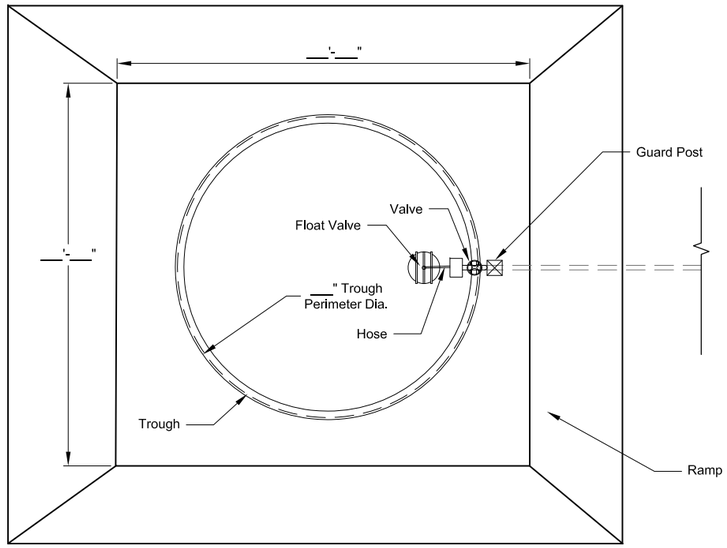
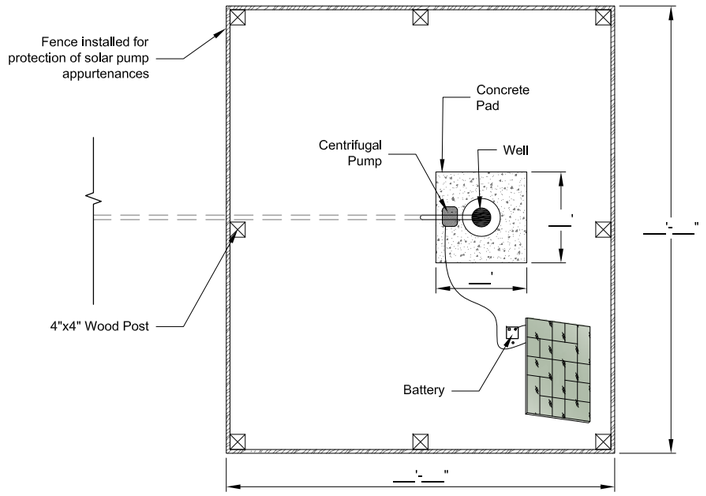
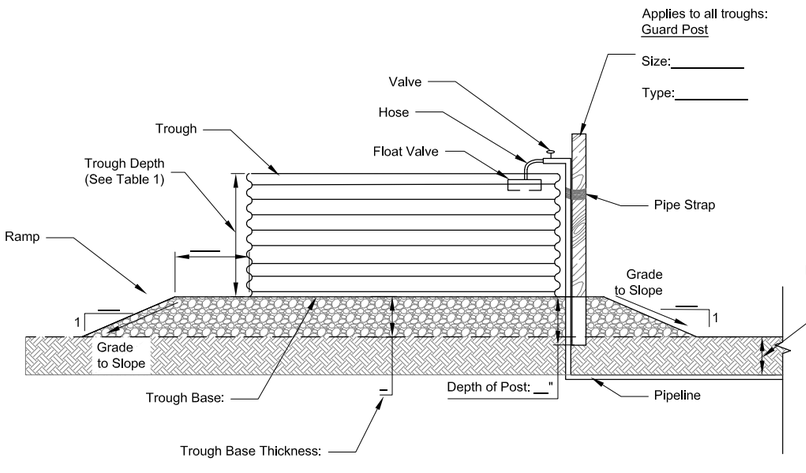


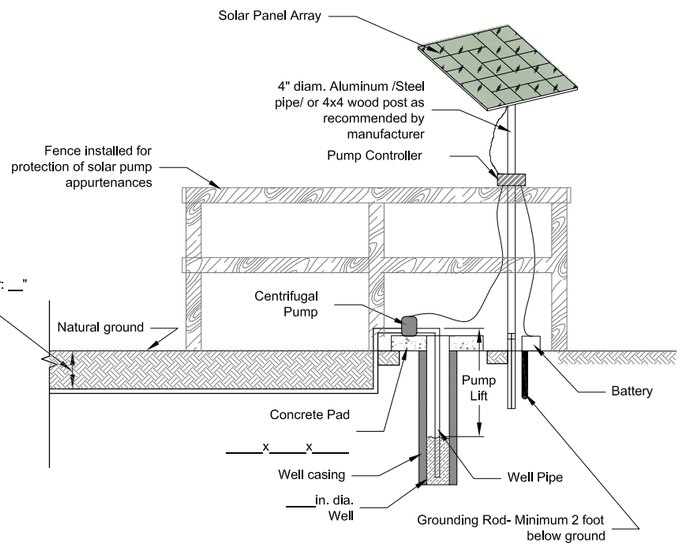
TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.



TROUGH PROFILE VIEW
n.t.s.



SOLAR PANEL PROFILE VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Date
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Solar Livestock Watering System
Centrifugal Pump with Battery

United States Department of Agriculture
Natural Resources Conservation Service

File No.
FL-614Bseries.dwg

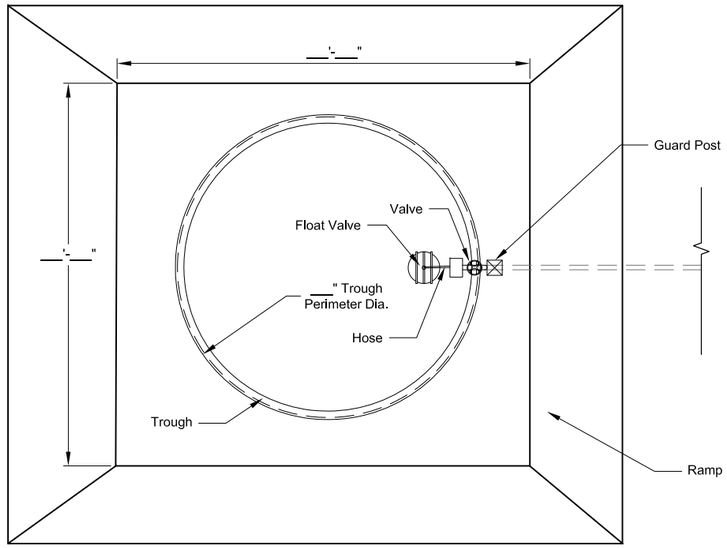
Drawing No.

