



Resilience + Sustainability

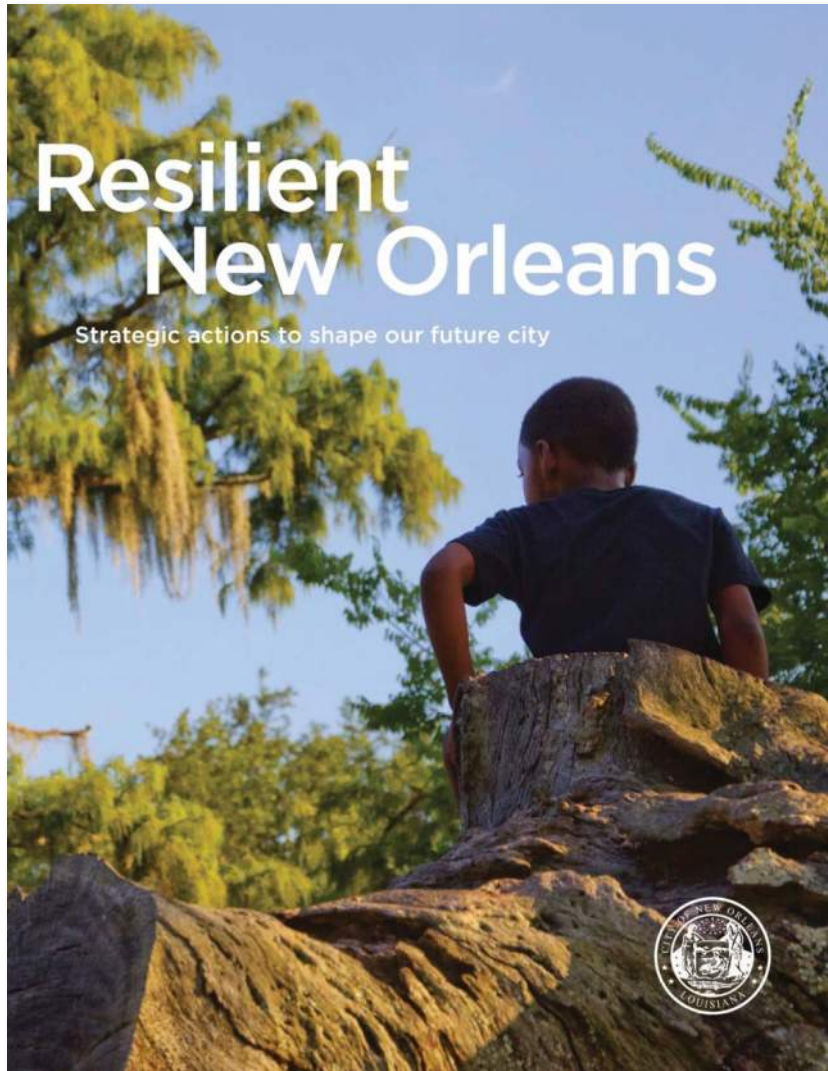
CITY OF NEW ORLEANS

**INCORPORATING GREEN INFRASTRUCTURE
INTO THE NEW ORLEANS LANDSCAPE WITH A
FOCUS ON LAKEVIEW**

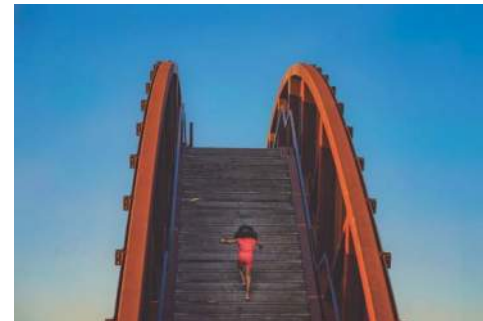
Wednesday, November 1, 2017

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



Parks & Playgrounds



Vacant Lots



Streets & Corridors



Open Spaces

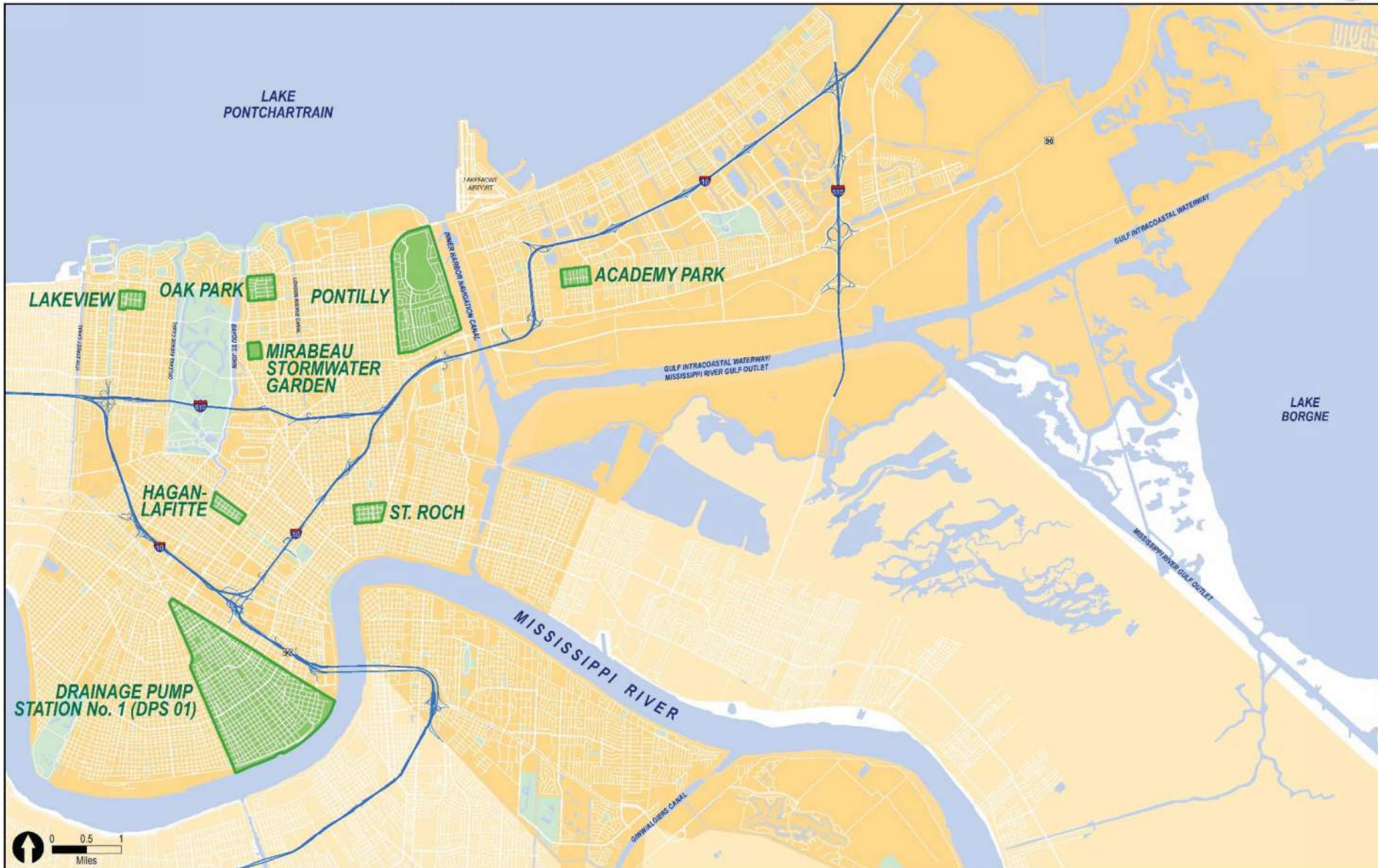


Home & Property Improvements



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



