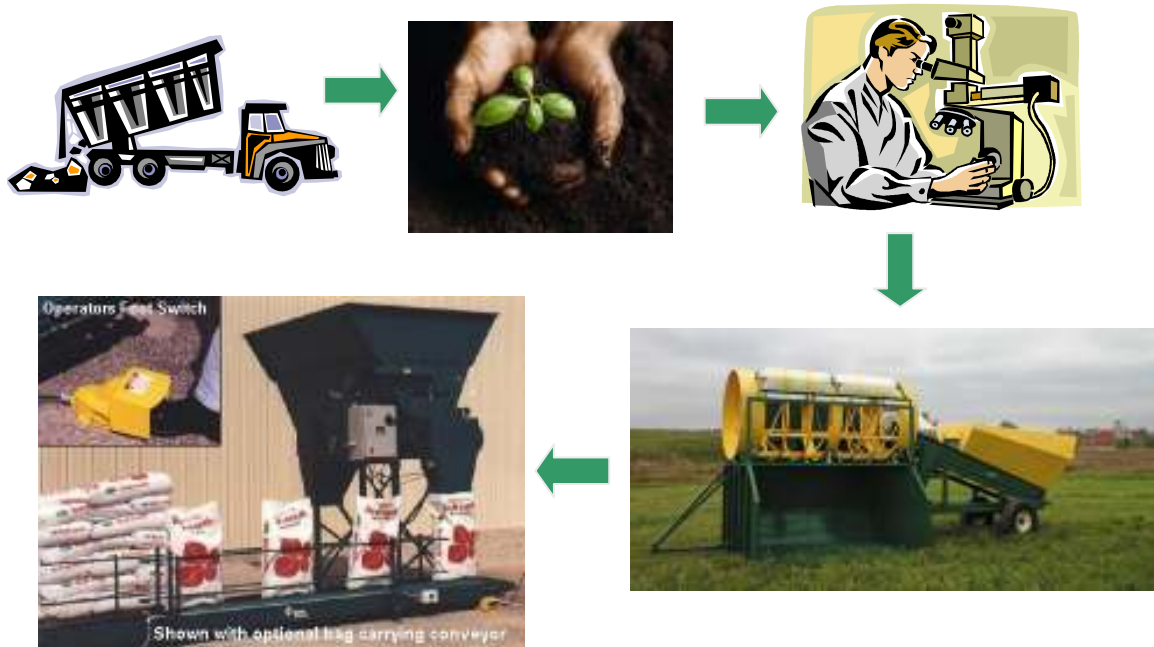
The compost to be bagged is then loaded into the bagger with a two wheel drive tractor and is bagged in 20 kg white plastic bags which are specifically designed for Ground-Maker. The bags are supplied by Super Poly Ltd. of Calgary. The bagger weighs and seals each bag which are loaded onto pallets and are stored inside the coverall. The screener and bagger are both located inside the Cover-All as the floor plan shows.

There are not any regulations or licenses that we must meet or acquire in order to operate.

The annual output of the facility will be 100 tonnes of bulk and 350 tonnes of bagged product which is the equivalent of 17,500 bags.

During the processing of the compost a typical business day at Ground-Maker will be from 8:00 am until 5:00 pm. Throughout the twelve month fiscal period a five day work week will be in affect.

Figure 2.4.1 Flow of Work



## 2.5 Capital Budget

Table 2.5.1 Capital Budget Summary

<b>Capital Budget Summary for Ground - Maker</b>	
Land	3,750
Site & Buildings	132,000
Equipment	101,600
Office Supplies	4,600
Net Working Capital	20,877
<b>Total Capital Required</b>	<b>\$262,827</b>

## 2.5.1 Capital Purchases

*Table 2.5.1.1 Building Costs*

	<b>Costs:</b>	<b>References:</b>
<b>Land Costs:</b> (10ac)	<b>\$3750</b>	Prairie Rose RM
<b>Building Costs:</b>		
Cover-All	60,000	Cover-All Corporate
Office Building	20,000	Red Rose Trailers
Sasktel	500	Sasktel
Plumbing	6,000	P and J Plumbing
SaskPower	300	SaskPower
<b>Total Building Costs:</b>	<b>\$86,800</b>	

*Table 2.5.1.2 Site Costs*

<b>Site Costs</b>	<b>Costs:</b>	<b>References:</b>
Yard lights	2,000	CMI Humboldt
Sewage System	3,500	P and J Plumbing
Electricity Installation	25,000	P and J Plumbing
Town Water Installation	14,300	P and J Plumbing
Landscaping	400	Lakeshore Garden Centre
<b>Total Site Costs</b>	<b>\$45,200</b>	

Ground-Maker will be located no more than 5 miles away from Pound-Maker to facilitate hauling. The rural municipality of Prairie Rose has given us an estimate for the 10 acres of land that this company will purchase. The building, which will be the Cover-All, will be located near the road or black top, and equipment will be parked either in the building or outside the Cover-All.

## 2.5.2 Equipment Costs

Table 2.5.2.1 Equipment Costs

<b>Equipment Costs:</b>	<b>Costs:</b>	<b>References:</b>
Bagger	45,505	Turn and Screen in USA
Screeener	49,595	Global Repair in Ontario
Scale	6500	CMI in Humboldt
<b>Total cost of equipment:</b>	<b>\$101,600</b>	

Some of the equipment that will be used by Ground-Maker will be rented such as the tractor, and all the trucking will be done under contract. The bagger will be purchased from Turn and Screen in the US. The screener will be purchased from Sittler Manufacturing of Ontario. The capacities of these machines more than meet requirements at current levels of production and have the capacities to handle larger volumes by running them for longer periods of time. Custom trucking in and rental of the two wheel drive tractor to move the compost will cost about \$930.00. Custom trucking out will be at a cost of approximately \$400.00 per load, which works out to \$2/loaded running mile on a 100 mile run which is the distance from Lanigan to Saskatoon. Since these areas of production are carried out under contract or with rented equipment it is very easy to increase capacities in the future if warranted without a tremendous capital cost.

## 2.5.3 Office Supplies and Equipment

Table 2.5.3 Office Supplies and Equipment

	<b>Costs:</b>	<b>References:</b>
Computers 2 desktops @ \$800 each	1,600	Staples
Computer 1 laptop	1,500	Staples
File cabinets	100	Staples
Fax machine	130	Staples
Photocopier	390	Staples
2 Desks @ \$150 each	300	Staples
Coffee machine	30	Wal-Mart
Chairs & Furniture	400	Staples
Water machine	150	Wal-Mart
<b>Total Office Supplies:</b>	<b>\$4600</b>	

## 2.6 Working Capital Planning and Management

### 2.6.1 Cost of Goods Manufactured

Table 2.6.1.2 Cost of Goods Manufactured

<b>Direct Material</b>	
Bags	4784
Trucking In	930
Nutrient Testing	500
<i>Total Direct Material</i>	<b>\$5,714</b>
<b>Direct Labour Costs</b>	
<i>Total Direct Labour</i>	<b>\$4,213</b>
<b>Variable Manufacturing Overhead Costs</b>	
Freight and Pallet Charges	8,125
Maintenance	87
<i>Total Variable Overhead</i>	<b>\$8,212</b>
<b>Fixed Manufacturing Overhead Costs</b>	
Insurance	1,000
Property Taxes	2,000
Capital Cost Allowance	15,760
Utilities	1,200
<i>Total Fixed Overhead</i>	<b>\$19,960</b>
<b>Total Manufacturing Overhead</b>	<b>\$28,172</b>
<b>Cost of Goods Manufactured</b>	
Direct Materials	5,714
Direct Labour Used	4,213
Manufacturing Overhead	28,172
<b>Total Cost of Goods Manufactured</b>	<b>\$38,099</b>

The direct materials costs include the handling costs of trucking in and renting the tractor to move the compost. Bags and nutrient testing are also a cost, however, the compost itself costs Ground-Maker nothing as Pound-Maker is giving it to the company. The direct labor is the labour used during processing. The overhead cost includes the fixed costs to operate the facility and the variable costs such as the trucking of the bagged compost to retail stores.

## 2.6.2 Cost of Goods Sold

Table 2.6.2.1 Cost of Goods Sold

Beginning Inventory	-
Cost of Goods Manufactured	38,099
Cost of Goods Available for Sale	38,099
Ending Inventory	<u>(3,500)</u>
<b>Cost of Goods Sold</b>	<b>\$34,599</b>

Cost of Goods sold has a beginning finished Goods Inventory of \$0. The cost of Goods Manufactured came to an amount of \$38,099, and that number is also the cost of Goods available for sale. The ending Finished Goods Inventory for Ground-Maker is \$3500 so the Cost of Goods Sold is \$34,599. If the cost of goods sold is \$34,599 and we plan on selling 440 tonnes of compost per year our average selling price must be \$78.60/tonne to break even.

## 2.6.3 Working Capital Planning and Management

### 2.6.3.1 Cash Management

The cash flows for Ground-Maker are positive throughout the ten year cash projections. The seasonality of sales does create some problems as the majority of sales are made during the spring. However the majority of Ground-Maker's expenses are incurred during processing during the fall and spring so it is possible to plan cash flows to be able to service debts. A line of credit can be set up with the supplier of bags and the trucking companies which will give more time to pay these major expenses. Any excess cash as paid out as dividends at the end of the year.

### 2.6.3.2 Inventories

The amount of inventory left unsold at year end is projected to be \$3,500. The average days inventory of the raw product is 30 days, inventory in process is 1 day and finished days inventory is 60 days to produce an average days inventory of 91 days.

#### 2.6.3.3 Accounts Receivable

Ground-Maker is working with Ag-Line credit to reduce the risk associated with receivables. Ground-Maker pays Ag-Line a 2.5% fee for all product sold on a line of credit. Assuming all sales will be based on a 30 day line of credit Ground-Maker will pay Ag-Line \$3,538 in fees to manage to first years sales. Ag Line will pay Ground-Maker for the product within thirty days of sale and then Ag Line is responsible is for collecting, which ensures Ground-maker gets paid.

#### 2.6.3.4 Account Payable

The majority of the supplies and products used in operations will be purchased on a 30 day line of credit. All direct materials and trucking costs will be paid on a line of credit. The total account payable is equal to \$13,839.

#### 2.6.3.5 Cash Conversion Cycle

The CCC is a formula that calculates the average days of inventories which is 60 days + average collection periods of 30 days – average days payable of 30 days, which equals to a 60 day period.

## **Module 3: Human Resources Plan**

### 3.0 Human Resources Plan

Table 3.1 Full Time Employee Salaries & Benefits

<b>Total Annual Salaries</b>		<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Manager/Marketer		\$59,000	\$60,180	\$61,384	\$62,611	\$63,863
Secretary		7,500	15,000	15,300	15,606	15,918
Total Salaries		\$66,500	\$75,180	\$76,684	\$78,217	\$79,781
<b>Benefits for Salary Workers</b>						
Employment Insurance	1.40%	931	1,053	1,074	1,095	1,117
Canada Pension Plan	2.00%	1,330	1,504	1,534	1,564	1,596
Workers Compensation	1.00%	665	752	767	782	798
Total Benefits for Salary Employees		2,926	3,308	3,374	3,442	3,510
<b>Total Marketing Salaries, Wages and Benefits</b>						
		<b>\$69,426</b>	<b>\$78,488</b>	<b>\$80,058</b>	<b>\$81,659</b>	<b>\$83,292</b>

Ground-Maker has one manager, who is responsible for managing operations and marketing. He or she will be working all year round, doing all of the traveling and the marketing for the company with customers. He/she will be required to have a degree in business management or marketing with a strong understanding of managing operations. The manager will be a part of the board of directors and will have to answer to the board. For the first year the secretary/treasurer will be only working for half of the year, after the first year the secretary/treasurer will be working full time all year round which would bring them up to making \$15,000 per year, the first year they will be making \$7500. They will be responsible for taking phone calls, managing the office, and doing all the book keeping associated with the business. The secretary/treasurer will work under the direction of the manager.

Table 3.2 Part Time Employee Salaries &amp; Benefits

<b>Part-Time Baggers</b>		<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Wage		\$11.00	\$11.22	\$11.44	\$11.67	\$11.91
Hours per worker		40	40	40	40	40
Total Bagger Wages		1,320	1,346	1,373	1,401	1,429
<b>Benefits for Baggers</b>						
Employment Insurance	1.40%	55	57	58	59	60
Canada Pension Plan	2.00%	79	81	82	84	86
Workers Compensation	3.00%	119	121	124	126	129
Holiday Pay	5.80%	230	234	239	244	249
Total Benefits for Salary Employees		253	259	264	269	274
<b>Total Part Time Salaries &amp; Benefits</b>						
		<b>\$4,213</b>	<b>\$4,298</b>	<b>\$4,384</b>	<b>\$4,471</b>	<b>\$4,561</b>

The baggers are only seasonal workers which will be earning \$11.00 an hour and working for about 40 hours throughout the year. The baggers are Ground-Maker's only direct labor, which can be high school kids or anyone looking for extra cash. Experience operating tractors and other equipment are higher requirements than education level. Due to the seasonality of the work these employees must receive holiday pay. They will be under the direction of the manager who will oversee the entire operation.

## **Module 4: Marketing Plan**

This company will mainly focus on Saskatchewan, and is to be an environmentally friendly business. It also is a great opportunity for Ground-Maker to use its natural resources and markets to the fullest.

## **4.1 Products and Services**

Ground-Maker is selling composted beef cattle manure in bulk and 20kg plastic bags. Bulk quantities will depend on how much the person wants.

The company is selling a natural soil improvement product which will be delivered to the retail outlet.

### **4.1.1 Pricing**

Ground-Maker is a competitive pricer and competes against peat moss, chemical fertilizer and bone meal. The biggest competition is other manures such as sheep and horse manure.

### **4.1.2 Promotion**

Ground-Maker wants to promote locally, and throughout Saskatchewan.

This product is an environmentally friendly, natural product.

Advertising will be simple and cost effective focusing mainly on getting the bagged product onto more store shelves.

The majority of the promotion will be done by the marketing manager, and a basic website.

With the growth potential in the bulk compost market other advertising media such as flyers may have to be considered.

### **4.1.3 Place**

- Product will be mainly targeting Saskatchewan markets through retail and some direct sales

## **4.2 Segmentation, Targeting and Positioning**

### **Segmentation**

- Environmentally minded gardener and their supplies (dealers) for the 20kg bags.
- Bulk will be going directly to larger growers with the potential for expanded sales to organic farmers.

### **Targeting**

- Ground-Maker is aiming to target small gardeners, green houses and landscapers, and possibly organic golf courses that aren't located too far to decrease shipping costs.

### **Positioning**

- To promote Ground Maker as an environmentally friendly product which is beneficial to the small and large gardener

## **4.3 SWOT Analysis**

### **4.3.1 Internal Strengths and Weaknesses**

#### **Human Resources**

##### **Weakness:**

- The weakness of the human resources plan is that attracting qualified workers to a small town requires paying higher wages for the same workload compared to larger centres.

##### **Strengths:**

- There is a minimum training standard, and only the manager and secretary require a post-secondary education, and some accounting/bookkeeping skills.
- There are enough staff members to accomplish the jobs that need to be done, and no areas are overloaded with employees.

### **Physical Resources**

#### Strengths:

- Located close to the raw material supplier which reduces transportation costs.
- Deals with Pound-Maker which is a large, well established company.
- Ground Maker has a reliable supply of compost.
- Only real competition there is, is located in Alberta. Ground Maker is the only large scale compost processing operation in the province.

