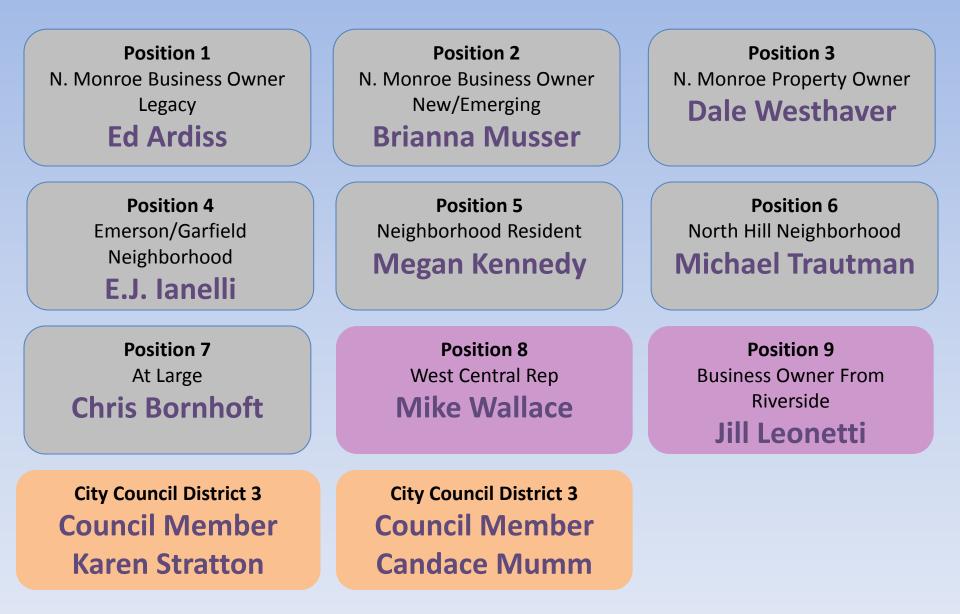
# Monroe Street Stormwater, Landscaping and Parking

#### August 11, 2016





#### N. Monroe Project Advisory Board



# Review of Questions (7-13-2016)

## TRANSIT

- High Performance Transit
   Network
- ADA & Bicycles
- Transit Meeting with STA in September

## TRAFFIC

- Level of Service (LOS)
- Residential traffic impact
- Snow Removal
- Emergency Response Vehicles
- Garbage Trucks

#

 Traffic Operations Meeting in August

# **Review of Questions (7-13-2016)**

## **OTHER**

- Underground Utilities
- Checking with Avista

TACOBS JAVA

- City Investment
- ~\$2.5 million

##

# **Review of Questions (7-28-2016)**

Housing – Centers & Corridors designation calls for housing to support commercial corridor
Water/Sewer Infrastructure – In good shape generally, but water main work at south end, laterals are opportunity based

#### Stormwater MS4 System



MS4=Municipal Separated Storm Sewer System

Discharges pollutants directly to the Spokane River

Historic view of the river as a place to send waste

#### Spokane's Integrated Clean Water Plan

#### Clean River, Faster



- More stormwater to River than CSOs
- Stormwater key to River health
- Commitment to eliminate stormwater when rebuilding streets

#### **Current Stormwater Standard**



Stormwater Options (infiltration tools)

- Bio-Infiltration swales
- Trees with Soil Cells
- Permeable Parking Zone
- Cartridge Filtration

## **Bio-Infiltration**

- Treatment Area / Impact Area = HIGH
- Includes decorative landscaping or greenscape (customizable)
- Traffic Calming and Pedestrian Buffer
- Requires regular maintenance and water
- Turf requires frequent maintenance and water
- Trade-off for parking and/or pedestrian space
- Costs \$\$\$\$

