

Storm Water Basin Maintenance and Retro-Fit

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Current Maintenance totals

Type	Total
Miles of Ag Ditch	52.94
Miles of Subsurface Drainage	24.71
Miles of Storm tile	194.83
Miles of Swale	2.7
Miles of Waterway	3.45
Miles of Surface Drain	7.39
Miles of Open Channel	42.95
Total # of Projects	447
Total # of Basins	458
Total # of Parcels Affected by Maintenance	19,985
Maintenance Base	\$ 72,221,799.66

2 types of Basins

Retention vs. Detention

Retention- (Wet Basin)



Detention- (Dry Basin)



What's Wrong with this Basin?

-How do we fix this?



Soil Testing



Soil
samples
taken
every 3
years

What nutrients does the soil need?

- Basins are fertilized based on results of soil sample results
- Typically Use 19-19-19 Fertilizer at a rate of 200-300 lb per acre



Soil preparation for seeding

- Basins seeded on an “As Needed Basis” to help Prevent Erosion



Brush and cattail control



- Allows for maximum drainage efficiency
- Can be achieved through Chemical and mechanical methods

Chemical control

Brush Control



Cattail Control



Mechanical Control





Erosion Control

Outlet Structure Retro-Fit



- Outlet Improvements Needed



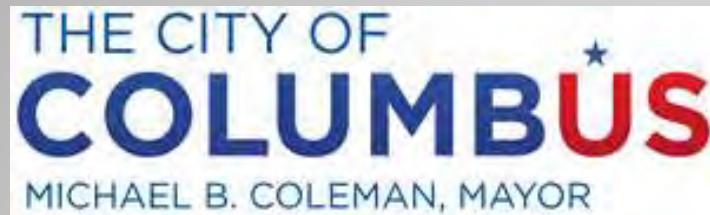


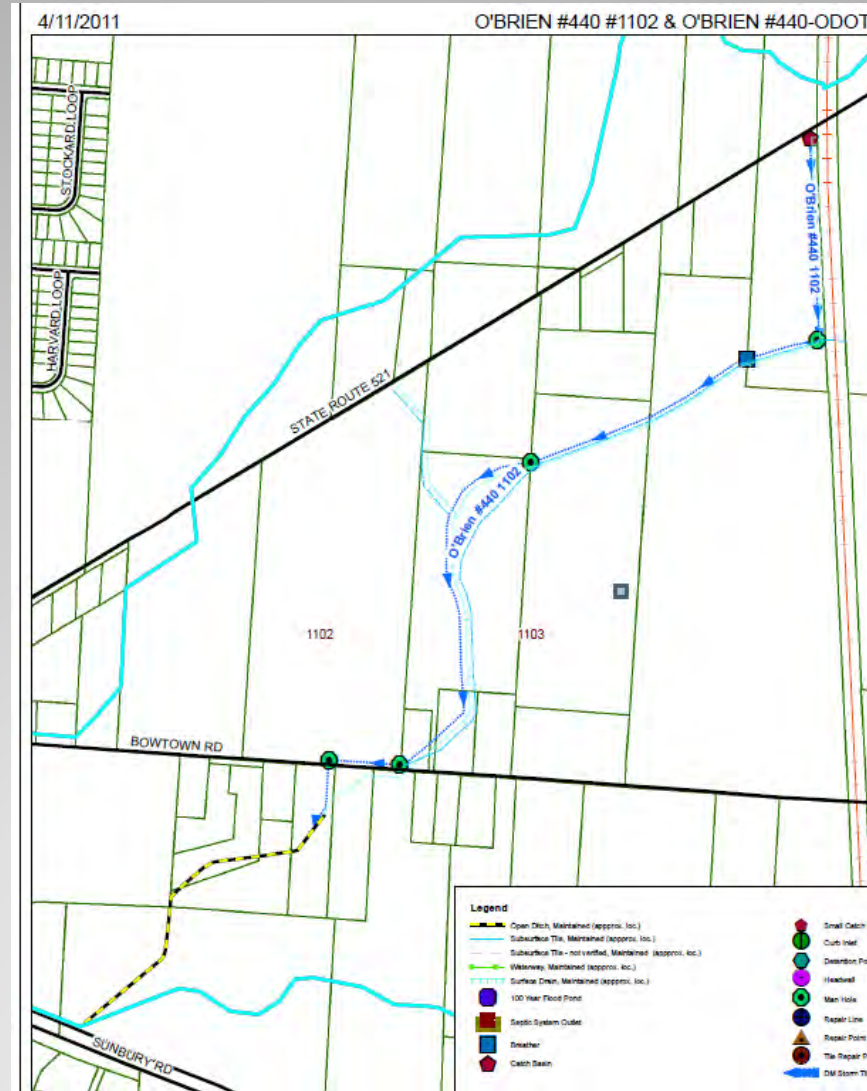
Long Term Maintenance



Long Term Maintenance

6131 & 6133 Projects





Obrien / ODOT Project



State Route 521 Flood After Heavy Rain Events
Multiple Times A Year





Obrien ODOT Project

- \approx 1 mile of 48" & 42" N12 Tile
- \approx 1 mile of Surface Drain
- \$380,000 dollars of drainage improvements now on maintenance.



Columbus Reservoir

Columbus Reservoir

- 850 surface acres
- 5 mile perimeter
- 9.3 Billion gallons at normal pool
- 35 to 45 feet to top of levee
- 10 Million cubic yards of earth moving
- Largest single up ground reservoir in Ohio
- Largest synthetically lined reservoir in the United States
 - 37 Million square feet





We Maintain....

- 23,535 feet of open channel that has a watershed of over 1500 acres.
- 7,868 feet of subsurface drain tile
- 210 feet of storm tile
- 4,638 feet of surface drain
- 25 tile outlets entering the site
- \$1,173,998.77 million dollars of drainage improvements now on maintenance.







Questions

