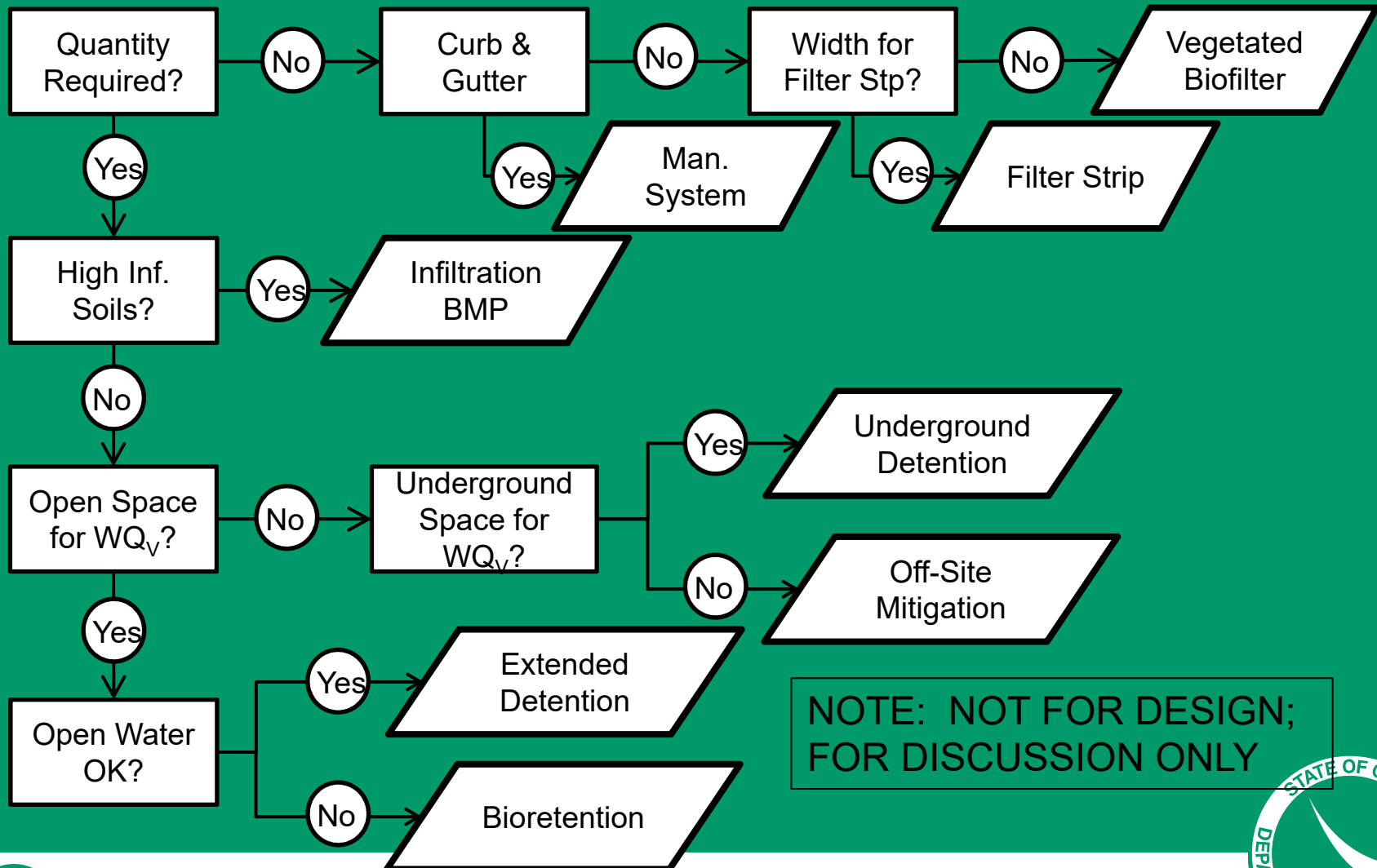


BMP Selection

BMPs in ODOT's L&D Vol. 2

| Source | BMP Name | Category | Quality | Quantity |
|---------------------------|--------------------------|--------------|---------|----------|
| ODOT Quality Only | Manufactured System | Flow Through | X | |
| | Vegetated Biofilter | Flow Through | X | |
| | Vegetated Filter Strip | Flow Through | X | |
| ODOT Quality and Quantity | Extended Detention Basin | Detention | X | X |
| | Retention Basin | Detention | X | X |
| | Bioretention Cell | Bioretention | X | X |
| | Infiltration Trench | Infiltration | X | X |
| | Infiltration Basin | Infiltration | X | X |
| | Constructed Wetland | Detention | X | X |
| ODOT Quantity Only | Underground Detention | Detention | | X |
| | Stream Grade Control | (Other) | | X |