Sheet 2 of 2

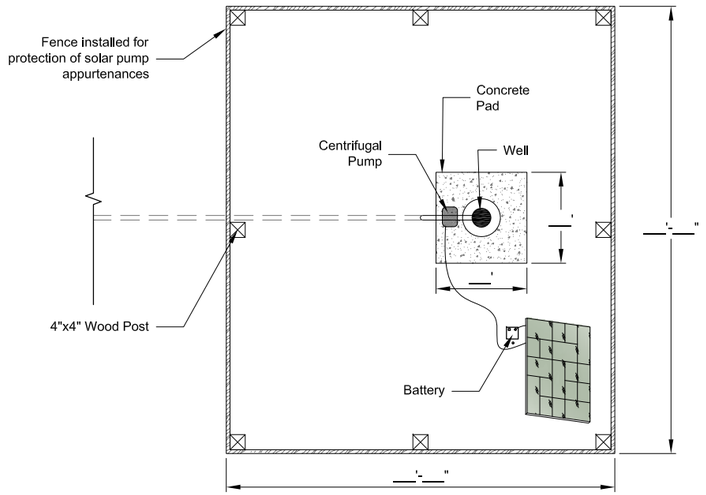
Solar Livestock Watering System
Centrifugal Pump with Battery

Standard DWG. No.	FL-614B2
Date 02/2015	Sheet 2 of 2

Revisions		
Date	Approved	Title



TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

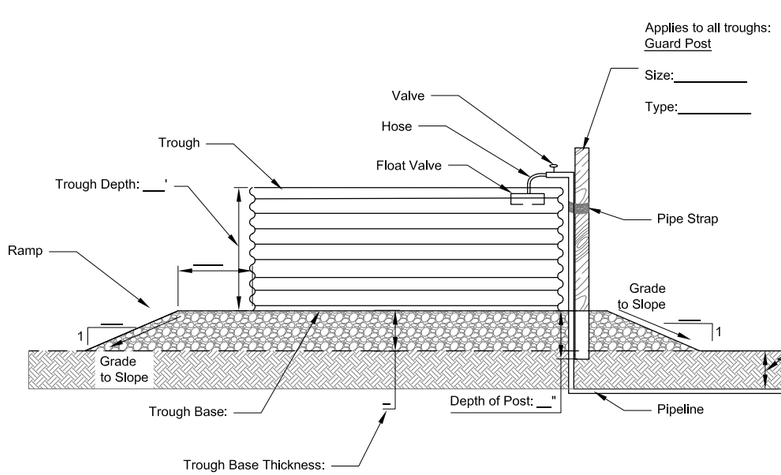
Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

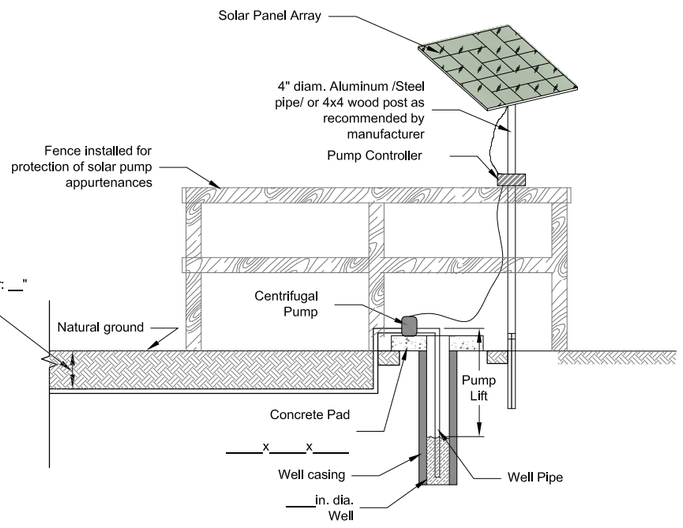
Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP



TROUGH PROFILE VIEW
n.t.s.



SOLAR PANEL PROFILE VIEW
n.t.s.

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Solar Livestock Watering System
Centrifugal Pump without Battery

Standard DWG. No.	FL-614B3
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Revisions		
Date	Approved	Title

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Solar Livestock Watering System
Centrifugal Pump without Battery

