



# Guidelines for Estimating Beef Feedlot Finishing Costs 2015

in Manitoba





Guidelines For Estimating  
**Beef Feedlot Finishing Costs**  
For Weight Range of 650 - 1400 lbs.  
Based on feeding 500 Steers

**Date: September, 2015**

(\*\*revised market prices November 6th\*\*)

This guide is designed to provide you with planning information and a format for calculating costs of production of a beef cattle feedlot finishing enterprise in Manitoba. General Manitoba Agriculture, Food and Rural Development (MAFRD) recommendations are assumed in using feed and veterinary inputs. These figures provide an economic evaluation of the livestock and estimated prices required to cover all costs. Costs include labour, investment and depreciation, but do not include management costs, nor do they necessarily represent the average cost of production in Manitoba.

Cattle feeding is a high risk business requiring large amounts of short term capital to buy feeder cattle and feed. With cyclical price variations for both livestock and feed, successful management involves careful consideration of costs, projection of markets and sound judgement.

These budgets may be adjusted by putting in your own figures. As a producer you are encouraged to calculate your own costs of production. Good management is assumed in that a balanced ration is being fed, livestock are on a herd health program and handling facilities are included.

This tool is available as an Excel worksheet at: [www.manitoba.ca/agriculture](http://www.manitoba.ca/agriculture) or at your local [MAFRD GO Office](#). [The Farm Machinery Custom and Rental Rate Guide](#) is also available to help determine machinery costs.

**Note:** This budget is only a guide and is not intended as an in-depth study of the cost of production of this industry. Interpretation and use of this information is the responsibility of the user. If you need help with a budget, contact your local MAFRD GO Office.

**Feedlot Finishing Cost Summary September, 2015**  
**Based on feeding 500 steers for weight range 650 to 1400 lbs.**

	<u>Cost/Head</u>	<u>Total Cost</u>	<u>Your Cost</u>
<b>A. Operating Costs</b>			
<b>1. Feed Costs</b>			
1.01 Rolled Barley	\$378.38	\$189,190	_____
1.02 Barley Silage	\$56.31	\$28,155	_____
1.03 Grass Hay	\$3.38	\$1,690	_____
1.04 Supplement	<u>\$52.38</u>	<u>\$26,190</u>	_____
<b>Total Feed Costs</b>	<b>\$490.45</b>	<b>\$245,225</b>	_____
<b>2. Other Operating Costs</b>			
2.01 Feeder Cost	\$1,708.55	\$854,275	_____
2.02 Straw	\$15.00	\$7,500	_____
2.03 Veterinary Medicine & Supplies	\$18.46	\$9,230	_____
2.04 Annual Fuel & Repair Costs	\$9.45	\$4,725	_____
2.05 Utilities	\$6.80	\$3,400	_____
2.06 Marketing & Transportation	\$101.72	\$50,860	_____
2.07 Insurance	\$1.66	\$830	_____
2.08 Manure Removal	\$11.20	\$5,600	_____
2.09 Barn & Office Supplies	\$1.80	\$900	_____
2.10 Death Loss	<u>\$39.72</u>	<u>\$19,860</u>	_____
Subtotal Operating Costs	\$2,404.81	\$1,202,405	_____
2.11 Operating Interest	<u>\$70.90</u>	<u>\$35,450</u>	_____
<b>Total Operating Costs</b>	<b>\$2,475.71</b>	<b>\$1,237,855</b>	_____
<b>B. Fixed Costs</b>			
<b>3. Depreciation</b>			
3.01 Buildings	\$7.46	\$3,730	_____
3.02 Machinery & Equipment	\$17.92	\$8,960	_____
<b>4. Investment</b>			
4.01 Buildings	\$2.28	\$1,140	_____
4.02 Machinery & Equipment	<u>\$3.36</u>	<u>\$1,680</u>	_____
<b>Total Fixed Costs</b>	<b><u>\$31.02</u></b>	<b><u>\$15,510</u></b>	_____
<b>Total Operating and Fixed Costs</b>	<b>\$2,506.73</b>	<b>\$1,253,365</b>	_____
<b>C. Labour</b>	\$40.00	\$20,000	_____
<b>TOTAL COST OF PRODUCTION</b>	<b>\$2,546.73</b>	<b>\$1,273,365</b>	_____

