



CITY OF NEW ORLEANS

Incorporating Green Infrastructure into the New Orleans Landscape with a Focus on Lakeview

February 15, 2017

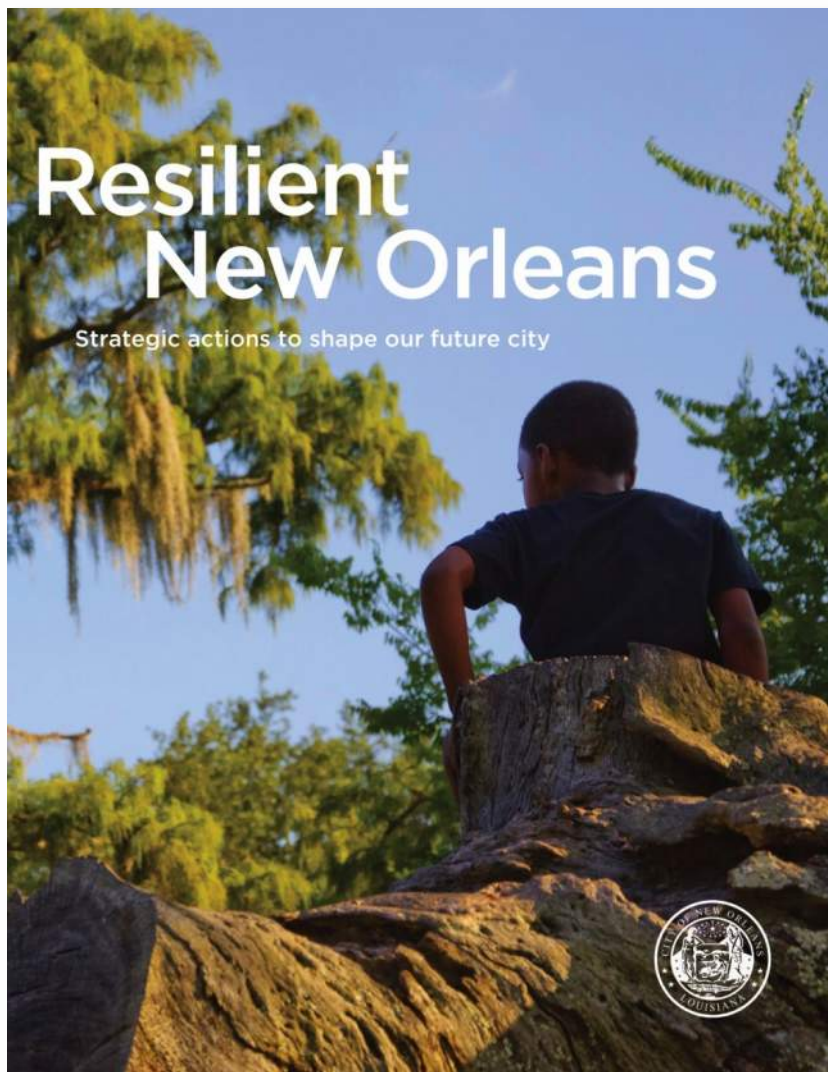
A satellite image of the Gulf of Mexico coastline. The land is green and brown, showing vegetation and terrain. The water is dark blue. A white rectangular box highlights a specific area on the coast, which is the location of New Orleans. The text "New Orleans is a coastal city." is overlaid on the left side of the image.

New Orleans
is a coastal city.

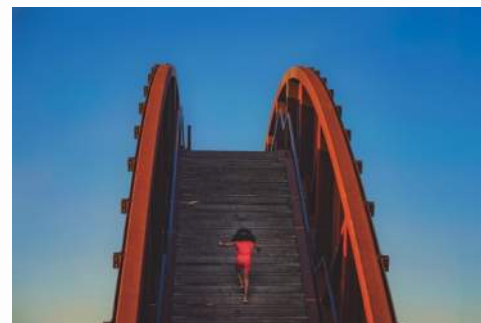
New Orleans' location, where the Mississippi River Delta becomes the Gulf of Mexico, is strategic for commerce, but also defines our most existential threat.