BMP Selection



NOTE: NOT FOR DESIGN;
FOR DISCUSSION ONLY



BMP Selection

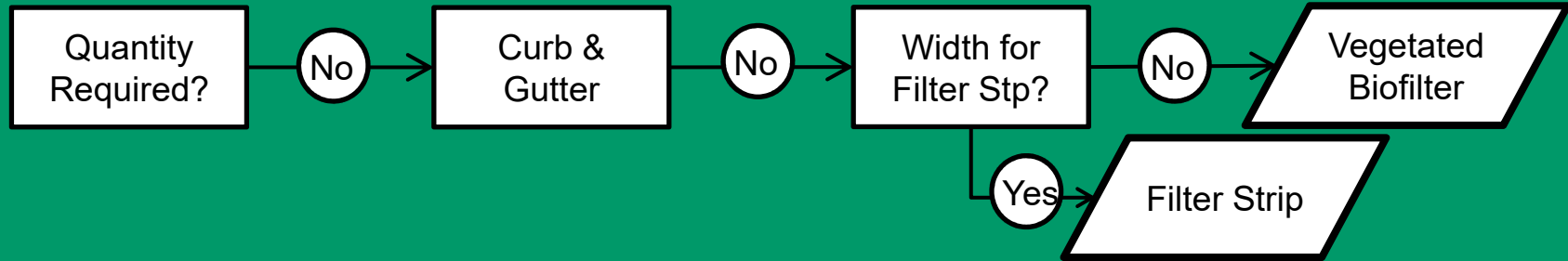
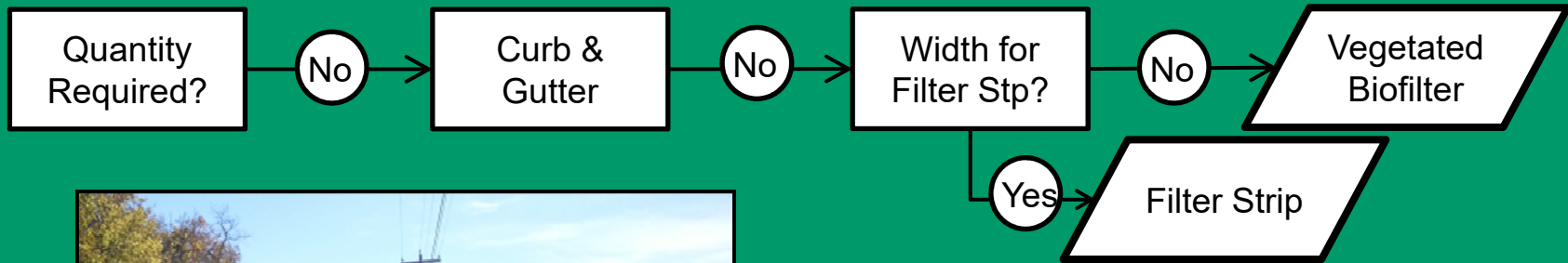


Table 1117-3

| Maximum Pavement Width (ft.) | Slope (H:V) | Filter Strip Width (ft. minimum) |
|------------------------------|-----------------|----------------------------------|
| 22 | 3:1 and flatter | 15 |
| 24 | 3:1 and flatter | 17 |
| 26 | 3:1 and flatter | 18.5 |
| 28 | 3:1 and flatter | 20.5 |
| 30 | 3:1 and flatter | 22 |
| 32 | 3:1 and flatter | 24 |
| 34 | 3:1 and flatter | 25 |
| 48 | 6:1 and flatter | 25 |