#### Weakness:

- Climate may be a weakness in the sense that it only allows the business to operate during certain months due to the harsh winter.

### **Financial Resources**

#### Strength:

- Low direct materials costs and levels of inventory are very low in off season.

#### Weakness:

- Profit proves to be based less on large margins and more on volume.

### **4.3.2 External Opportunities and Threats**

- Great opportunities present themselves for expansion of the company:
  - Environmentally friendly products are becoming more popular with consumers
  - Organic food production is increasing which requires natural products.
  - Government legislation continues to favor using less chemicals
- Major threat is that there is little market research to show “who will be willing to purchase this product and at what price”.

## 4.4 Market Analysis

The Market analysis shows a tight profit margin, and the competition would be Nu-Grow from Alberta and Greenleaf from Alberta as well. Potential for growth due to less chemical use in gardening. There are currently 61 garden centers in Saskatchewan, and 1 organic golf course in Manitoba. 15 greenhouses are located throughout Saskatoon, and there are 14 landscaper companies in the city. There is a potential for increased sales since many consumers and farmers are aware of the environmental issues that chemical fertilizers present, and the Kyoto protocol has now come into affect.

### Market:

- Selling composted beef cattle manure
- Saskatchewan made
- All natural
- Sell bulk and bagged
- Small margins and high volume
- Average store sells around 400 bags/year

### Competition:

- Agricore United-The Real Thing
- Sheep manure
- Nu-Grow
- Green Leaf
- Indirect Competition from chemical fertilizers and other soil products such as potting soil

### Competition – Bags

*Table 4.4.1 Bag Competition Analysis*

Competition	Size of product	Retail price
Agricore-The Real Thing	40L or approx. 18 KG	\$8.98
NU-Grow – Calgary/Ontario	20KG	\$3.99
Greenleaf- Olds, AB	20KG	\$3.68 - \$3.99 Wholesale = \$2.44

**Competition – Bulk***Table 4.4.2 Bulk Competition Analysis*

<b>Competition</b>	<b>Price</b>
Lakeshore Garden Centre	\$2.49/cubic yard, Retail
Wilson's Greenhouse	\$14-\$15/cubic yard, Own use
Agricore – The Real Thing	2 tonne truck delivered @ \$600

**Customers:**

- Gardeners
- Greenhouses/Landscapers
- Golf courses

**Target Market:**

- Golf courses
- Small gardeners
- Greenhouses
- Landscapers

**Product Service features:**

- Locally produced product being sold in local markets
- Bulk compost is available to meet the needs of higher volume users such as golf courses and greenhouses
- Product will naturally improve soil condition by adding organic matter, nutrients, increasing water holding capacity and soil tilth.
- Products may be lower priced
- The bagged product is portable, keeps dry, has instructions on it, and it has a long shelf life.

**Opportunity:**

- There is no other bagged compost producer in Saskatchewan
- Endless supply of manure
- People want to get rid of their manure
- Growth market, growth industry
- Alternatives being to chemical use being considered

## **4.5 Marketing Strategy**

### **Sales and profit objectives**

The sales and profit objectives are to receive at least a 20% profit on 440 tonnes of compost sold across the province. The goal is to sell 100 tonnes of bulk composed manure and 350 tonnes of bagged compost.

### **Channels of Distribution**

The bags will be sold retail and bulk will be sold directly to customers.

### **Pricing Policy**

Price will be determined based upon what other competitors are charging, and ensuring that the price meets our target of at least a 20% profit over cost of production.

### **Select Markets/Product/Service Mix**

The compost market is a competitive market that consists of peat moss and chemical fertilizers and other manures.

### **Selling and Advertising**

Ground-Maker will be advertising through a web page and flyers and pamphlets and a marketing manager who travels locally and province-wide to promote the product.

**Marketing Plan Budget**

The marketing plan budget and total costs are as follows:

*Table 4.5.1 Marketing Budget*

<b>Marketing and Advertising</b>	<b>\$</b>
Traveling	500
Cell phone	480
Internet - Web page	350
Flyers and pamphlets	300
Trade shows	3000
Hotel	1200
Meals	300
Business Cards	100
<b>Total</b>	<b>\$6,230</b>

## **Module 5: Financial Plan**

## 5.1 Financing Budget

For this venture a total of \$261,502 in capital must be raised to meet expenditures and maintain a positive cash flow. Half of which will be raised from investors in order to raise 50% of the total capital required so that the other 50% can be borrowed from a lending institution. The money will be raised from a small group of investors which could come from a variety of backgrounds and interests.

*Table 5.1.1 Financing*

Long Term Debt	<u>\$131,413.00</u>
Owner's Equity	<u>\$131,413.00</u>
<b>Total Financing</b>	<b>\$262,827.00</b>

### 5.1.1 Income Tax

*Table 5.1.1.2 Taxes Payable*

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Income Before Taxes	22,046	1,229	9,231	14,239	18,701
Accumulated Loss Carry forward	-	-	-	-	-
Loss Carry forward Used	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Taxable Income	22,046	1,229	9,231	14,239	18,701
Federal Tax @ 28%, 21%	4,630	258	1,938	2,990	3,927
Federal Surtax @ 4%	185	10	78	120	157
Small Bus Tax Credit @ 16%	(3,527)	(197)	(1,477)	(2,278)	(2,992)
Provincial Tax @ 6%, 10%	<u>1,102</u>	<u>61</u>	<u>462</u>	<u>712</u>	<u>935</u>
Total Taxes	2,390	133	1,001	1,543	2,027

### 5.1.2 Dividend Policy

Dividends will be paid to the investors once enough cash has been generated to cover the next years expenses. Therefore a calculation of the available cash at

the end of the year minus the working capital required for the following year increased by a factor of 1.5 to allow for unexpected expenses. A negative result of this calculation will result in no dividends being paid out while a positive balance is paid out 100% as dividends.

**Dividend Paid: If Cash – (Working Capital x 1.5) > 0**

## **5.2 Economic Forecast**

Ground-Maker has planned to keep the sales volume relatively the same with small increases in price. Ground-Maker will not be expanding sales volume and will not have to staff more employees. A 10 year projection has been made using an inflation rate of 2.0%. This rate has been used to derive all wages, supplies, and expenses.

## **5.3 Ratio Analysis**

The projected performance ratios for Ground-Maker show a successful business which is successful early on in the life of the business. The following table summarizes the ratio analysis. When interpreting the ratios it is important to remember the nature of the business and the values on which they are based.

Liquidity is measured by the current ratio which is the current assets divided by the current liabilities. Our current ratio is high at 4.69 which indicates that Ground-Maker should have no difficulties meeting short-term obligations.

Half of the financing to start the business is debt financing. This is reflected in the debt to equity ratio. The debt to equity ratio is quite high but it is artificially inflated. The ratio is high due to amortization which reduces the value of our assets which causes our equity level to actually drop over the ten year period. This is because all the profits in the company are paid out as dividends to investors rather than being reinvested in the company. That is why due to amortization our assets and therefore equity lose value every year. This is not a

major concern however as it does not affect profitability or the ability to service debt.

The inventory ratios are favorable due to the short inventory times and the relatively low value of inventory carryover from year to year. The processing time to screen and bag the compost is short which helps keep the time required to move in the raw product and produce the finished product short.

Profitability is very solid which drastically reduces the amount of risk involved in the venture. It will also reduce the amount of start up capital required because extra cash to service debts can be obtained through profits.