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

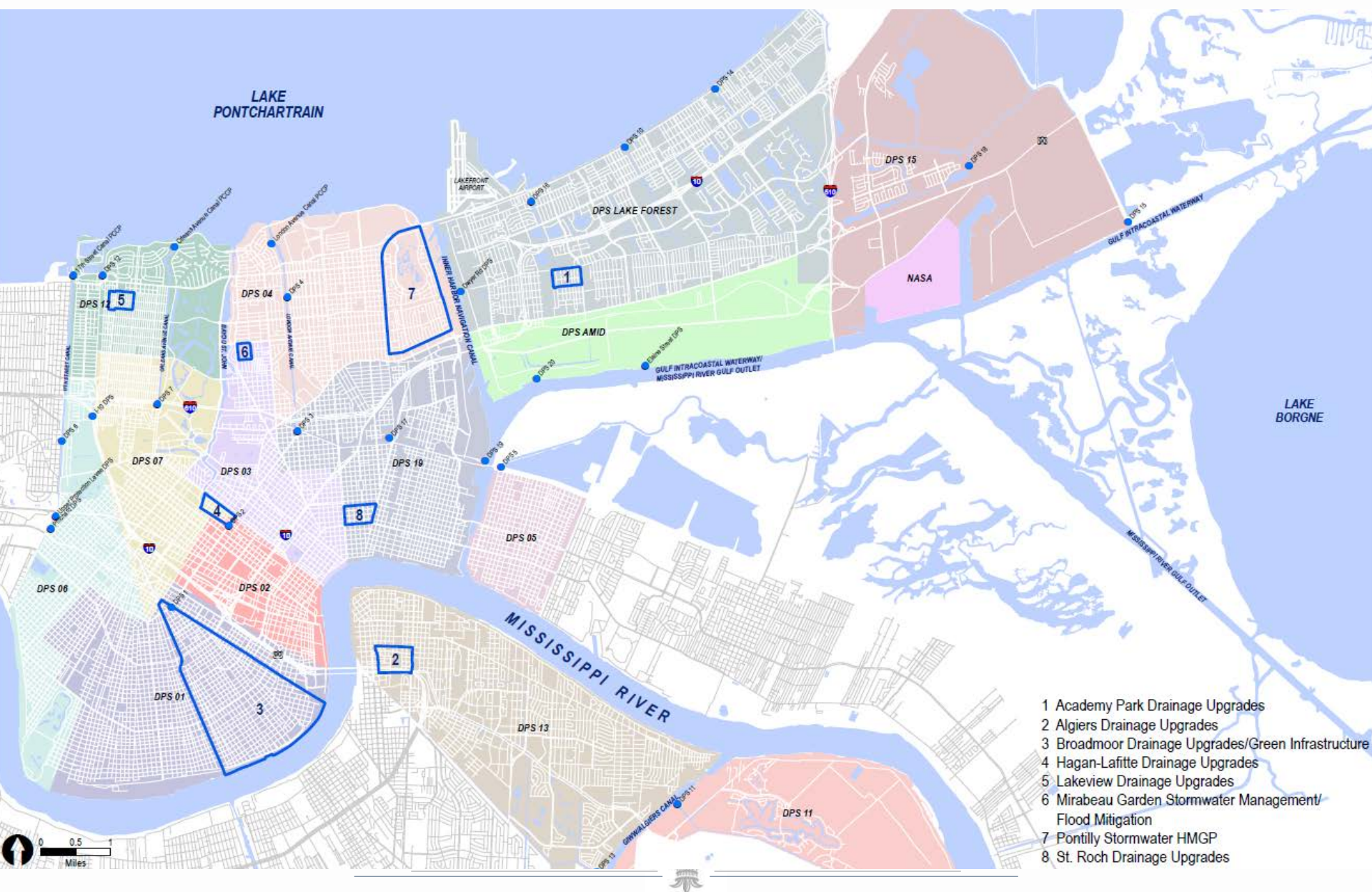


Open Spaces



Home & Property Improvements

Hazard Mitigation Grant Program (HMGP) Project Locations



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

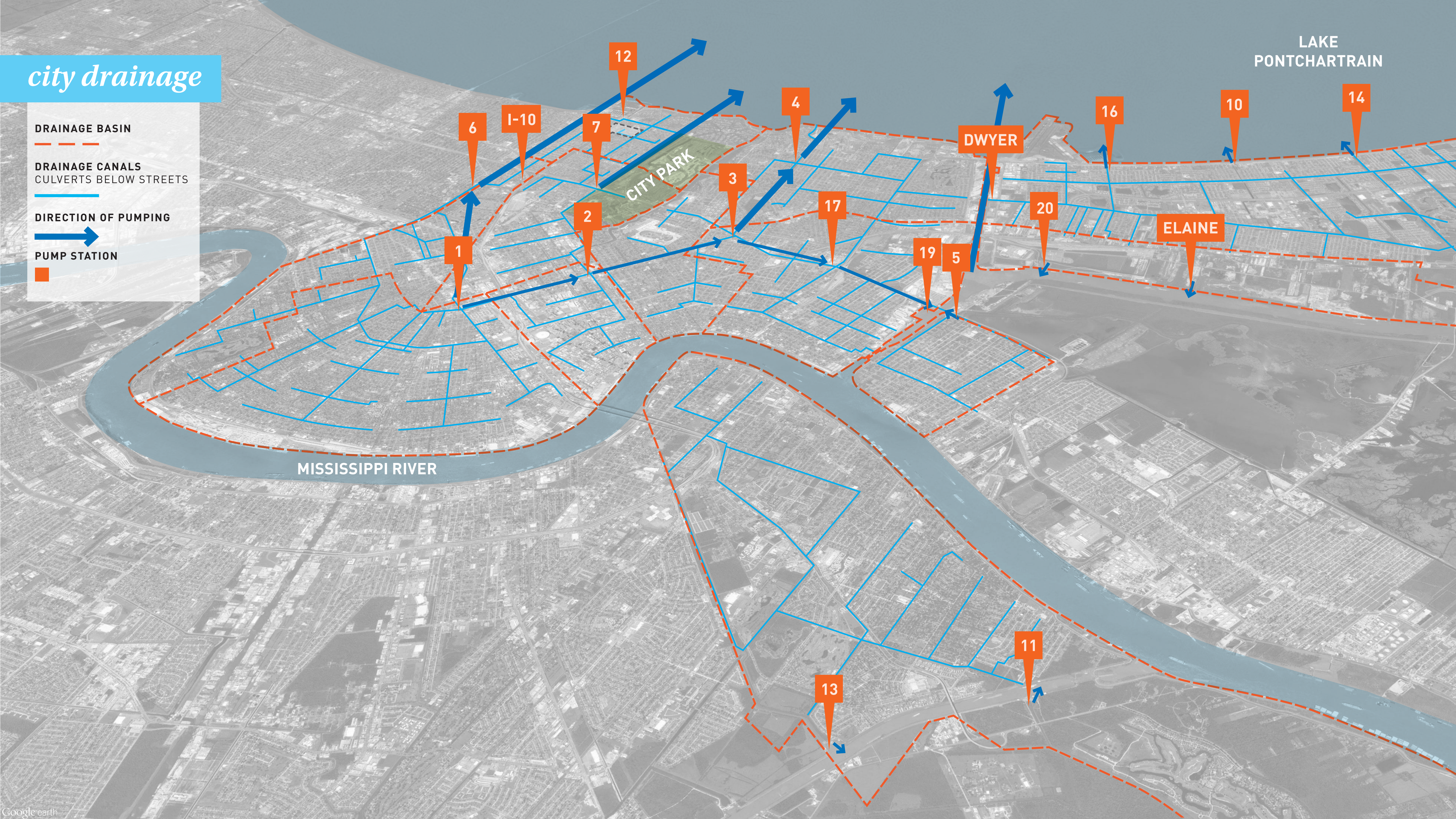
LAKE
PONTCHARTRAIN

CITY PARK

DWYER

ELAINE

MISSISSIPPI RIVER



lakeview neighborhood existing

DRAINAGE BASIN

DRAINAGE CANALS
CULVERTS BELOW STREETS
—

DIRECTION OF PUMPING
➡

PUMP STATION
■

PROJECT AREA

BENEFIT AREA



analysis



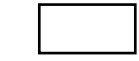
