MO–FLEX GROW–FINISH BUILDING PLAN
PREPARED FOR: MISSOURI PLAN SERVICE
PLAN NUMBER: MO1–726–94C1

DEVELOPED BY:
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UNIVERSITY OF MISSOURI – COLUMBIA

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MO-FLEX GROW–FINISH BUILDING
WITH 24 PENS AND FLUSH UNDER TOTAL SLATS

SITE SELECTION AND PREPARATION INFORMATION

1. BUILDING LENGTH SHOULD RUN EAST AND WEST IN MISSOURI.
2. AREA 100' TO THE NORTH AND SOUTH OF BUILDING SHOULD BE CLEAR FOR
   NATURAL VENTILATION.
3. SOIL BUILDING PAD SHOULD BE ABOUT 10'-0" TO 20'-0" LONGER AND 12'-0" WIDER
   THAN BUILDING.
4. SOIL BUILDING PAD SHOULD SLOPE 2% FROM TANK END TO BASIN END FOR GOOD
   FLUSHING PERFORMANCE.
5. NO SLOPE ACROSS WIDTH OF SOIL BUILDING PAD SHOULD EXIST.
6. BUILDING PROXIMITY TO OTHER SWINE BUILDINGS IMPACTS PIG PERFORMANCE
   AND SHOULD BE CONSIDERED.

SCALE: 1" = 10'-0"
FLUSH BUILDING WITH INSULATED CEILING

ATTIC VENTILATION/OPENINGS PROVIDED THROUGH RIDGE AND GABLE AREAS ONLY.

TRUSSES, 4'-0" O.C.
SEE MANUAL FOR COMPLETE TRUSS SPECIFICATION.

METAL ROOFING

2" x 4" PURLINS, 3'-0" O.C.

CEILING

6 ML PLASTIC VAPOR RETARDER ABOVE CEILING

10" OF LOOSE FILL INSULATION (R-30)

CURTAIN SIDEWALL

WINTER CEILING INLETS
(TYP.)

FEED DELIVERY SYSTEM
(TYP.)

WINTER MINIMUM EXHAUST FAN
(TYP.)

SEE POST FRAME STRUCTURAL DETAILS
(DWG. S1 AND S2)

CLOSE DAVE OPENING TO ATTIC - OPENINGS ON CURTAIN SIDEWALL BUILDINGS LEAD TO ATTIC MOISTURE PROBLEMS IN WINTER.

40'-2"

6'-0"

APPROXIMATE
9'-0" FLOOR
HEIGHT

SEE FLUSH GUTTER CONCRETE CROSS SECTION (DWG. F3) FOR CONCRETE AND FOUNDATION DETAILS

SEE FLUSH GUTTER CONCRETE CROSS SECTION (DWG. F4) FOR GUTTER DETAILS

FLUSH BUILDING CROSS SECTION
SCALE: 1/4" = 1'-0"

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FLUSH BUILDING CROSS SECTION USING INSULATED CEILING

MO-FLEX GROW-FINISH BUILDING PLAN

COOPERATIVE EXTENSION SERVICE
AGRICULTURAL ENGINEERING DEPARTMENT-UNIVERSITY OF MISSOURI-COLUMBIA
UNIVERSITY EXTENSION - COMMERCIAL AGRICULTURE PROGRAM
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

PLAN
1/4" = 1'-0"

DRAWN BY
JNZ

REVIEWED BY
JNZ

DATE
8/94

FILE NO.
1001-728-94CL

1-10
FLUSH BUILDING WITH OPEN RIDGE SYSTEM

MINIMUM RIDGE OPENING OF 8" SHOULD BE AUTOMATICALLY ADJUSTABLE.
CHECK WITH RIDGE OPENING MANUFACTURER FOR INSTALLATION DETAILS.
SEE MANUAL FOR FURTHER DISCUSSION OF OPEN RIDGE SYSTEM.

TRUSSES, 4'-6" O.C.
SEE MANUAL FOR COMPLETE TRUSS SPECIFICATION.

A 4" (MINIMUM) EAVE INLET REQUIRED FOR COLD WEATHER.
SEE MANUAL FOR FURTHER DISCUSSION.

SEE POST FRAME STRUCTURAL DETAILS
(DWGS. 51 AND 52)

METAL ROOFING

2" x 6" PURULINS, 39" O.C.

1/2" FIRE-RATED EXTERIOR GRADE PLYWOOD

6 MIL PLASTIC VAPOR RETARDER ABOVE PLYWOOD

6" OF BATT INSULATION (R-19)

CURTAIN SIDEWALL

APPROXIMATE 9'-0" LONG

HEIGHT

SEE FLUSH GUTTER CONCRETE
CROSS SECTION (DWG. F4) FOR
CONCRETE AND FOUNDATION DETAILS

SEE FLUSH GUTTER CONCRETE
CROSS SECTION (DWG. F4) FOR
GUTTER DETAILS

FLUSH BUILDING CROSS SECTION

SCALE: 1/4" = 1'-0"

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FLUSH BUILDING CROSS SECTION USING OPEN RIDGE SYSTEM

MO-PLEX GROW-FINISH BUILDING PLAN

COORD. BY
DRAWN BY
CHECKED BY

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AGRICULTURAL ENGINEERING DEPARTMENT-UNIVERSITY OF MISSOURI-COLUMBIA
UNIVERSITY EXTENSION - COMMERCIAL AGRICULTURE PROGRAM
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

PLAN NO.: M01-726-94C1
DATE: 8/94

1/4" = 1'-0"
STEEL DETAILS
AROUND PIPING

NOTE: ALL STEEL SHOULD BE TIED TOGETHER AT JOINTS.

