



Phase I: Case Study of  
Low Impact Development (LID)

# Burrows Smith

Over 20+ years experience, development includes:

Masonboro Landing • Masonboro Forest • Cove Point, Crosswinds • Brewster Place  
Landfall • Porters Neck • Beacon Woods • Treybrooke • Cedar Landing • Greenbriar  
Stones Edge • Shinn Creek Estates • Dune Ridge • Cordgrass Bay • One South Lumina  
Sitework for the Dillard's expansion at Independence Mall • Kerr Ave Business Park  
Dockside Restaurant • Slaters Billiards Hall • Village Square Townhomes  
Sea Watch at Kure Beach • Wrightsville Sound Office Park • Westbay  
Plantation Landing • Sagewood





# Why LID?



Wrightsville Beach, North End



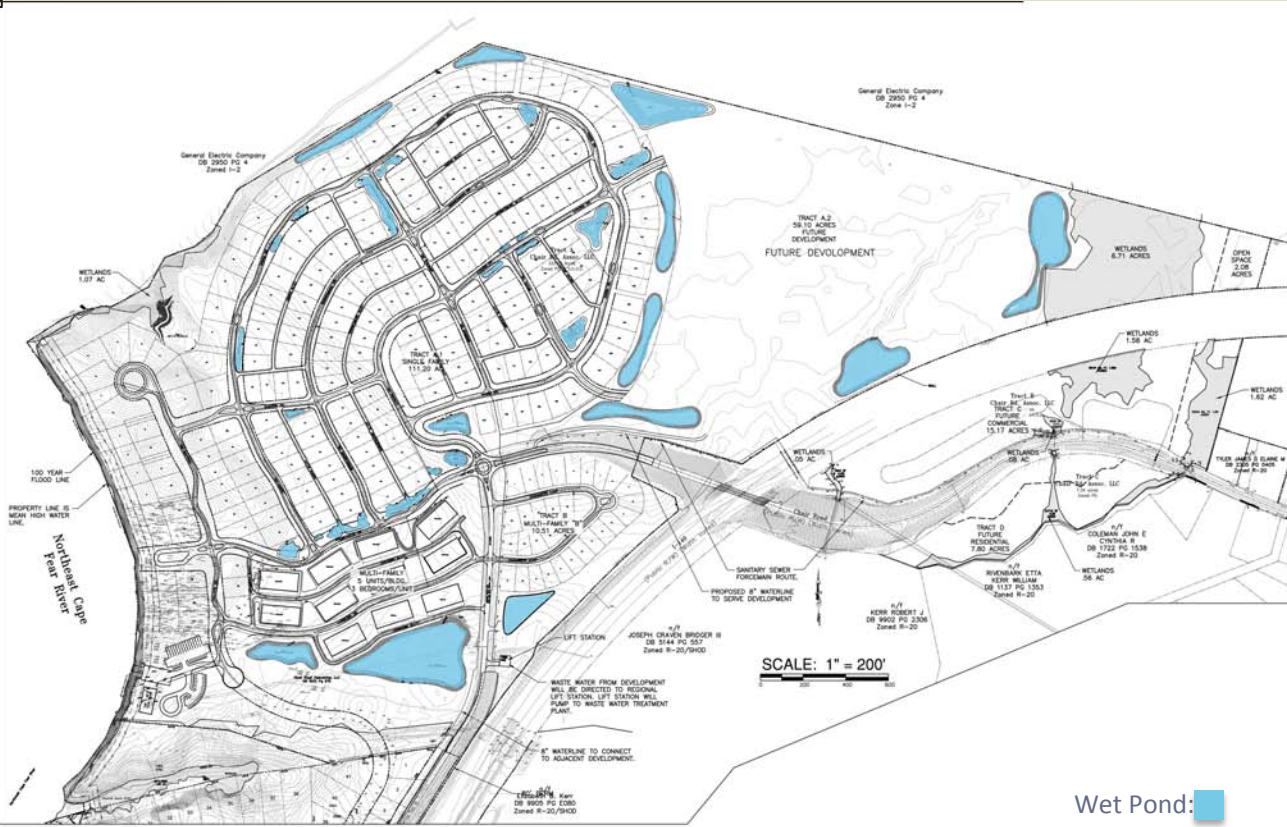
Banks Channel



# Why LID?



# Economies of LID



Wet Pond:

Original Plat







# Economies of LID

Wet Pond





Wet Pond – Not!!