United States Department of Agriculture
Natural Resources Conservation Service

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FL-614Bseries.dwg

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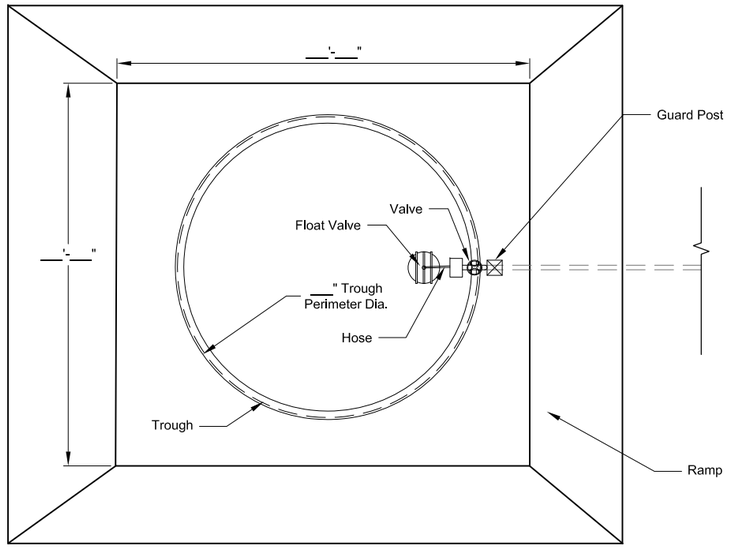
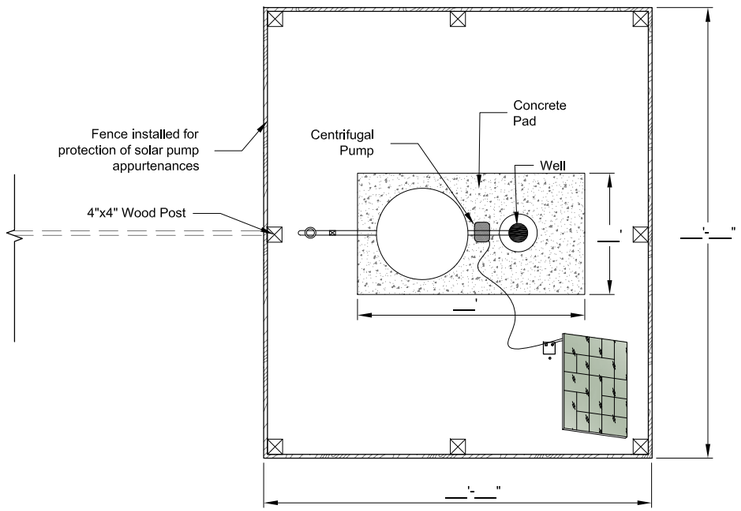


TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

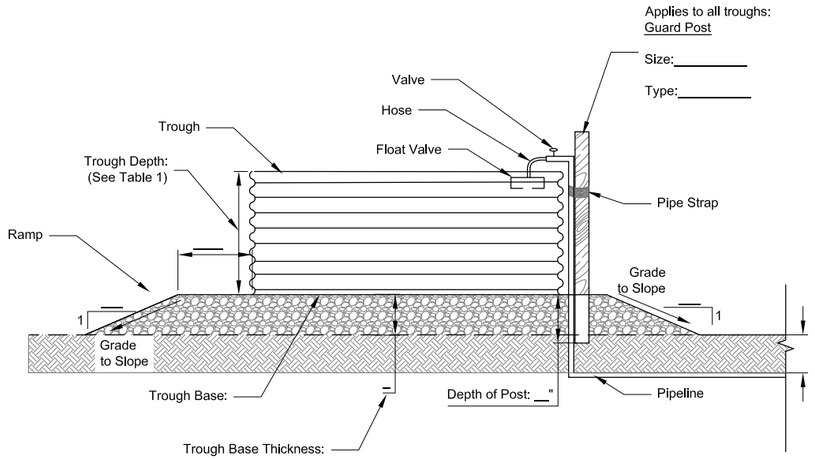
Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

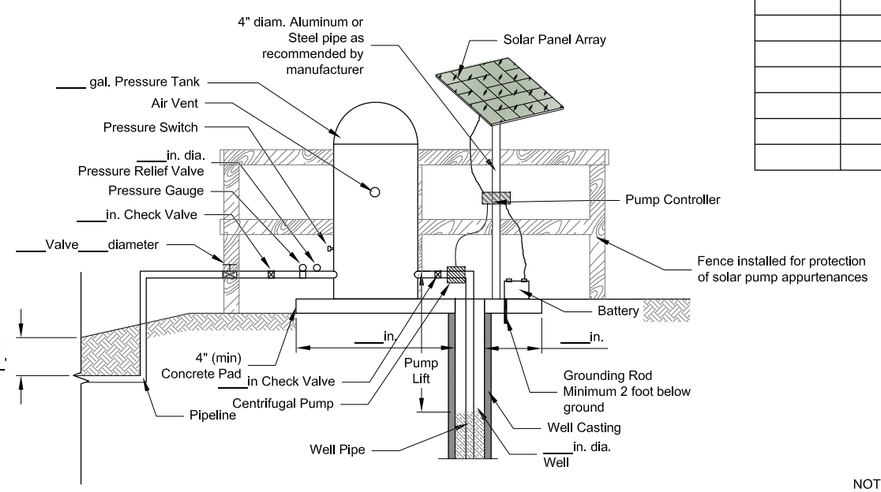
Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP



TROUGH PROFILE VIEW
n.t.s.



Pump must supply a minimum of_____gpm at ____psi at the pressure tank

Pressure switch shall be set at ____psi

SOLAR PANEL PROFILE VIEW
n.t.s.

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Solar Livestock Watering System
Centrifugal Pump with Battery and Pressure Tank

Standard DWG. No. FL-614B4	
Date 02/2015	Sheet 2 of 2

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Date	Approved	Title

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Solar Livestock Watering System
Centrifugal Pump with Battery and Pressure Tank

United States Department of Agriculture
Natural Resources Conservation Service

File No.
FL-614Bseries.dwg

Drawing No.