*Table 5.3.1 Summary of Financial Ratios*

<b>Liquidity Ratios</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	4.69	4.38	4.38	4.41	4.44
<b>Activity Ratios</b>					
Inventory Turnover = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$	9.79	13.86	12.00	11.02	10.23
Average Days Inventory = $\frac{365}{\text{Inventory Turnover}}$	37	26	30	33	36
Total Asset Turnover = $\frac{\text{Sales}}{\text{Total Assets}}$	0.49	0.56	0.62	0.68	0.73
Fixed Asset Turnover = $\frac{\text{Sales}}{\text{Fixed Assets}}$	0.63	0.73	0.83	0.95	1.07
<b>Solvency Ratios</b>					
Debt Ratio = $\frac{\text{Total Liabilities}}{\text{Total Assets}}$	48.1%	51.6%	53.4%	54.5%	54.7%
Debt to Equity Ratio = $\frac{\text{Total Liabilities}}{\text{Total Equity}}$	92.7%	106.7%	114.6%	119.5%	120.9%
<b>Profitability Ratios</b>					
Gross Profit Margin = $\frac{\text{Gross Profit}}{\text{Sales}}$	75.5%	65.5%	70.3%	72.9%	74.9%
Net Profit Margin = $\frac{\text{Net Profit}}{\text{Sales}}$	13.9%	0.8%	5.5%	8.3%	10.7%
Return on Assets = $\frac{\text{Net Profit}}{\text{Total Assets}}$	6.8%	0.4%	3.4%	5.6%	7.8%
Return on Equity = $\frac{\text{Net Profit}}{\text{Total Equity}}$	14.6%	1.0%	8.2%	13.9%	19.4%

## 5.4 Financial Analysis

The profitability of Ground-Maker over ten years is very stable and consistent with no extremes. Cash flows are more than adequate to service debts and inventories are at acceptable levels. The Net Present Value of this venture is \$33,647. The Internal and External Rate of return are very favorable being 26.2% and 19.2% respectively. These are very solid ratios which show a good return.

## 5.5 Sensitivity Analysis

The sensitivity analysis portrays how sensitive the Internal Rate of Return is to changes in several critical variables. The following table shows the worst, base and best case scenarios. The base case is the values that are used throughout the plan.

*Table 5.5.1 Variable Analysis*

Variable	Worst Case	Base Case	Best Case
Quantity of Sales	50%	100%	110%
Average Selling Price	75%	100%	125%
Average Trucking Costs	150%	100%	75%

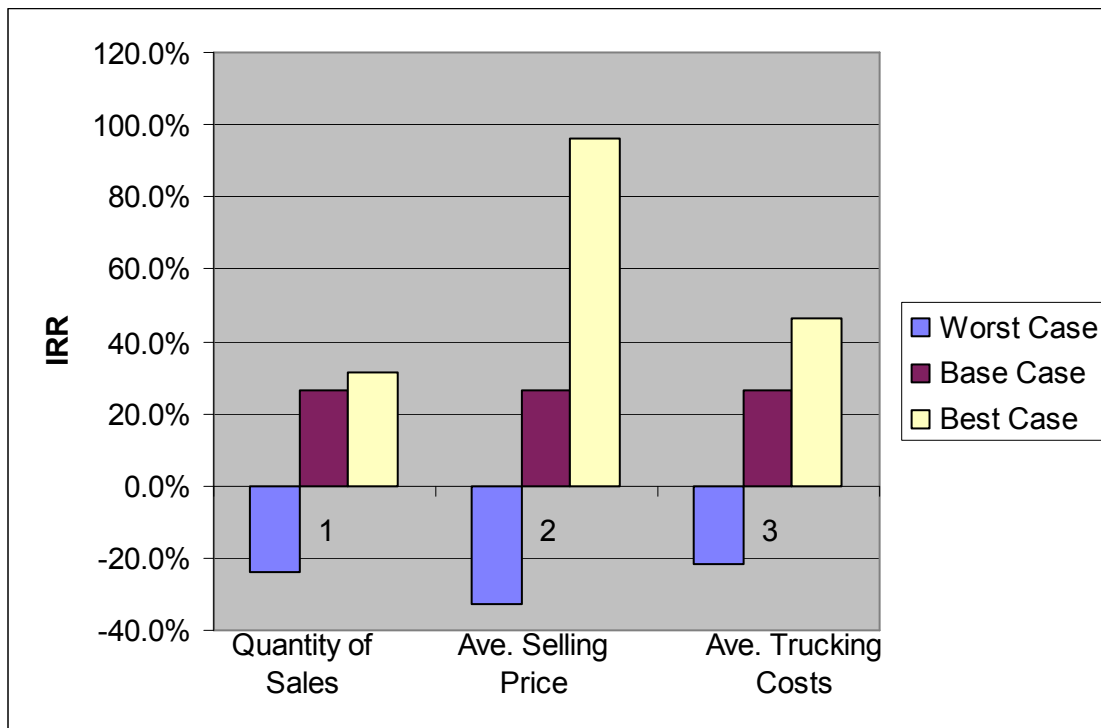
The first variable that Ground-Maker must deal with is how great the demand will be for the product and its total sales volume. This is an important variable because retail markets can be difficult to penetrate, and Ground-Maker's sales are seasonal. For these reasons the worst case is set at 50% of our base sales volume which results in an IRR of -24%. The base case produces an IRR of 26.2%. The best case is based on a slight increase in sales volume due to the limited amount of product readily available. The best case at a 105% increase in sales quantity results in an IRR of 31.4%.

Another critical variable is the average selling price of the compost. This is one of the variables we are most vulnerable to due to the competitive nature of

pricing in the selling area. The worst case scenario shows our selling price dropping by 75% which has an impact on our IRR which is -32.6%. The best case scenario involves a 25% increase from our expected sale price which produces an IRR of 96.4%. With growing consumer trends towards using more natural products and less chemicals this sort of increase is possible.

The last critical variable to consider is the cost of trucking due to the varying cost of fuel. Due to the fact that raw product must be shipped in and then shipped out again after processing makes trucking costs the major expense. The worst case scenario involves trucking costs increasing 150% which produces an IRR of -22%. The best case involves costs dropping to 75% of their expected value to yield an IRR of 46.3%.

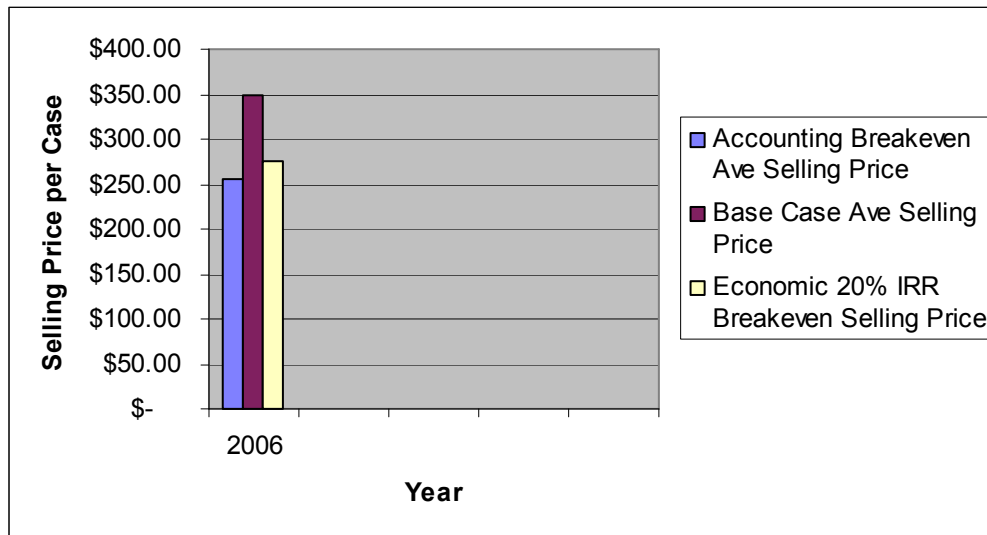
Figure 5.5.2 Internal Rate of Return Based on Sensitivity Analysis



