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# Hand County— Multiplier Farm 19 FIE Round Janually 19 FIE Round Janually 195 200 56 new 195 200 56 new 195 200 56 new 195 200 56 new Information Sheet for a 5918 Sow Farm July 2019

This farm is designed to raise high quality genetic improvement livestock

### Why Hand County:

- Agriculture community
- Grain availability
- Low population density
- Access to good work ethics and animal husbandry skills

### Scope and Size:



- 4 buildings
  - 1. 4838 gestating sows, housed in group housing
  - 2. 1080 maternity pens (18 rooms of 60 pens)
  - 3. 3094 gilt development spaces
  - 4. Compost building

**Employment opportunity summary:** 

- 19 full time employees to run the farm
  - Annual payroll ~ \$1,268,000
  - o Comprehensive benefits package offered to all full-time employees
  - o Profit sharing retirement plan offered with employer match

### Annual numbers production:

- 145,000 weaned piglets produced annually
  - Estimated value \$5,600,000 per year in weaned piglet sales

### Resources used annually:

- Estimated feed stuffs used
  - 185,000 bushels of corn
  - o 890 tons of soybean meal
  - o 2,800 tons of DDG's
  - Estimated total feed cost \$1,300,000
- Estimated annual utility needs
  - Electrical use \$170,000
  - Propane use \$56,000

### Manure production and nutrient management summary:

- Approximately \$170,000 in nutrient value created annually by the organic manure from the facility
- Will provide enough organic nutrients for ~ 1,000-1,200 acres annually. The nutrient management plan will be monitored by the State of South Dakota
- Nutrients will go to local land owners.
- Application methods used:
  - Drag line will be used
    - Lower field compaction
    - Less road use
    - Improved safety
    - Faster application
  - Manure is incorporated into the soil at the time of application for improved nutrient utilization

### Nutrient summary:

• Typical sow barn manure will have—25 lb. N, 5 lb. P & 15 lb. K per 1,000 gallons.

- Based on a 170 bushel/acre corn crop and a nitrogen based application the target would be 8,000 dallons per acre applied. This would be 200 lbs of N, 40 lbs of P and 120 lbs of K. A six market average price for spring 2018 was \$.37/lb N, \$.38/lb P and \$.48/lb K o \$74.00 N/a o \$15.20 P/a o \$57.60 K/a Hereinary Services Fit?

### How does the Pipestone Veterinary Services Fit?

- Site prospecting and permitting
- Provide design
- Provide complete management for the owners
- Currently mange 70 sow farms and more than 240,000 sows across Midwest

### **Position on roads:**

- Need good quality roads
- Will restore to as good or better condition than they were in at the start of the project
- Will sign a road haul agreement with the Township or County if appropriate
- Truck Traffic equivalent
  - 5 semi loads of feed per week
  - 2 loads of wean piglets or sows per week 0

### Estimated State and Local economic impact totaling nearly \$3,000,000 annually:

- Employee base and \$1,268,000 annual payroll
- Feed purchased locally at approximately \$1,300,000 per year
- Grain user of approximately 1200 acres of corn and 750 acres of soybean production
  - \*Assuming 150 bu/ac. Corn and 40 bu./ac. soybean yields 0
- Utilities purchased locally valued at approximately \$216,000 per year
- Other vendors used would include phone service, fuel, lawn care, snow removal, etc. in excess of \$20,000 annually.
- Nutrient application costs are approximately \$130,000
- Real Estate taxes paid by the farm
- State sales and excise tax to build the project will be approximately \$485,000

## Water Usage and reference:

- Site will use an average of 40,000 gallons of water per day
  - o 2 wells
- 65,000 gallon reservoir on site

# Water use comparison – example

Dr. Steve Pohl – Phone conversation South Dakota State University College of Agricultural and Biosystems Engineering April 16, 2012

### Irrigation Calculation

"How many gallons of water does it take to irrigate 130 acres of land?"

In a typical irrigation system one inch of water would be applied over 4 days.

800 gallons of water per minutes is generated from one pump. (48000 per hour)

48000 gal of water per hour x 96 hours (4 days) = 4,608,000 gallons to apply one inch of water to 130 acres

It will take the farm approximately 115 days to use the same water as one center pivot putting on 1" of water!

Reference: Midwest Plan Service (mwps.org) MWPS-30 Sprinkler Irrigation Systems, 1999



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