Lakeview Drainage Updates & Green Infrastructure

NEW ORLEANS, LA

city drainage

DRAINAGE BASIN

DRAINAGE CANALS
CULVERTS BELOW STREETS

DIRECTION OF PUMPING

PUMP STATION

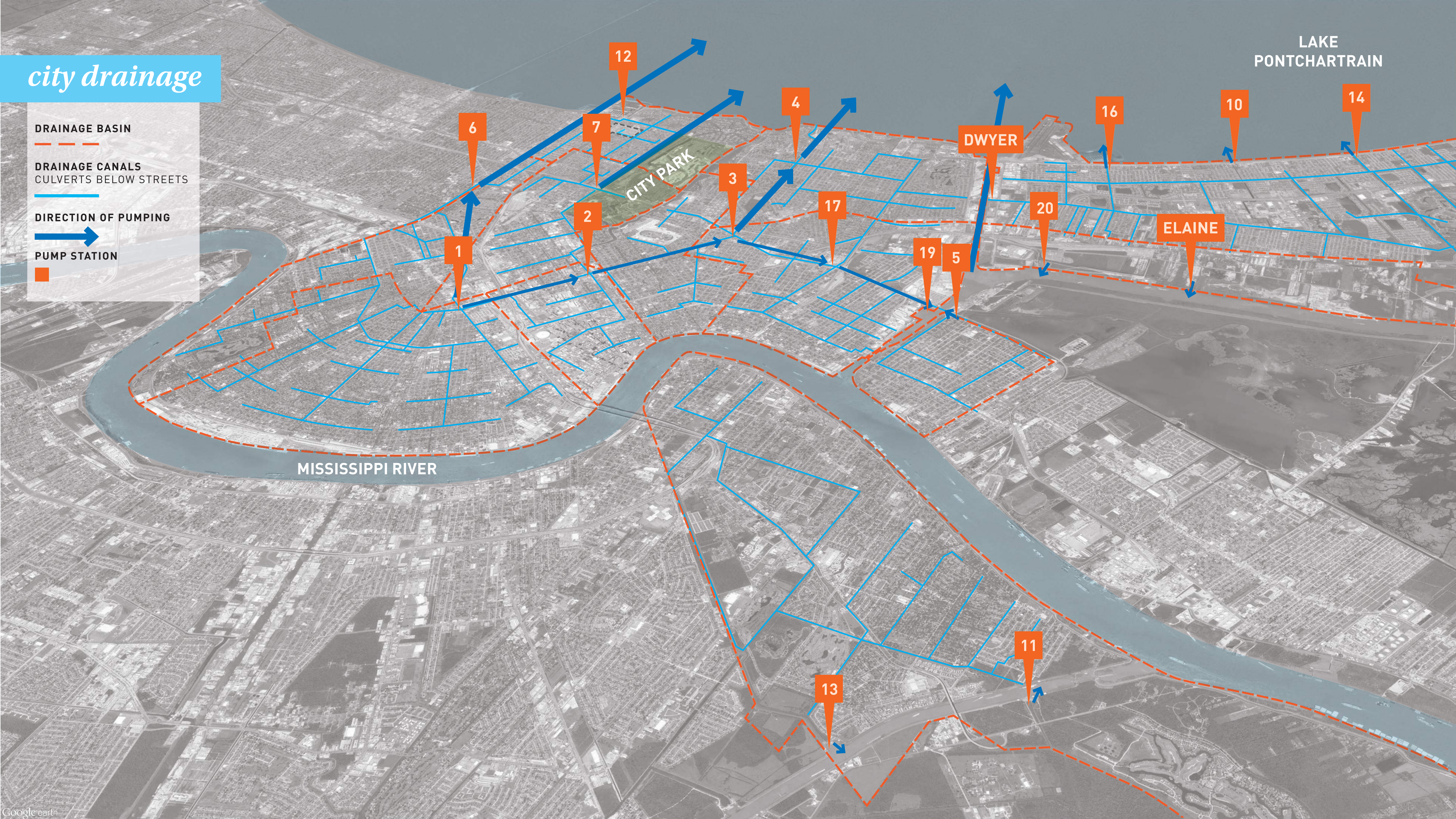
LAKE
PONTCHARTRAIN

CITY PARK

DWYER

ELAINE

MISSISSIPPI RIVER



lakeview neighborhood existing

DRAINAGE BASIN
- - - - -

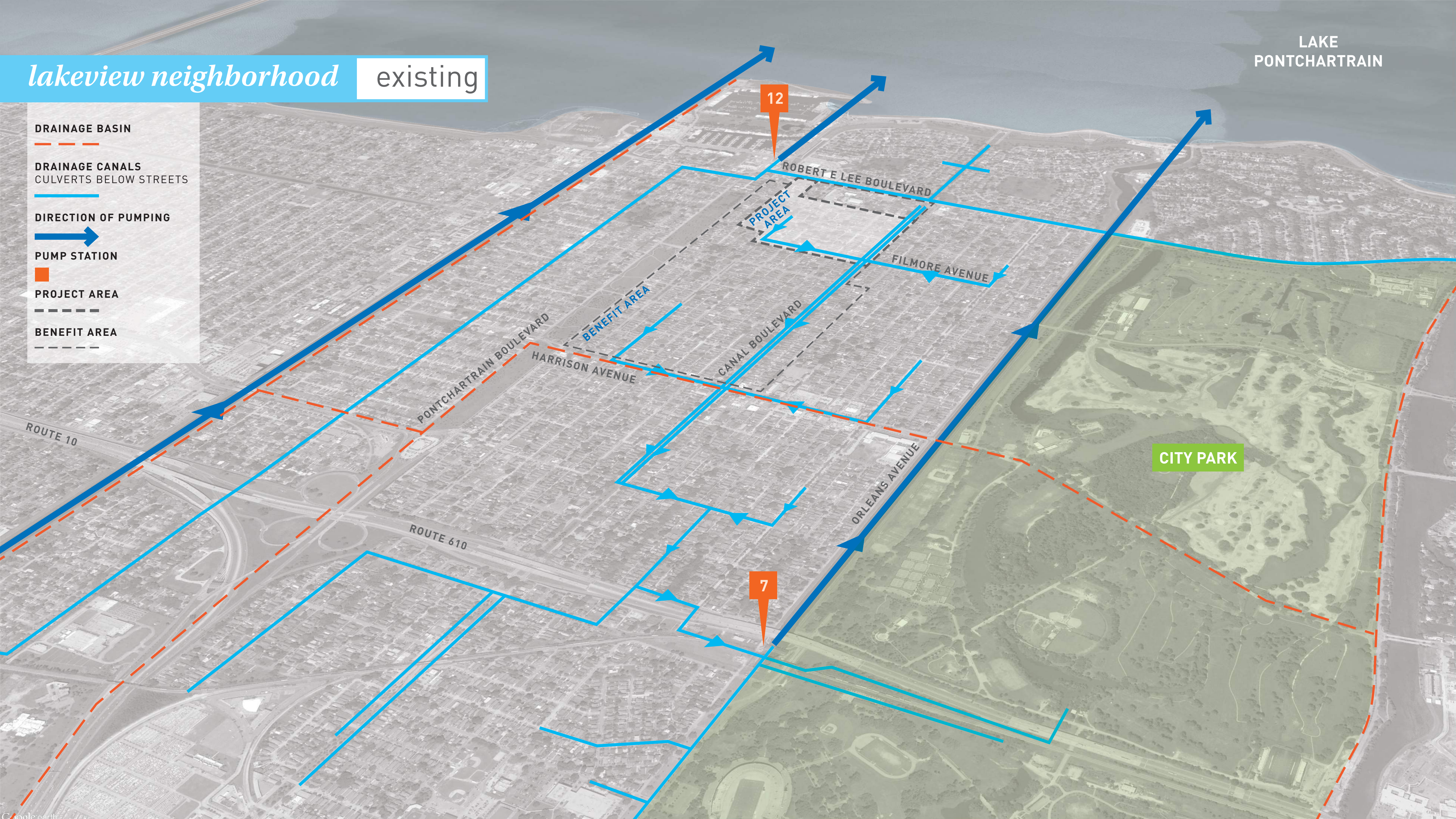
DRAINAGE CANALS
CULVERTS BELOW STREETS
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DIRECTION OF PUMPING
➡

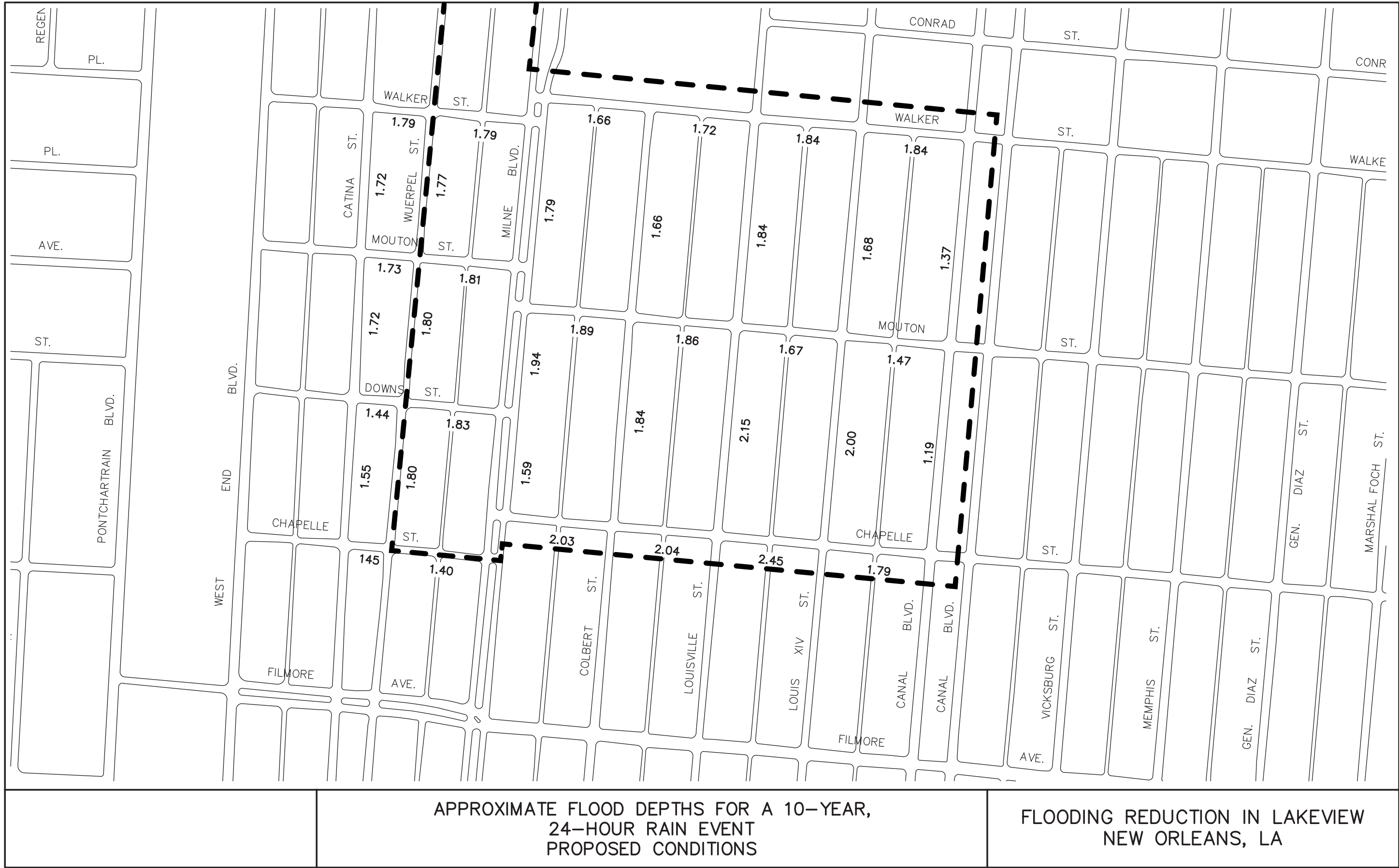
PUMP STATION
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PROJECT AREA
- - - - -

BENEFIT AREA
- - - - -



analysis



Reference Example of H&H Model Development During Site Analysis.

