

PUB. SEWER STATUS VERIFIED BY _____

ISSUE DATE: 9/14/2010

PERMIT

P 534028

APPROVAL DATE: 7/11/2011

A REPAIR

Septic Repair 4340655 ON-SITE SEWAGE DISPOSAL SYSTEM HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

Fogles Septic Clean Inc. IS PERMITTED TO INSTALL ALTER

ADDRESS: 580 Obrecht Road Sykesville, MD 21784 PHONE NUMBER: 410-795-5670

SUBDIVISION: Burntwoods LOT NUMBER: 16

ADDRESS: 14022 Celbridge Drive PROPERTY OWNER: Mary Jo Kishter

SEPTIC TANK CAPACITY (GALLONS): N/A

PUMP CHAMBER CAPACITY (GALLONS): _____

NUMBER OF BEDROOMS: 3

SQUARE FEET OF HOUSE: _____

LINEAR FEET OF TRENCH REQUIRED: _____

TRENCHES:	
LOCATION:	
PURPOSE:	Replace pump in pump chamber and add an alarm to the system. Line between the septic tank and pump chamber needs to be repaired.

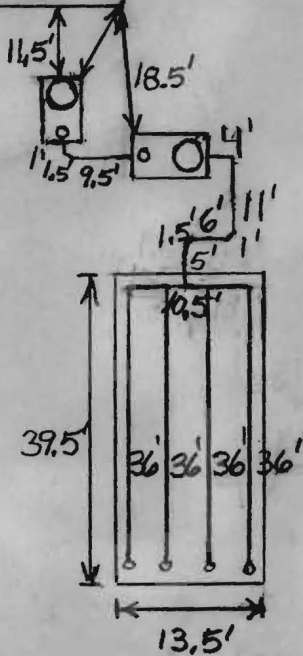
PLANS APPROVED: B. Baker DATE: _____

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

NEITHER THE HOWARD COUNTY COUNCIL OR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM

NOT TO SCALE

18.5' Well
9.5'



ROAD NAME
Celbridge Drive

TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
13.5'	3-5'	5.5'-8'
NUMBER OF TRENCHES 1		
TOTAL LENGTH 13.5' x 39.5'		
ABSORPTION AREA 533		
DISTRIBUTION BOX LEVEL N/A		
DISTRIBUTION BOX BAFFLE N/A		
DISTRIBUTION BOX PORT N/A		

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	Yes
MANUFACTURER	?
CAPACITY	? GAL
SEAM LOC	Midseam
TANK LID DEPTH	3-4.5'
BAFFLES	Yes
BAFFLE FILTER	No
MANHOLE LOC	Front
6" PORT LOC	Rear
WATERTIGHT TEST	No
SLOTTED	No
DATE ON LID	N/A
PUMP/SEPTIC TANK LEVEL	Yes
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	2.5-3.5'
BAFFLES	Front + Middle
BAFFLE FILTER	No
MANHOLE LOC	Rear
6" PORT LOC	Front
WATERTIGHT TEST	No
SLOTTED	Yes
DATE ON LID	4/12/2011

PRE-CONSTRUCTION:

4/1/2011 Pump tank and bed locations laid out and discussed installation. (BB)

INSTALLATION:

7/6/2011 Pump chamber set and connected to existing tank. (BB)

7/7/2011 Contractor working on bed. (BB)

7/8/2011 Bed finished except for laterals, etc. (BB)

7/11/2011 Alarm working. Pump is delivering 3.5' of head on laterals with ball valve fully open. A Victory 93511 1/2 H.P. pump was used. This pump has a little less power than a 1/2 H.P. Goulds pump or equivalent. O.K. to backfill. (BB)

FINAL INSPECTOR

B. Baker

DATE OF APPROVAL

7/11/2011

3 Bedrooms = 450 sq. ft.

$450 \div 0.8 = 563$ sq. ft.

Bed Size = $14' \times 40' = 560$ sq. ft.

