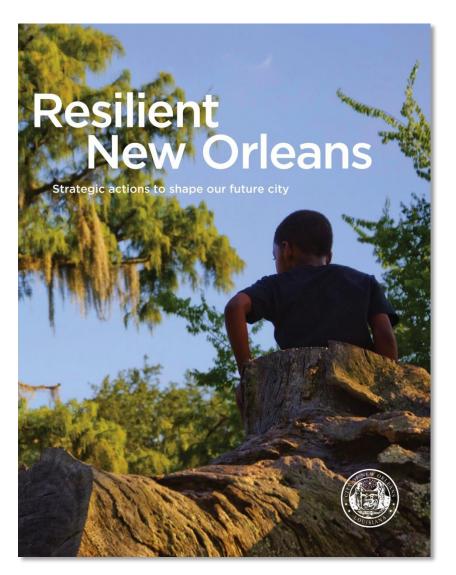


Hagan-Lafitte Drainage Upgrades & Green Infrastructure Project

Tuesday, November 7, 2017



### New Orleans City Resilience Strategy Released August, 2015





Adapt to Thrive



**Connect to Opportunity** 



Transform City Systems

#### **Gentilly Resilience District**

**Projects proposed in City's application to National Disaster Resilience Competition** 





**Streets & Corridors** 



**Open Spaces** 



Parks & Playgrounds



**Vacant Lots** 



**Home & Property Improvements** 



#### CITY OF NEW ORLEANS DRAINAGE UPGRADE PROJECT LOCATIONS



City of New Orleans Department of Public Works: September 2017



#### **Benefits of the Projects**



Reduced risk of flooding and subsidence



Neighborhood beautification & economic development



Recreation & health



Environmental awareness

Hagan-Lafitte Drainage Upgrades and Green Infrastructure Project



Community Meeting November 7, 2017





### Presentation Agenda

- 1. Project Overview and Progress
- 2. Grey Infrastructure
- 3. Green Infrastructure (GI)
- 4. Easton Park Underground Detention
- 5. Results
- 6. Discussion



### Project Overview

- Purpose reduce flooding in Hagan-Lafitte neighborhood
- HMGP funded \$5.35 Million for construction
- Design is Complete
- Construction Scheduled for March or April 2018



## Project Location





## Project Area





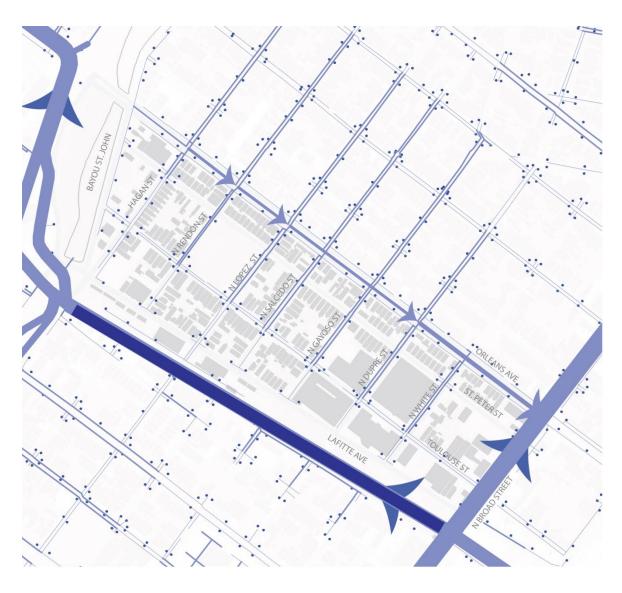
### Project Goals –Neighborhood Resiliency

- Increase drainage Reduce Flooding
- Utilize Green Infrastructure to slow, retain, and absorb storm water
- Beautification with green areas
- Replenish groundwater
- Store rainwater underground



# Existing Drainage Conditions

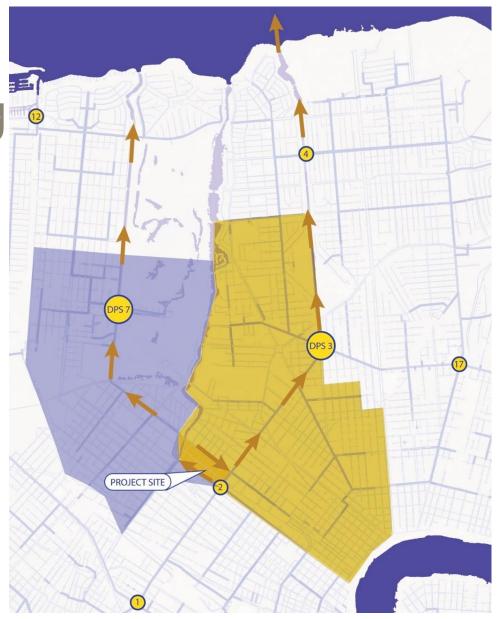
- Site drains
   to Orleans
   Avenue
   and then to
   N. Broad
   Street
- Low area