## 5.6 Breakeven Analysis

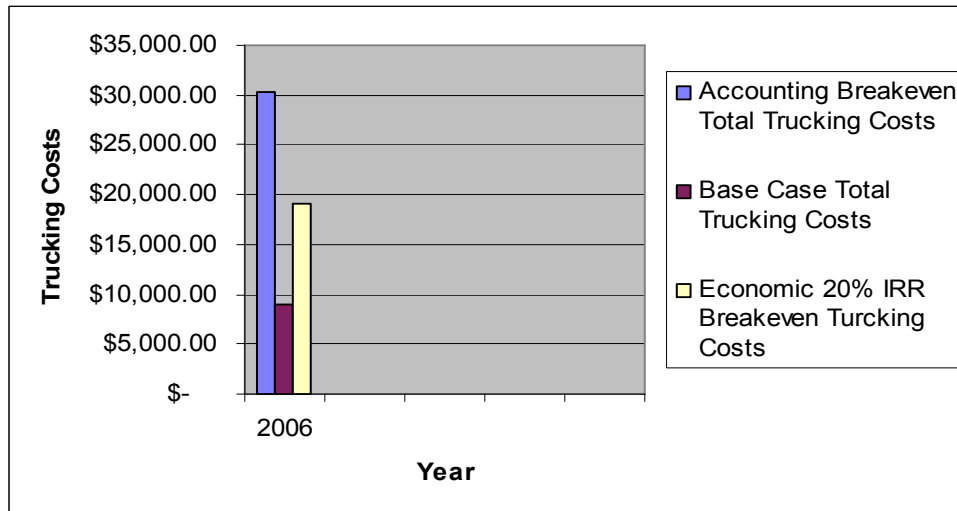
The breakeven analysis was conducted for the first crucial year of business. Accounting and economic analysis was done on two of the most influential variables on profit. The two variables used were the selling price, and total cost of trucking. Economic breakeven was based on the desired IRR of 20% and accounting breakeven was based on a net income of 0.

Figure 5.6.1 Selling Price Breakeven Price



As the preceding table shows our actual selling price is much higher than the breakeven selling price for accounting and economic purposes. This means we should have no problem meeting required cash flows and we can provide our expected profits and dividends to investors.

Figure 5.6.2 Trucking Cost Breakeven Price



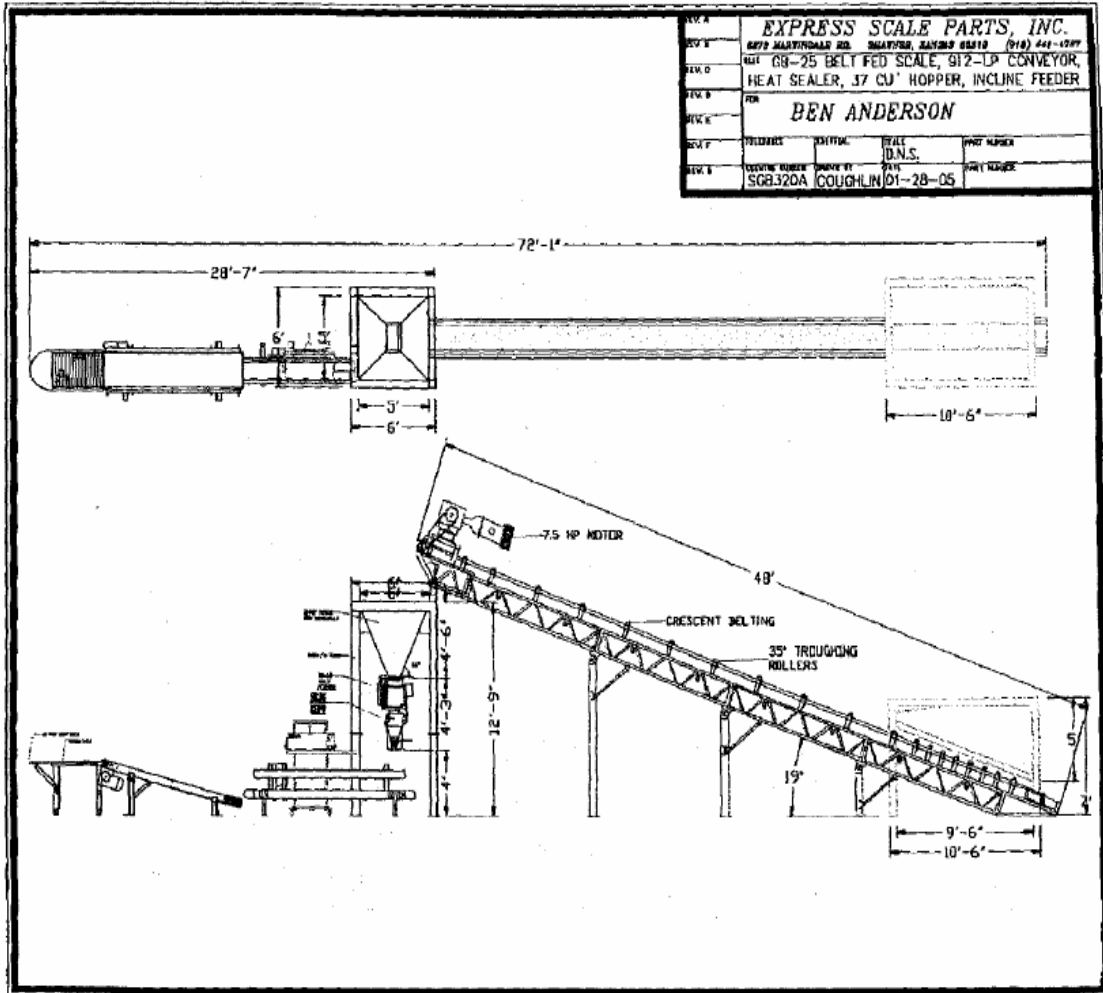
The table showing the breakeven cost of trucking shows that the current price Ground-Maker is paying for trucking is well below the breakeven cost. This gives the venture quite a bit of room for the trucking costs to increase without affecting breakeven points.

## 5.7 Conclusion

Based on the results of the financial and risk analysis this venture most definitely appears to be feasible. The financial model shows that over the ten year period Ground-Maker will make an IRR of 26.2%. This venture also does not require several years of negative income before producing a profit. Dividends are paid out to investors within the first two years without affecting the viability of the business. The main obstacles are meeting projected sales projections and keeping costs down to acceptable levels. Getting the bagged product on to store shelves will take some work, but there is tremendous growth potential for bulk market.

## **Appendix A: Equipment**





## **Appendix B: Financial Worksheets**

**Ground-Maker  
Financial Projections**
**Base Case**
**Statement of Income and Retained Earnings**  
**For the year ended August 31**