GOALS

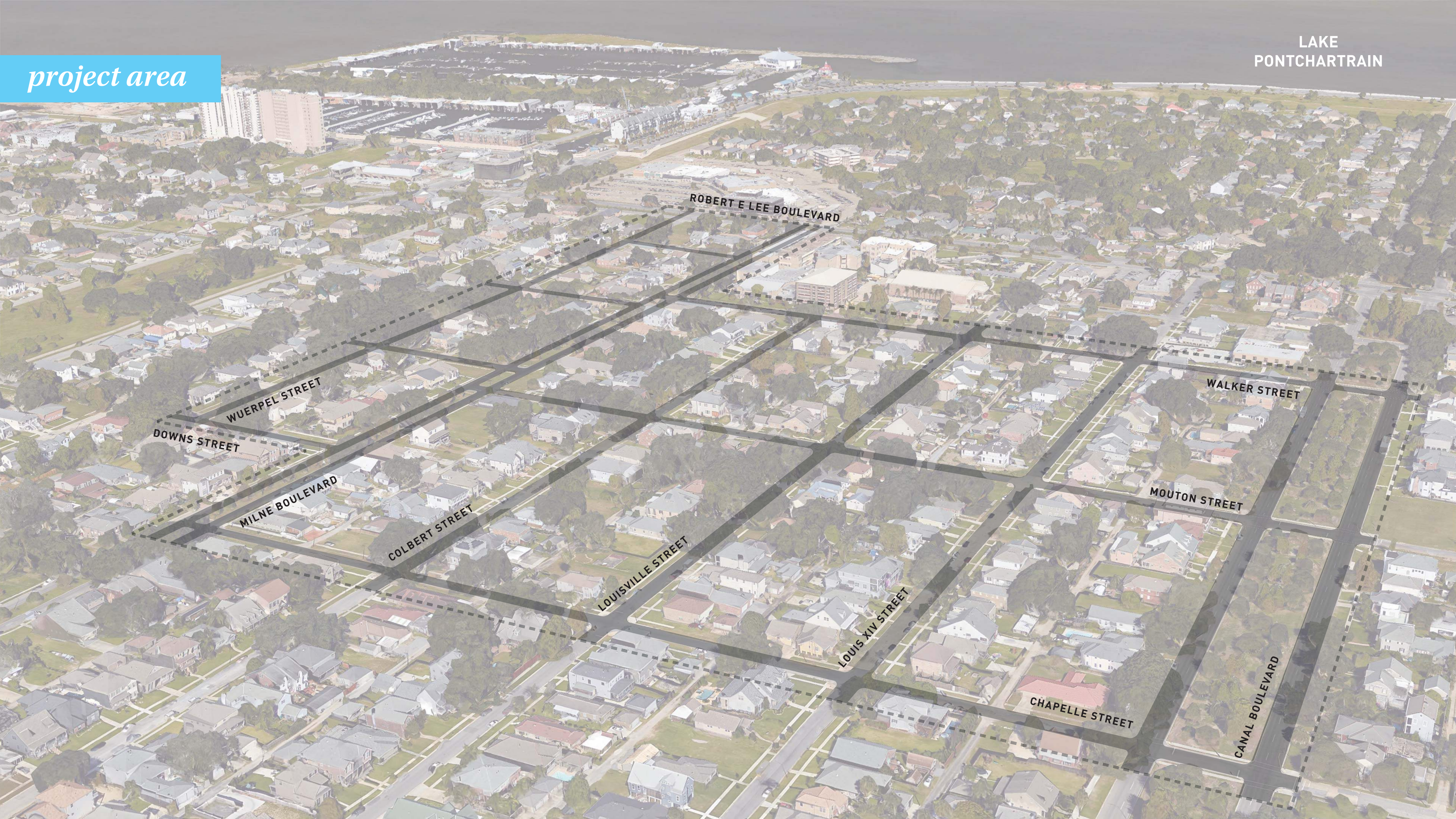
- *Mitigate and Reduce Flooding*
- *Upgrade Infrastructure and Reroute Storm Drain*
- *Slow and Store Water with Green Infrastructure*

RESULTS

- *Average Flood Reduction of 1" Across the Site*
- *Up to 2.5" of Average Flood Reduction in Areas Adjacent to the Site*

project area

LAKE
PONTCHARTRAIN



limits of work

LAKE
PONTCHARTRAIN

LIMITS OF PHASED
CONSTRUCTION



INSTALLATION OF PROPOSED
PIPING WITHIN ROADWAY TO
BE PHASED

ALLEY BIOSWALES TO BE
PHASED

INSTALLATION OF RAIN GARDENS;
ROADWAY TO REMAIN OPEN

ROBERT E LEE BOULEVARD

WUERPEL STREET

DOWNS STREET

MILNE BOULEVARD

COLBERT STREET

LOUISVILLE STREET

LOUIS XIV STREET

CHAPELLE STREET

WALKER STREET

MOUTON STREET

CANAL BOULEVARD

proposed system

EXISTING DRAIN LINES

PROPOSED PIPING (30"-60")

PROPOSED GREEN
INFRASTRUCTURE

CONNECTIONS
[PROPOSED TO EXISTING]