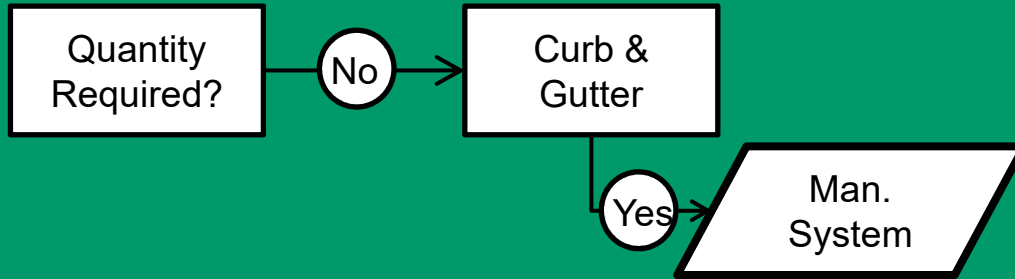
- First choice if they work
- Cheapest BMPs
- Easy to maintain
 - Mow
 - Keep grass alive
 - Prevent erosion
- Linear BMPs
- Quality treatment only

BMP Selection



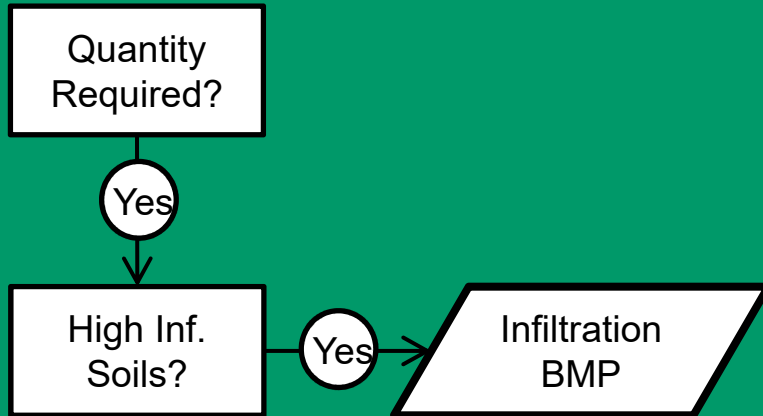
- First choice if they work
- Cheapest BMPs
- Easy to maintain
 - Mow
 - Keep grass alive
 - Prevent erosion
- Linear BMPs
- Quality treatment only

BMP Selection

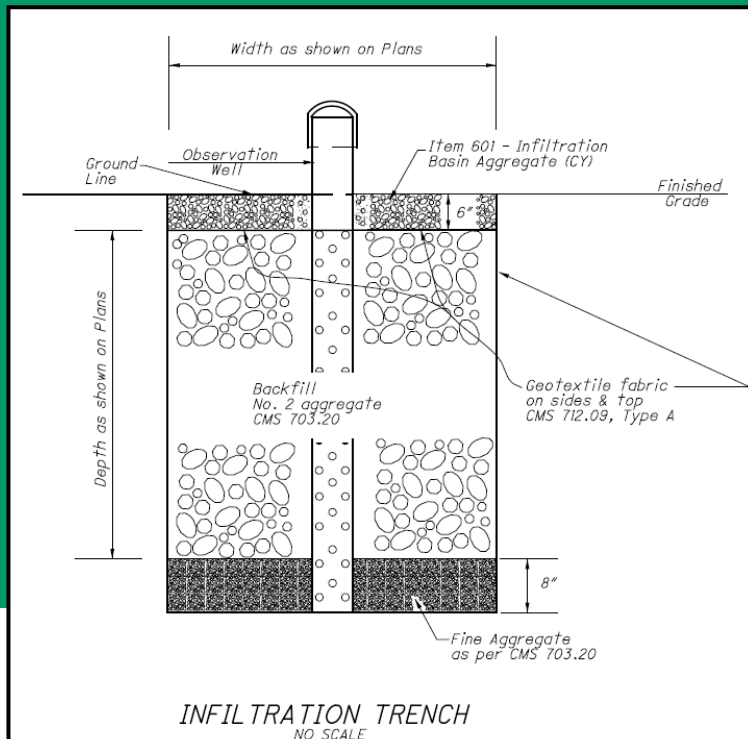


- Flow-Through BMP
- Small Footprint
- Quality treatment only
- Frequent Maintenance
 - (Vac truck 4 – 12 months)
- Limit: 6 cfs