SWMM model developed in analysis

Mitigate and reduce flooding

Upgrade infrastructure and reroute storm drain

Slow and store water with green infrastructure

NO FLOODING



0.0 - 0.5



0.5 - 1.0



1.0 - 1.5



1.5 - 2.0



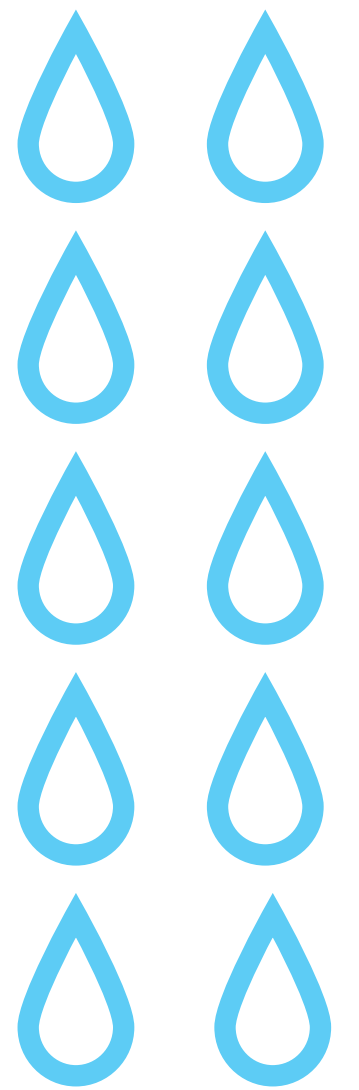
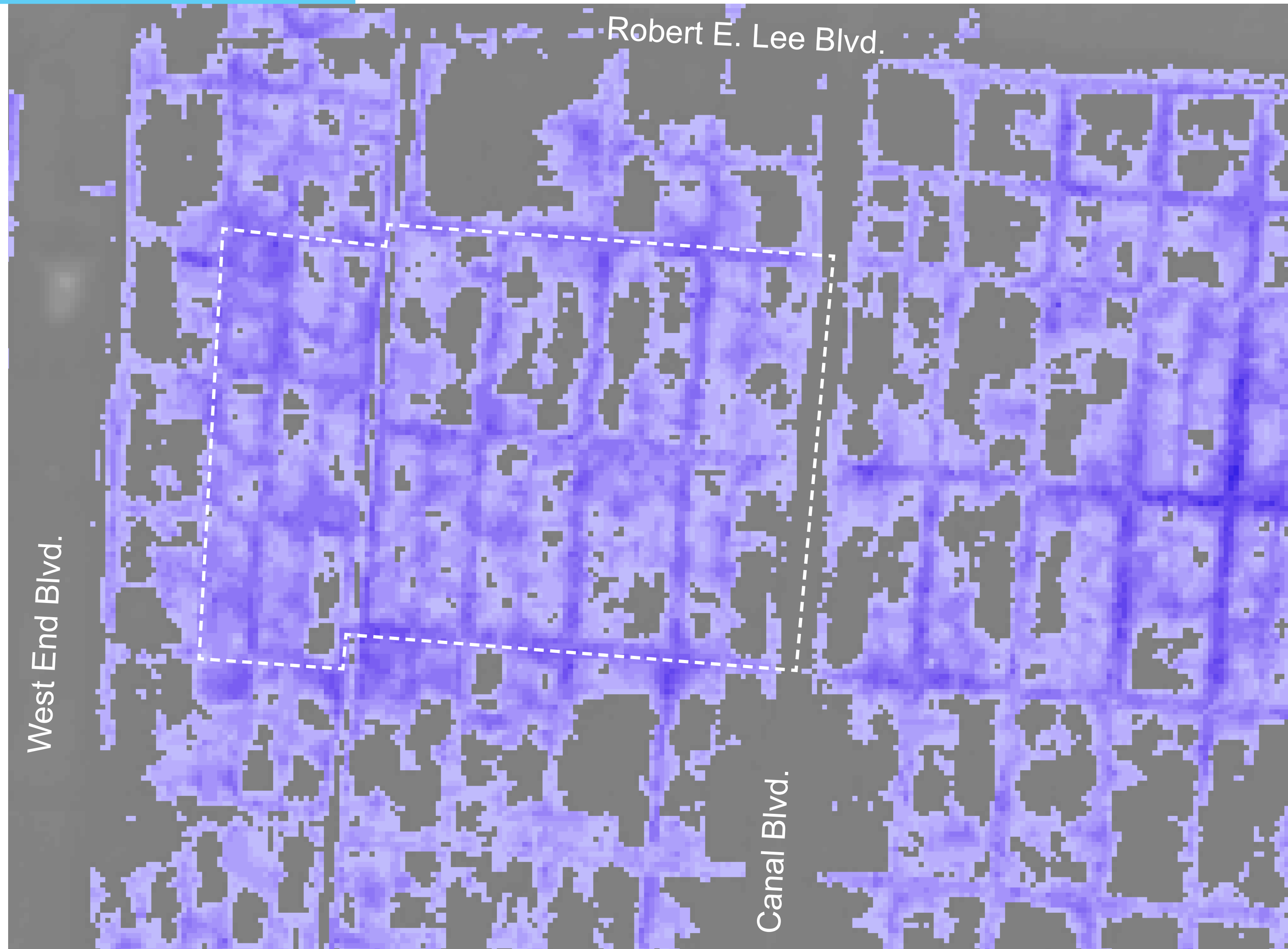
2.0 - 2.5



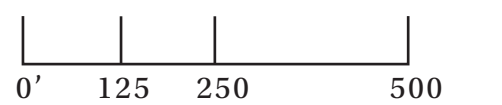
2.5 - 3.0



3.0 - 3.5+



FLOODING



NO FLOODING



0.0 - 0.5



0.5 - 1.0



1.0 - 1.5



1.5 - 2.0



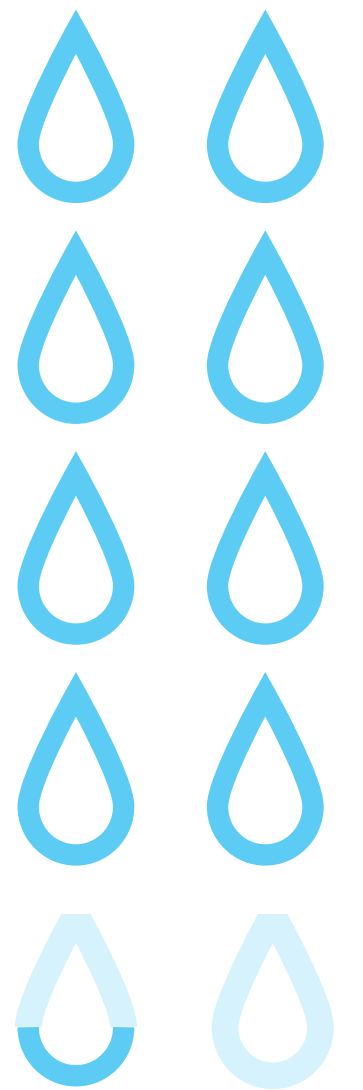
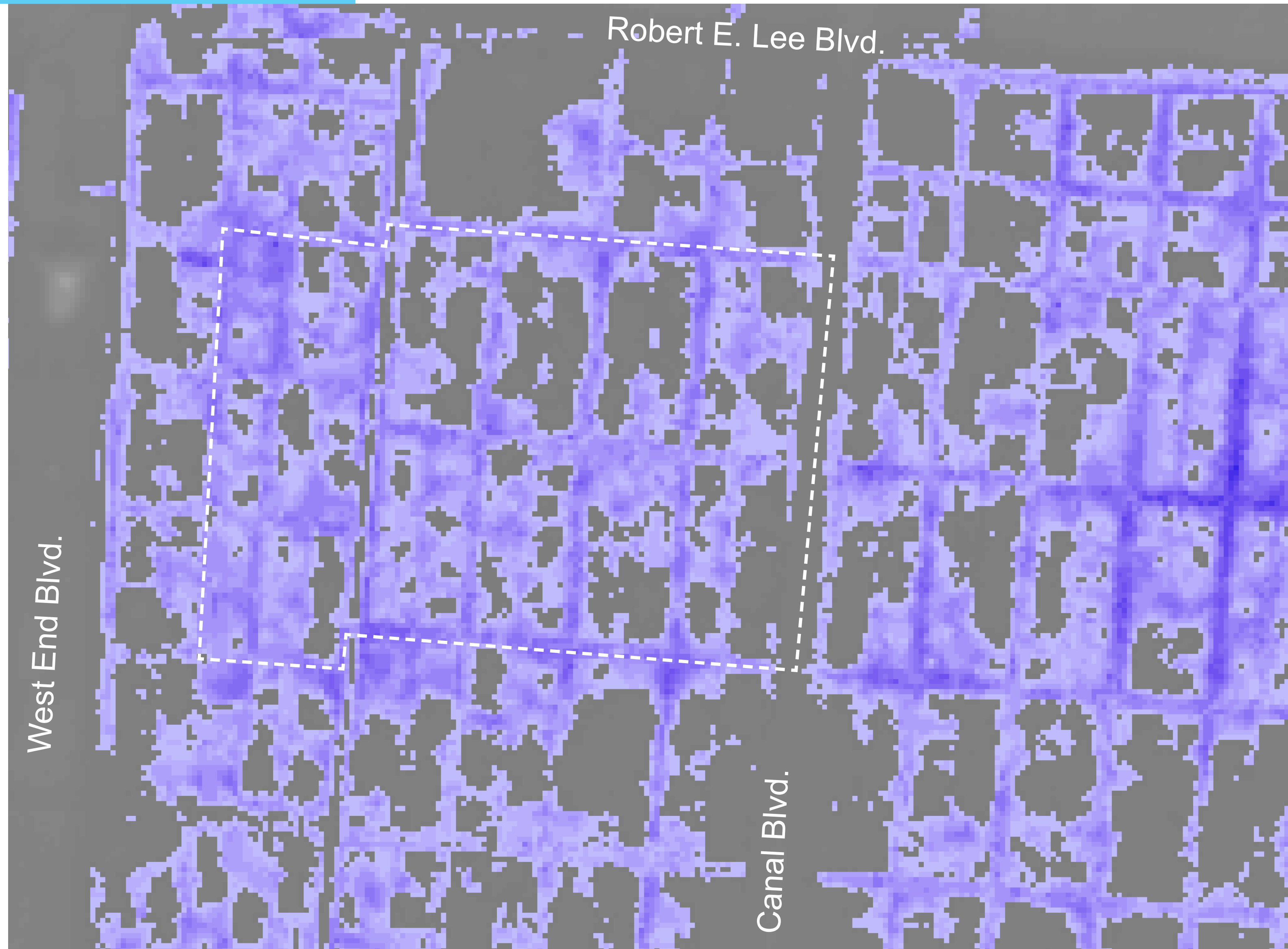
2.0 - 2.5