# Existing Pump Station Routing

- Pump Station 3 drainage basin
- Tail end of the system





## Proposed Solutions

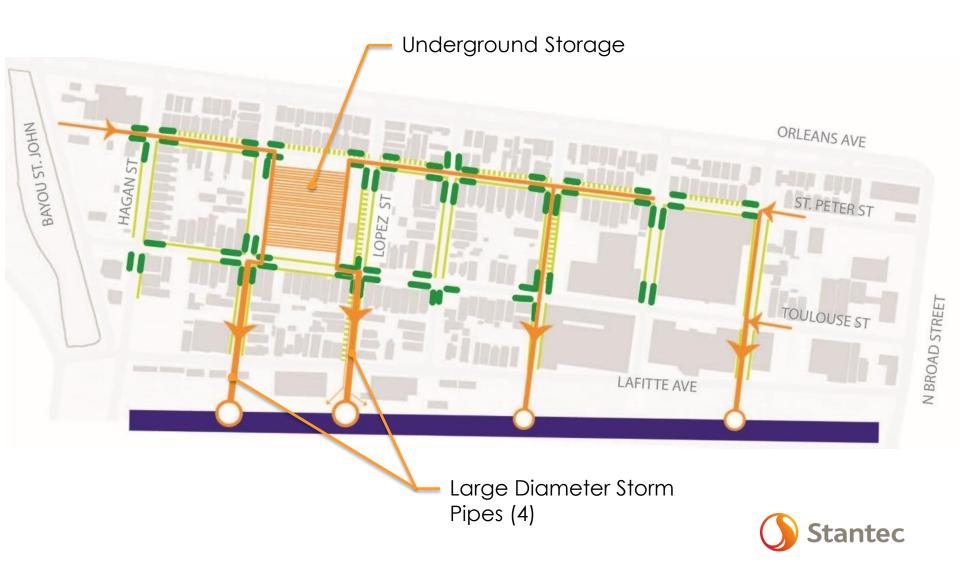
Mix of green and grey infrastructure

- Rain Gardens
- Pervious Sidewalk
- Increased Pipes
- Redirect flow to St. Louis Canal
- Rain storage at Easton Park

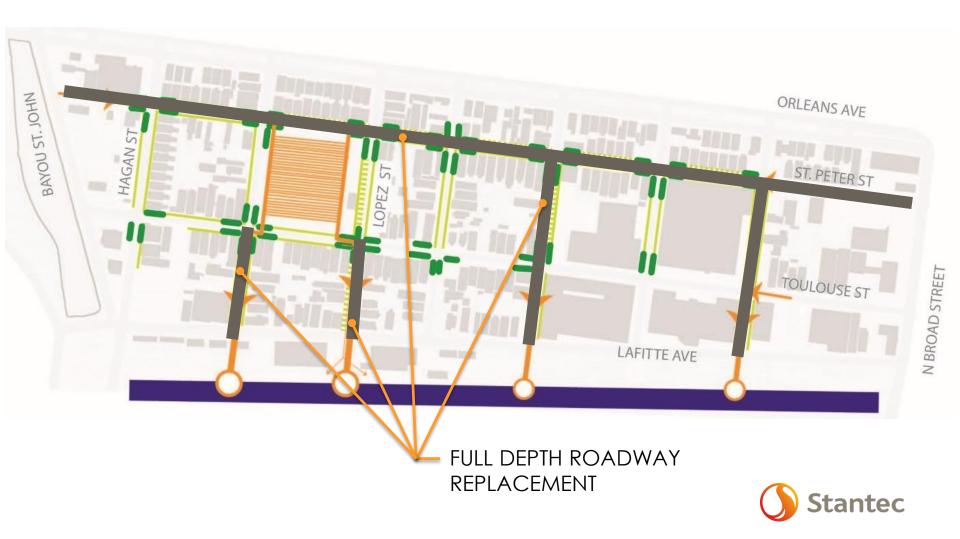




### Grey Infrastructure



### Pavement Replacement



### Underground Storage





- Storage Volume to reduce flooding for the neighborhood
- 50 Year Design Life
- Park gains new turf
- Maximizes use of fields after storms

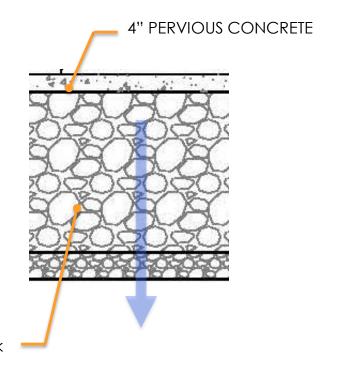


### Green Infrastructure Pervious Sidewalks

# Replace sidewalks with pervious concrete

- Already in use in Greenway Project
- Intercept flows from roof leaders, driveways, and yards
- Create a recharge grid to address subsidence Drainage Rock