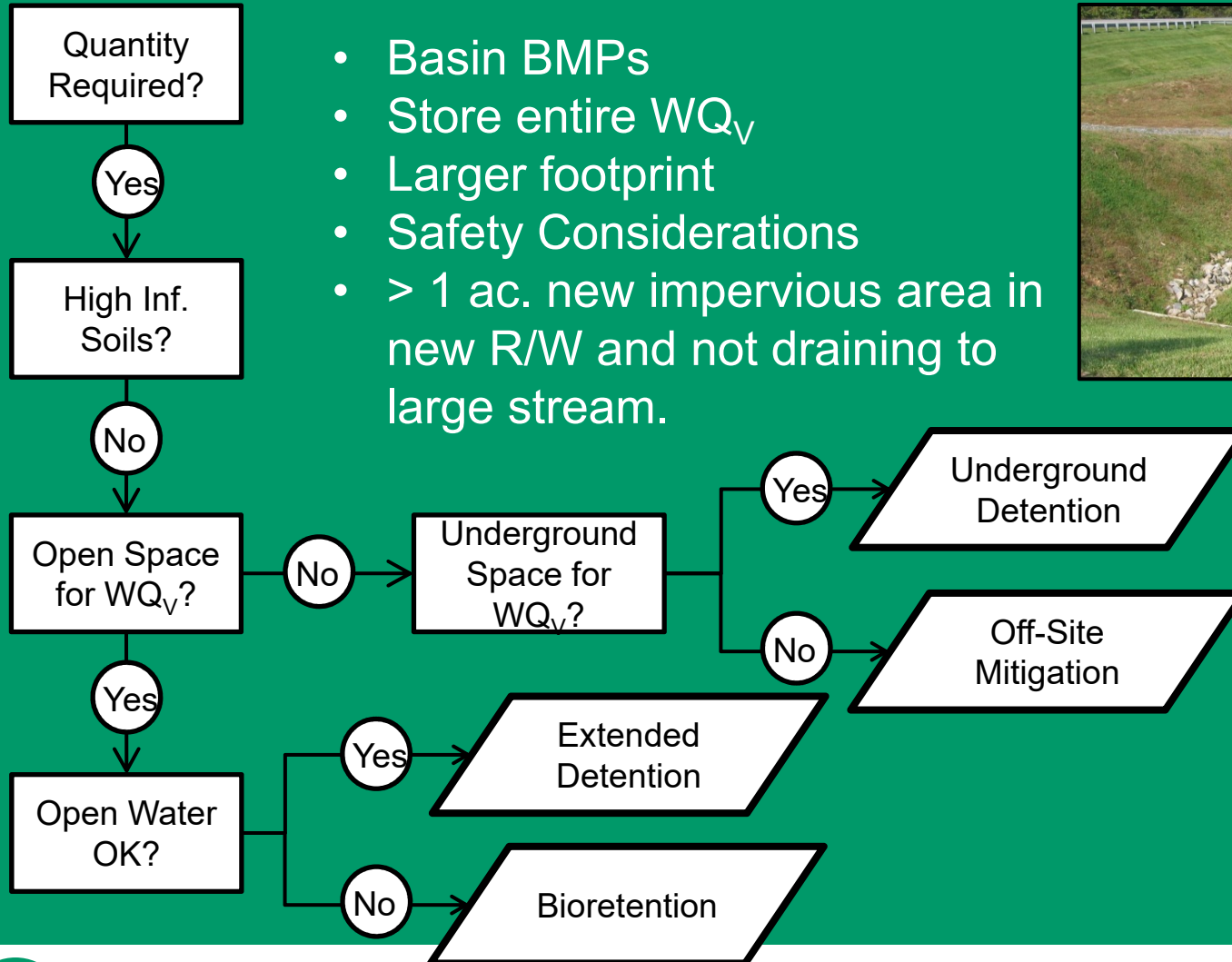
BMP Selection



- High infiltration (0.5 – 2.4 in/hr)
- HSG A or B soil
- Pretreatment Necessary
- Groundwater Protection
- Few areas with HSG A or B soils
- Infiltration testing recommended