Future Wet Pond Cost







# Economies of LID



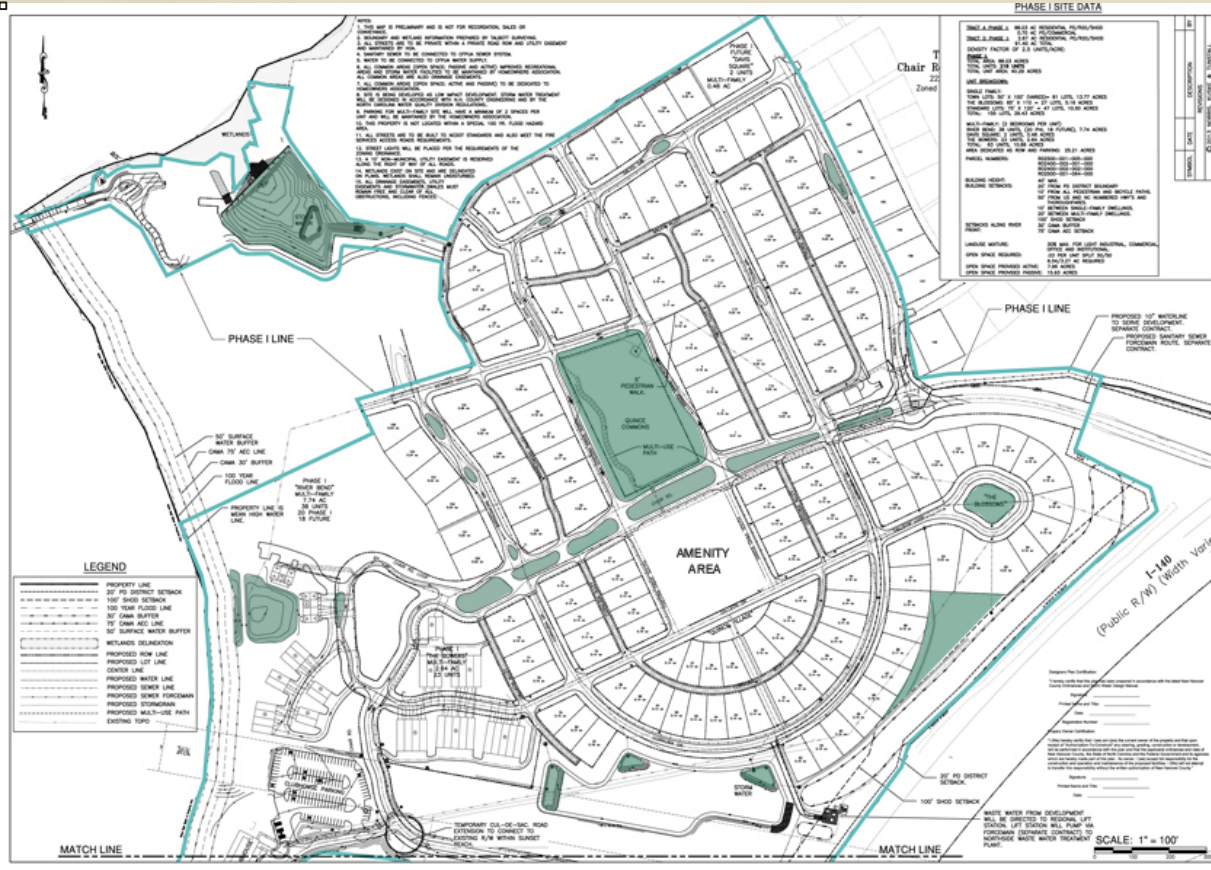
2-acre Park







# Economies of LID



Current Plat





# Economies of LID

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# Maintenance

Minimal maintenance for homeowners

Infiltration & cistern

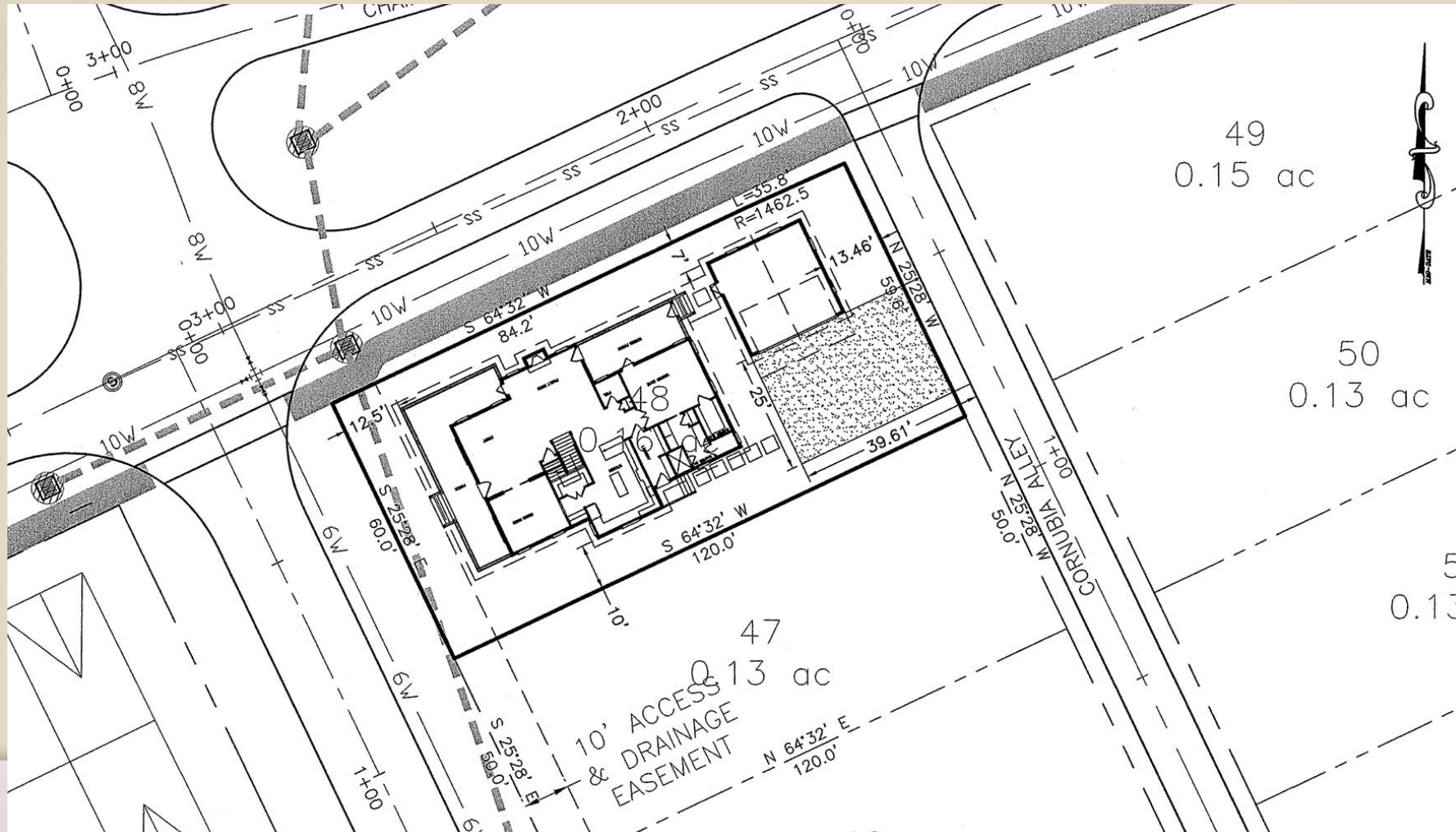
Pervious concrete





# Model Home





49  
0.15 ac

50  
0.13 ac

47  
0.13 ac  
10' ACCESS & DRAINAGE EASEMENT

5  
0.13





# Pervious Surface

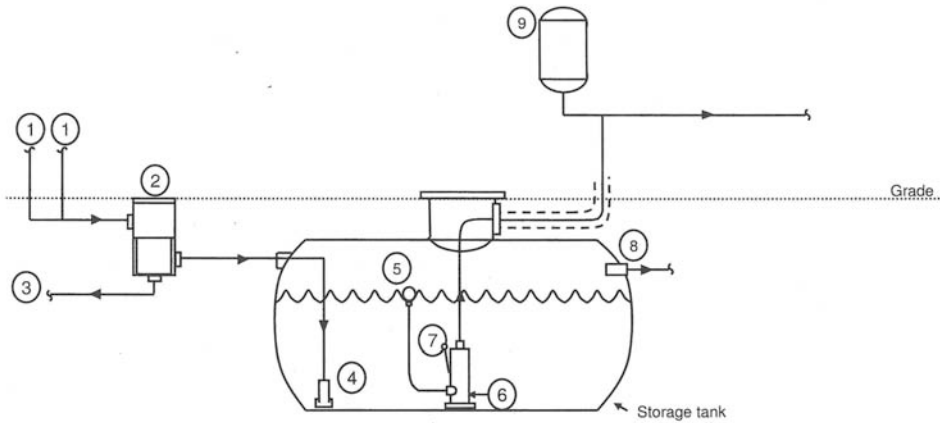


# Infiltration Piping





# Cisterns



- |   |   |
|---|---|
| ① Rainwater collection point (roof drains, gutters, etc)  | ⑤ Floating stainless steel suction filter |
| ② Rainwater enters the vortex filter and is processed (Possible 90% diverted to storage tank)                               | ⑥ Submersible feed pump                   |
| ③ Remaining water from vortex filter to overflow  | ⑦ Low water cut off float switch          |
| ④ Smoothing inlet stainless steel "flow calming" device to eliminate turbulence of the incoming water as it enters the tank | ⑧ Overflow                                |
|   | ⑨ Pressure tank                           |

**RAINWATER HARVESTING SYSTEM DETAIL**



# Non-irrigated grass