- Make Bed Depth 6.5' at Lowest Elevation
- Keep Bottom of Bed Level
- Bed Depth at Highest Elevation Will Be Approximately 8' Deep
- Depth of Gravel 2' + Enough to Cover Laterals and Manifold
- Inlet 4.5' to Around 6', Bottom 6.5' to Around 8'
- Cover Bed With Geotextile Fabric

* Existing Bed Will Only Be 5'-6' From New Bed
Existing Bed May Have to Be Pumped Down to Prevent Sidewall Collapse While Digging New Bed, Existing Bed is 22' x 24' with ~2' of Gravel and is 4.5'-5.5' Deep, Supposedly

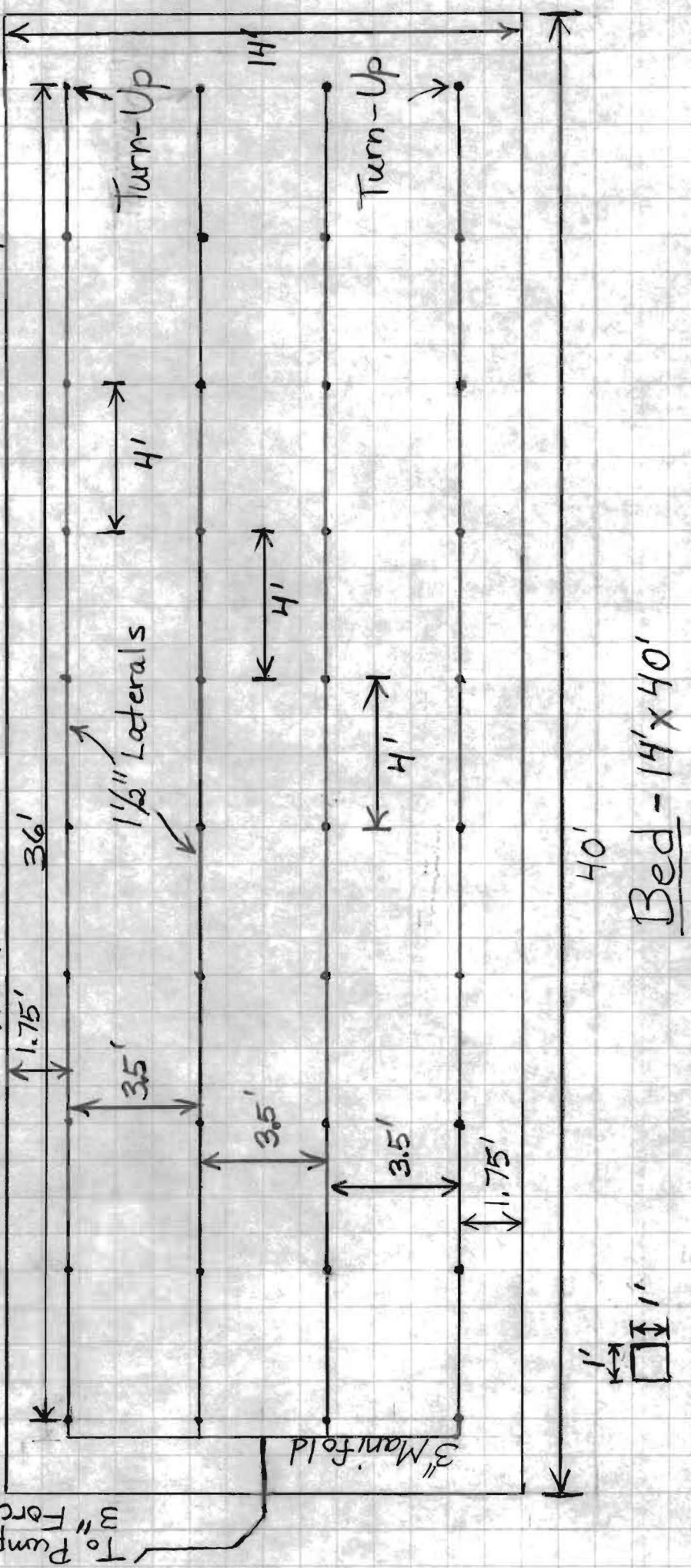
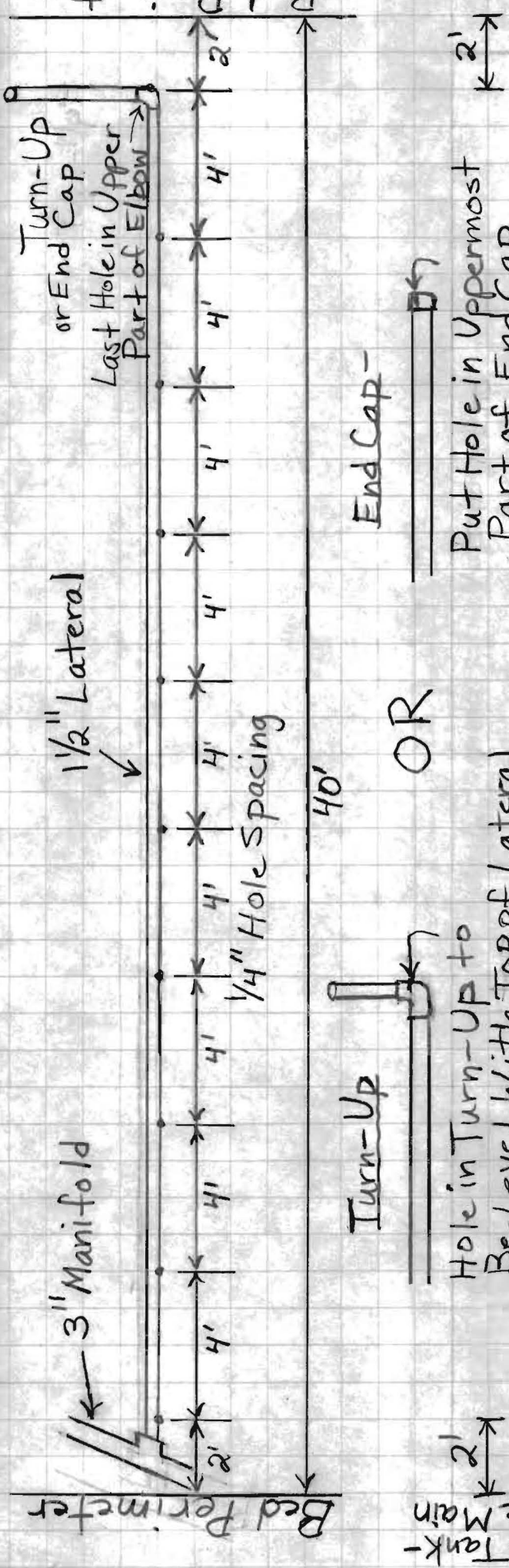
- Pump Chamber - 1500 Gallon Two Compartment With Baffles in Center and No Slot
- Tank Outlet to Be Used as Inlet, With 1000 Gallon Compartment For the Pump
- Manifold to Be 3" PVC
- Four Laterals to Be 1.5" PVC
- Laterals to Be 36.5' in Length With Turn-Ups on the Two Outer Laterals, End Caps On Other Two
- Turn-Ups to Be Cut Down to Grade After Testing

- ②
- Bed to Be Tested Before Laterals are Covered
 - Holes in Laterals to Be $\frac{1}{4}$ " in Diameter
 - Hole Spacing in Laterals to Be 4' Apart and First and Last Holes to Be 2' From Bed Sidewall
 - Laterals to Be 3.5' Apart With Outside Laterals 1.75' From Bed Sidewall
 - Measure Hole Spacing From Turn-Up or End Cap
 - 10 Holes Per Lateral