**Profitability and Breakeven Analysis**

<b>Estimated Farmgate</b>	<u>Per Head</u>	<u>Total</u>
Gross Revenue @ \$165/cwt market price	<b>\$2,194.50</b>	<b>\$1,097,250</b>

<b>Breakeven Analysis</b>	<b>Breakeven Purchase</b>	<b>Breakeven Selling</b>
	<b>Price (\$/cwt) @</b>	<b>Price (\$/cwt) @</b>
	<b><u>\$165/cwt market price</u></b>	<b><u>\$260/cwt feeder price</u></b>
Operating Costs	\$216.74	\$186.14
Operating Costs & Labour	\$210.58	\$189.15
Operating & Fixed Costs	\$211.96	\$188.48
Total Costs	\$205.81	\$191.48
	<b>Cost per lb of</b>	<b>Marginal Returns per head</b>
	<b><u>gain sold (\$/cwt)</u></b>	<b><u>@ \$165 /cwt market price</u></b>
Feed Costs	\$72.13	
Operating Costs	\$115.55	(\$281.21)
Operating Costs & Labour	\$121.43	(\$321.21)
Operating & Fixed Costs	\$120.11	(\$312.23)
Total Costs	\$125.99	(\$352.23)

**Note:** This budget is only a guide and is not intended as an in-depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user. No liability for decisions based on this publication is assumed.

## Feedlot Finishing Production Cost Worksheet

### Assumptions

1. Average daily gain (ADG) was assumed to be 3.25 lbs/day.
2. It was assumed that the feeder steer weighed in at 650 lbs., and finished at 1400 lbs ( 1330 lbs after a 5% shrink.)
3. Days on feed was 231. Hay was fed for 15 days.
4. Investment in feedlot facilities and equipment was assumed to handle 500 head.

### A. Operating Costs

Your Cost

#### 1. Feed Costs

##### 1.01 Rolled Barley

	231.00	days on grain	
x	18.50	lbs/feeder/day	
÷	48.00	lbs/bushel	
<u>x</u>	<u>\$4.25</u>	<u>/bushel</u>	
<b>=</b>	<b>\$378.38</b>	<b>/feeder</b>	

##### 1.02 Barley Silage

	231.00	days on silage	
x	12.50	lbs/feeder/day	
÷	2,000.00	lbs/ton	
<u>x</u>	<u>\$39.00</u>	<u>/ton</u>	
<b>=</b>	<b>\$56.31</b>	<b>/feeder</b>	

##### 1.03 Grass Hay

	15.00	days on hay	
x	5.00	lbs/feeder/day	
÷	2,000.00	lbs/ton	
<u>x</u>	<u>\$90.00</u>	<u>/ton</u>	
<b>=</b>	<b>\$3.38</b>	<b>/feeder</b>	

##### 1.04 Supplement (Salt, Vitamins, Minerals, Ionophore)

	231.00	days on supplement	
x	1.00	lbs/feeder/day	
÷	2,205.00	lbs/tonne	
<u>x</u>	<u>\$500.00</u>	<u>/tonne</u>	
<b>=</b>	<b>\$52.38</b>	<b>/feeder</b>	