PUMP TO
LAKE

PROPOSED CONNECTION
TO EXISTING ROBERT E LEE
STORM BOX

LAKE
PONTCHARTRAIN

ROBERT E LEE BOULEVARD

WALKER STREET

MOUTON STREET

CANAL BOULEVARD

WUERPEL STREET

DOWN'S STREET

MILNE BOULEVARD

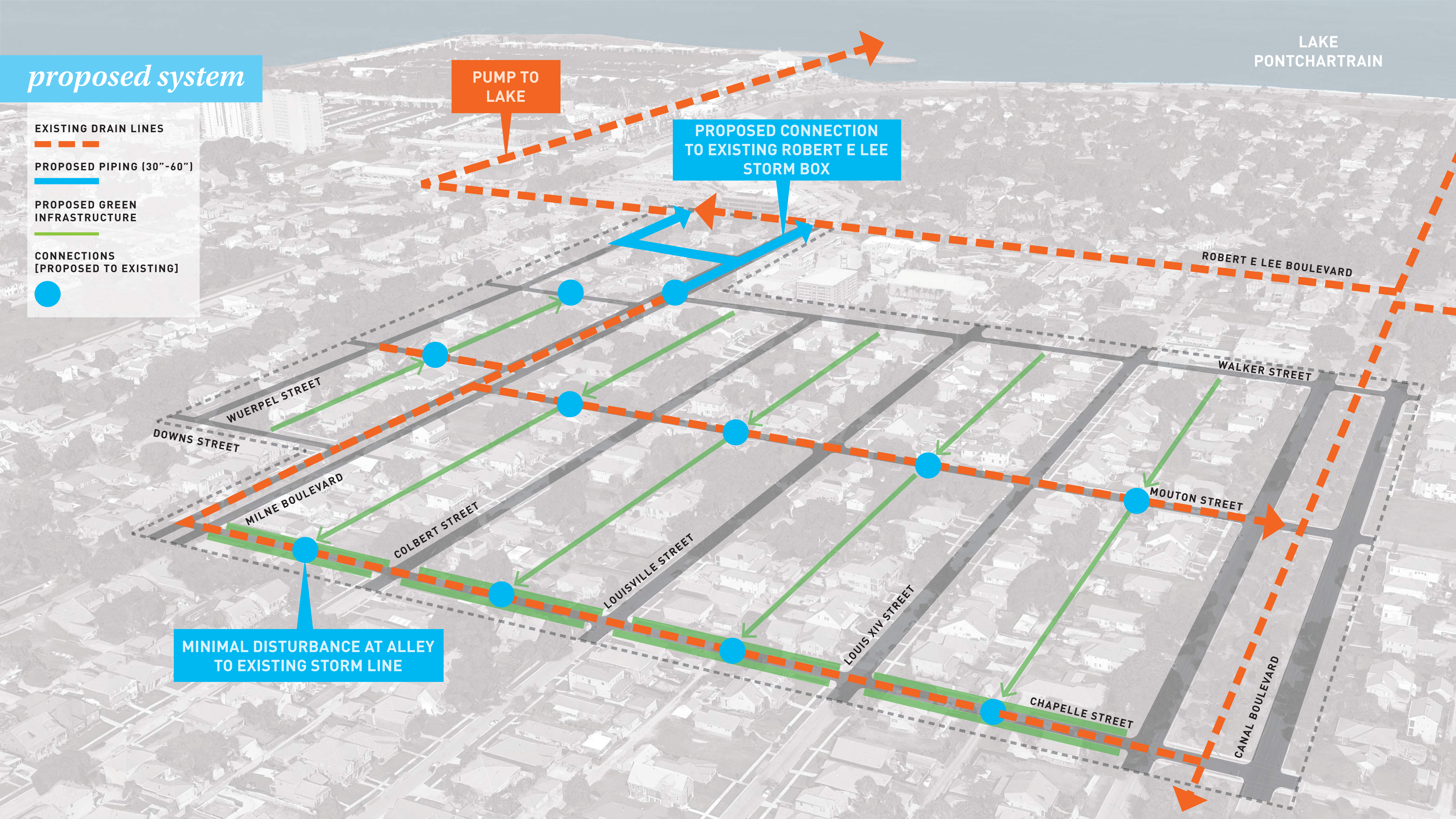
COLBERT STREET

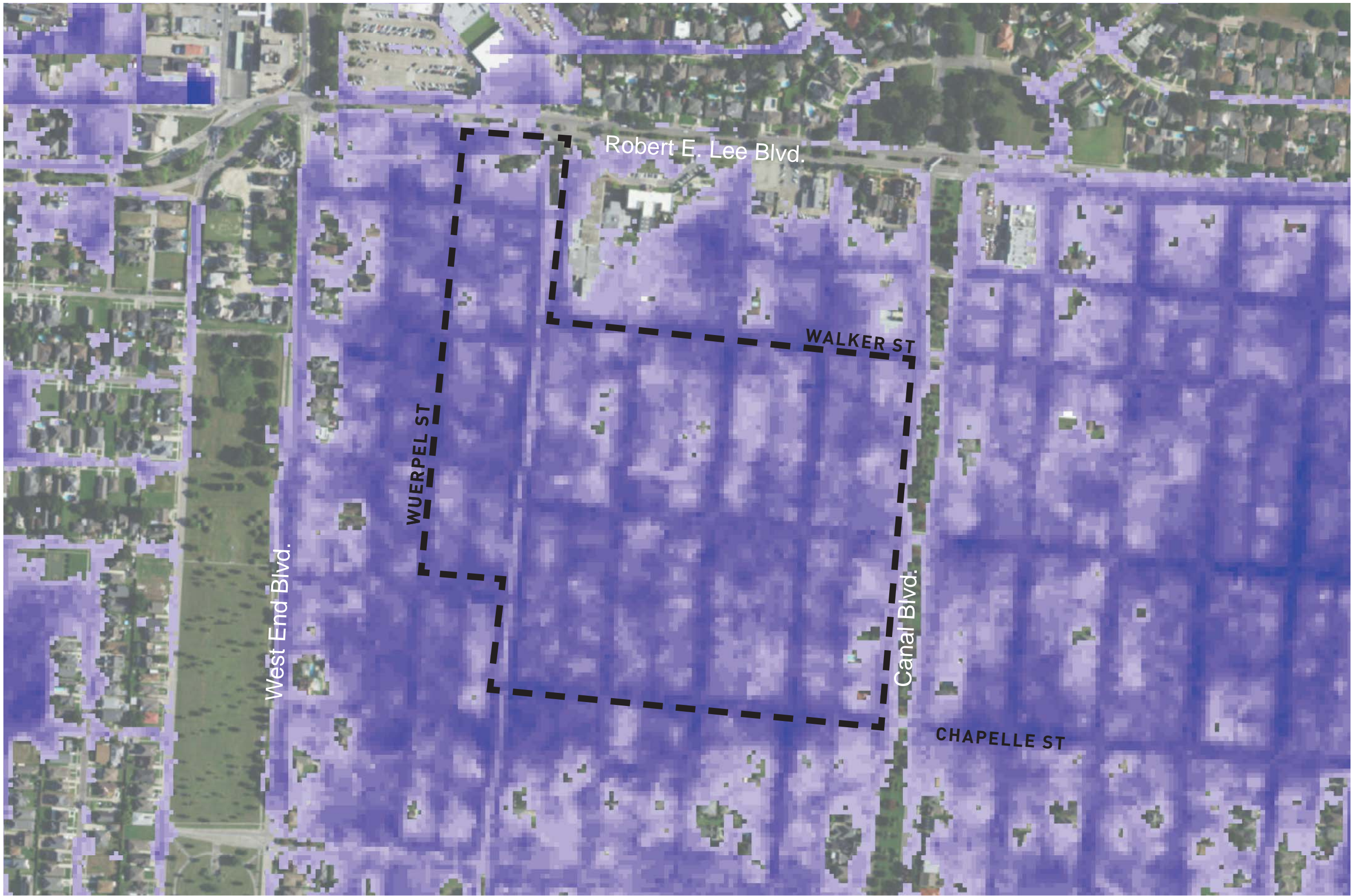
LOUISVILLE STREET

LOUIS XIV STREET

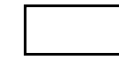
CHAPELLE STREET

MINIMAL DISTURBANCE AT ALLEY