2.5 - 3.0



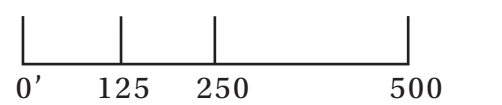
3.0 - 3.5+



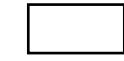
FLOODING

REDUCED

17%



NO FLOODING



0.0 - 0.5



0.5 - 1.0



1.0 - 1.5



1.5 - 2.0



2.0 - 2.5



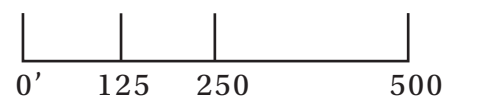
2.5 - 3.0



3.0 - 3.5+

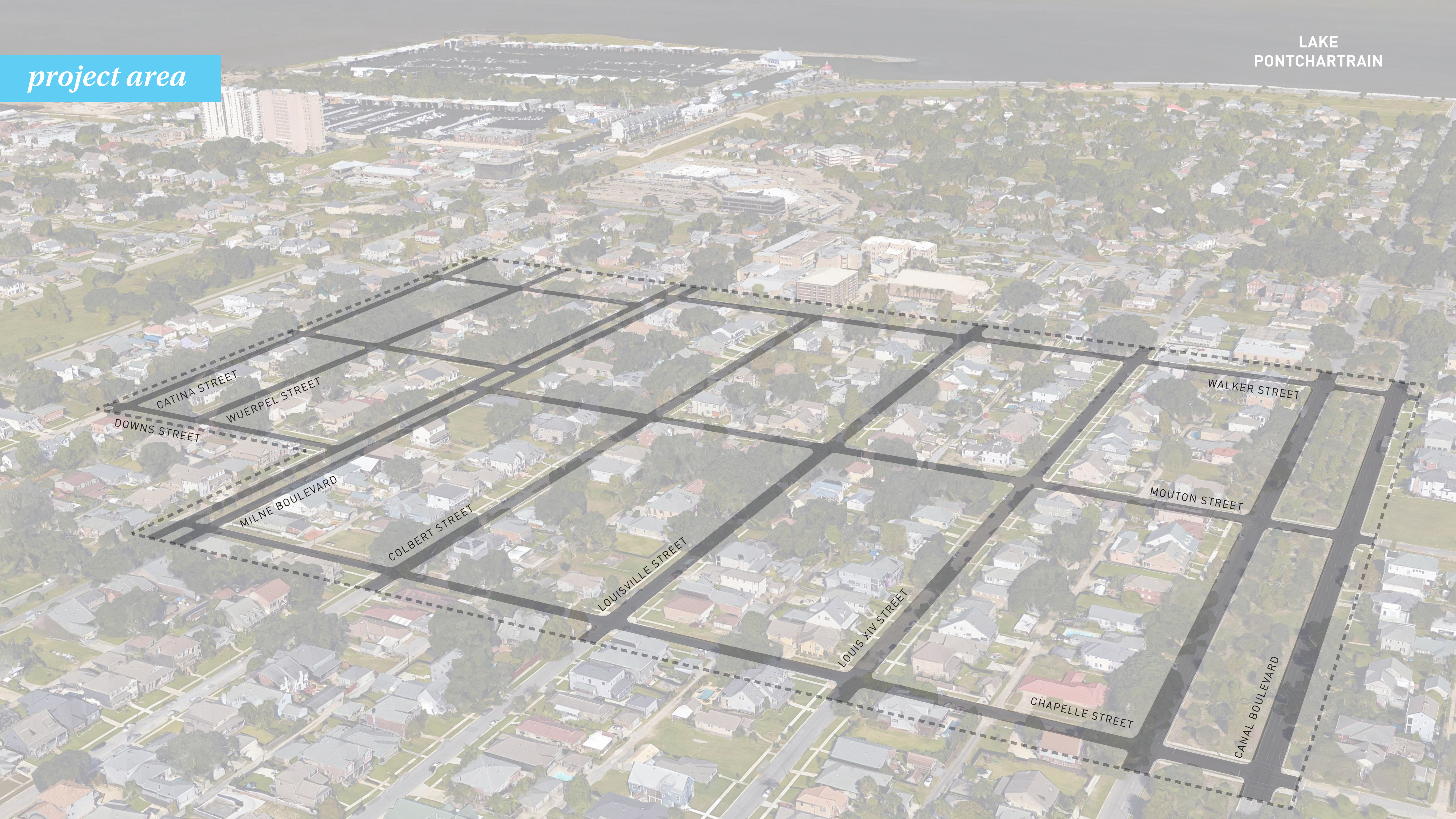


FLOODING ELIMINATED



project area

LAKE
PONTCHARTRAIN



existing system

EXISTING BOX CULVERT



SURFACE FLOW



DIRECTION OF PUMPING



LAKE
PONTCHARTRAIN

12

CATINA STREET

WUERPEL STREET

OWNS STREET

MILNE BOULEVARD

COLBERT STREET

LOUISVILLE STREET

LOUIS XIV STREET

CHAPELLE STREET

WALKER STREET

MOUTON STREET

ROBERT E LEE BOULEVARD

CANAL BOULEVARD

TO PUMP STATION 7



proposed system

EXISTING DRAIN LINES



PROPOSED BOX CULVERT



PROPOSED GREEN
INFRASTRUCTURE



CONNECTIONS
[PROPOSED TO EXISTING]