## 2. Other Operating Costs

### 2.01 Feeder Cattle Cost

Buying Commission & insurance

\$6.50 commission/feeder

\$1.00 insurance/feeder

Trucking-in

\$1.70 /cwt

x 650.00 lbs/feeder

÷ 100.00 lbs/cwt

= \$11.05 /feeder

650.00 lbs/feeder

x \$260.00 /cwt

÷ 100.00 lbs/cwt

= \$1,690.00 /feeder

**Total = \$1,708.55 /feeder**

### 2.02 Straw

0.50 tons/feeder/year

x \$30.00 /ton

= \$15.00 /feeder

### 2.03 Veterinary Medicine & Supplies

Cattle Medication

\$4.60 IBR,PI3,BVD,BRSV & Pasteurella

+ \$0.56 Vitamin A,D & E

+ \$0.96 External & Internal Parasites

+ \$1.06 Blackleg & Haemphilus

+ \$3.42 Implant

+ \$7.00 Antibiotics

= \$17.60 /feeder

Professional Services

\$150.00 /hour charge

x 2.00 hours

÷ 500 feeder cattle

= \$0.60 /feeder

Transportation Costs

	\$0.80	/km charge	_____
x	80.00	kilometres	_____
x	2.00	visits	_____
÷	<u>500</u>	<u>feeder cattle</u>	_____
=	\$0.26	/feeder	_____

**Total = \$18.46 /feeder** \_\_\_\_\_

**2.04 Annual Fuel & Repair Costs**

	\$1,725	repairs	_____
+	\$3,000	fuel costs	_____
÷	<u>500</u>	<u>feeder cattle</u>	_____
=	<b>\$9.45</b>	<b>/feeder</b>	_____

**2.05 Utilities**

	\$3,400	utilities	_____
÷	<u>500</u>	<u>feeder cattle</u>	_____
=	<b>\$6.80</b>	<b>/feeder</b>	_____

**2.06 Marketing & Transportation**

	\$3.00	MBP Levy	_____
+	\$0.00	WLPIP Insurance Premium	_____
±	<u>\$0.00</u>	<u>commission</u>	_____
=	\$3.00	/feeder	_____

Trucking	700.00	miles	_____
x	\$5.50	/loaded mile	_____
÷	<u>39.00</u>	<u>head/load</u>	_____
=	\$98.72	/feeder	_____

**Total = \$101.72 /feeder** \_\_\_\_\_

**2.07 Insurance**

	\$194,890	building & equipment investment	_____
x	\$0.40	/\$100 capital	_____
÷	100.00	/\$100 capital	_____
÷	<u>500</u>	<u>feeder cattle</u>	_____
=	\$1.56	/feeder/year	_____

	\$1,000,000	feeder investment	_____
x	\$0.00	/\$100 capital	_____
÷	100.00	/\$100	_____
÷	<u>500</u>	<u>feeder cattle</u>	_____
=	\$0.00	/feeder/year	_____

		\$49.00	liability premium	_____
	÷	<u>500</u>	<u>feeder cattle</u>	_____
	=	\$0.10	/feeder/year	_____
<b>Total</b>	=	<b>\$1.66</b>	<b>/feeder</b>	_____
<b>2.08 Manure Removal</b>				
		\$5,600	removal cost	_____
	÷	<u>500</u>	<u>feeder cattle</u>	_____
	=	<b>\$11.20</b>	<b>/feeder</b>	_____
<b>2.09 Barn &amp; Office Supplies</b>				
		\$900.00	total barn expenses	_____
	÷	<u>500</u>	<u>feeder cattle</u>	_____
	=	<b>\$1.80</b>	<b>/feeder</b>	_____
<b>2.10 Death Loss</b>				
		\$1,708.55	feeder cattle cost	_____
	+	\$2,365.09	maximum value	_____
	-	\$101.72	marketing costs	_____
	÷	2.00	average value	_____
	×	<u>2.00</u>	<u>% mortality rate</u>	_____
	=	<b>\$39.72</b>	<b>/feeder</b>	_____
<b>2.11 Operating Interest</b>				
		\$1,708.55	feeder cost	_____
	+	\$328.27	½ of feed & other costs	_____
	x	5.50	% operating interest	_____
	x	231.00	days on feed	_____
	÷	<u>365.00</u>	<u>365 days</u>	_____
	=	<b>\$70.90</b>	<b>/feeder</b>	_____



### Capital Costs

#### Buildings, Corrals & Water System

Windbreak fence	\$7,350	_____
Pens	\$4,540	_____
Handling Facilities	\$7,500	_____
Waterers	\$6,000	_____
Gates	\$2,000	_____
Bunk Feeders	\$25,000	_____
Well & Pressure System	\$8,000	_____
Grain Bin	\$5,000	_____
Landscaping	\$17,500	_____
<b>Total</b>	<b>\$82,890</b>	_____