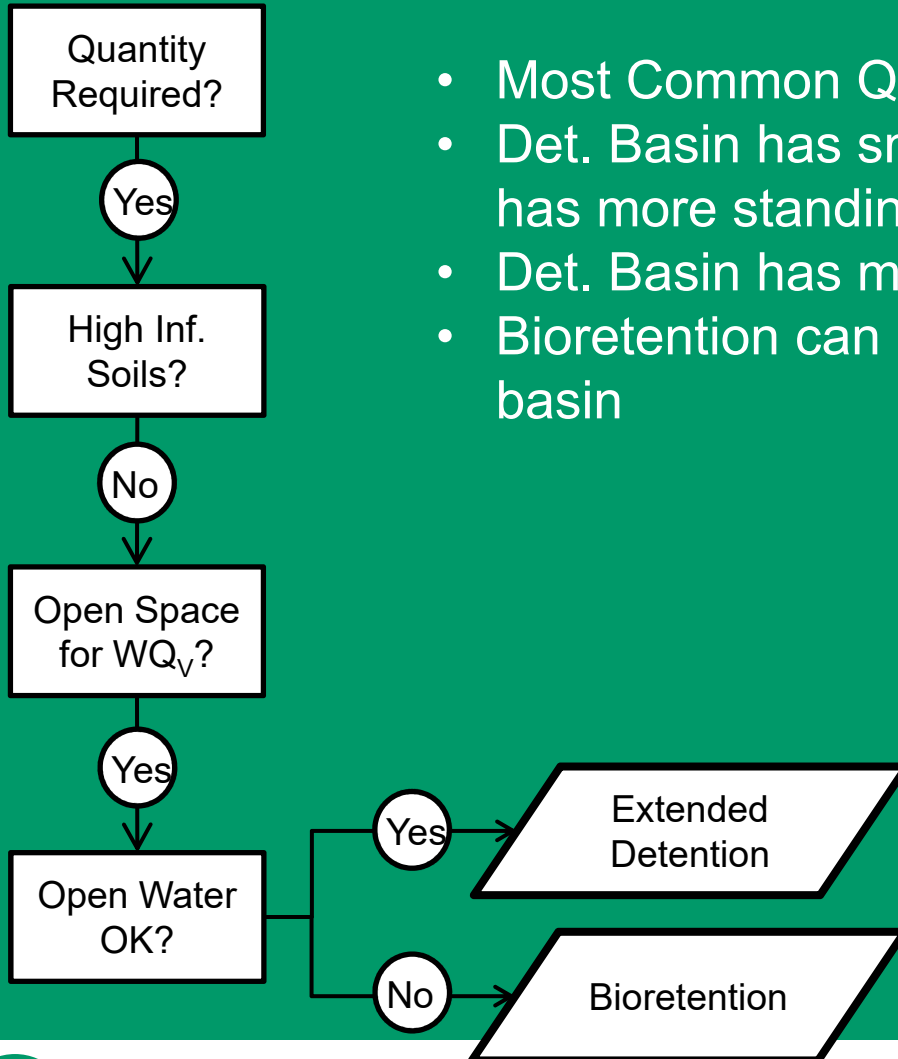
BMP Selection



- Basin BMPs
- Store entire WQ_v
- Larger footprint
- Safety Considerations
- > 1 ac. new impervious area in new R/W and not draining to large stream.