LAKE
PONTCHARTRAIN

12

CONNECT TO
EXISTING

ROBERT E LEE BOULEVARD

CATINA STREET

WUERPEL STREET

OWNS STREET

MILNE BOULEVARD

PROJECT AREA

COLBERT STREET

LOUISVILLE STREET

LOUIS XIV STREET

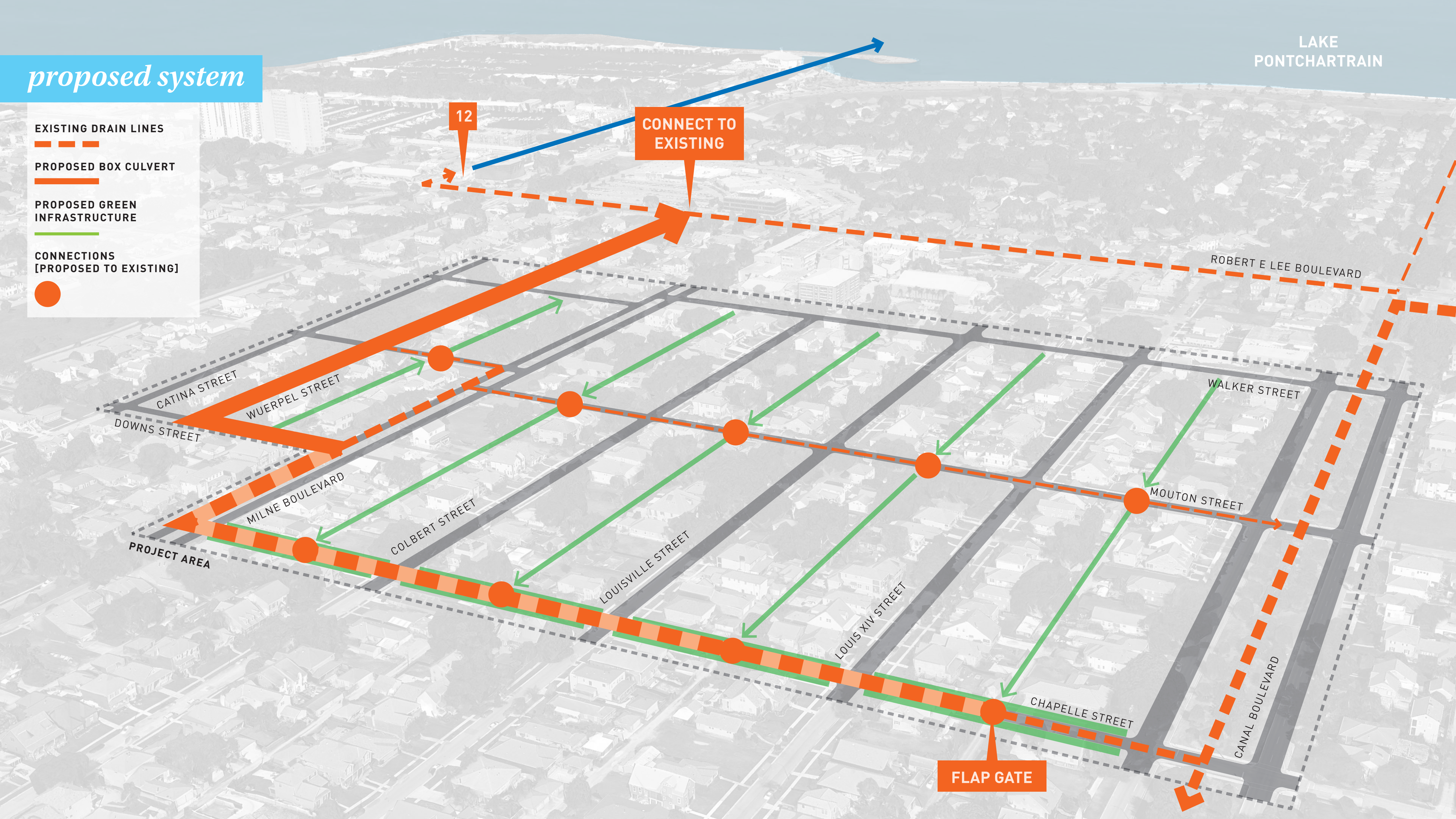
WALKER STREET

MOUTON STREET

CANAL BOULEVARD

FLAP GATE

CHAPELLE STREET



proposed system

EXISTING DRAIN LINES



PROPOSED BOX CULVERT



PROPOSED GREEN
INFRASTRUCTURE



CONNECTIONS
[PROPOSED TO EXISTING]