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
<b>Sales Revenue:</b>							
Bulk	22,500	23,063	23,639	24,230	24,836	25,457	26,093
Bags	119,000	121,975	125,024	128,150	131,354	134,638	138,004
<b>Total</b>	141,500	145,038	148,663	152,380	156,190	160,094	164,097
<b>Cost of Goods Sold</b>	<u>34,599</u>	<u>49,984</u>	<u>44,134</u>	<u>41,341</u>	<u>39,157</u>	<u>37,465</u>	<u>36,170</u>
<b>Gross Margin</b>	106,901	95,054	104,529	111,039	117,033	122,630	127,927
<b>Operating and Marketing Expenses</b>							
Marketing	6,230	6,504	6,800	7,119	7,466	7,841	8,248
Marketing Salaries	69,426	78,488	80,058	81,659	83,292	84,958	86,657
Interest on Long Term Debt	<u>9,199</u>	<u>8,833</u>	<u>8,441</u>	<u>8,022</u>	<u>7,574</u>	<u>7,094</u>	<u>6,580</u>
<b>Total Expenses</b>	84,855	93,825	95,299	96,800	98,331	99,892	101,486
<b>Income Before Taxes</b>	22,046	1,229	9,231	14,239	18,701	22,737	26,441
Income Taxes	<u>2,390</u>	<u>133</u>	<u>1,001</u>	<u>1,543</u>	<u>2,027</u>	<u>2,465</u>	<u>2,866</u>
<b>Net Income(Loss)</b>	19,656	1,096	8,230	12,695	16,674	20,273	23,575
Retained Earnings	-	19,656	(5,145)	(18,890)	(28,621)	(35,175)	(39,017)
Net Income(Loss)	19,656	1,096	8,230	12,695	16,674	20,273	23,575
Dividends	-	<u>25,897</u>	<u>21,975</u>	<u>22,426</u>	<u>23,228</u>	<u>24,115</u>	<u>25,072</u>
End Retained Earnings	19,656	(5,145)	(18,890)	(28,621)	(35,175)	(39,017)	(40,514)
Dividend Policy	(31,315)	25,897	21,975	22,426	23,228	24,115	25,072

**Balance Sheet**

<b>31-Aug</b>	<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b>Assets</b>							
<b><u>Current Assets:</u></b>							
Cash	57,864	54,608	55,740	57,237	58,833	60,514	62,270
Accounts Receivable	3,538	3,626	3,717	3,810	3,905	4,002	4,102
Total Inventories	3,500	3,570	3,641	3,714	3,789	3,864	3,942
<b>Total Current Assets</b>	<b>64,902</b>	<b>61,804</b>	<b>63,098</b>	<b>64,761</b>	<b>66,526</b>	<b>68,381</b>	<b>70,314</b>
<b><u>Capital Assets:</u></b>							
Plant and Equipment	241,950	241,950	241,950	241,950	241,950	241,950	241,950
Accumulated C.C.A.	(15,760)	(42,783)	(63,527)	(81,039)	(95,919)	(108,651)	(119,623)
Net Plant and Equipment	226,190	199,167	178,423	160,911	146,031	133,299	122,327
<b>Total Assets</b>	<b>291,092</b>	<b>260,971</b>	<b>241,521</b>	<b>225,672</b>	<b>212,557</b>	<b>201,680</b>	<b>192,640</b>
<b>Liabilities</b>							
<b><u>Current Liabilities:</u></b>							
Accounts Payable	13,839	14,116	14,398	14,686	14,980	15,279	15,585
<b><u>Noncurrent Liabilities</u></b>							
Long Term Debt	126,183	120,588	114,601	108,194	101,339	94,005	86,157
<b>Total Liabilities</b>	<b>140,022</b>	<b>134,704</b>	<b>128,999</b>	<b>122,880</b>	<b>116,319</b>	<b>109,284</b>	<b>101,741</b>
<b><u>Shareholders' Equity</u></b>							
Owner's Equity	131,413	131,413	131,413	131,413	131,413	131,413	131,413
Retained Earnings	19,656	(5,145)	(18,890)	(28,621)	(35,175)	(39,017)	(40,514)
<b>Total Shareholder's Equity</b>	<b>151,069</b>	<b>126,268</b>	<b>112,523</b>	<b>102,792</b>	<b>96,238</b>	<b>92,396</b>	<b>90,899</b>
<b>Total Liabilities and Shareholder's Equity</b>	<b>291,092</b>	<b>260,971</b>	<b>241,521</b>	<b>225,672</b>	<b>212,557</b>	<b>201,680</b>	<b>192,640</b>

**Statement of Cash Flow**

For the year ended August 31

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
<b><u>Cash from (used in) Operating Activities:</u></b>							
Net Income(Loss)	19,656	1,096	8,230	12,695	16,674	20,273	23,575
Depreciation	15,760	27,023	20,744	17,512	14,881	12,732	10,972
Accounts Receivable	(3,538)	(88)	(91)	(93)	(95)	(98)	(100)
Inventory	(3,500)	(70)	(71)	(73)	(74)	(76)	(77)
Accounts Payable	13,839	277	282	288	294	300	306
Net Cash Flow from Operations	42,218	28,237	29,094	30,329	31,679	33,131	34,675
<b><u>Cash from (used for) Financing Activities:</u></b>							
Owner's Equity	131,413	-	-	-	-	-	-
Long Term Debt	126,183	(5,596)	(5,987)	(6,406)	(6,855)	(7,335)	(7,848)
Dividends	-	(25,897)	(21,975)	(22,426)	(23,228)	(24,115)	(25,072)
Net Cash Flow from Financing	257,596	(31,493)	(27,962)	(28,832)	(30,083)	(31,450)	(32,920)
<b><u>Cash from (used for) Investing Activities:</u></b>							
Buildings and Equipment	(241,950)	-	-	-	-	-	-
Net Cash Flow from Investing	(241,950)	-	-	-	-	-	-
<b>Increase(decrease) in Cash</b>	<b>57,864</b>	<b>(3,256)</b>	<b>1,132</b>	<b>1,497</b>	<b>1,596</b>	<b>1,681</b>	<b>1,755</b>
Cash beginning of year	-	57,864	54,608	55,740	57,237	58,833	60,514
Cash end of year	57,864	54,608	55,740	57,237	58,833	60,514	62,270

**Supporting Schedules****Schedule 1: Economic Forecast**

		<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
Long Term Debt Rate	Input	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Rate of Inflation (expenses)	Input	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

**Schedule 2: Revenues**

		<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b><u>Growth in Selling Prices</u></b>								
Bulk	Input	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Bags	Input	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%

**Quantity of Sales (tonnes)**

Bulk	Input	100	100	100	100	100	100	100
Bags	Input	340	340	340	340	340	340	340
Total Quantity		440	440	440	440	440	440	440

		<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b><u>Selling Prices (per tonne)</u></b>								
Bulk	Input	225	231	236	242	248	255	261
Bags	Input	350	359	368	377	386	396	406
Average Selling Price		288	295	302	310	317	325	333

**Sales Revenue**

Bulk		22,500	23,063	23,639	24,230	24,836	25,457	26,093
Bags		119,000	121,975	125,024	128,150	131,354	134,638	138,004
<b>Total</b>		<b>141,500</b>	<b>145,038</b>	<b>148,663</b>	<b>152,380</b>	<b>156,190</b>	<b>160,094</b>	<b>164,097</b>