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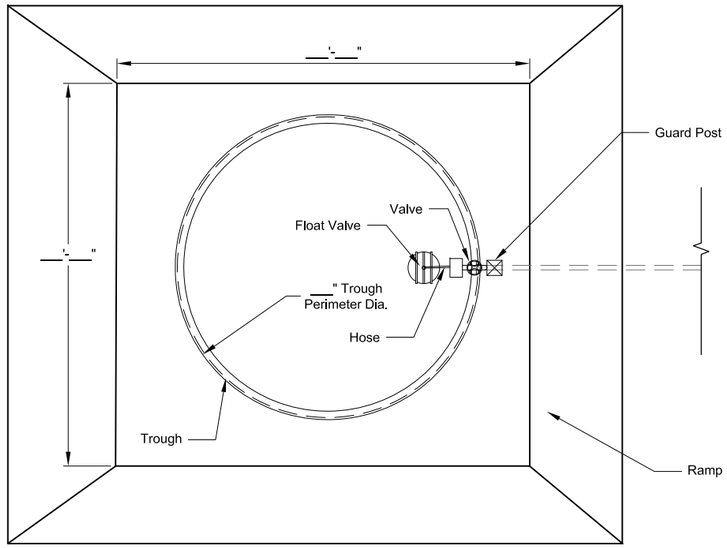
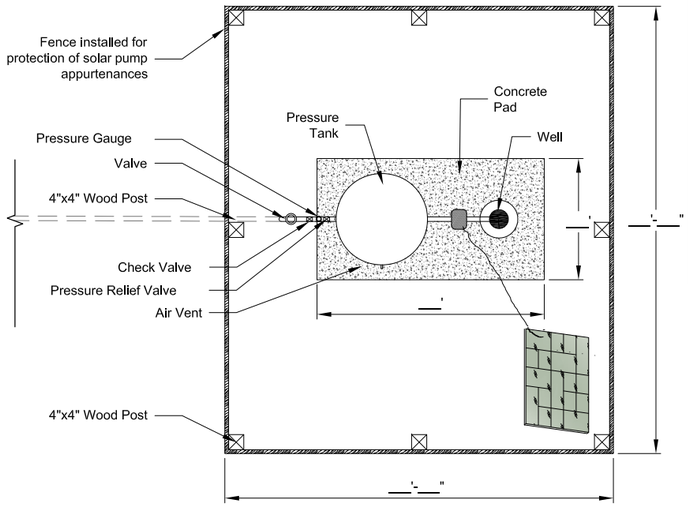


TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

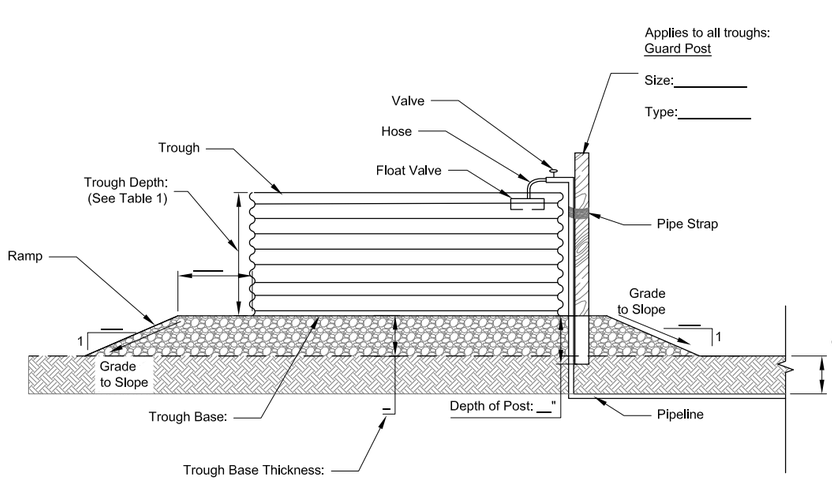
Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

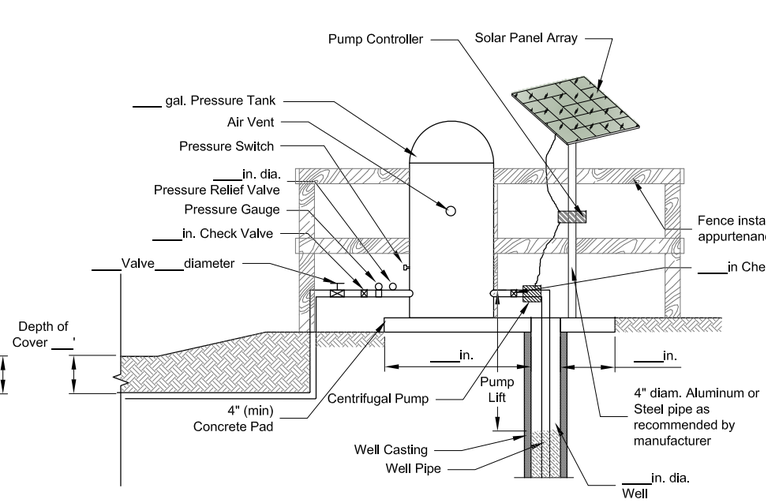
Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP



TROUGH PROFILE VIEW
n.t.s.



Pump must supply a minimum of_____gpm at ____psi at the pressure tank

Pressure switch shall be set at ____psi

SOLAR PANEL PROFILE VIEW
n.t.s.

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Revisions

Date	Approved	Title

Solar Livestock Watering System
Centrifugal Pump, Pressure Tank, without Battery
Standard DWG. No. FL-614B5
Date 02/2015 | Sheet 2 of 2

Date
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Solar Livestock Watering System
Centrifugal Pump, Pressure Tank, without Battery

United States Department of Agriculture
Natural Resources Conservation Service

File No.
FL-614Bseries.dwg

Drawing No.