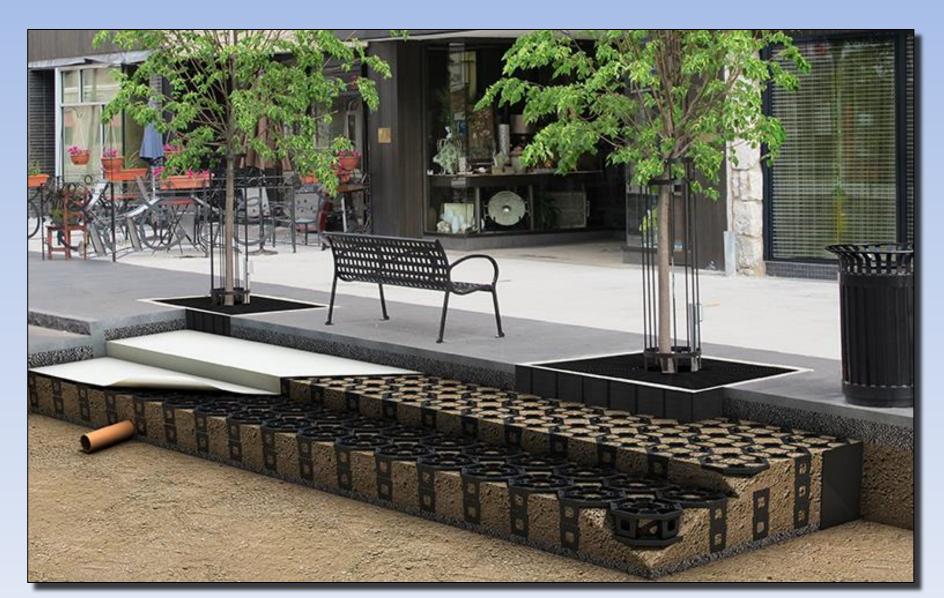
#### **Bio-Infiltration**



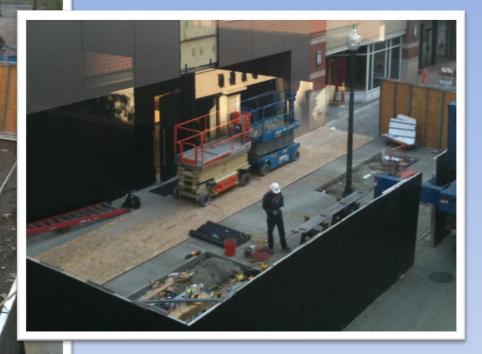
## Tree with Soil Cell

- Treatment Area / Impact Area = VERY LOW
- Adds green landscaping (trees/shrubs)
- Infiltration area sits below the hardscape
- Traffic Calming and Pedestrian Buffer
- Requires regular maintenance and watering
- Double benefit with on-street parking
- Costs \$\$\$\$

### Tree with Soil Cell









### **Pervious Concrete Parking**

- Treatment Area / Impact Area = VERY LOW
- Infiltration area sits below parking
- No conflict with green space
- Requires regular street maintenance
- Double benefit with on-street parking
- Costs \$\$\$\$

### **Pervious Parking**

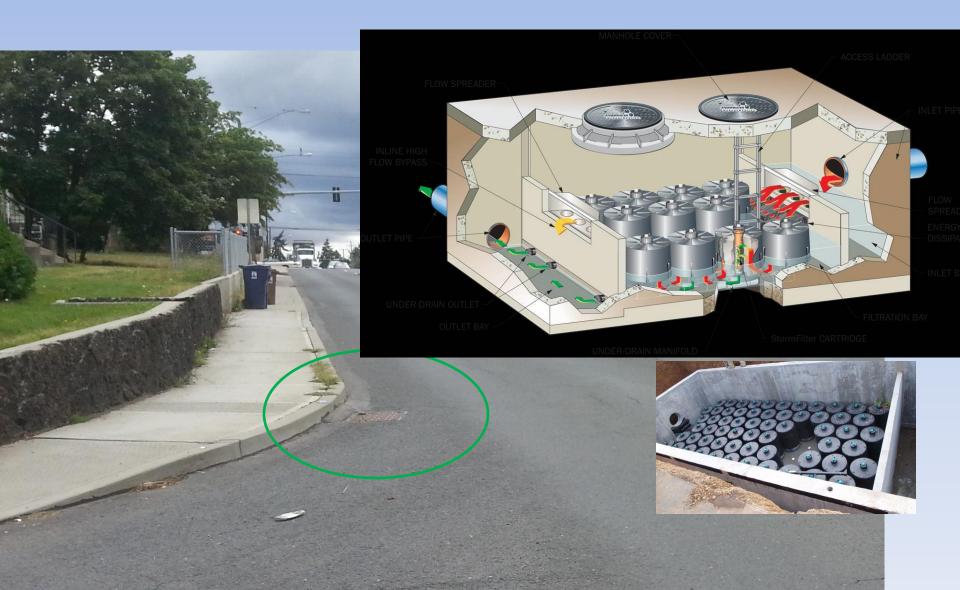




## **Cartridge Filtration**

- Treatment Area / Impact Area = VERY LOW
- Looks like conventional stormwater system
- Requires regular utility maintenance
- No overall loss of on-street parking
- Costs \$\$\$\$

## **Cartridge Filtration**



## What do you want?

- Work together to set priorities for the corridor and mix & match option per corridor vision
  - ✓ Green Space
    - Extra trees, landscaping, grass?
    - At corners, along blocks?
  - ✓ Parking Needs
    - Landscape full or partial length of blocks?
    - Where is parking most important
- Focus Areas? For landscaping, furniture, lighting?

#### Visualization



## Landscaping Options

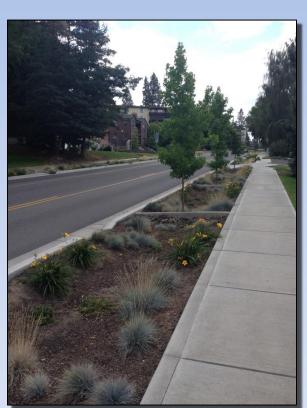
All green landscaping requires a functional watering system. Stormwater landscaping will be maintained by City Staff.