TO EXISTING STORM LINE





NO FLOODING



0.0 - 0.5



0.5 - 1.0



1.0 - 1.5



1.5 - 2.0



2.0 - 2.5



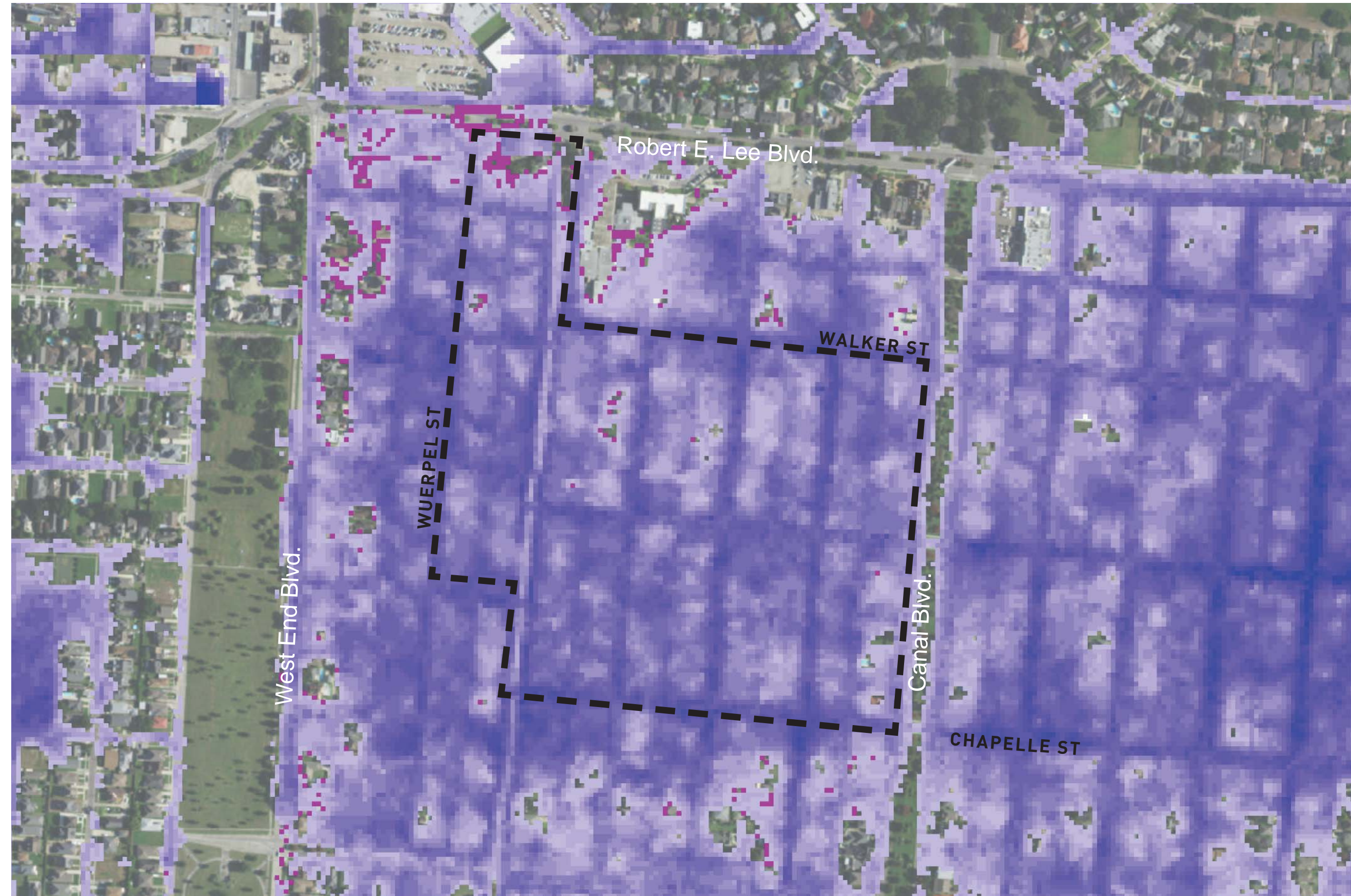
2.5 - 3.0



3.0 - 3.5+



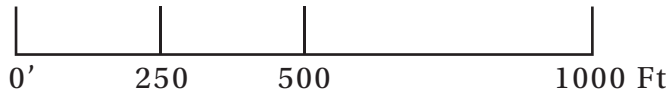
FLOODING ELIMINATED



0' 250 500 1000 Ft

flood reduction

- 1" - 2"
[dark blue box]
- 2" - 3"
[green box]
- 3" - 4"
[light green box]
- 4" - 5"
[yellow box]
- 5" - 6"
[orange box]
- 6"+
[red box]



