

Junction Hollow Update

December 7th 2015



Agenda:

I. Introduction

II. Watershed and Stormwater Improvements

III. Broader Potential Park Improvements

IV. Potential Transit Improvements Study

V. Community Presentation

VI. Discussion

II. Watershed and Stormwater Improvements

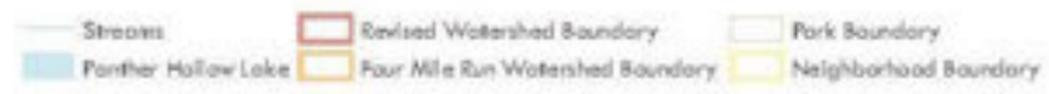
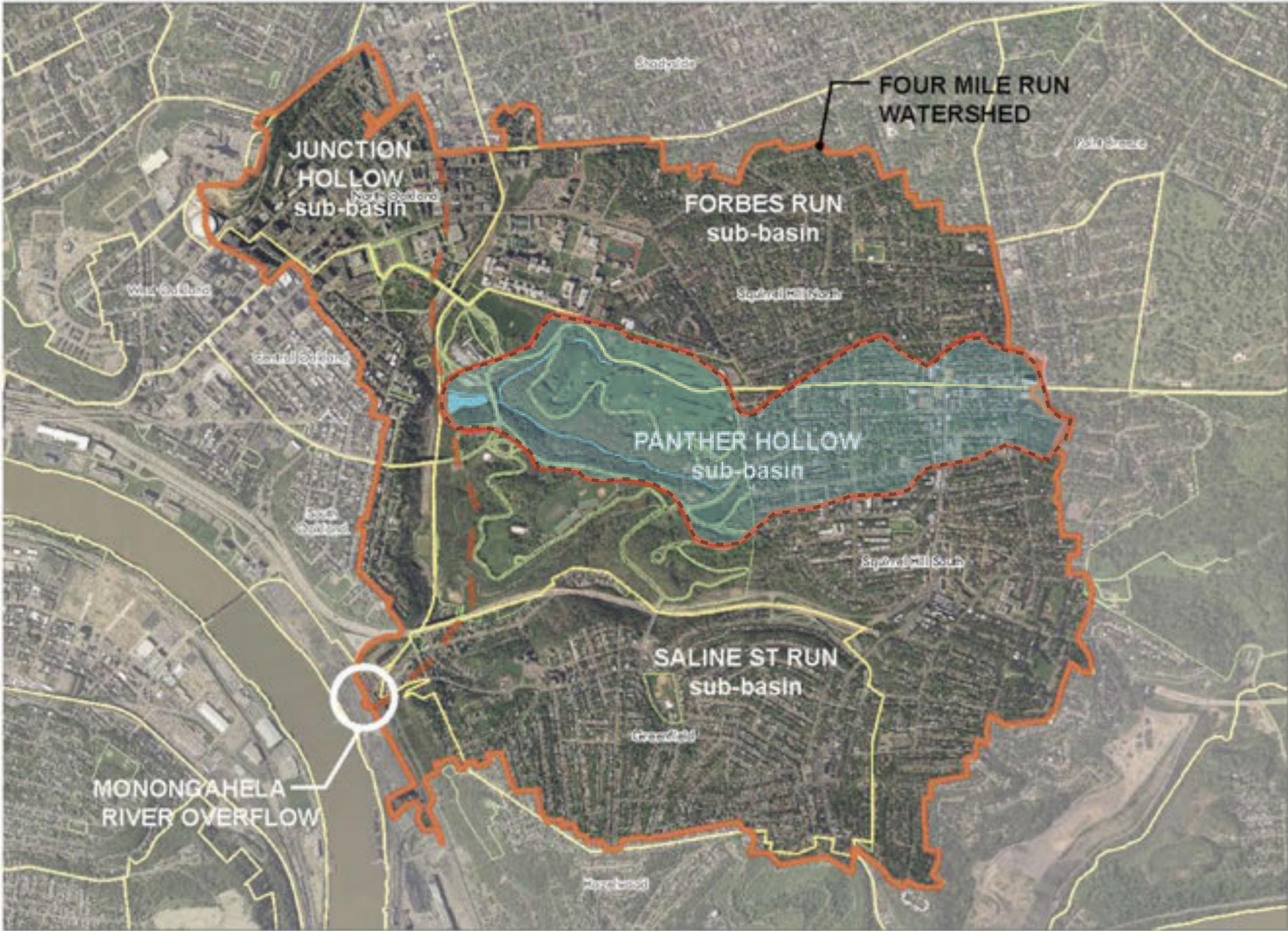
Panther Hollow Watershed Restoration

- City + Parks Conservancy + PWSA + ALCOSAN
- 2011 Watershed Study
- Beacon & Bartlett Meadow & Infiltration Trenches
- Schenley Drive & Golf Course Rain Gardens
- Ongoing Watershed Monitoring



The Four Mile Run watershed contains Oakland, Squirrel Hill and Greenfield, while also abutting Shadyside, Point Breeze and Hazelwood. This watershed is the home to some of the region's greatest cultural and educational institutions, is a regional workforce hub, and one of Pittsburgh's premiere neighborhoods.