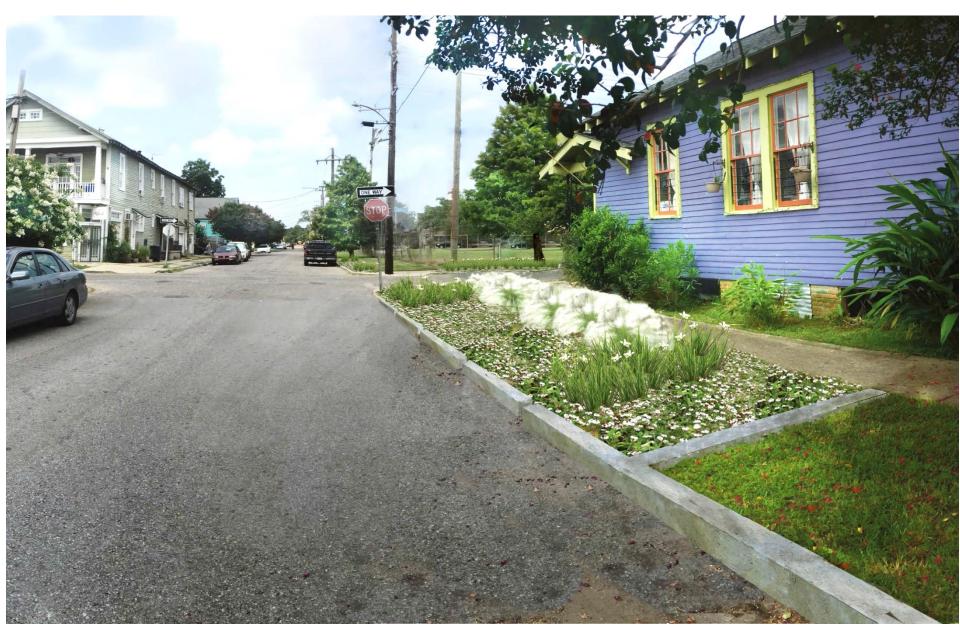


### Rain Gardens





### Rain Gardens

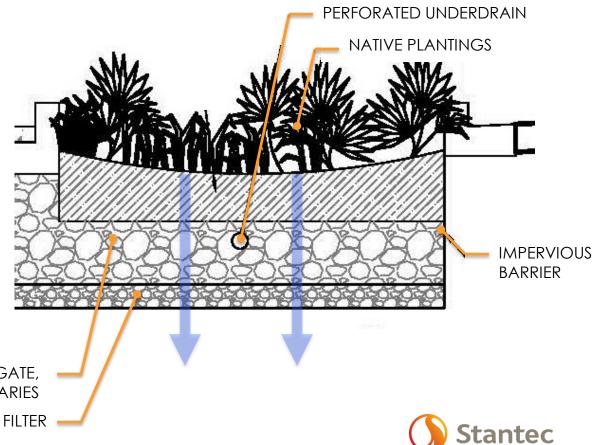


### Rain Gardens

- Strategically within the project area
- As street corner parking deterrent
- Add trees in available
   spaces

#57 AGGREGATE, DEPTH VARIES

6" AGGREGATE FILTER



### Plant List

### Native Plantings - Low Maintenance

- Tolerant of standing water & drought
- Shade out weeds
- Not messy or reedy
- Ideally flowering
- Evergreen



Sweetbay Magnolia



Bald Cypress



Gulf Muhly



Louisiana Iris



Butterfly Iris



Asian Jasmine



Dwarf Palmetto



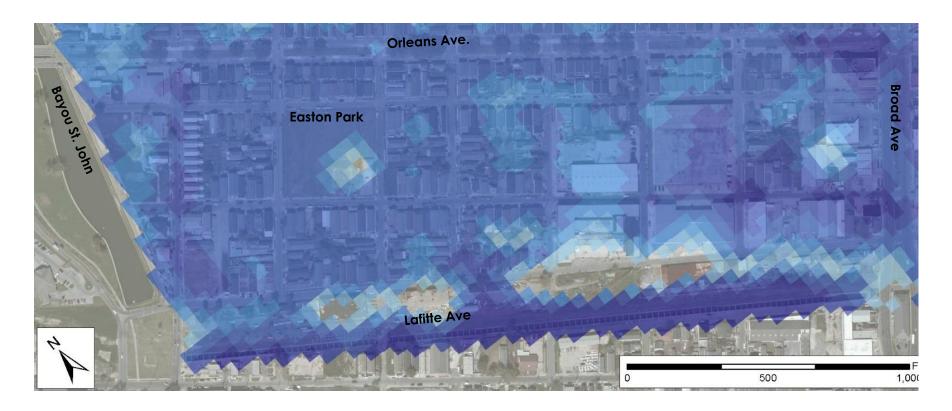
Stokes' Aster



Turkey
Tangle
'Frog Foot'



### Existing Flooding Map – 2 year





### Proposed Flooding Map – 2 year





# Extent of Benefit **Louis Armstrong** Park

### Extent of Benefit



### **Flood Reduction**

- 2" to 6" Reduction
- 6" to 12" Reduction
- 12" to 4' Reduction



### Next Steps

Bid Process through January 2018
Construction Start: March/April 2018
Estimated construction- Total - 12 Months
Includes 3 months at Easton Park



### Discussion

### **Thank You!**