SCALE: 1/2" = 1'-0"

POST DETAIL

TANK FLOOR

6"

#4 DOWEL WITH 1-1/2" BENDING RADIUS

6" x 6" CONCRETE POST

1 - #4 REBAR IN CENTER OF POST

2" ROUND OR SQUARE KEYWAY FOR POST

MO SIPOHN FLUSH TANK SECTION

SCALE: 1/2" = 1'-0"

NOTE: STAND PIPES FOR TANK DRAINS NEEDED BUT NOT SHOWN HERE.

TANK AND SUMP LONGITUDINAL SECTION (PART 2)

MO-PLEX GROW-FINISH BUILDING PLAN

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POST DETAIL

SCALE: 1" = 1'-0"
MO SIPHON FLUSH TANK SECTION
(SIPHON DETAILS)

<table>
<thead>
<tr>
<th>GUTTER LENGTH</th>
<th>TANK LENGTH DI</th>
<th>DIST. FROM FOOTER TO SUMP DJ</th>
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<tr>
<td>UP TO 130&quot;</td>
<td>6&quot;-0&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>140&quot;-160&quot;</td>
<td>5&quot;-0&quot;</td>
<td>26&quot;</td>
</tr>
<tr>
<td>170&quot;-200&quot;</td>
<td>6&quot;-0&quot;</td>
<td>38&quot;</td>
</tr>
<tr>
<td>210&quot;-240&quot;</td>
<td>7&quot;-0&quot;</td>
<td>50&quot;</td>
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NOTE: GUTTER LENGTH IS THE DISTANCE FROM THE FRONT OF THE TANK TO THE FAR END WALL.

SCALE: 1" = 1'-0"
CATCH BASIN DETAIL

NOTE: SLATS AND EQUIPMENT NOT SHOWN TO ALLOW CONCRETE DETAILS TO BE SHOWN.

CATCH BASIN END DETAIL

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CATCH BASIN CROSS SECTION

SCALE: 1" = 1'-0"

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MO–FLEX GROW–FINISH BUILDING
WITH 24 PENS AND PIT RECHARGE SYSTEM UNDER SLATS

SITE SELECTION AND PREPARATION INFORMATION

1. Building length should run east and west in Missouri.
2. Area 100' to the north and south of building should be clear for natural ventilation.
3. Soil building pad should be about 12'–0" to 20'–0" longer and 10'–0" wider than building.
4. No slope across width or length of soil building pad should exist.
5. Building proximity to other swine buildings impacts pig performance and should be considered.

PIT RECHARGE BUILDING FLOOR PLAN

SCALE: 1" = 10'-0"

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FLOOR PLAN USING PIT RECHARGE MANURE SYSTEM

MO–FLEX GROW–FINISH BUILDING PLAN

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UNITED STATES DEPARTMENT OF AGRICULTURE

1" = 10'-0"
MO-FLEX GROW-FINISH BUILDING
WITH 24 PENS AND HAIRPIN GUTTER UNDER TOTAL SLATS

REVIEW ACCOMPANYING MANUAL FOR DISCUSSION ON MODIFYING BUILDING SIZE AND HOW TO INCLUDE MULTIPLE ROOMS

HAIRPIN GUTTER BUILDING FLOOR PLAN

SITE SELECTION AND PREPARATION INFORMATION

1. BUILDING LENGTH SHOULD RUN EAST AND WEST IN MISSOURI.
2. AREA 100' TO THE NORTH AND SOUTH OF BUILDING SHOULD BE CLEAR FOR NATURAL VENTILATION.
3. SOIL BUILDING PAD SHOULD BE ABOUT 10'-0" TO 20'-0" LONGER AND 12'-0" WIDER THAN BUILDING.
4. NO SLOPE ACROSS WIDTH OR LENGTH OF SOIL BUILDING PAD SHOULD EXIST.
5. BUILDING PROXIMITY TO OTHER SWINE BUILDINGS IMPACTS FID PERFORMANCE AND SHOULD BE CONSIDERED.

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GENERAL NOTES

1. BOTTOM STEEL PLATE - 1/4" x 7" FLAT PLATE A36 STEEL
2. VERTICAL STEEL PIECE - 1/4" x 4" FLAT PLATE A36 STEEL
3. 1/4" FILLET WELDS USING E 60 XX ELECTRODES

POST FRAME STEEL BRACKET

MO-FLEX GROW-FINISH BUILDING PLAN

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