 - Manhole Riser to Be Installed On Existing Tank and Pump Tank
 - Junction Box to Be Mounted on Wood Post Near Pump Tank
 - Alarm to Be Installed Inside the House On Different Breaker Than Pump
 - Pump Tank to Have 6" Cleanout on Front
 - Pump to Be Placed on Block in Pump Tank And Operated By a Float Tree

 - Suggested Pump: Goulds $\frac{1}{2}$ HP or Equivalent 115 V or Equivalent
 - This Pump Will Work per My Calculations, However Installer is Responsible for Confirming this, A Minimum of 3' of Head is Required at Turn-Ups
 - If For Some Reason a $\frac{1}{2}$ HP Pump Is Required Then A Ball Valve Will Probably Be Needed

 - Two Fairly Large Trees In Tank/Bed Area, Stumps Will Have to Be Dug Up



14022 Celbridge Drive - Mary Jo Kishter

- Proposed Bed Only 5'-6' From Existing Saturated Bed - Will Existing Bed Need to Be Pumped Down Before Installing New Bed? Approximately 2' of Gravel in Existing 22'x24' Bed

- Two Large Trees in Proposed Bed and Pump Tank Area

Both Trees Will Have to Be Removed Because Bed and Tank Installation Will Kill/Destroy Them

Root Balls Will Have to Be Removed - Will Removing Root Balls Have Any Effect on Proposed Bed or Pump Tank?

$$Q = 1.65 \quad \frac{1}{4}'' \quad 5' \text{ Head} \times 40 = 66 \text{ gpm}$$

$$Q = 1.28 \quad 3' \text{ Head} = 51 \text{ gpm}$$

$$1.73$$

$$.0625$$

$$Q = 11.82 \times d^2 \times \sqrt{h}$$

$$.0625 \quad 1.73$$

14022 Celbridge Drive -

3 Bedroom = 450 sq. ft.

$$450 \div 0.8 = 563 \text{ sq. ft.}$$

Bed 14' Width x 40' Length = 560 sq. ft.

Depth of Bed - 6' at Shallowest Point

Approximately 7.5' at Deepest Point

2.5' of Stone + Enough to Cover Manifold, Laterals

Tank Invert Out ~ 4' Below Grade

30' From Tank to Pump Chamber

Pump Chamber Invert ~ 4.6'

Pump Chamber Depth ~ 3'-3.5'

Depth of Pump Chamber Bottom ~ 8.9'

Pump Height ~ 6" + 16" = 22"

Pump Float Off ~ 7.1'

Bed Depth - 6' at Shallowest Part

Inlet - 3.5' to 5', Bottom - 6' to 7.5'

Manifold Depth ~ 5'

1.5' of Static Head + 4' Distal Head + Approximately

2' of Friction Head ~ 7.5' TDH

3 Laterals → 36.5' Length (1 1/2" Diameter)

10 Holes Per Lateral

$$10 \times 3 \times 2.32 = 70 \text{ gpm (4' Distal Head)}$$

1/4" Holes
Needed

Pump - Goulds WE0311M

Howard County Health Department

Bureau of Environmental Health, Ellicott City, Maryland 410-313-2640

SEWAGE DISPOSAL PERMIT NO. A- Repair **P-** 534028

PERMITTEE Fogles Septic Clean Inc.

LOCATION 14022 Celbridge Drive Burntwoods Lot 16

Mary Jo Kishler

Do Not Cover Work Until Health Department Approval Appears On This Card

POST THIS CARD WHERE IT CAN BE SEEN FROM ROAD

STOP ALL CONSTRUCTION ON SEWAGE DISPOSAL SYSTEM AND CONTACT HEALTH DEPARTMENT BEFORE CONTINUING

WORK IS SATISFACTORY, CONTINUE

Inspector

Date

Inspector

Date

FINAL INSPECTION MADE, COVER ALL WORK

Inspector

Date