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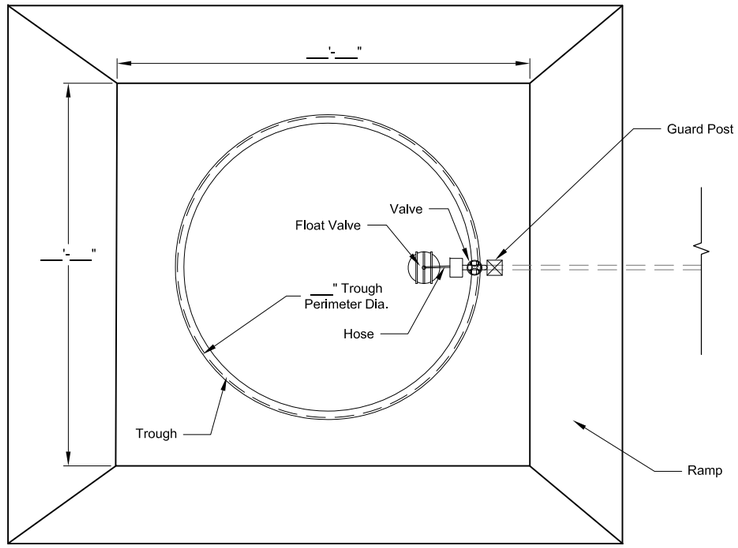
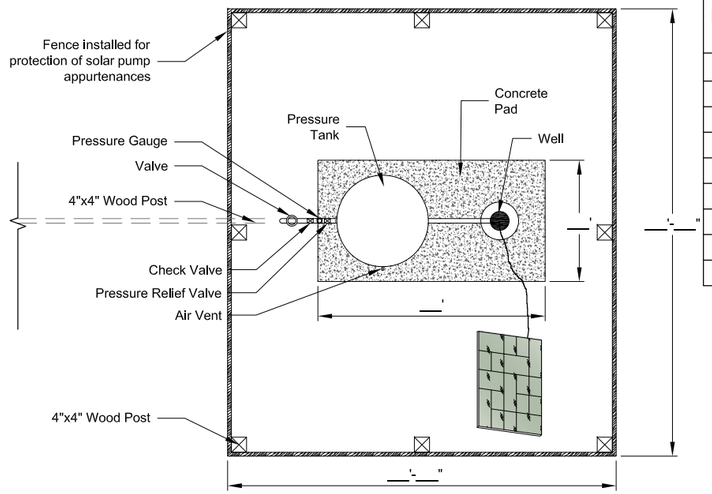


TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

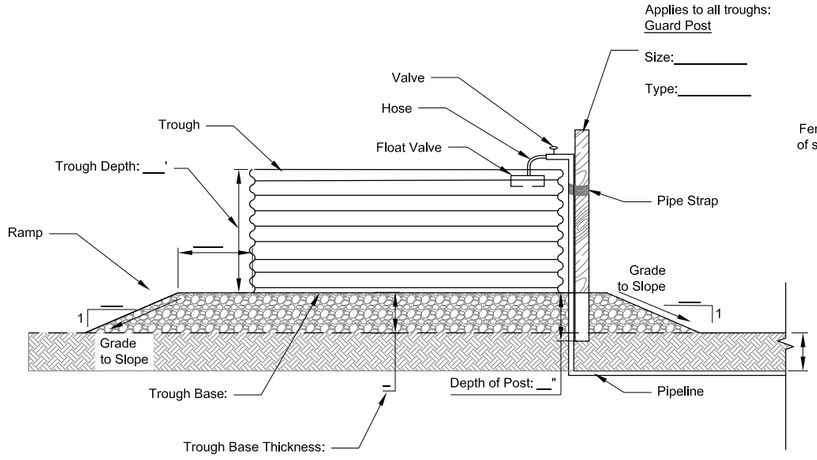
Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

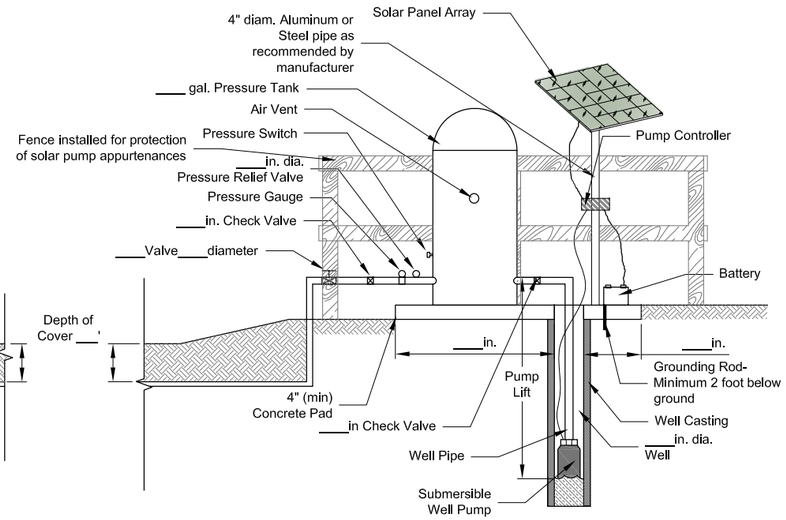
Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP



TROUGH PROFILE VIEW
n.t.s.



Pump must supply a minimum of_____gpm at ____psi at the pressure tank

Pressure switch shall be set at ____psi

SOLAR PANEL PROFILE VIEW
n.t.s.

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Revisions

Date	Approved	Title

Date
Designed
Drawn
Checked
Approved

Solar Livestock Watering System
Submersible Pump, Pressure Tank, and Battery

United States Department of Agriculture
Natural Resources Conservation Service

File No.
FL-614Bseries.dwg

Drawing No.