#### Machinery & Equipment

Tractor & Loader	\$72,000	_____
Miscellaneous	\$40,000	_____
<b>Total</b>	<b>\$112,000</b>	_____

<b>Total Investment</b>	<b>\$194,890</b>	_____
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#### B. Fixed Costs

##### 3. Depreciation

##### Original Cost - Salvage Value Useful Life

##### 3.01 Buildings

	\$82,890	original cost	_____
-	\$8,289	salvage value	_____
÷	20.00	years useful life	_____
÷	500	feeder cattle	_____
=	<b>\$7.46</b>	<b>/feeder</b>	_____

##### 3.02 Machinery & Equipment

	\$112,000	original cost	_____
-	\$22,400	salvage value	_____
÷	10.00	years useful life	_____
÷	500	feeder cattle	_____
=	<b>\$17.92</b>	<b>/feeder</b>	_____



## Breakeven Calculations

<b>Cost per lb of gain sold</b>				<b><u>Your Farm</u></b>
<b>Feed Costs</b>		\$490.45	feed cost	_____
	÷	680.00	<u>weight gain (lb)</u>	_____
	=	<b>\$0.72</b>	<b>/lb</b>	_____
 <b>Operating Costs</b>		\$2,475.71	operating costs	_____
	-	\$1,690.00	feeder cost	_____
	÷	680.00	<u>weight gain (lb)</u>	_____
	=	<b>\$1.16</b>	<b>/lb</b>	_____
 <b>Operating &amp; Labour Costs</b>		\$2,515.71	operating & labour	_____
	-	\$1,690.00	feeder cost	_____
	÷	680.00	<u>weight gain (lb)</u>	_____
	=	<b>\$1.21</b>	<b>/lb</b>	_____
 <b>Total Operating &amp; Fixed</b>		\$2,506.73	operating & fixed	_____
	-	\$1,690.00	feeder cost	_____
	÷	680.00	<u>weight gain (lb)</u>	_____
	=	<b>\$1.20</b>	<b>/lb</b>	_____
 <b>Total Costs</b>		\$2,546.73	total	_____
	-	\$1,690.00	feeder cost	_____
	÷	680.00	<u>weight gain (lb)</u>	_____
	=	<b>\$1.26</b>	<b>/lb</b>	_____
 <b>Breakeven selling price</b>				
<b>Operating Costs</b>		\$2,475.71	operating costs	_____
	÷	1,330.00	<u>lbs shrunk weight</u>	_____
	=	<b>\$1.86</b>	<b>/lb</b>	_____
 <b>Operating &amp; Labour</b>		\$2,515.71	operating & labour costs	_____
	÷	1,330.00	<u>lbs shrunk weight</u>	_____
	=	<b>\$1.89</b>	<b>/lb</b>	_____
 <b>Operating &amp; Fixed</b>		\$2,506.73	operating & fixed costs	_____
	÷	1,330.00	<u>lbs shrunk weight</u>	_____
	=	<b>\$1.88</b>	<b>/lb</b>	_____
 <b>Total Costs</b>		\$2,546.73	total costs	_____
	÷	1,330.00	<u>lbs shrunk weight</u>	_____
	=	<b>\$1.91</b>	<b>/lb</b>	_____

**Breakeven purchase price**

**Operating Costs**

	1,330.00	lbs shrunk weight	_____
x	\$165.00	\$/cwt selling price	_____
=	\$2,194.50	income	_____
-	\$785.71	operating less feeder cost	_____
÷	<u>650.00</u>	<u>lbs purchase net weight</u>	_____
=	<b>\$2.17</b>	<b>/lb</b>	_____

**Operating & Labour**

	1,330.00	lbs shrunk weight	_____
x	\$165.00	\$/cwt selling price	_____
=	\$2,194.50	income	_____
-	\$825.71	op & labour less feeder cost	_____
÷	<u>650.00</u>	<u>lbs purchase weight</u>	_____
=	<b>\$2.11</b>	<b>/lb</b>	_____

