Building Resilient Coasts: Implementing Dune Infiltration Systems

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Siting Dune Infiltration Systems

- Your team has decided that a DIS is the best solution for your project.
- Now, where do you install it?
- What sites are readily available?
- Municipal-owned properties or R/W's, Beach Access areas
- Undeveloped "paper streets"
- Any properties available for purchase?
- Depending on topography, stormwater flow may be collected and flow by gravity to the DIS, whereas other drainage areas may require a lift station to pump the stormwater to the elevated DIS system
- Where to place the DIS in the dune?

Possible DIS Locations

- Adjacent to Public Beach Access
- Back side of Dune
- Top of Dune

- Adjacent to Public Beach Access
- High Dune above the Beach
- Allows for gravity flow









Beach Access Location

- R/W of 50 feet wide
- Top of Dune 6+ ft above pavement in parking area

DIS Profile in a Dune

- Set chambers as high as possible in dune system.
- Minimum of 6" stone foundation under chambers.
- Set the DIS a minimum of 24" above the Seasonal High-Water Table (SHWT). Can be reduced to 12" above SHWT, but requires additional hydrogeologic evaluation to demonstrate the water table subsides to pre-storm elevation within five days.
- Required cover over the chambers may vary by manufacturer, product material, and the type of traffic (if any) over the chamber system.