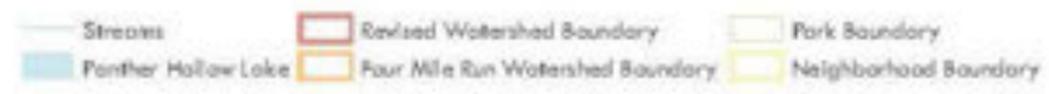
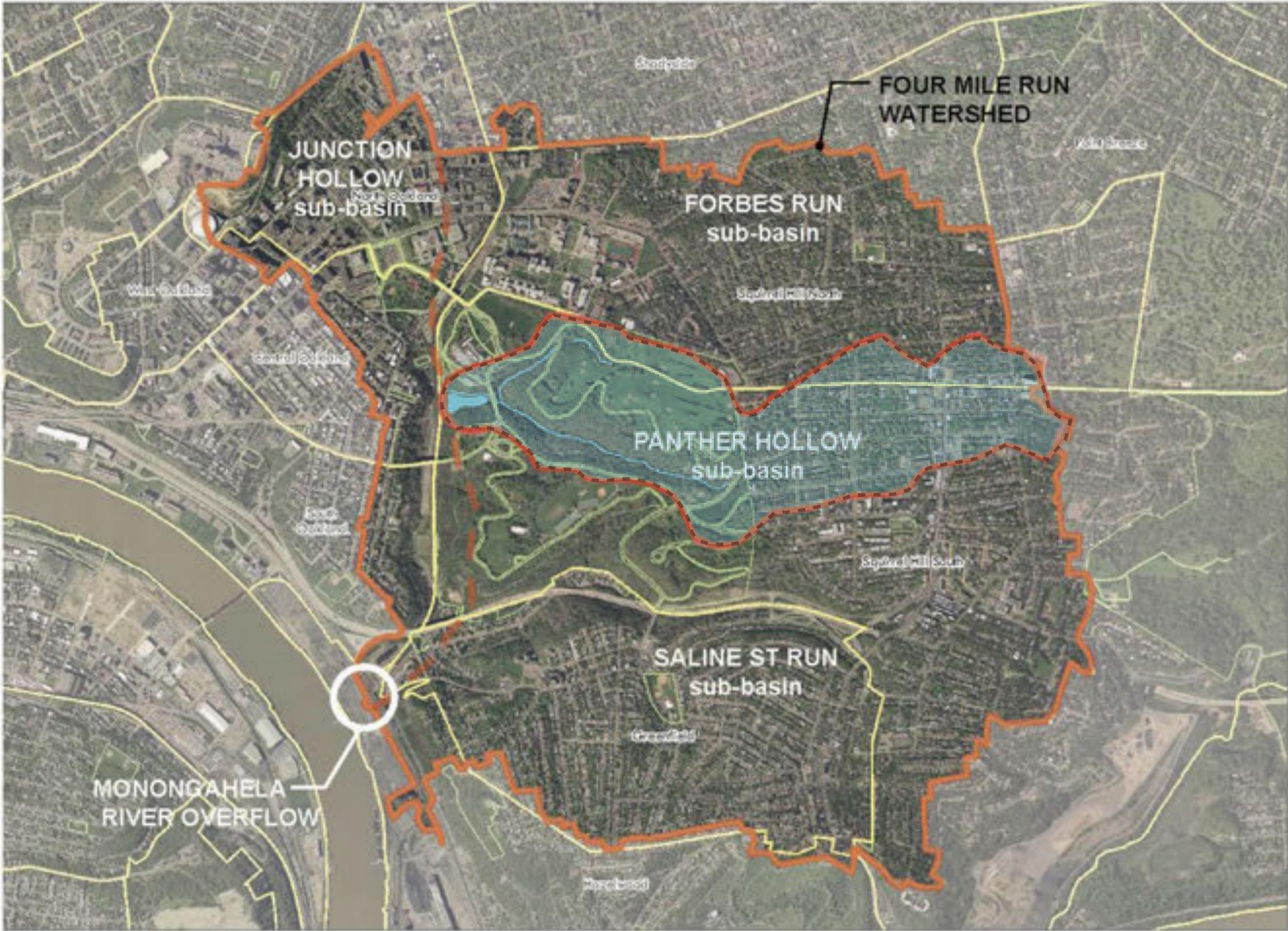
It offers a great opportunity for stormwater demonstrations within the park space that will be highly visible to the residents and users of this vibrant watershed community.