**Operating & Fixed**

	1,330.00	lbs shrunk weight	_____
x	\$165.00	\$/cwt selling price	_____
=	\$2,194.50	income	_____
-	\$816.73	op & fixed less feeder cost	_____
÷	<u>650.00</u>	<u>lbs purchase weight</u>	_____
=	<b>\$2.12</b>	<b>/lb</b>	_____

**Total Costs**

	1,330.00	lbs shrunk weight	_____
x	\$165.00	\$/cwt selling price	_____
=	\$2,194.50	income	_____
-	\$856.73	total less feeder cost	_____
÷	<u>650.00</u>	<u>lbs purchase weight</u>	_____
=	<b>\$2.06</b>	<b>/lb</b>	_____

Created and maintained by [MAFRD Farm Management](#)

September, 2015

For more information, contact your local [MAFRD GO Office](#) or:

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## Feedlot Finishing Production Costs - Input

### Assumptions

1. This budget outlines the cost of production for a cattle feeder's operation.
2. Buildings and equipment are valued at new cost.
3. All feed is purchased.

### Herd Profile

	<u>Total</u>	
Number of Feeders Purchased	<b>500</b>	head
Feeder Cattle Mortality Rate	<b>2.00</b>	%
Feeder Purchased Weight	<b>650</b>	lbs
Feeder Cattle Price	<b>\$260.00</b>	/cwt
Finish Weight	<b>1,400</b>	lbs
Finish Selling Price	<b>\$165.00</b>	/cwt
WLPPI Insurance Premium	<b>\$0.00</b>	/cwt
Percent Shrink - finished	<b>5.00</b>	%
Percent Shrink - feeder	<b>0.00</b>	%
Average Daily Gain	<b>3.25</b>	lbs/day
Days On Feed	231	days

FOOTNOTE: 1 kilogram (kg) = 2.2046 pounds (lbs)

<b>Feed Costs</b>	<b><u>\$/unit</u></b>	<b><u>Feeder Cattle Requirement</u></b>	<b><u>Days on Feed</u></b>
Rolled Barley	<b>\$4.25</b> /bu	<b>18.50</b> (lbs/day)	231
Barley Silage	<b>\$39.00</b> /ton	<b>12.50</b> (lbs/day)	231
Hay	<b>\$90.00</b> /ton	<b>5.00</b> (lbs/day)	<b>15</b>
Supplement 32%	<b>\$500.00</b> /tonne	<b>1.00</b> (lbs/day)	231
Other Feed #2	<b>\$0.00</b>	<b>0.00</b> (lbs/day)	
Salt, Vitamins & Mineral	<b>\$0.00</b> /lb	<b>0.00</b> (lbs/year)	

FOOTNOTE: 1 bushel (bu) barley = 48 lbs = 21.8 kg  
 1 kilogram (kg) = 2.2046 pounds (lbs)  
 1 tonne (t) = 1,000 kg

### Other Operating Costs

	<u>Total</u>	
<b>Feeder Purchase Costs</b>		
Buying Commission	<b>\$1.00</b>	/cwt
Insurance	<b>\$1.00</b>	/head
Trucking Cost	<b>\$1.70</b>	/cwt
<b>Straw</b>		
Tons/feeder	<b>0.50</b>	tons
Cost	<b>\$30.00</b>	/ton

**Veterinary Medicine & Supplies****Cattle Medication**

Cost/Head(IBR,BVD,PI3,BVD,BRSV, Pasteurella)	<b>\$4.60</b>	
Vitamin A-D	<b>\$0.56</b>	
External & Internal Parasites	<b>\$0.96</b>	
Blackleg & Haemophilus	<b>\$1.06</b>	
Growth Implants	<b>\$3.42</b>	
Antibiotics	<b>\$7.00</b>	