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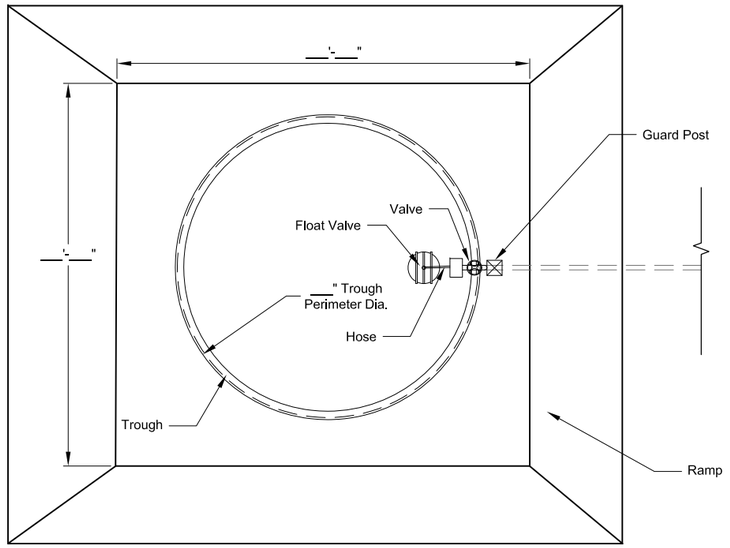
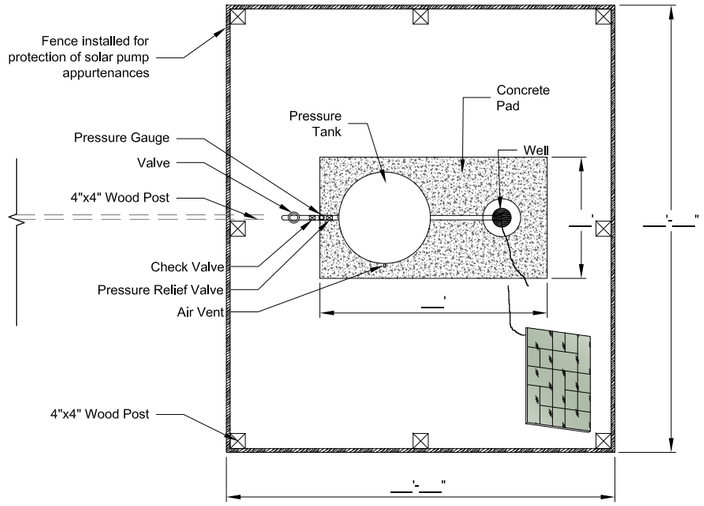
Solar Livestock Watering System
Submersible Pump, Pressure Tank, and Battery

Standard DWG. No. FL-614B6

Date 02/2015 | Sheet 2 of 2



TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

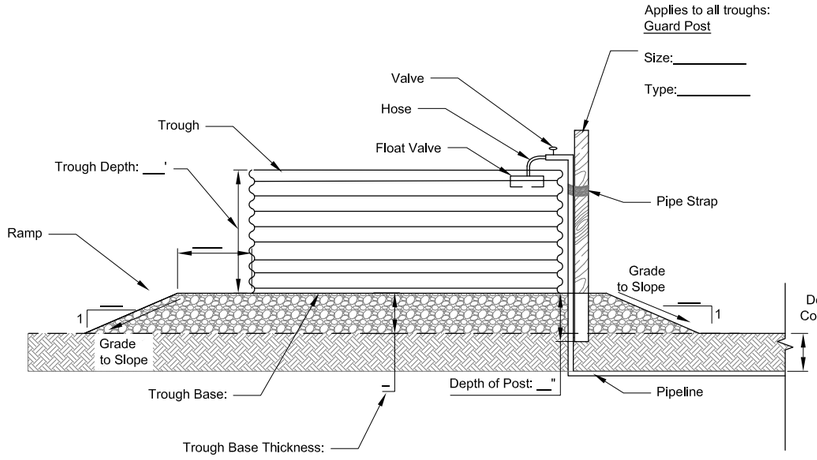
Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

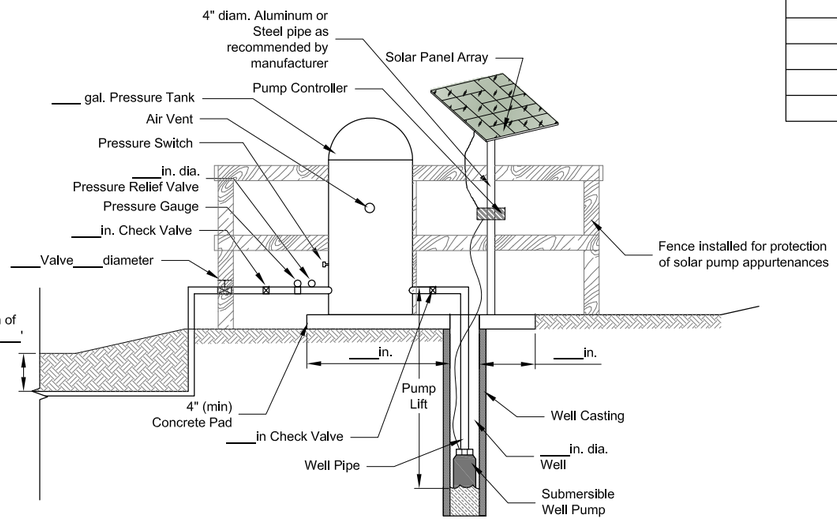
Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP

Date
Designed
Drawn
Checked
Approved

Solar Livestock Watering System
Submersible Pump, Pressure Tank, without Battery



TROUGH PROFILE VIEW
n.t.s.



Pump must supply a minimum of_____gpm at ____psi at the pressure tank
Pressure switch shall be set at ____psi

SOLAR PANEL PROFILE VIEW
n.t.s.

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Revisions		
Date	Approved	Title

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Solar Livestock Watering System
Submersible Pump, Pressure Tank without Battery