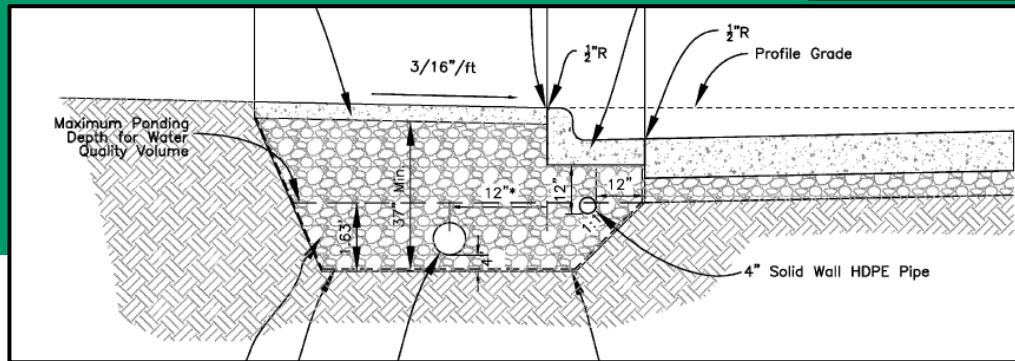
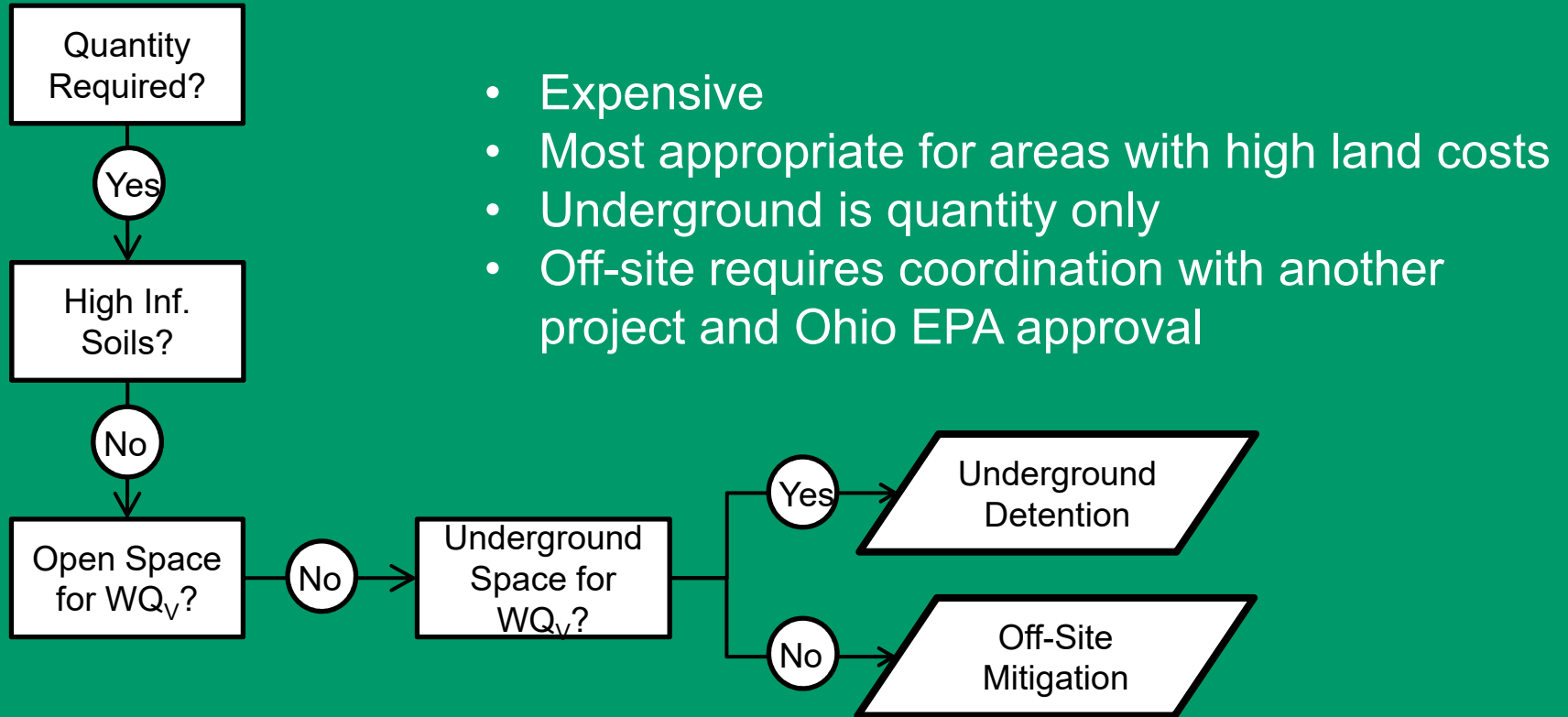
BMP Selection