**Herd health program****Professional Services**

Total Yearly Hours	<b>2.00</b>	hours
Charge per Hour	<b>\$150.00</b>	/hour

**Transportation**

Total Kilometres (round trip)	<b>80.00</b>	km
Charge per km	<b>\$0.80</b>	/km
Number of Yearly Visits	<b>2</b>	

**Annual Fuel & Repair Costs**

Repairs (Machinery, Equipment & Facilities)	<b>\$1,725.00</b>
Fuel Costs	<b>\$3,000.00</b>

**Utilities**

Yearly Telephone & Hydro	<b>\$3,400.00</b>
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**Marketing Costs****Trucking Cost**

Distance	<b>700</b>	miles
Rate	<b>\$5.50</b>	/loaded mile
Truck Capacity	<b>54,000</b>	lbs/load
Number of head per load	<b>39</b>	per load
Selling commission	<b>\$0.00</b>	/head

**Other Costs**

MBP Levy	<b>\$3.00</b>	/head
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**Manure Removal**

Annual Cost for Removal	<b>\$5,600.00</b>
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**Insurance**

Cost per \$100 Capital Invested in:	
a) Livestock	<b>\$0.00</b>
b) Building & Equipment	<b>\$0.40</b>
Additional Coverage for Liability	<b>\$49.00</b>