Standard DWG. No. FL-614B7

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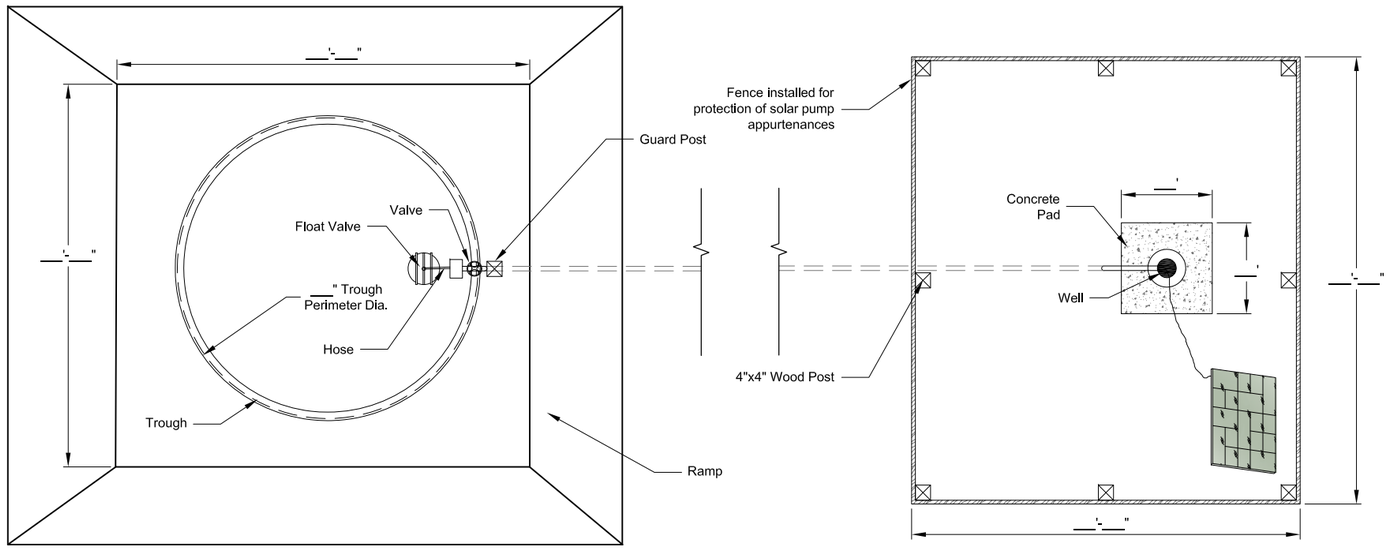

TROUGH PLAN VIEW
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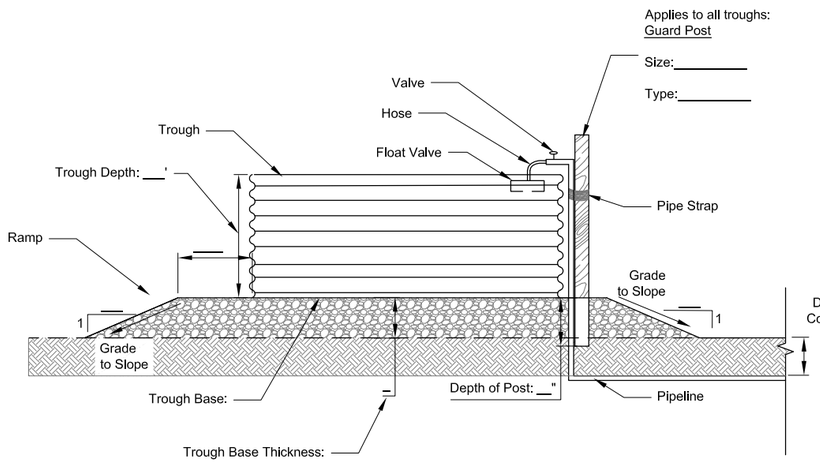
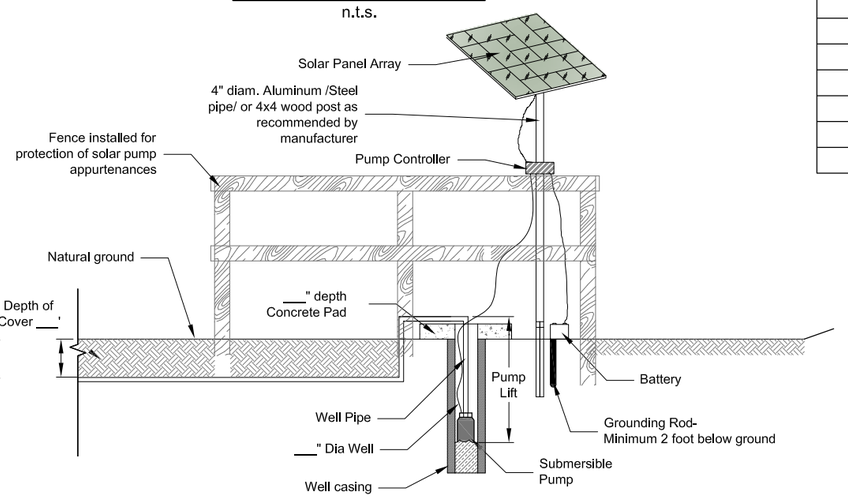


TROUGH PROFILE VIEW
n.t.s.

SOLAR PANEL PLAN VIEW
n.t.s.



NOTE: There is a minimum of 7 days water supply between all troughs on site.

SOLAR PANEL PROFILE VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Revisions

Date	Approved	Title

Designed | Drawn | Checked | Approved | Date

Solar Livestock Watering System
Submersible Pump with Battery

United States Department of Agriculture
Natural Resources Conservation Service

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Drawing No.

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Solar Livestock Watering System
Submersible Pump with Battery