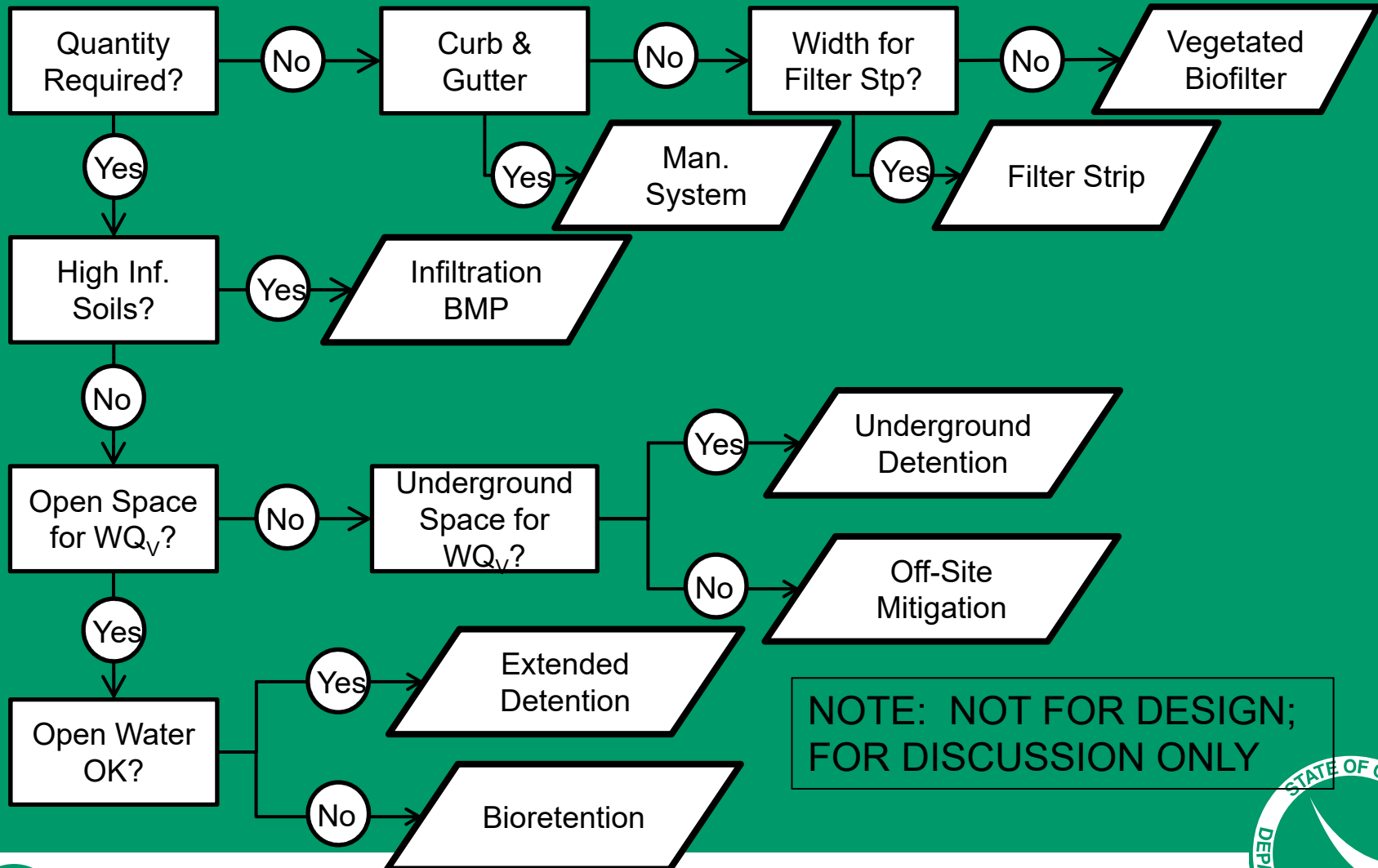
- Most Common Quantity Treatment
- Det. Basin has smaller footprint but has more standing water
- Det. Basin has more safety issues
- Bioretention can be linear (trench) or basin