## Ground-Maker

### Schedule 3: Cost of Goods Manufactured

		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
<u>Direct Material Purchases</u>								
Bags		4784	4880	4977	5077	5178	5282	5388
Trucking In		930	949	968	987	1007	1027	1047
Nutrient Testing		500	510	520	531	541	552	563
Total		5,714	5,828	5,945	6,064	6,185	6,309	6,435
<u>Direct Labour Costs</u>								
<u>Direct Labour Staff</u>								
Part-time baggers	Input	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Total Labour Staffing		3	3	3	3	3	3	3
<u>Baggers</u>								
Wage	Input	\$ 11.00	\$ 11.22	\$ 11.44	\$ 11.67	\$ 11.91	\$ 12.14	\$ 12.39
Hours per worker	Input	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>
Total bagger wage		1,320	1,346	1,373	1,401	1,429	1,457	1,487
Total Direct Labour		3,960	4,039	4,120	4,202	4,286	4,372	4,460
<u>Benefits for Baggers</u>								
Employment Insurance	1.40%	55	57	58	59	60	61	62
Canada Pension Plan	2.00%	79	81	82	84	86	87	89
Workers Compensation	3.00%	119	121	124	126	129	131	134
Holiday Pay	5.80%	<u>230</u>	<u>234</u>	<u>239</u>	<u>244</u>	<u>249</u>	<u>254</u>	<u>259</u>
Total Benefits for Salary Employees		253	259	264	269	274	280	285
Total Direct Labour + Benefits		4,213	4,298	4,384	4,471	4,561	4,652	4,745
<u>Variable Manufacturing Overhead Costs</u>								
Freight and Pallet Charges	Input	8,125	8,288	8,453	8,622	8,795	8,971	9,150
Maintenance	Input	<u>87</u>	<u>89</u>	<u>90</u>	<u>92</u>	<u>94</u>	<u>96</u>	<u>98</u>
Total Variable Overhead		8,212	8,376	8,544	8,714	8,889	9,066	9,248
<u>Fixed Manufacturing Overhead Costs</u>								
Insurance	Input	1,000	1,020	1,040	1,061	1,082	1,104	1,126
Property Taxes	Input	2,000	2,040	2,081	2,122	2,165	2,208	2,252
Capital Cost Allowance		15,760	27,023	20,744	17,512	14,881	12,732	10,972
Electricity	Input	<u>1,200</u>	<u>1,469</u>	<u>1,469</u>	<u>1,469</u>	<u>1,469</u>	<u>1,469</u>	<u>1,469</u>
Total Fixed Overhead		19,960	31,552	25,334	22,164	19,597	17,513	15,819
Total Manufacturing Overhead		28,172	39,928	33,877	30,879	28,485	26,580	25,067
<u>Cost of Goods Manufactured</u>								
Direct Materials		5,714	5,828	5,945	6,064	6,185	6,309	6,435
Direct Labour Used		4,213	4,298	4,384	4,471	4,561	4,652	4,745
Manufacturing Overhead		<u>28,172</u>	<u>39,928</u>	<u>33,877</u>	<u>30,879</u>	<u>28,485</u>	<u>26,580</u>	<u>25,067</u>
Total Cost of Goods Manufactured		38,099	50,054	44,206	41,414	39,231	37,540	36,247



**Schedule 5: Operating and Marketing Expenses****Marketing Salary and Wages**

<u>Staffing</u>		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Manager/ Marketer	Input	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Secretary	Input	<u>0.5</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
Total Manager/mrktng staff		1.5	2.0	2.0	2.0	2.0	2.0	2.0

Total Annual Salaries

Manager/Marketer	Input	59,000	60,180	61,384	62,611	63,863	65,141	66,444
Secretary	Input	<u>7,500</u>	<u>15,000</u>	<u>15,300</u>	<u>15,606</u>	<u>15,918</u>	<u>16,236</u>	<u>16,561</u>
Total Salaries		66,500	75,180	76,684	78,217	79,782	81,377	83,005

Benefits for Salary Workers

Employment Insurance	1.40%	931	1,053	1,074	1,095	1,117	1,139	1,162
Canada Pension Plan	2.00%	1,330	1,504	1,534	1,564	1,596	1,628	1,660
Workers Compensation	1.00%	<u>665</u>	<u>752</u>	<u>767</u>	<u>782</u>	<u>798</u>	<u>814</u>	<u>830</u>
Total Benefits for Salary Employees		2,926	3,308	3,374	3,442	3,510	3,581	3,652

Total Marketing Salaries, Wages and Benefits 69,426 78,488 80,058 81,659 83,292 84,958 86,657

<u>Marketing Expenses</u>		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Travelling	Input	500	561	629	706	792	889	998
Cell Phone	Input	480	490	499	509	520	530	541
Internet -Web Page	Input	350	357	364	371	379	386	394
Flyers/Pamphlets	Input	300	306	312	318	325	331	338
Trade Shows	Input	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Hotel	Input	1,200	1,322	1,457	1,606	1,770	1,950	2,149
Meals	Input	300	306	312	318	325	331	338
Business Cards	Input	100	102	104	106	108	110	113
Total Marketing Expense		6,230	6,504	6,800	7,119	7,466	7,841	8,248

Summary of Operating and Marketing Expenses

Marketing Salaries	69,426	78,488	80,058	81,659	83,292	84,958	86,657
Marketing Expenses	6,230	6,504	6,800	7,119	7,466	7,841	8,248
Interest on Long term Debt	<u>9,199</u>	<u>8,833</u>	<u>8,441</u>	<u>8,022</u>	<u>7,574</u>	<u>7,094</u>	<u>6,580</u>
Total Expenses	84,855	93,825	95,299	96,800	98,331	99,892	101,486

Unit Cost Analysis (\$ per tonne)

Unit Cost per tonne	87	114	100	94	89	85	82
Average Unit Selling Price	<u>288</u>	<u>295</u>	<u>302</u>	<u>310</u>	<u>317</u>	<u>325</u>	<u>333</u>
Average Unit Margin	201	181	202	215	228	240	251

**Schedule 6: Capital Budget**

		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Land	Input	3,750						
Site Setup:								
Yard lights	input	2,000						
Buildings	Input	86,800						
Sewage System	Input	3,500						
Electricity Installation	Input	25,000						
Town Water Installation	Input	14,300						
Landscaping	Input	400						
Production Equipment:								
Bagger	Input	45,505						
Screener	Input	49,595						
Scale	Input	6,500						
Office Equipment	Input	4,600						
<b>Total Capital Costs</b>		<b>241,950</b>	-	-	-	-	-	-

**Working Capital**

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Accounts Receivable	3,538	3,626	3,717	3,810	3,905	4,002	4,102
Raw Inventory	-	-	-	-	-	-	-
Finished Inventory	3,500	3,570	3,641	3,714	3,789	3,864	3,942
Accounts Payable	13,839	14,116	14,398	14,686	14,980	15,279	15,585
Total	(6,802)	(6,920)	(7,040)	(7,162)	(7,287)	(7,413)	(7,541)

Average Days Inventory

Raw Inventory	Input	30	30	30	30	30	30	30
Inventory in progress	Input	1	1	1	1	1	1	1
Finished Inventory	Input	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>
Total Days Inventory		91	91	91	91	91	91	91
Average Days Payables	Input	30	30	30	30	30	30	30

**Schedule 7: Financing Budget**

		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Long Term Debt	Input	131,413	-	-	-	-	-	-
Owner's Equity	Input	131,413	-	-	-	-	-	-
Total		262,826	-	-	-	-	-	-

**Schedule 8: Long Term Debt**

<b>Interest Rate</b>	<b>7.0%</b>	<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b>Payment Period (Years)</b>	<b>15</b>							
Beginning Balance		-	126,183	120,588	114,601	108,194	101,339	94,005
Addition		131,413	-	-	-	-	-	-
Interest		9,199	8,833	8,441	8,022	7,574	7,094	6,580
Debt Payment		<u>14,428</u>	<u>14,428</u>	<u>14,428</u>	<u>14,428</u>	<u>14,428</u>	<u>14,428</u>	<u>14,428</u>
Ending Balance		126,183	120,588	114,601	108,194	101,339	94,005	86,157

**Schedule 9: Capital Cost Allowance**

		<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b><u>Buildings</u></b>	Input Rate	<b>5%</b>						
Beginning Balance		-	128,700	122,265	116,152	110,344	104,827	99,586
Additions		132,000	-	-	-	-	-	-
Capital Cost Allowance		<u>3,300</u>	<u>6,435</u>	<u>6,113</u>	<u>5,808</u>	<u>5,517</u>	<u>5,241</u>	<u>4,979</u>
Ending Balance		128,700	122,265	116,152	110,344	104,827	99,586	94,606
<b><u>Equipment</u></b>	Input Rate	<b>20%</b>						
Beginning Balance		-	91,440	73,152	58,522	46,817	37,454	29,963
Additions		101,600	-	-	-	-	-	-
Capital Cost Allowance		<u>10,160</u>	<u>18,288</u>	<u>14,630</u>	<u>11,704</u>	<u>9,363</u>	<u>7,491</u>	<u>5,993</u>
Ending Balance		91,440	73,152	58,522	46,817	37,454	29,963	23,970
<b><u>Office Equipment</u></b>	Input Rate	<b>100%</b>						
Beginning Balance		-	2,300	-	-	-	-	-
Additions		4,600	-	-	-	-	-	-
Capital Cost Allowance		<u>2,300</u>	<u>2,300</u>	-	-	-	-	-
Ending Balance		2,300	-	-	-	-	-	-
<b>Total CCA Expense</b>		<b>15,760</b>	<b>27,023</b>	<b>20,744</b>	<b>17,512</b>	<b>14,881</b>	<b>12,732</b>	<b>10,972</b>