**Barn & Office Supplies**

Total yearly expense relating to barn

**\$900.00****Operating Interest Rate****5.50 %****Investment Interest Rate****2.50 %**

FOOTNOTE: cwt = hundred-weight = 100 lbs

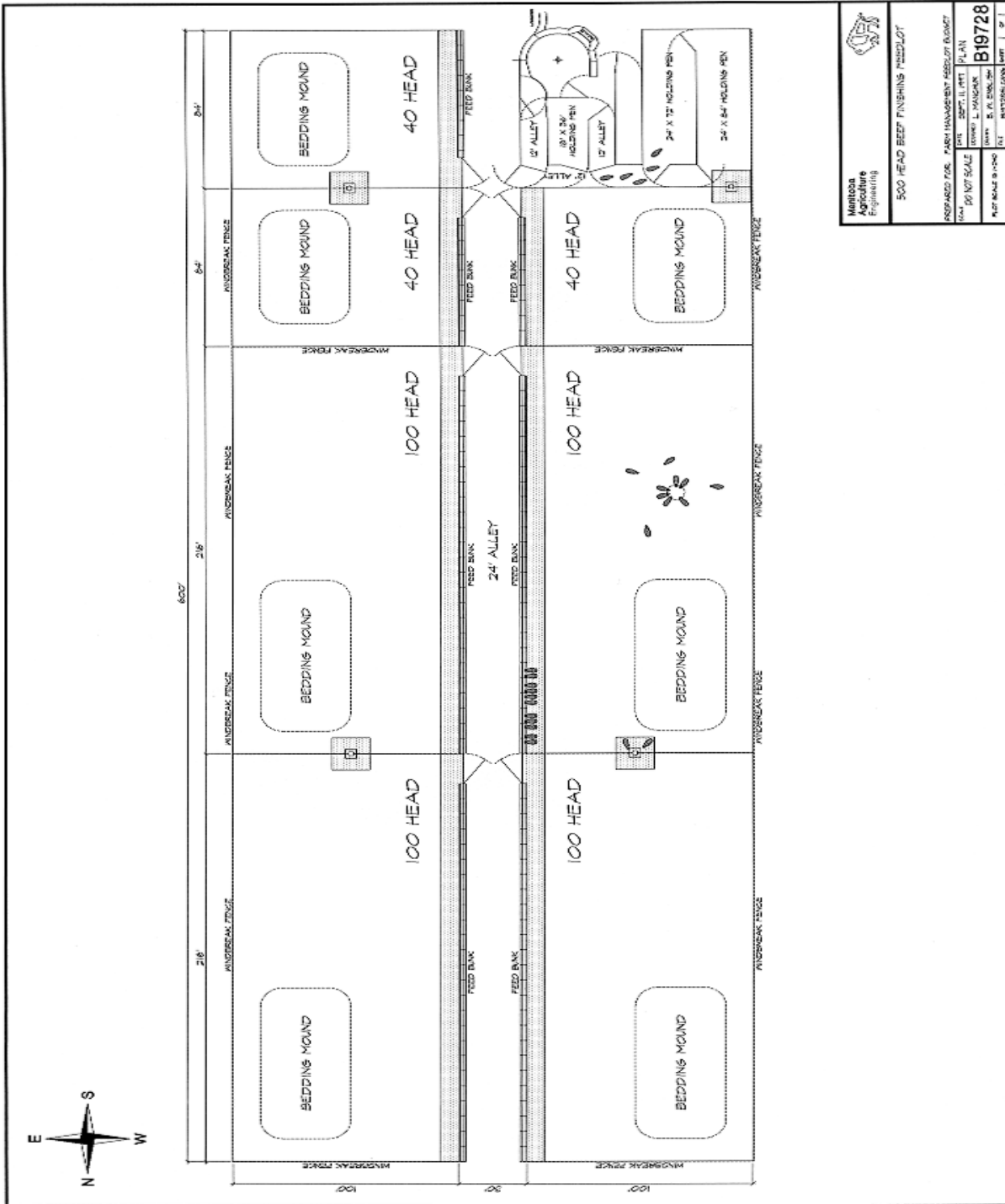
**Capital Costs**

	<b>Original Value</b>	<b>Salvage Value</b>	<b>Useful Life</b>
<b>Buildings, Corrals &amp; Water System</b>			
Windbreak fence	<b>\$7,350</b>	<b>10 %</b>	<b>20 years</b>
Pens	<b>\$4,540</b>	<b>10 %</b>	<b>20 years</b>
Shelters	<b>\$0</b>	<b>10 %</b>	<b>20 years</b>
Handling Facilities	<b>\$7,500</b>	<b>10 %</b>	<b>20 years</b>
Waterers	<b>\$6,000</b>	<b>10 %</b>	<b>20 years</b>
Gates	<b>\$2,000</b>	<b>10 %</b>	<b>20 years</b>
Bunk Feeders	<b>\$25,000</b>	<b>10 %</b>	<b>20 years</b>
Well & Pressure System	<b>\$8,000</b>	<b>10 %</b>	<b>20 years</b>
Grain Bin	<b>\$5,000</b>	<b>10 %</b>	<b>20 years</b>
Landscaping	<b>\$17,500</b>	<b>10 %</b>	<b>20 years</b>
<b>Total</b>	<b>\$82,890</b>		
<b>Machinery &amp; Equipment</b>			
Tractors & Loader (\$180,000 @ 40%)	<b>\$72,000</b>	<b>20 %</b>	<b>10 years</b>
Miscellaneous	<b>\$40,000</b>	<b>20 %</b>	<b>10 years</b>
<b>Total Investment</b>	<b>\$194,890</b>		

**Labour Costs**

	<b>Total</b>
Labour Hours	<b>2.00</b> hours/head
Labour Rate	<b>\$20.00</b> /hour

# Beef Finishing Feedlot 500 Head



**Manitoba Agriculture Engineering**

**500 HEAD BEEF FINISHING FEEDLOT**

PREPARED FOR: RURAL MANAGEMENT CONSULTANTS	DATE: SEPT. 11, 1971	PLAN NO. DO NOT SCALE
DRAWN BY: L. THOMPSON	CHECKED BY: S. A. ENGLISH	PROJECT NO. B-19728
SCALE: 1/4" = 1'-0"	SHEET NO. 1 OF 1	DATE: 11-1-71





A decorative graphic at the top of the page consists of three horizontal bars: a green bar on the left, a dark blue bar in the middle, and an orange bar on the right. From the bottom edge of the dark blue bar, several dashed orange lines curve downwards and outwards across the page.

**For more information**

- Contact your local Manitoba Agriculture, Food and Rural Development (MAFRD) Growing Opportunities (GO) Office.
- Visit us at [manitoba.ca/agriculture](http://manitoba.ca/agriculture).