PUMP TO
LAKE

LAKE
PONTCHARTRAIN

ROBERT E LEE BOULEVARD

WALKER STREET

MOUTON STREET

CANAL BOULEVARD

CHAPELLE STREET

FLAP GATE

LOUISVILLE STREET

LOUIS XIV STREET

COLBERT STREET

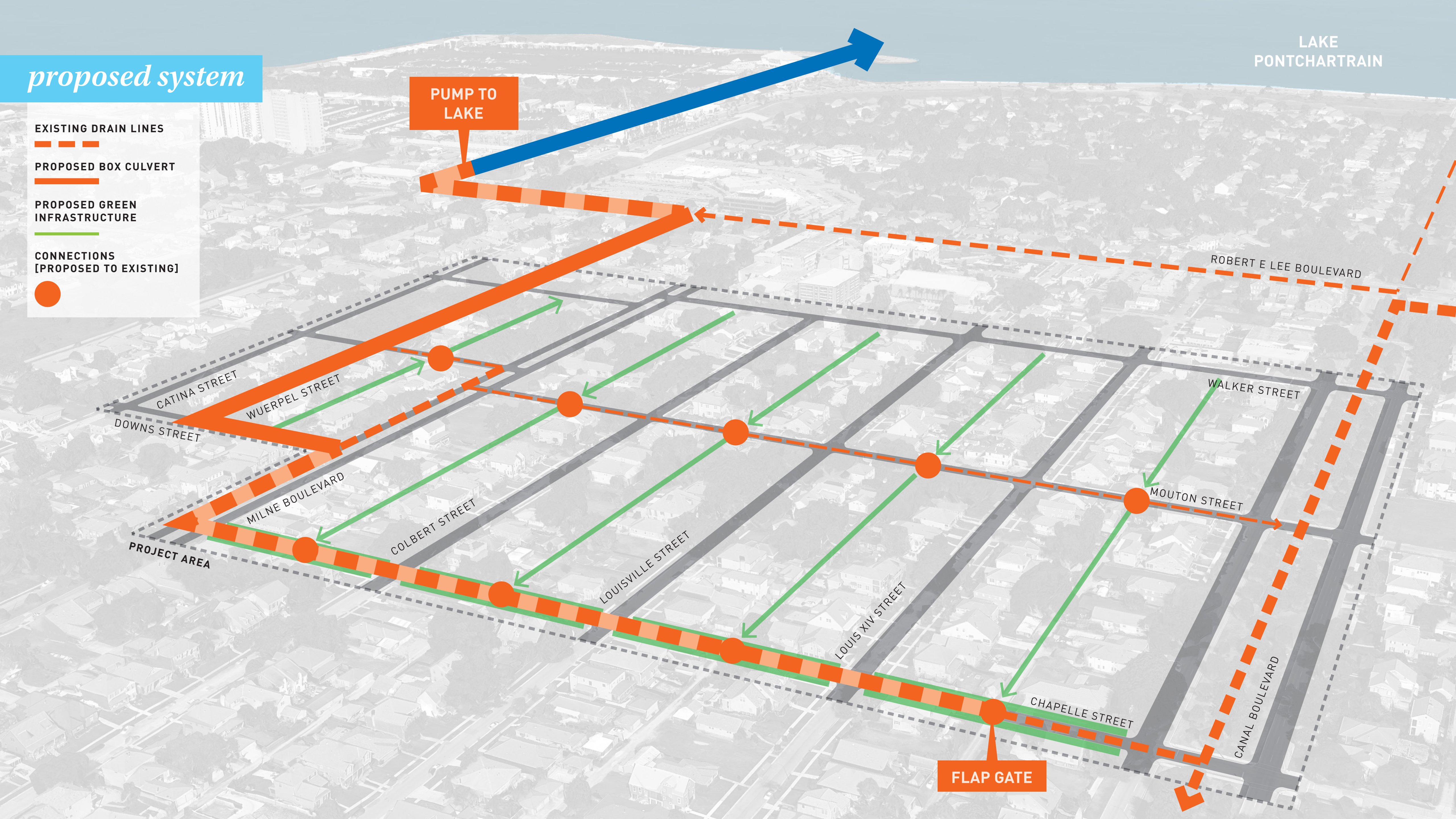
MILNE BOULEVARD

WUERPEL STREET

CATINA STREET

DOWN'S STREET

PROJECT AREA



proposed system

PROPOSED GREEN INFRASTRUCTURE

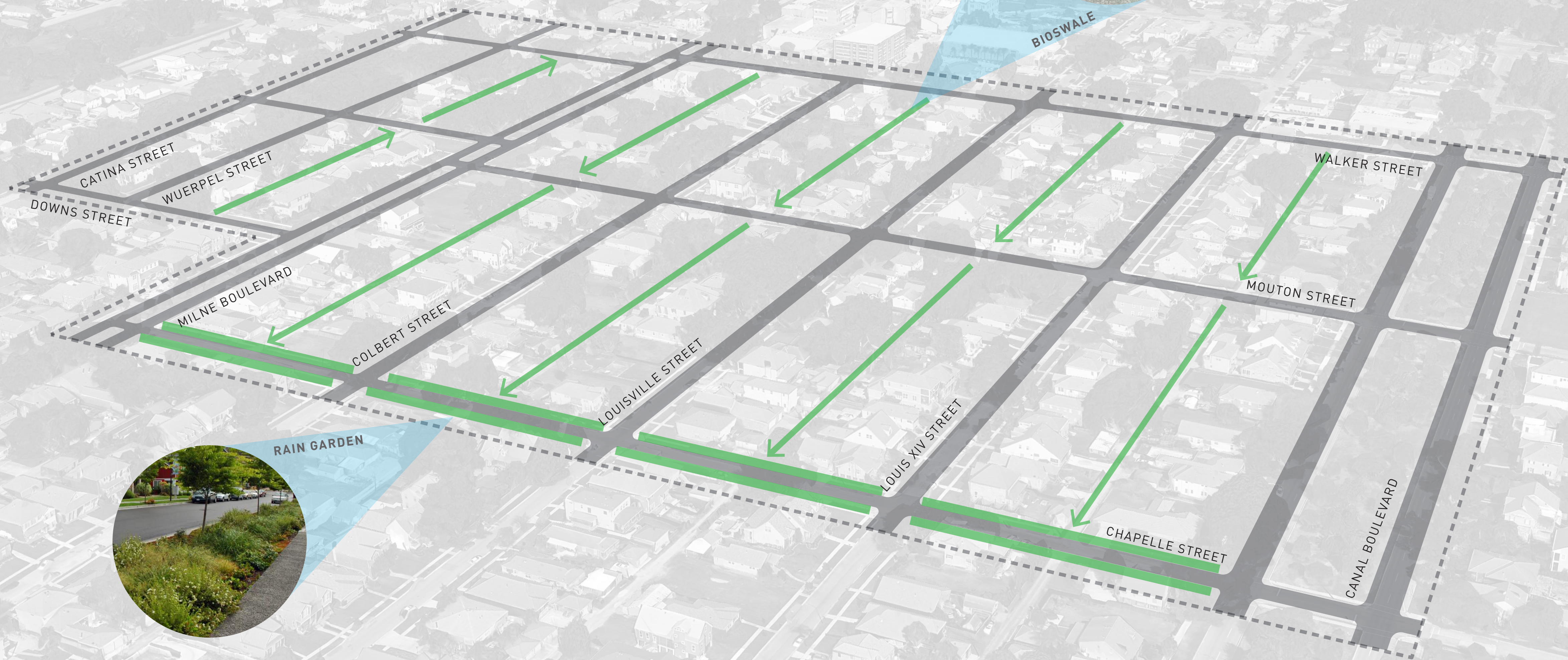
LAKE
PONTCHARTRAIN



BIOSWALE



RAIN GARDEN



principles

bioswales