**Schedule 10: Income Tax**

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Income Before Taxes	22,046	1,229	9,231	14,239	18,701	22,737	26,441
Accumulated Loss Carryforward	-	-	-	-	-	-	-
Loss Carryforward Used	-	-	-	-	-	-	-
Taxable Income	22,046	1,229	9,231	14,239	18,701	22,737	26,441
Federal Tax @ 28%, 21%	4,630	258	1,938	2,990	3,927	4,775	5,553
Federal Surtax @ 4%	185	10	78	120	157	191	222
Small Bus Tax Credit @ 16%	(3,527)	(197)	(1,477)	(2,278)	(2,992)	(3,638)	(4,231)
Provincial Tax @ 6%, 10%	1,102	61	462	712	935	1,137	1,322
Total Taxes	2,390	133	1,001	1,543	2,027	2,465	2,866

**Schedule 11: Ratio Analysis**

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Cash Conversion Cycle	61	61	61	61	61	61	61
<u>Liquidity Ratios</u>							
Current Ratio	4.69	4.38	4.38	4.41	4.44	4.48	4.51
<u>Activity and Operating Ratios</u>							
Total Asset Turnover	0.49	0.56	0.62	0.68	0.73	0.79	0.85
Inventory Turnover	9.79	13.86	12.00	11.02	10.23	9.60	9.09
Average Days Inventory	37	26	30	33	36	38	40
<u>Leverage Ratios</u>							
Debt Ratio	48.1%	51.6%	53.4%	54.5%	54.7%	54.2%	52.8%
Debt to Equity	92.7%	106.7%	114.6%	119.5%	120.9%	118.3%	111.9%
<u>Profitability Ratios</u>							
Gross Profit Margin	75.5%	65.5%	70.3%	72.9%	74.9%	76.6%	78.0%
Net Profit Margin	13.9%	0.8%	5.5%	8.3%	10.7%	12.7%	14.4%
Return on Total Assets	6.8%	0.4%	3.4%	5.6%	7.8%	10.1%	12.2%
Return on Equity	13.0%	0.9%	7.3%	12.4%	17.3%	21.9%	25.9%
Net Profit Margin *	15.6%	0.8%	6.2%	9.3%	12.0%	14.2%	16.1%
Return on Total Assets *	6.8%	0.4%	3.4%	5.6%	7.8%	10.1%	12.2%
Return on Equity *	14.6%	1.0%	8.2%	13.9%	19.4%	24.6%	29.1%

\* Using net income before tax

<b>Schedule 12: Investment Analysis</b>	<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b>Required Return on Equity</b> Input	<b>20%</b>						
<b><u>Present Value of Equity Investment</u></b>							
Equity Investment	131,413	-	-	-	-	-	-
Present Value of Equity Investment	131,413	-	-	-	-	-	-
<b><u>Present Value of Equity Returns</u></b>							
Net Cash Flows to Equity	57,864	(3,256)	1,132	1,497	1,596	1,681	1,755
Dividends	-	25,897	21,975	22,426	23,228	24,115	25,072
Salvage Value	-	-	-	-	-	-	-
Total Net Cash Flow to Equity	57,864	22,641	23,107	23,923	24,824	25,796	26,827
Present Value of Net Cash Flows	165,060						
Total Cash Flows to Equity	(131,413)	57,864	22,641	23,107	23,923	24,824	25,796
<b>Net Present Value of Equity Investment</b>	<b>33,647</b>						
<b>Internal Rate of Return on Equity Investment</b>	<b>26.2%</b>						
<b><u>External Rate of Return on Equity Investment</u></b>							
Equity Investment	(131,413)						
Dividends	-	25,897	21,975	22,426	23,228	24,115	25,072
Salvage Value	-	-	-	-	-	-	-
Total to Equity Investor	(131,413)	-	25,897	21,975	22,426	23,228	24,115
<b>External Rate of Return on Equity Investment</b>	<b>19.2%</b>						

Description	Estimated Cost (\$)	Source
Land	3,750	
Site Setup:		
Yard lights	2,000	CMI in Humbolt
Buildings	86,800	Cover-All & Red rose trailers
Sewage System	3,500	P&J Plumbing
Electricity Installation	25,000	P&J Electrical
Town Water Installation	14,300	P&J Plumbing
Landscaping	400	Lakeshore garden Center
<b>Total Cost</b>	<b>135,750</b>	
Production Equipment:		<b>Capacity/Quantity/Source</b>
Bagger	45,505	Turn and screen in USA
Scale	6,500	Equipment trader
Screener	49,595	Global repair in ontario
Office Equipment	4,600	Staples
<b>Total Equipment Costs</b>	<b>106,200</b>	
<b>Total Working Capital</b>	<b>-6,802</b>	
<b>Total Capital Costs</b>	<b>235,149</b>	

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>Marketing/Sales Labour</b>										
Manager	\$59,000	\$60,180	\$61,384	\$62,611	\$63,863	\$65,141	\$66,444	\$67,772	\$69,128	\$70,510
<b>Total Marketing/Sales Labour +</b>	<b>\$59,000</b>	<b>\$60,180</b>	<b>\$61,384</b>	<b>\$62,611</b>	<b>\$63,863</b>	<b>\$65,141</b>	<b>\$66,444</b>	<b>\$67,772</b>	<b>\$69,128</b>	<b>\$70,510</b>
<b>Production Labour</b>										
Baggers	\$3,960	\$4,039	\$4,120	\$4,202	\$4,286	\$4,372	\$4,460	\$4,549	\$4,640	\$4,733
Benefits for Salary Employees	\$253	\$259	\$264	\$269	\$274	\$280	\$285	\$291	\$297	\$303
<b>Total Salaries</b>	<b>\$4,213</b>	<b>\$4,298</b>	<b>\$4,384</b>	<b>\$4,471</b>	<b>\$4,561</b>	<b>\$4,652</b>	<b>\$4,745</b>	<b>\$4,840</b>	<b>\$4,937</b>	<b>\$5,035</b>
<b>Total Direct Labour + Benefits</b>	<b>\$8,427</b>	<b>\$8,595</b>	<b>\$8,767</b>	<b>\$8,943</b>	<b>\$9,122</b>	<b>\$9,304</b>	<b>\$9,490</b>	<b>\$9,680</b>	<b>\$9,873</b>	<b>\$10,071</b>

**Direct Material Purchases**

Bags	4784
Trucking In	930
Nutrient Testing	500
<b>Total Direct Materials</b>	<b>6,214</b>

**Direct Labour and Benefits**

Baggers	3,960
Benefits for Baggers	253
<b>Total Direct Labour + Benefits</b>	<b>4,213</b>

**Manufacturing Overhead Costs**

<u>Variable</u>	
Freight and Pallet Charges	8,125
Maintenance	87
Total Variable Overhead	8,212
<u>Fixed</u>	
Insurance	1,000
Property Taxes	2,000
Capital Cost Allowance	15,760
Electricity	1,200
Total Fixed Overhead	19,960
<b>Total Manufacturing Overhead</b>	<b>28,172</b>

**Cost of Goods Manufactured**

Direct Materials	5,714
Direct Labour Used	4,213
Manufacturing Overhead	28,172
<b>Total Cost of Goods Manufactured</b>	<b>38,099</b>

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