public alley

materials



1 Protective Concrete Curb



2 Bioswale — Planting and Vegetation



3 Stabilized Permeable Pavement
COMBINED WITH UNDERGROUND WATER STORAGE

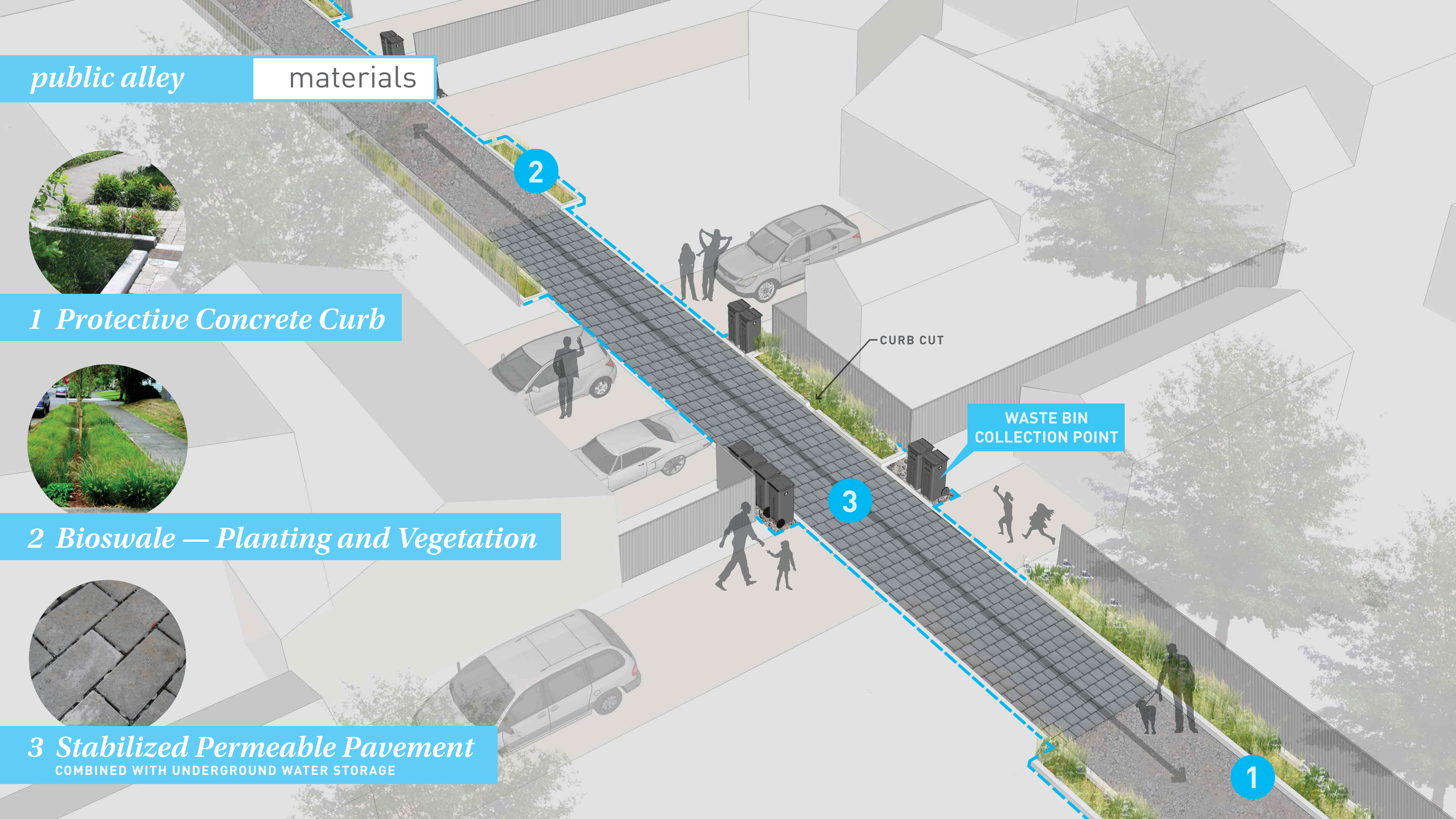
2

3

1

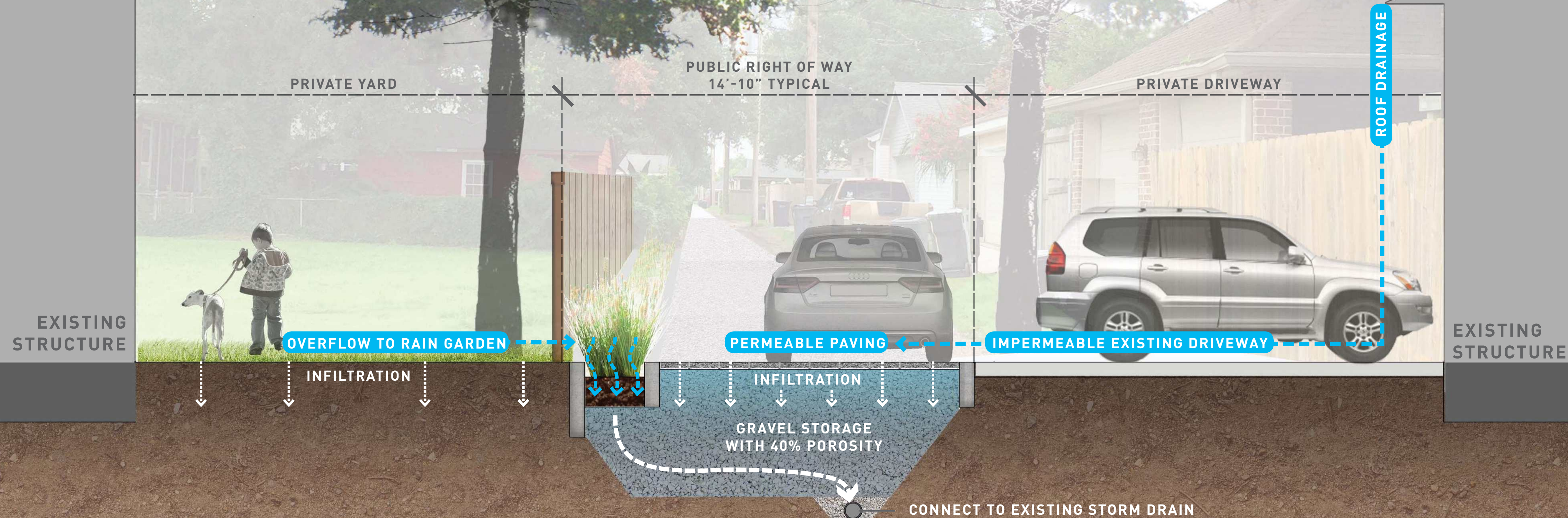
CURB CUT

WASTE BIN
COLLECTION POINT



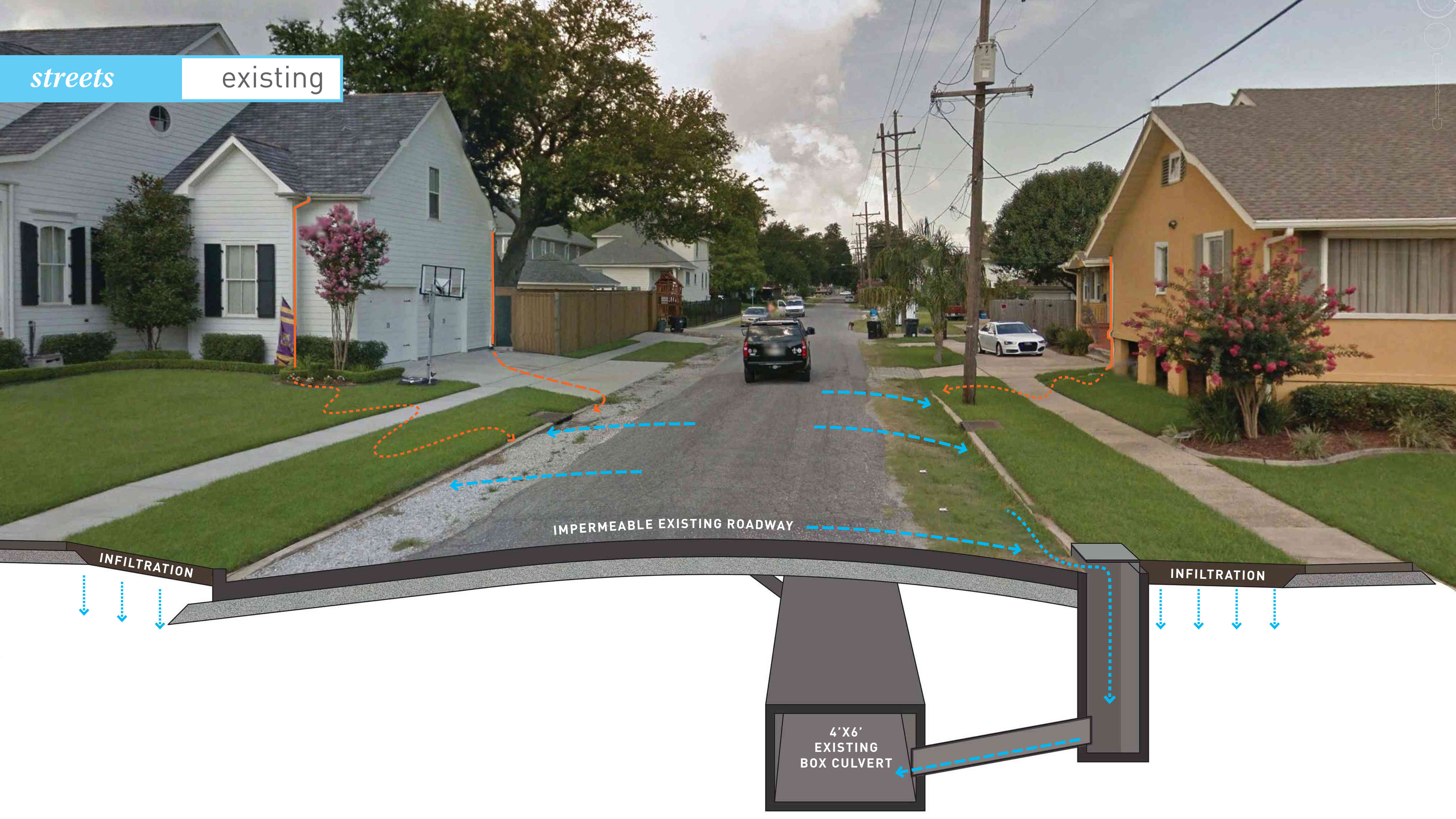
public alley

proposed



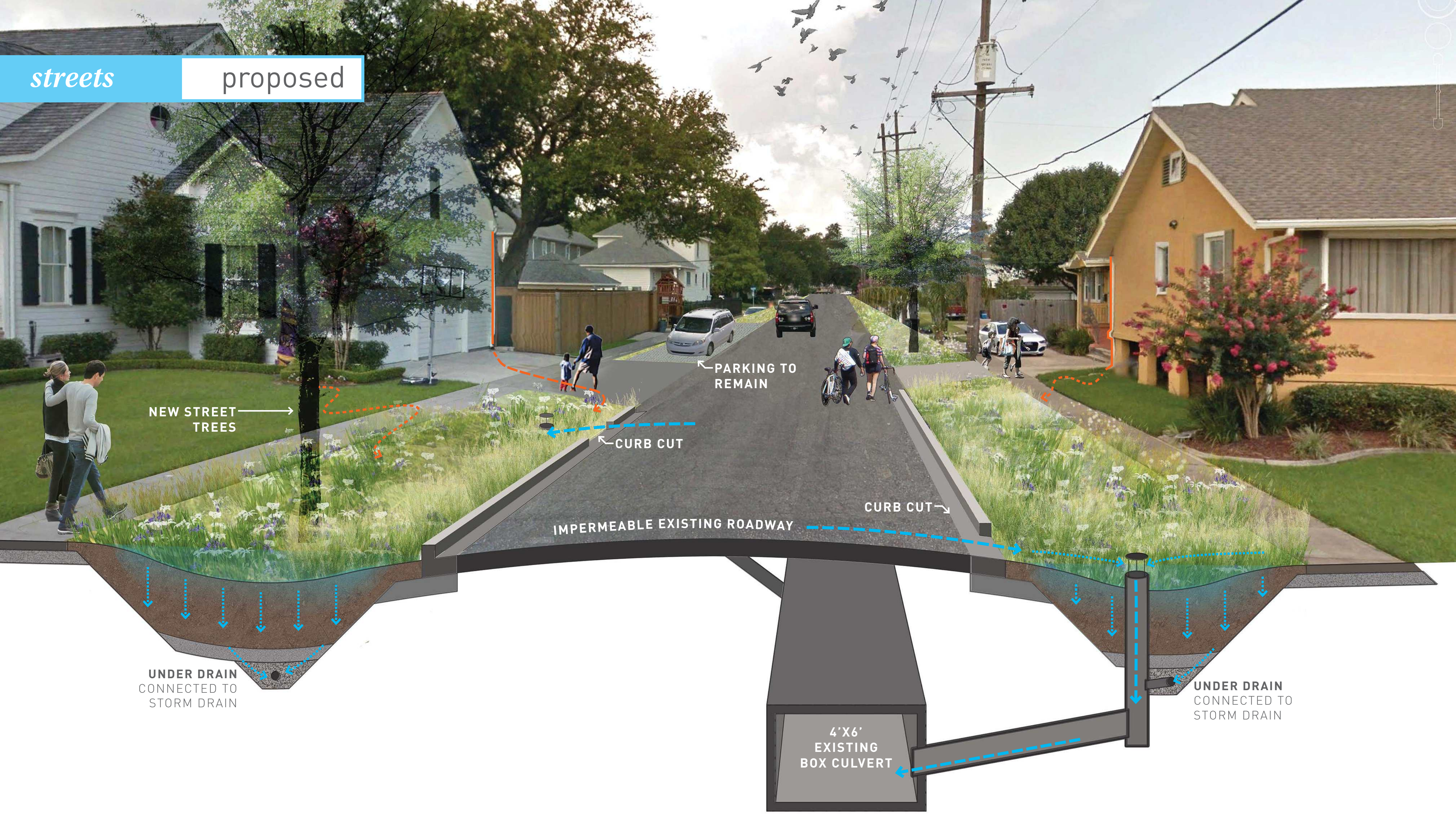
streets

existing



streets

proposed



NEW STREET
TREES

PARKING TO
REMAIN

CURB CUT

IMPERMEABLE EXISTING ROADWAY

CURB CUT

UNDER DRAIN
CONNECTED TO
STORM DRAIN

4'X6'
EXISTING
BOX CULVERT

UNDER DRAIN
CONNECTED TO
STORM DRAIN