BMP Selection



BMP Selection



NOTE: NOT FOR DESIGN;
FOR DISCUSSION ONLY



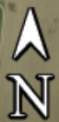
BMP Siting

Discuss Potential BMP Sites

Interstate 75

Between Dayton and Cincinnati

Legend



Interstate 75

Between Dayton and Cincinnati

Legend



Route 42

Plain City

Legend



Route 42

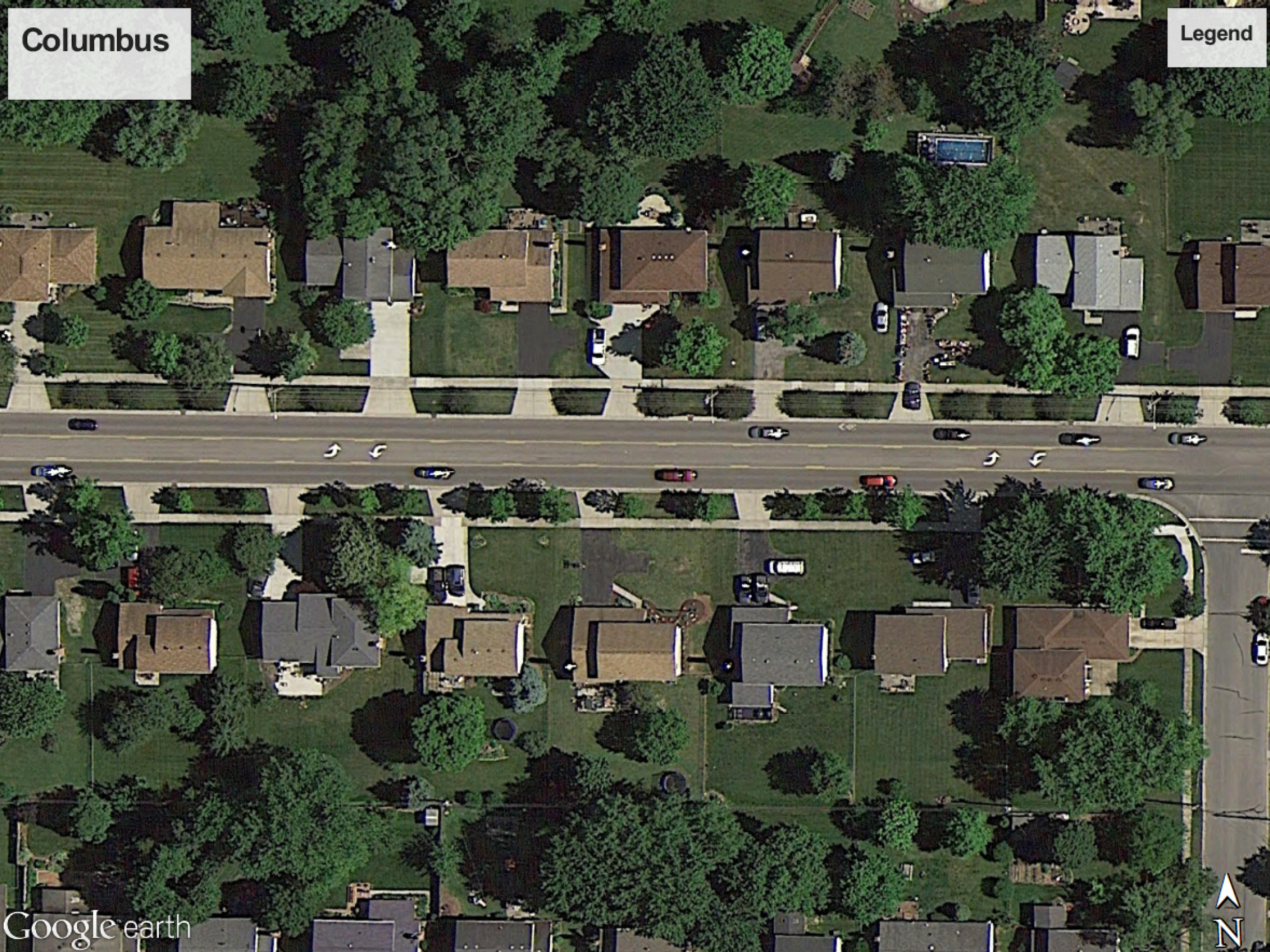
Plain City

Legend



Columbus

Legend



Toledo

Legend



Google earth



BMP Siting

- ④ Look for green space
- ④ Intersections and interchanges
- ④ Grass ditches (vegetated biofilters)
- ④ Linear bioretention
- ④ Don't have to treat 100%
- ④ Manufactured systems
- ④ Off-site mitigation

Questions ?

Jon Prier, P.E.
jonathan.prier@dot.ohio.gov
614-644-1876

