

## Agenda



- Project Overview and Goals
- Existing Conditions
- Community Outreach
- 60% Design
- Project Benefit Cost Analysis
- Schedule
- Q&A

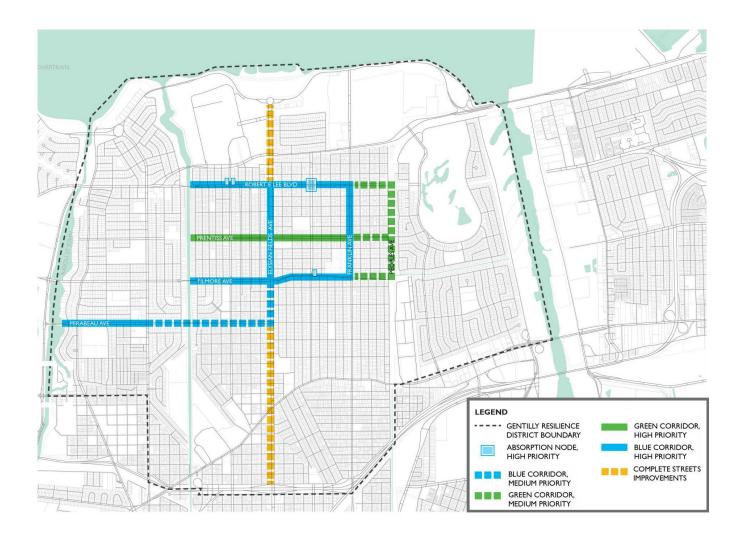






## **Project Overview**





- Phase 1&2 Budget: \$28 M
   Elysian Fields, Robert E Lee,
   and Filmore
- Phase 3&4: Stormwater Lots,
   Mirabeau, Franklin, Prentiss





## **Project Goals**





#### **Water Goals**

- Address flooding
- Promote infiltration and groundwater recharge



#### **Public Health Goals**

- Provide access to parks
- 2. Provide recreation



#### **Urban Heat Goals**

- Create shade
- 2. Reduce and monitor heat island effect



#### **Cultural Goals**

- Create community destinations for neighborhood gatherings
- Provide interactive educational opportunities



#### Economic Goals

- 1. Meet financial goals for funding
- 2. Drive economic growth through reinvestment
- 3. Reduce flood management risk











- Infrastructure needs addressing
- Pumping and low infiltration has led to high subsidence rates
- Entire neighborhood drains to Drainage Pump Station (DPS) #4
- Community experiences frequent flooding

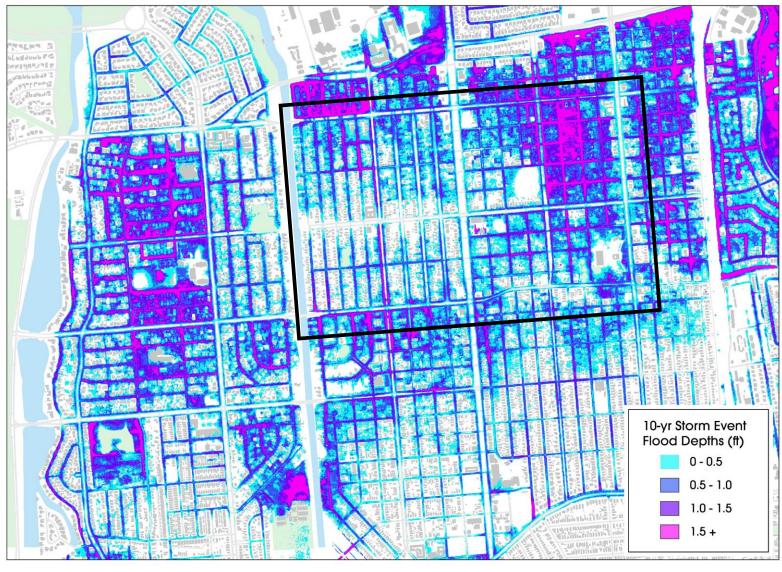


mages Courtesy of ISeeChange



## **Existing 10-Year Flood**



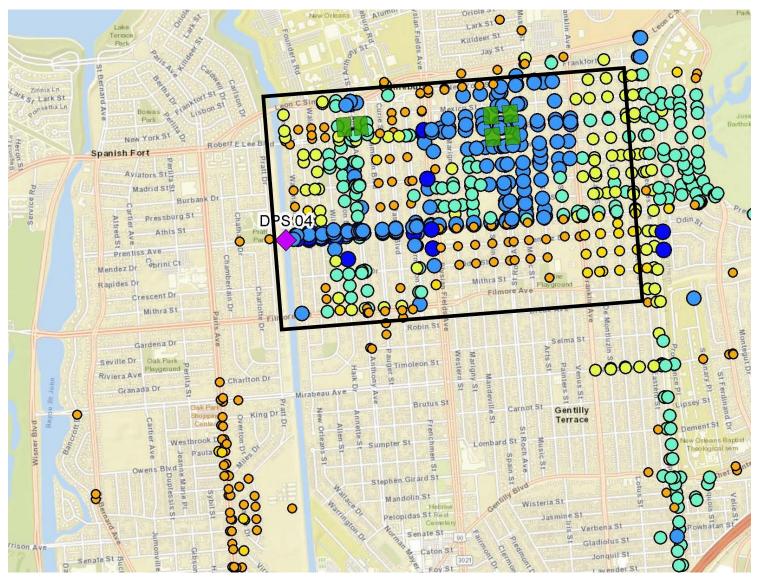




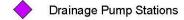


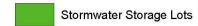
## **Project Flood Reduction**





## 10yr Storm Flood Reduction

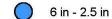




#### **All Alternatives**

#### Flood Reduction







1.75 in - 1.25 in

O 1.25 in - .75 in

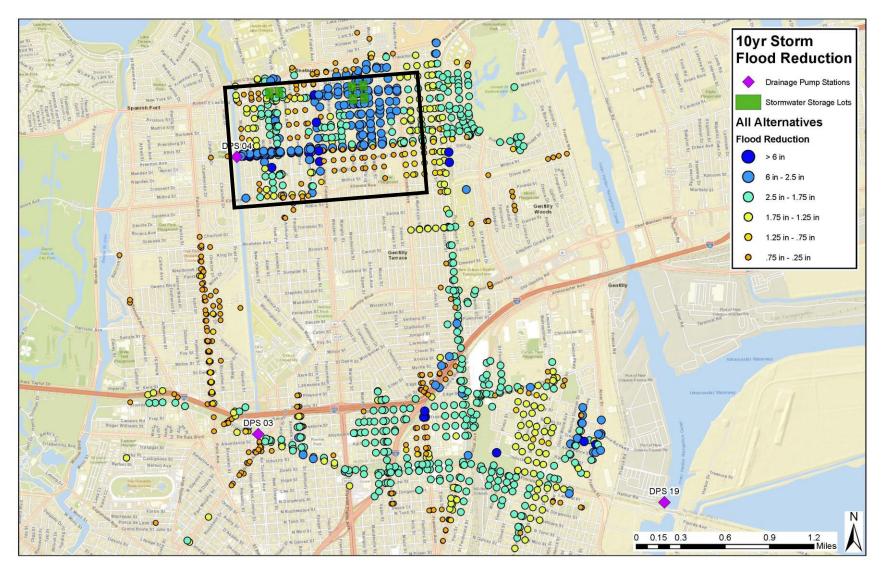
O .75 in - .25 in





## Larger System Impact









## **Public Engagement**

## What We Heard

Outreach connections:

Community Leaders

 Forum, Design Workshop,
 Gentilly Fest, Dillard
 Health Fair, Adopt a Rain
 Garden, Open House,
 Green Streets,
 Community and Faith
 Meetings, Door-to-Door
 Outreach









## Public Engagement What We Heard

- 1. Improve Drainage
- 2. Improve Neighborhood Landscaping
- 3. Provide Walkable and Bike Friendly Area
- 4. Provide Park Amenities









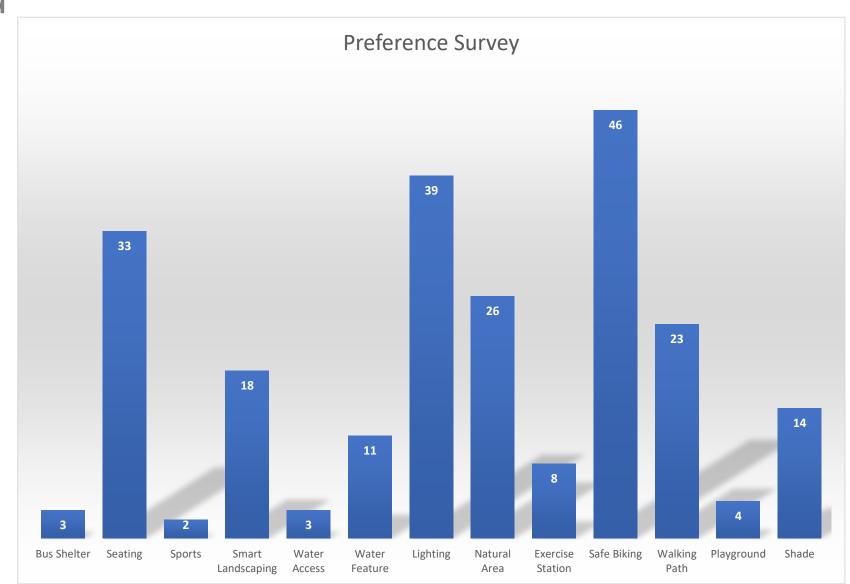
## **Public Engagement**

## **Stantec**

## What We Heard

#### Liked

- 1. Seating
- 2. Landscaping
- 3. Lighting
- 4. Safe Biking
- 5. Walking Path
- 6. Natural Areas







## **Public Engagement**

## **Stantec**

## What Comes Next

#### Field Day Event

Demonstration of proper landscaping techniques

#### **Gentilly Bike Tour**

Ride & Learn event with temporary protected bike lanes

#### **Project Visioning Demonstration**

Lifesize rendering projection in neutral ground

#### **Green Infrastructure Public Demonstration**

Interactive installation showing effect of rainfall management with STEM NOLA

Additional one-on-one interactions













## **Key Design Element**

#### **Stormwater Storage**

Neutral grounds designed to reduce flooding on roads and houses

Pumps move water to prevent nuisances









**Key Design Element** 

#### **Rain Gardens**

#### **Bump-outs:**

- Provide water quality, promotes transpiration, and enhances the streetscape
- Provides shorter crossing distance for pedestrians, enhancing safety









## Phase 1 – Elysian Fields and Robert E Lee

- Stormwater
   Storage in Elysian
   Fields
- Running Stream along Robert E Lee
- Walking Paths
- Curb Bumpouts
- Playgrounds









#### Phase 2 - Filmore Ave

- Rainwater Infiltration
- Bike Path
   Connection
- Streetscape
   Improvement



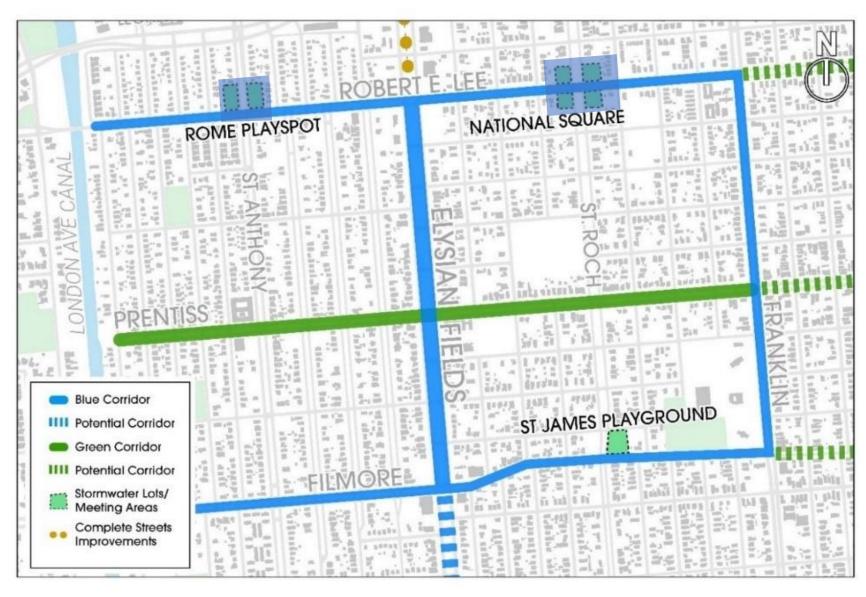






#### Phase 3

- Stormwater Storage
- Playgrounds
- Community Centers



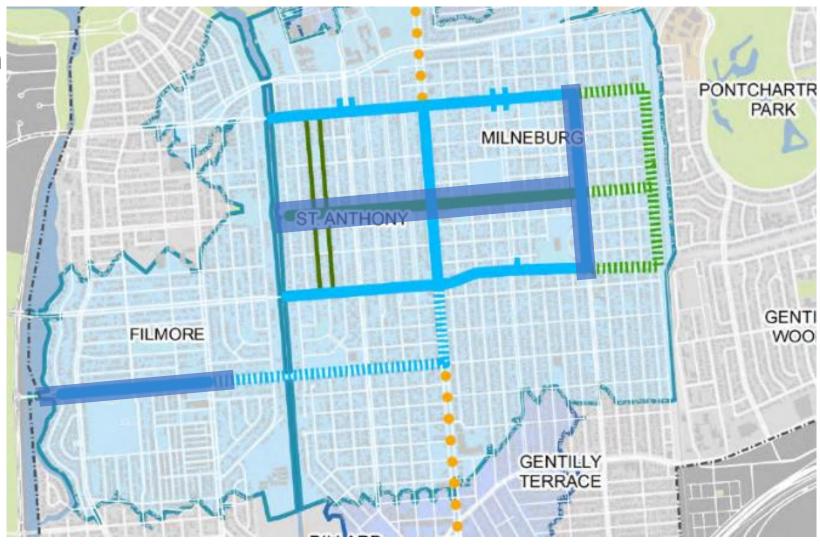






#### Phase 4

- Rainwater Infiltration
- Pedestrian
   Connections
- Drainage Upgrades









Open Canal Water Feature with Pedestrian Crossings









**Recreational Parks** 









Open Canal With Access to Water









**Open Spaces** 







## Phase 2 – Filmore Ave



Temporary Rainwater Storage

Pedestrian and Bike Facilities







## Phase 3 – Stormwater Lots



Recreation Focal Point







## Phase 3 – Stormwater Lots



Rainwater Storage

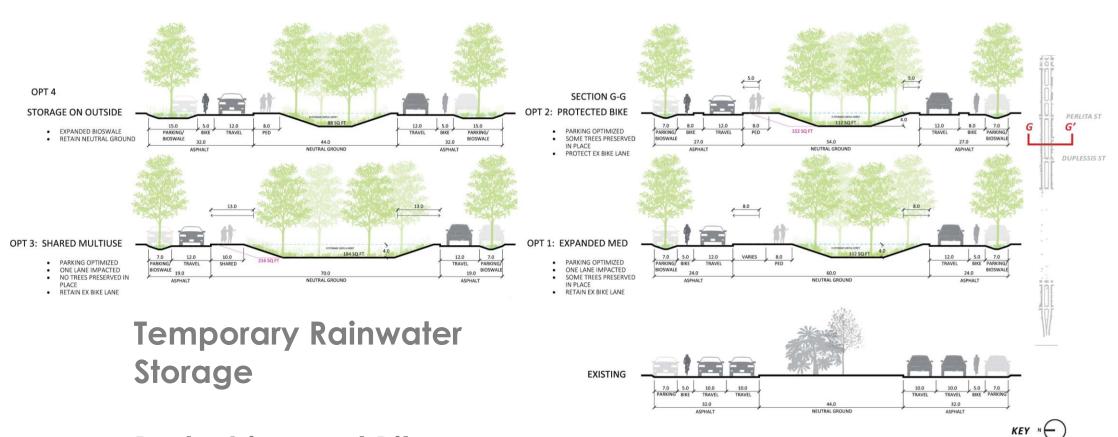






## Phase 4 – Franklin, Prentiss, Mirabeau





Pedestrian and Bike Facilities





## **Project Cost**



#### **Initial Project Components:**

**Phase 1** Elysian Fields and Robert E Lee:

\$22.4M

Phase 2 Filmore Ave: \$5.6M

PROBABLE CONSTRUCTION COST Approx. \$28M











## **Project Benefit Cost Analysis**



#### **Greatest Benefits**

- Property Value Increase
- Flood Damage Reduction
- Subsidence Reduction
- Recreation

#### Costs

- Capital Expenditures
- Operations and Maintenance
- Replacement Costs

Triple Bottom Line (in NPV) = \$29.3M

Benefit Cost Ratio = 1.7



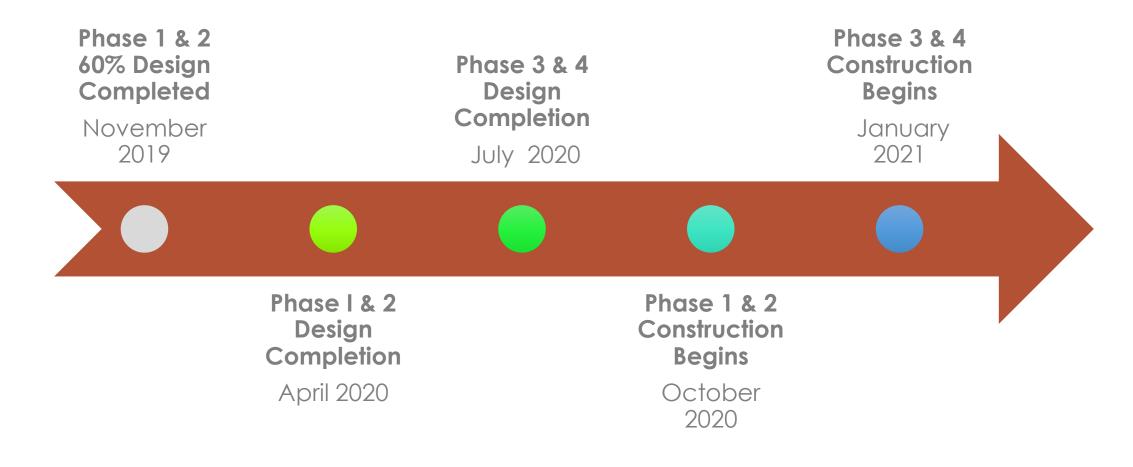


Impact Type	Cost/Benefit	Expected Value
Financial	Capital Expenditures	-\$32,808,000
Financial	Operations and Maintenance	-\$3,536,000
Financial	Replacement Costs	-\$8,353,000
Financial	Residual Value of Assets	\$1,370,000
Social	Subsidence Road Impact	\$13,097,000
Social	Subsidence Property Impact	\$31,571,000
Social	Public Health (Exercise)	\$455,000
Social	Public Health (Reduced Stress)	\$89,000
Social	Property Value Uplift	\$8,441,000
Social	Avoided Flood Damage	\$8,000,000
Social	Recreational Value	\$5,858,000
Social	Education	\$3,585,000
Social	Heat Island Effect	\$83,000
Environmental	Carbon Emission Sequestration	\$20,000
Environmental	Air Pollution Sequestration	\$12,000
Environmental	Water Quality	\$1,431,000

	Expected Value
Financial	-\$43,327,000
Social	\$71,179,000
Environmental	\$1,463,000
Triple Bottom Line NPV	\$29,315,000

## **Project Schedule**









# Questions - Thank You! Will Bane, PE 1340 Poydras Street Suite 1420, New Orleans, LA 70112-1241 Phone: (504) 654-1758 Will.Bane@stantec.com Resilience