pervious pavement



curb cuts allow water to flow

principles

bioswales



raised curb for protection



bioswale plantings

public alley

conflicts and challenges



waste collection throughout alleys



degraded pavement causing poor site drainage

public alley

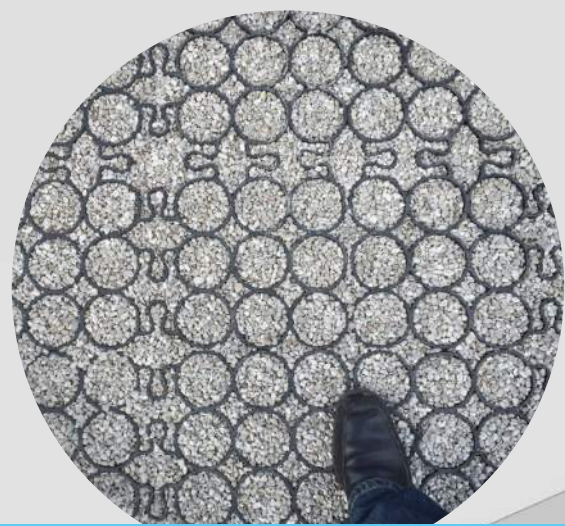
materials



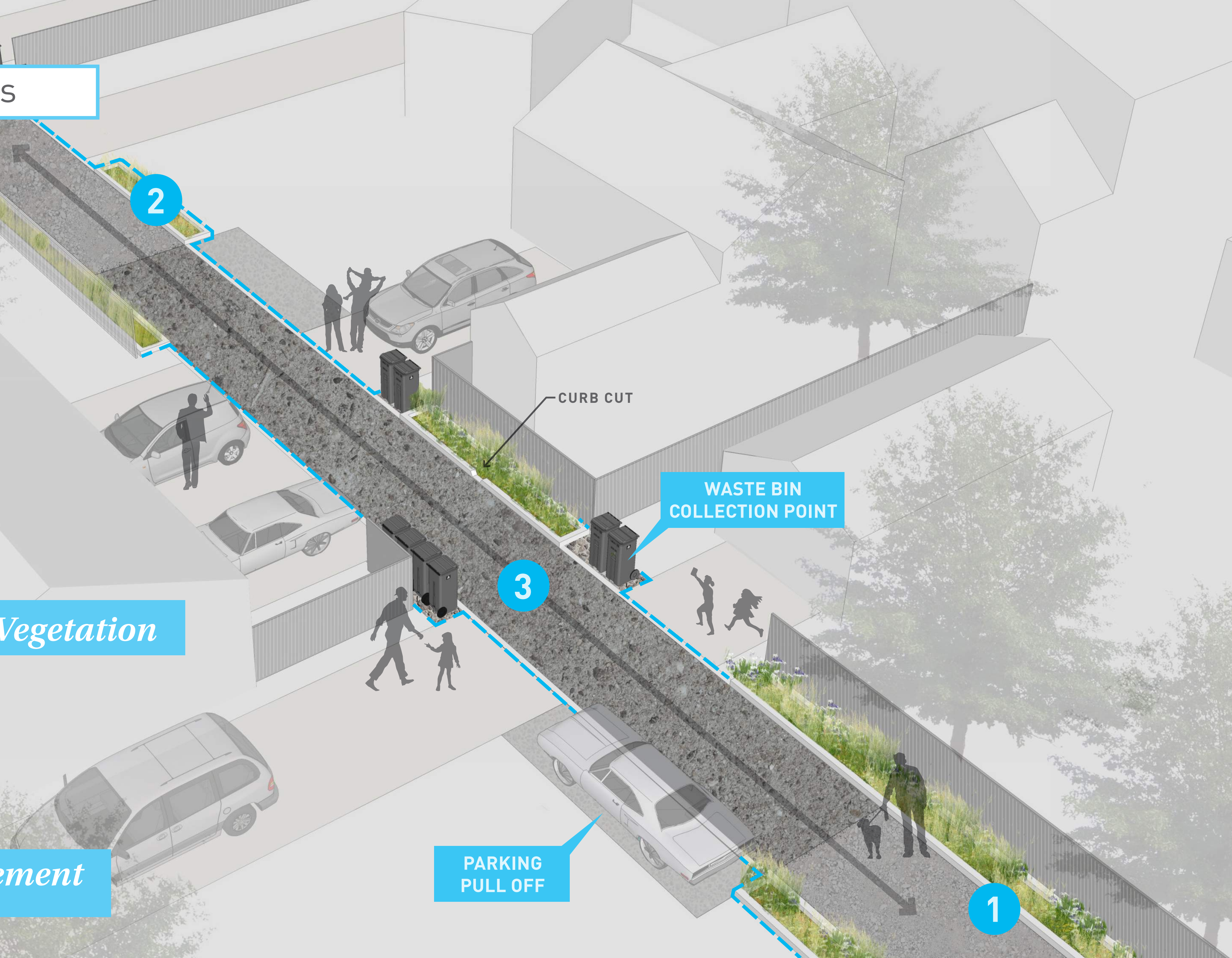
1 Protective Concrete Curb



2 Bioswale — Planting and Vegetation



3 Stabilized Permeable Pavement