- Trees required by SMC
- Additional trees
- Shrubs
- Grasses and flowers
- Hanging baskets

### Landscaping Options



#### **Grass Swale**



Tree/Shrubs Swale



Pedestrian Light w/ Baskets

### Landscaping Options





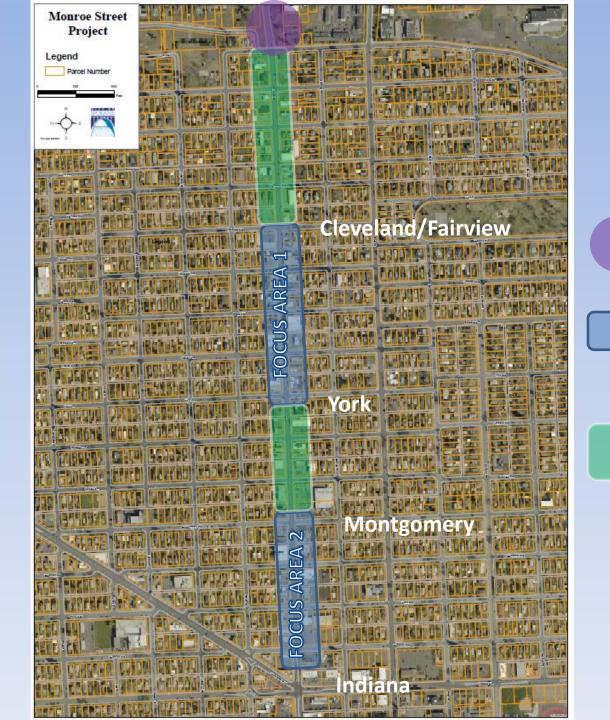
### Summary

Where is the focus area?

What level of landscaping is the target?

- More trees
- turf or shrub areas
- amount of parking allowable as trade-off

The City will use this information through the design process to implement the stormwater tools.

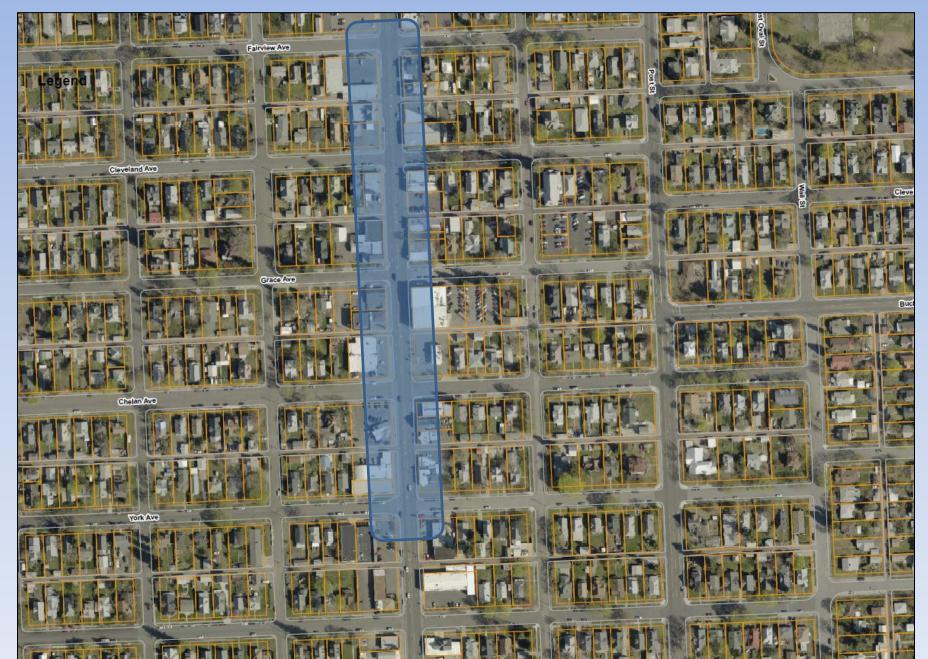




Potential Focus Areas

Remaining Project Area

#### Focus Area: York to Cleveland or Fairview





NW Corner of Monroe and Grace



NE Corner of Monroe and York



Between Cleveland & Grace looking east



SW Corner of Monroe and Fairview



NW Corner of Monroe and York Looking west



SW Corner of Monroe and Grace looking west



SE Corner of Monroe and Cleveland Looking west

#### Focus Area: Indiana to Montgomery





Between Montgomery and Mansfield

Between Montgomery and Mansfield



Entering Project Area, Indiana and Monroe (Google Maps Image)



Between Shannon Ave and Knox Ave on Monroe (Google Maps Image)