Questions?

Contact Information:

Charles Allen III
ceallen@nola.gov

resilientnola.org
[@resilientnola](https://twitter.com/resilientnola)
nola.gov/resilience

HIGH



MEDIUM



LOW



existing system

EXISTING STORM PIPING

— — — — —

SURFACE FLOW

↔

DIRECTION OF PUMPING

→

LAKE
PONTCHARTRAIN

12

ROBERT E LEE BOULEVARD

WUERPEL STREET

DOWN'S STREET

MILNE BOULEVARD

COLBERT STREET

LOUISVILLE STREET

LOUIS XIV STREET

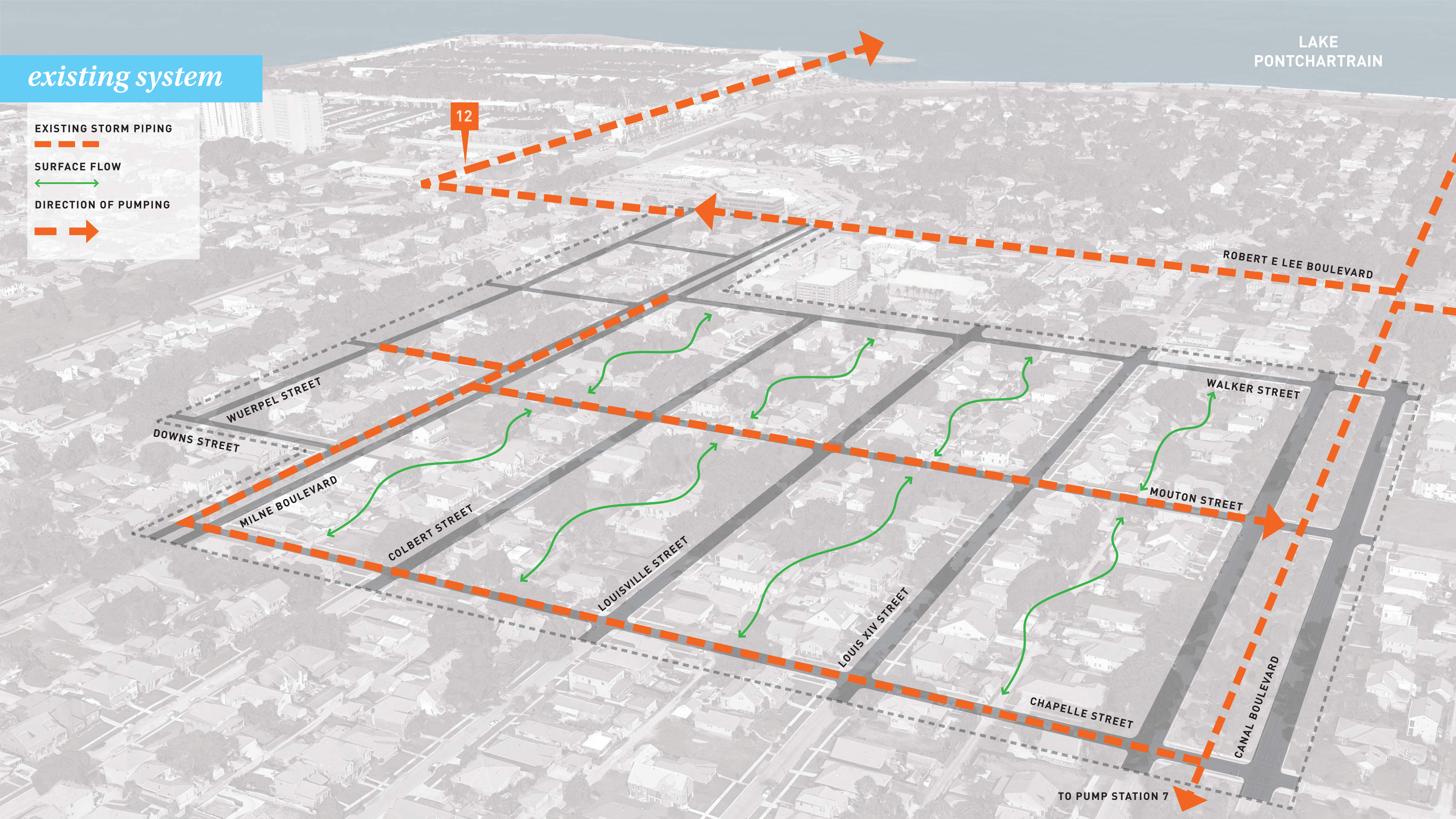
CHAPELLE STREET

MOUTON STREET

WALKER STREET

CANAL BOULEVARD

TO PUMP STATION 7



proposed system

PROPOSED GREEN
INFRASTRUCTURE

LAKE
PONTCHARTRAIN



BIOSWALE



RAIN GARDEN