Standard DWG. No. FL-614B8

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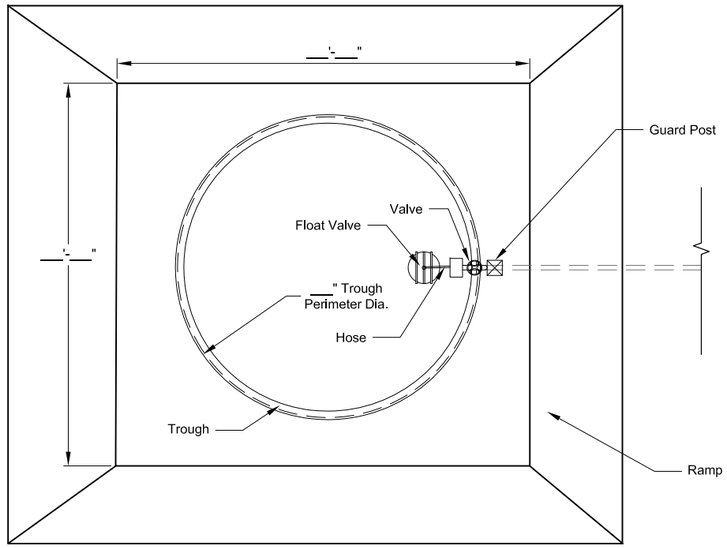
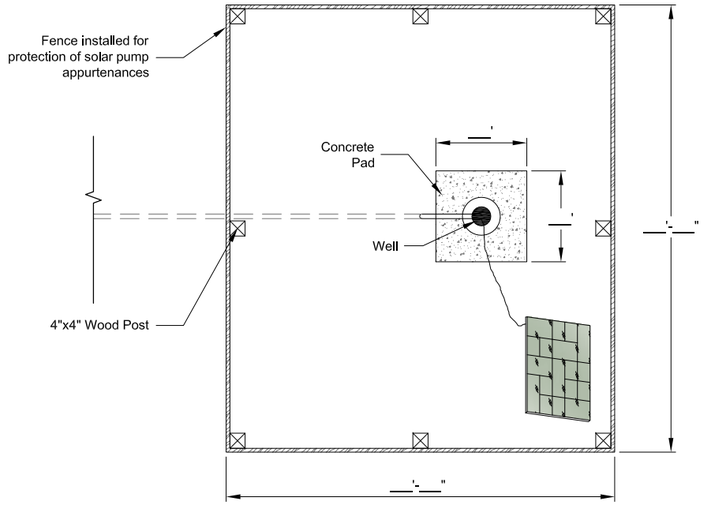
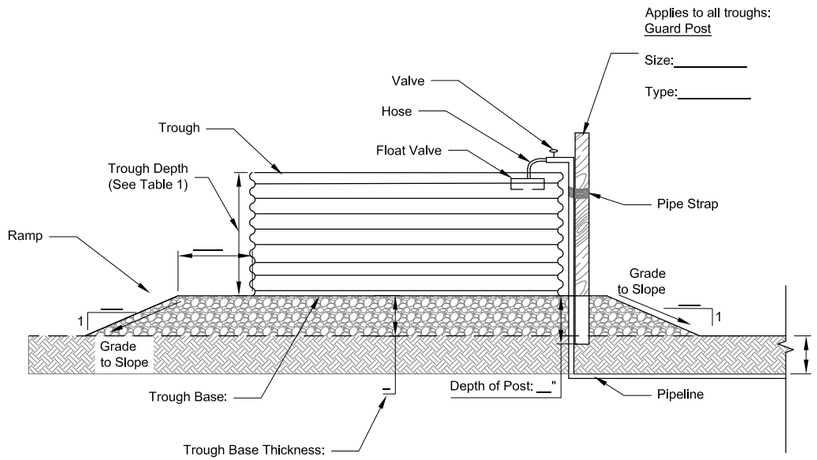


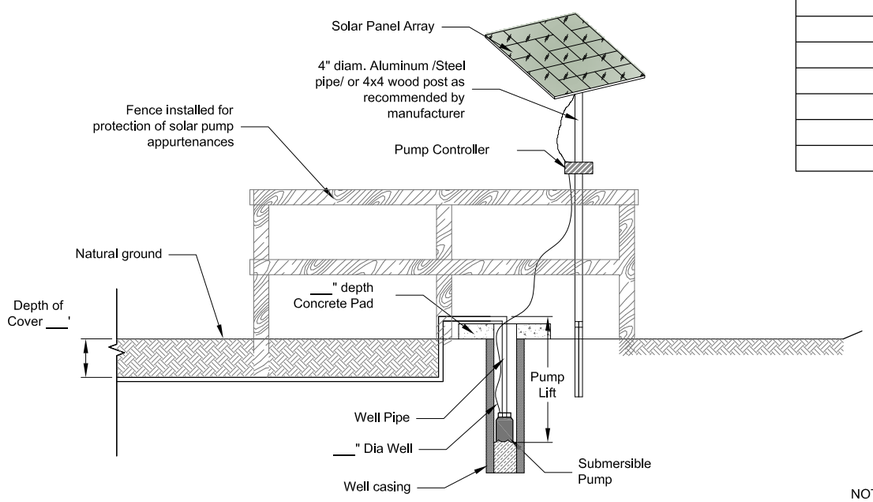
TROUGH PLAN VIEW
n.t.s.



SOLAR PANEL PLAN VIEW
n.t.s.



TROUGH PROFILE VIEW
n.t.s.



NOTE: There is a minimum of 7 days water supply between all troughs on site.

SOLAR PANEL PROFILE VIEW
n.t.s.

TABLE 1 - TROUGH SCHEDULE

Field Location	Trough Number	Trough Capacity (Gal.)	Trough Depth		Perimeter of Trough (in.)	Trough Base Material	Trough Base Thickness (in.)
			Min. (in)	Max. (in)			

TABLE 2 - PIPELINE SCHEDULE

Trough Number	Type	Press. Rating (psi)	Diameter (in.)	Valve (in.)	Hose Diameter (in.)	Float Valve (gpm)

TABLE 3 - PUMP AND WELL

Pump Number	Well Number	Pump Discharge (gpm.)	Well Depth (ft)	Well Pipe dia (in.)	Pump Lift (ft.)	Pump HP

NOTES:

1. There is a minimum of _____ days water supply between all troughs on site.
2. See Sheet 1 of 2 for Site Plan Sheet for all locations of Watering facilities, Pipes, Field Numbers and Troughs.
3. Each trough shall have a _____-inch drain plug located at one end, a float valve and _____-inch cutoff valve.
4. The float valve shall have a minimum flow capability of _____ gallons per minute.
5. Concrete pad shall extend a minimum of 2 feet in all directions from well casing.

Revisions

Date	Approved	Title

Date
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Checked
Approved

Solar Livestock Watering System
Submersible Pump without Battery

United States Department of Agriculture
Natural Resources Conservation Service

File No.
FL-614Bseries.dwg

Drawing No.

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Solar Livestock Watering System
Submersible Pump without Battery

Standard DWG. No. FL-614B9

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