# GRAVITY DISTRIBUTION
# FOR WASTEWATER TREATMENT

**Owner:** ANNISTON, LLC

**Address:** 17824 Statesville Rd., Suite 112
Cornelius, NC 28031
**Phone:** 704 362 5007
**County:** Iredell
**Location:** Anniston Lot 21A

**Source of Wastewater Flow:** 3 Bedroom Single Family Residence
**Estimated Daily Wastewater Production:** 360 gpd
**System Flow:** N/A

## Design Specifications

**Drainfield Size:** 450
**Loading Rate:** 0.20 gpd/ft.$^2$
**Depth of Gravel in Trench:** NA (25% reduction )
**Gravel Size:** NA (25% reduction )
**Trench Depth:** 18 IN.
**Trench Width:** 36 in.
**Septic Tank Size:** 1000
**Pump Tank Size:** 1000

**Estimated Supply Line Length:** 25FT
**Supply Line Diameter:** N/A
**Supply Line Volume:** N/A
**Dosing Volume:** NA
**Supply Manifold:** N/A
**Supply Manifold Length:** N/A
**Supply Manifold Volume:** N/A

**Recommended Float Controls:** N/A

**Recommended Control Panel:** N/A

**Pressure Head:** N/A
**Friction Head:** N/A
**Elevation Head:** N/A
**Total Dynamic Head:** N/A

**Threaded Union:** N/A
**Gate Valves:** N/A
N/A
**Check Valves:** N/A
**Anti-Siphon Hole:** N/A

**Additional Comments:** Soil suitability was performed by Rollans Soil & Environmental Services.

## ANNISTON LOT 20A
## GRAVITY DESIGN

| | | |
|---|---|---|
| **DESIGN FLOW:** | 360 | |
| **SOIL APPLICATION RATE:** | 0.2 gpd/ft.$^2$ | |
| **TOTAL AREA TRENCH BOTTOM:** | 1500 | |
| **TOTAL LATERAL LENGTH:** | 450 | |
| **NUMBER OF FIELDS:** | 1 | |
| **LATERAL LENGTH REQUIRED PER FIELD:** | 450 | |
| **SUPPLY LINE LENGTH:** | 25FT | |
| **TOTAL DYNAMIC HEAD:** | N/A | |
| **MANIFOLD SIZE:** | N/A | |
| **DOSING VOLUME:** | N/A | |
| **PUMP TANK DRAW DOWN*:** | N/A | |
| **SEPTIC TANK SIZE:** | | 1000 |
| **PUMP TANK SIZE:** | | 1000 |

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

# ANNISTON LOT #21A

Project #: 01-1005

***SYSTEM*** LAYOUT FOR 3 BEDROOM HOME — August 4, 2005

| LINE # | FLAG COLOR | BS | HI | FS | ELEVATION | FLAGGED LINE LENGTH | DESIGN LINE LENGTH |
|---|---|---|---|---|---|---|---|
| TBM | | 1.3 | | | 100.00 | | |
| INSTR. 1 | | | 101.30 | | | | |
| *1* | *YELLOW* | | | *14.40* | *86.90* | *46* | *45* |
| *2* | *BLUE* | | | *16.70* | *84.60* | *65* | *45* |
| *3* | *YELLOW* | | | *19.40* | *81.90* | *90* | *90* |
| *4* | *BLUE* | | | *21.80* | *79.50* | *90* | *90* |
| *6* | *YELLOW* | | | *24.00* | *77.30* | *90* | *90* |
| *7* | *BLUE* | | | *26.40* | *74.90* | *75* | *45* |
| *8* | *YELLOW* | | | *29.10* | *72.20* | *60* | *45* |
| | | | | | | *516* | *450* |

REPAIR LAYOUT FOR 3 BEDROOM HOME

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TBM | | 3.3 | | | 100.00 | | |
| INSTR. 1 | | | 103.30 | | | | |
| 1 | BLUE | | | 3.20 | 100.10 | 37 | 37 |
| 2 | ORANGE | | | 3.40 | 99.90 | 57 | 57 |
| 3 | BLUE | | | 3.60 | 99.70 | 64 | 64 |
| 4 | ORANGE | | | 3.90 | 99.40 | 72 | 72 |
| 5 | BLUE | | | 4.20 | 99.10 | 50 | 50 |
| | | | | | **Total** | **280** | **280** |

| | LINE LENGTH | LTAR GPD/FT$^2$ | SYSTEM TYPE | SOIL LTAR GPD/FT$^2$ | TRENCH SYSTEM | DISTRIBUTION |
|---|---|---|---|---|---|---|
| ** System* | *450* | *0.20* | *INNOV.* | *0.20* | *25% RED.* | **GRAVITY** |
| Repair | *280* | 0.25 | *MOD.* | 0.25 | ***PPBPS*** | **LOW PRESSURE** |

**Notes:**

** TBM ***(SYSTEM)*** located on top of ground @eip Lots 21/22 (see site plan)

** TBM REPAIR located on top of ground @eip Lots 37A/21A (see site plan)

**TBM is assumed to be 100'

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings