WEF Tech 2016 Service Project

June 30, 2016

DANA BROWN& Associates

Presentation Agenda:

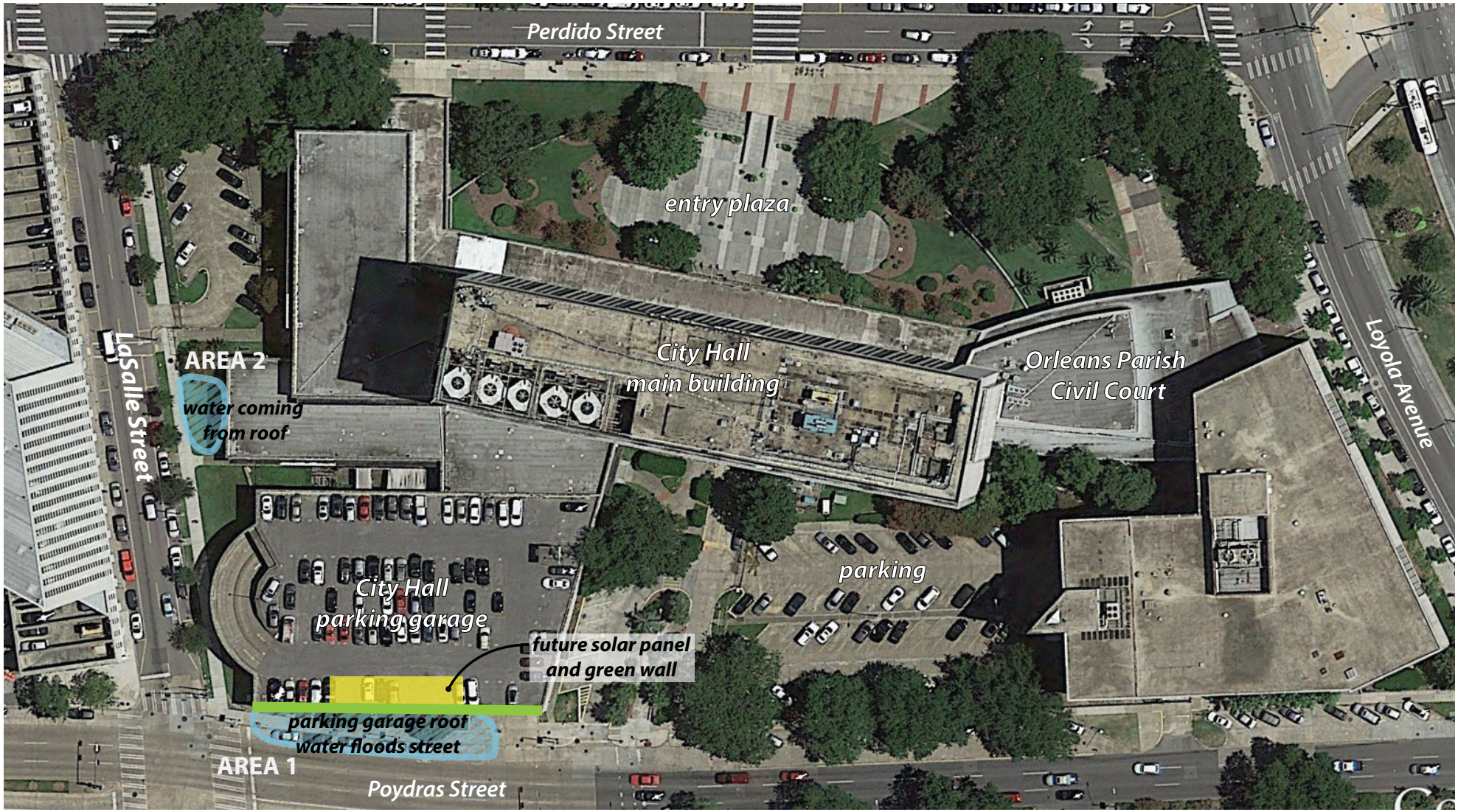
- About WEF
- Project Location
- Existing Conditions
- Proposed Improvements
- SW Calculation Estimates
- SW Products
- Cost & Maintenance
- Next Steps

WEF & Community Service Projects:

Water Environment Federation

- Annual conference held in New Orleans every other year since 2010
- Students & Young Professionals
- Past projects in New Orleans:
  - 2010 - Bioswales in the Bayou
  - 2012 - City Park Wetlands
  - 2014 - Conrad Park

2016 Project Location:

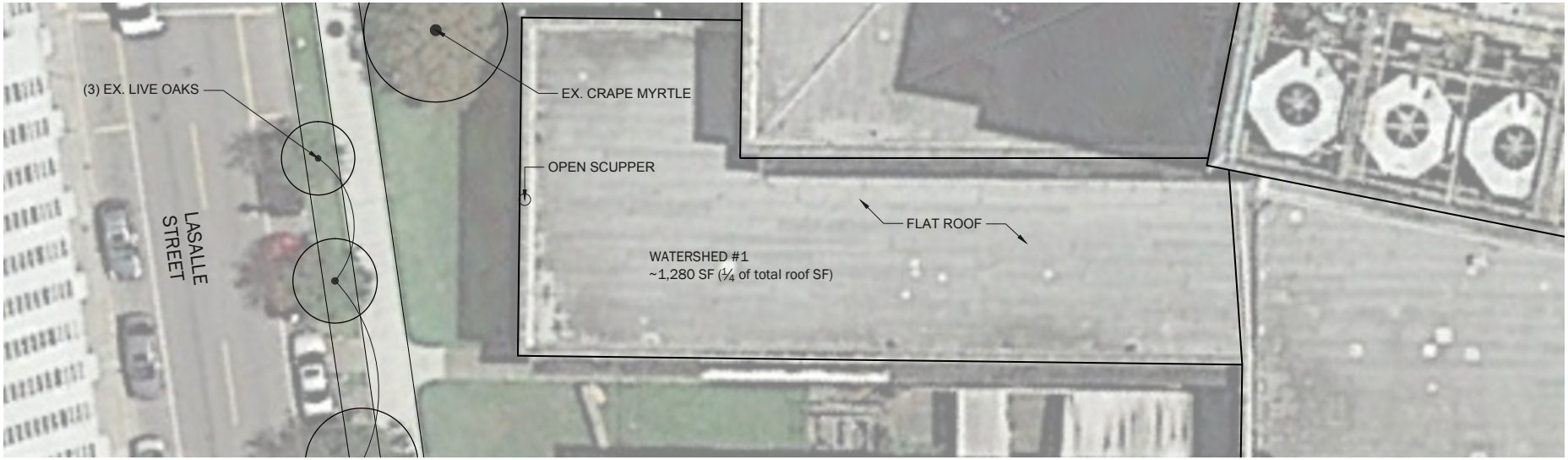


Existing Conditions:

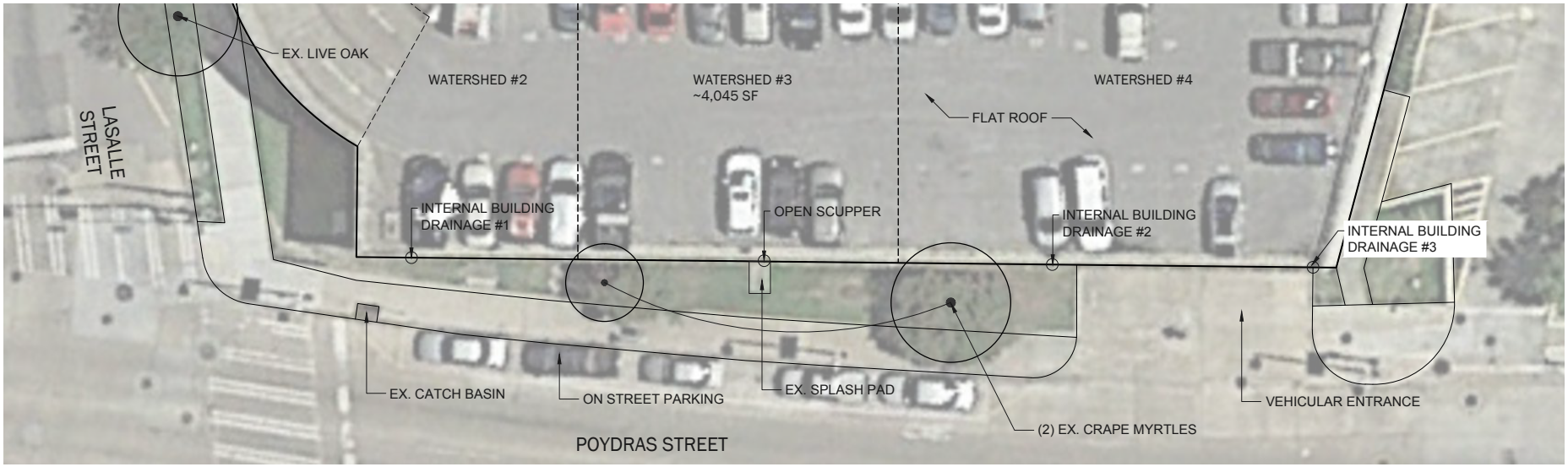
Grassy space between parking garage and sidewalk


Water pouring from scupper

Existing Conditions:

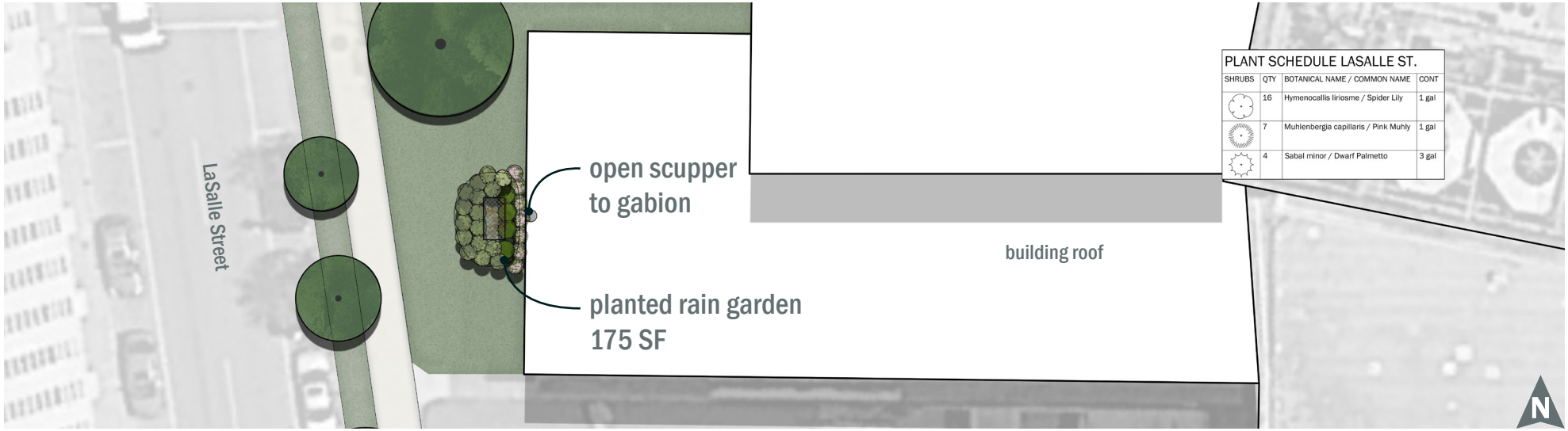


LaSalle Street



Poydras Street

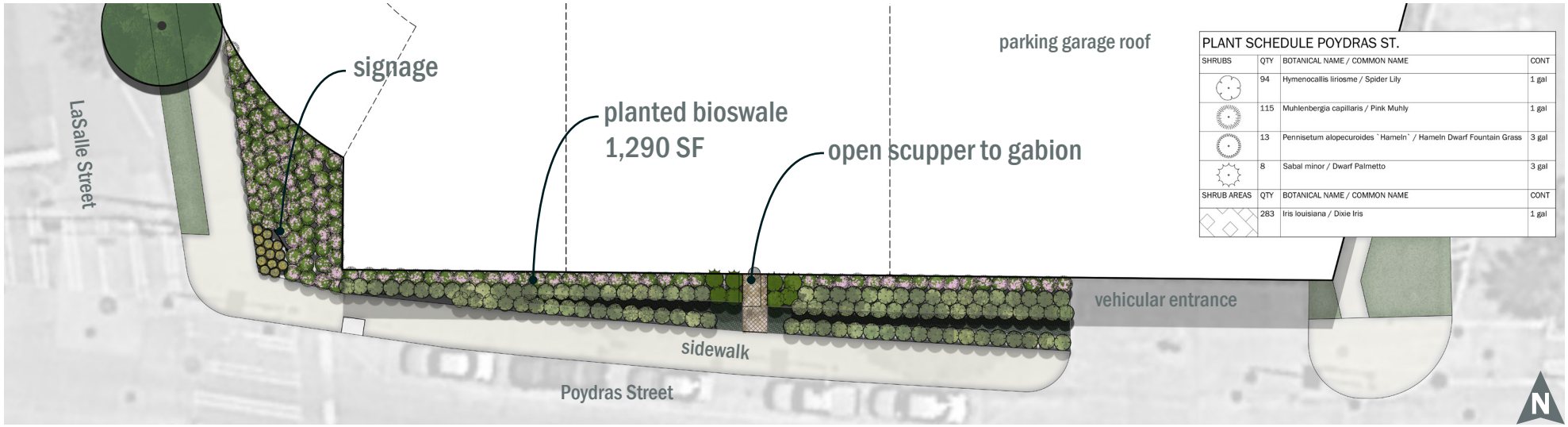
Proposed Site Improvements:



PLANT SCHEDULE LASALLE ST.

SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	CONT
	16	Hymenocallis liriosme / Spider Lily	1 gal
	7	Muhlenbergia capillaris / Pink Muhly	1 gal
	4	Sabal minor / Dwarf Palmetto	3 gal

LaSalle Street



PLANT SCHEDULE POYDRAS ST.

SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	CONT
	94	Hymenocallis liriosme / Spider Lily	1 gal
	115	Muhlenbergia capillaris / Pink Muhly	1 gal
	13	Pennisetum alopecuroides `Hameln` / Hameln Dwarf Fountain Grass	3 gal
	8	Sabal minor / Dwarf Palmetto	3 gal
SHRUB AREAS	QTY	BOTANICAL NAME / COMMON NAME	CONT
	283	Iris louisiana / Dixie Iris	1 gal

Poydras Street

Plant Species:

Pink Muhly Grass

Louisiana Iris

Dwarf Palmetto

Spider Lily

SW Calculation Estimates:

Poydras Street:

- Existing runoff volumes:
  - 1.25” of any storm - 344 CF
  - 1 Year, 24 hour storm - 1,718 CF
  - 2 Year, 24 hour storm - 2,375 CF
  - 10 Year, 24 hour storm - 3,699 CF

- Estimate of post installation runoff, assumes 1,290 SF of bioswale
  - 1.25” of any storm - 0 CF of runoff (1850% captured)
  - 1 Year, 24 hour storm - 0 CF of runoff (240% captured)
  - 2 Year, 24 hour storm - 0 CF of runoff (130% captured)
  - 10 Year, 24 hour storm - 732 CF (60% captured)

SW Calculation Estimates:

LaSalle Street:

- Existing runoff volumes:
  - 1.25” of any storm - 124 CF
  - 1 Year, 24 hour storm - 777 CF
  - 2 Year, 24 hour storm - 1,109 CF
  - 10 Year, 24 hour storm - 1,785 CF

- Estimate of post installation runoff, assumes 175 SF of bioswale
  - 1.25” of any storm - 0 CF of runoff (100% captured)
  - 1 Year, 24 hour storm - 635 CF of runoff (20% captured)
  - 2 Year, 24 hour storm - 1,115 CF of runoff (13% captured)
  - 10 Year, 24 hour storm -2,120 CF (7% captured)

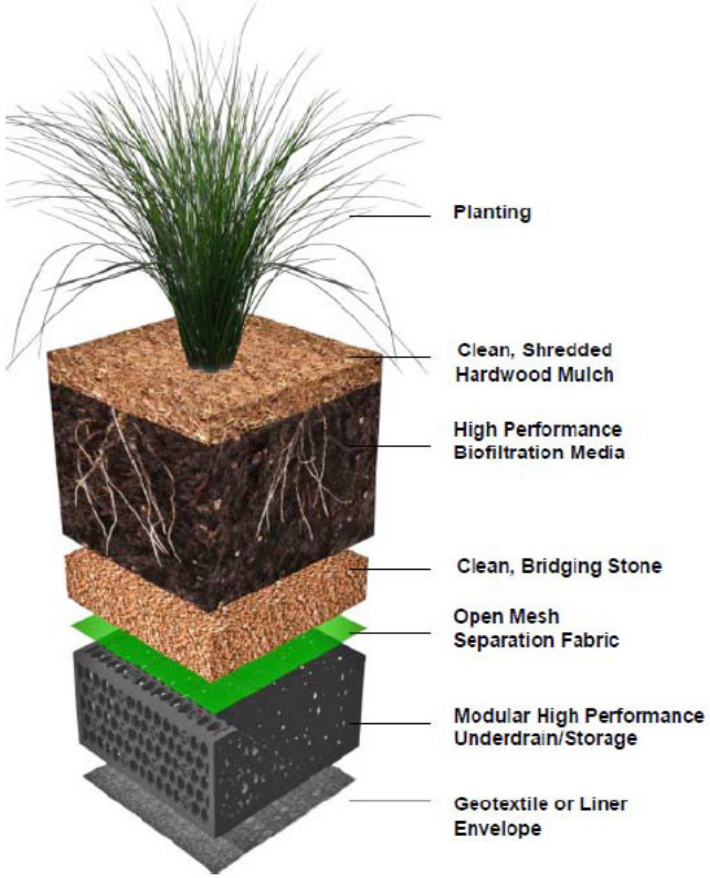
EcoServices SW Products:

FocalPoint High Performance Biofiltration System:

- High flow rates: ~100 inches/hour
- Removes pollutants: TSS (80%), Phosphorus (60%), Nitrogen (50%)

Void Space Aggregate:

- Steel slag, bi-product of steel manufacturing
- Variety of sizes
- At least a 45% void ratio (typical limestone is 30%)



Cost Estimate & Funding:

- Construction EcoServices - donating materials
- WEF fund raising efforts will cover
  - Tree removal
  - Excavation
  - Concrete work
  - Pipe installation
  - Gabions
- Volunteers
  - Backfill
  - Grading
  - Planting
  - Mulching

Maintenance:

- WEF's Jammin' 4 Water event
  - All proceeds go towards on-going maintenance of service projects
- Establishment Period - September 2016 to October 2017
  - Watering, weeding, debris removal
  - Replenish mulch in the spring
  - Plant replacement as needed
- After Establishment
  - Weeding, debris removal
  - Water in times of extreme drought
  - Replenishing mulch twice a year

Next Steps:

- Underground utility information
- Infiltration tests with EcoServices
- Catch basin and pipe conditions
- Construction Documents
- Volunteer Day - September 24, 2016

Questions?

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