COMBINED WITH UNDERGROUND WATER STORAGE



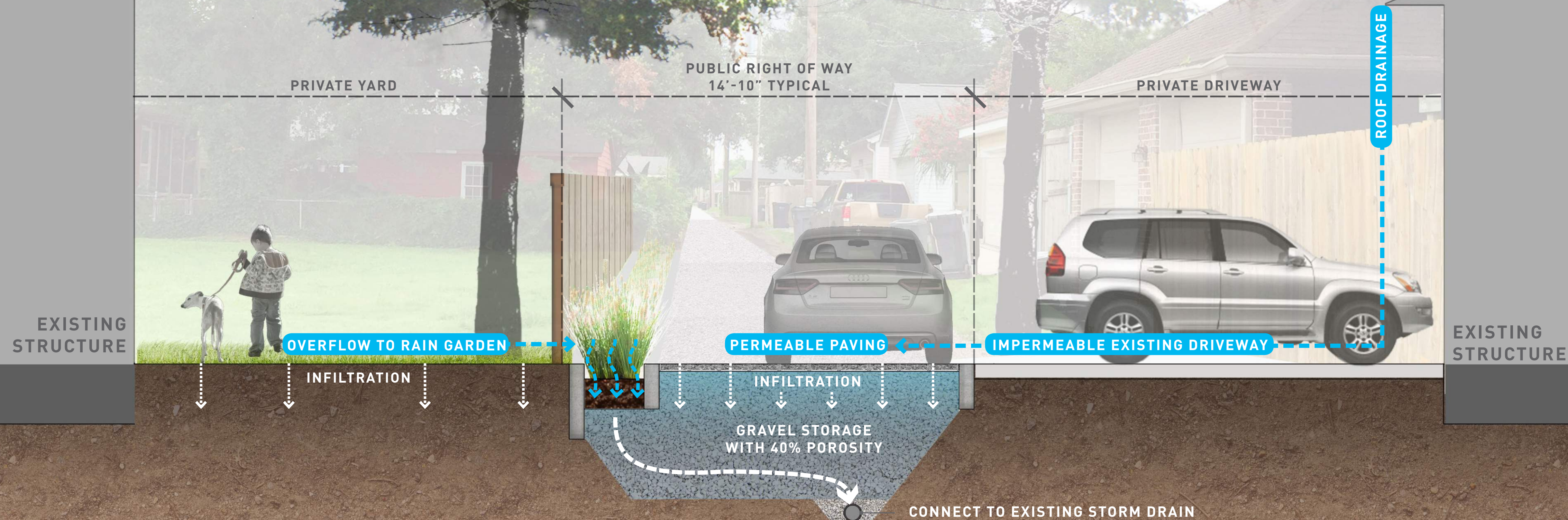
PARKING
PULL OFF

WASTE BIN
COLLECTION POINT

CURB CUT

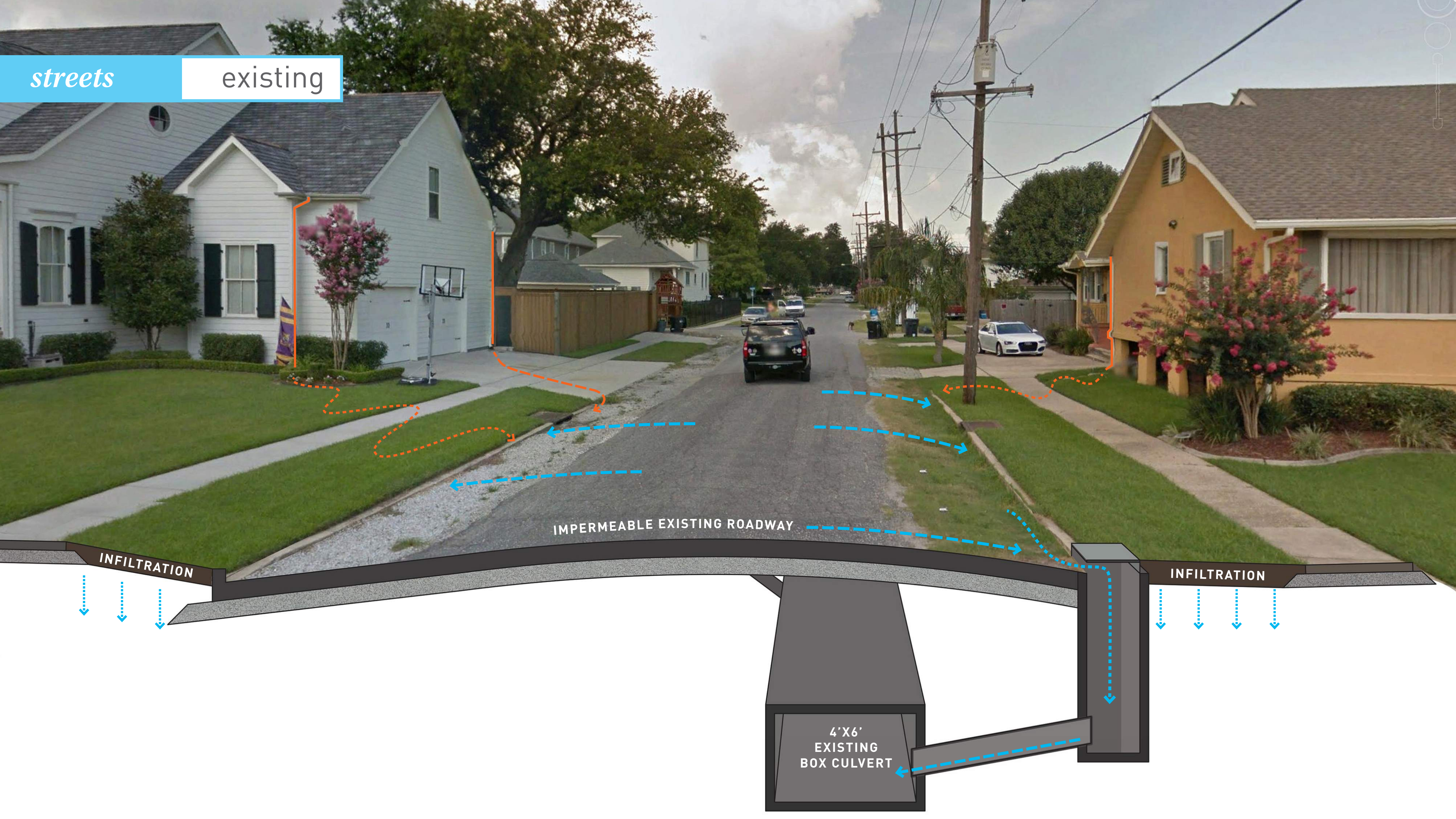
public alley

proposed



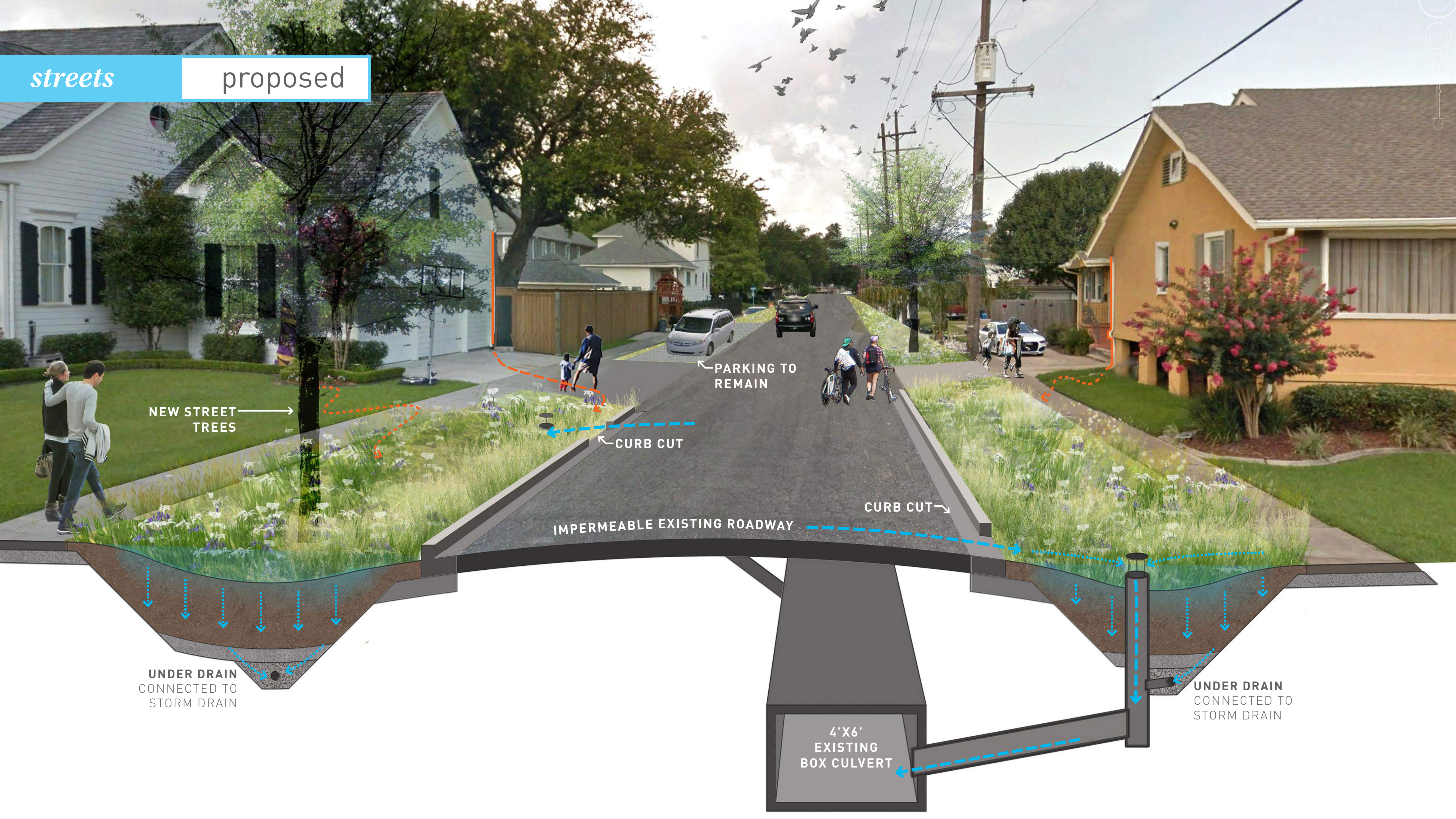
streets

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

Lakeview Drainage Upgrades & Green Infrastructure - Conclusion

- Questions, Comments or Concerns?
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FEMA