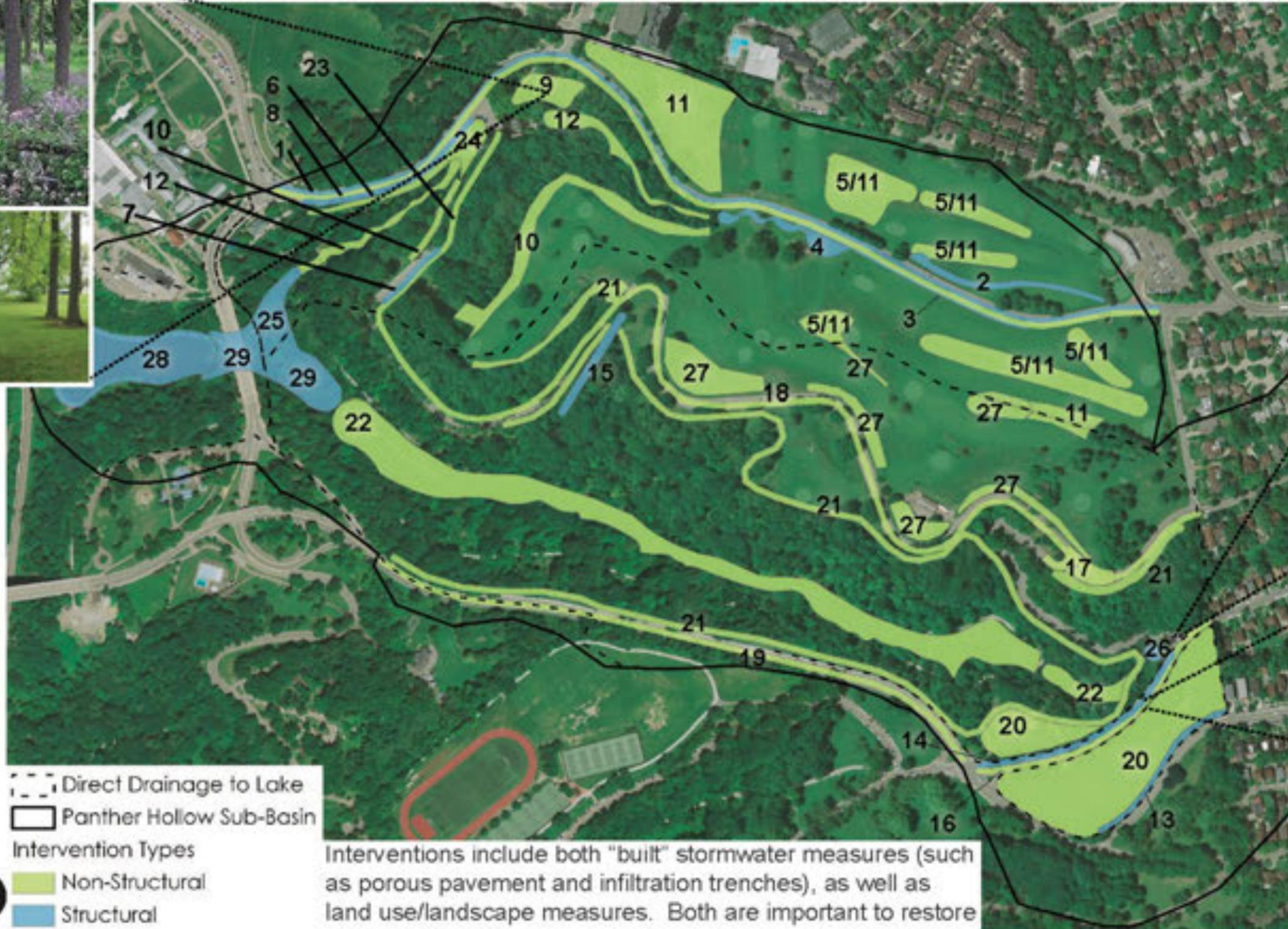


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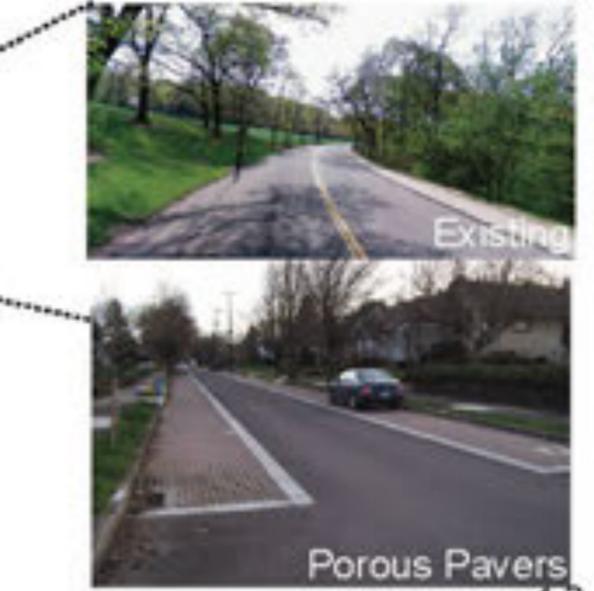
It offers a great opportunity for stormwater demonstrations within the park space that will be highly visible to the residents and users of this vibrant watershed community.



Panther Hollow Watershed Plan



Interventions include both "built" stormwater measures (such as porous pavement and infiltration trenches), as well as land use/landscape measures. Both are important to restore watershed health.



III. Broader Potential Park Improvements

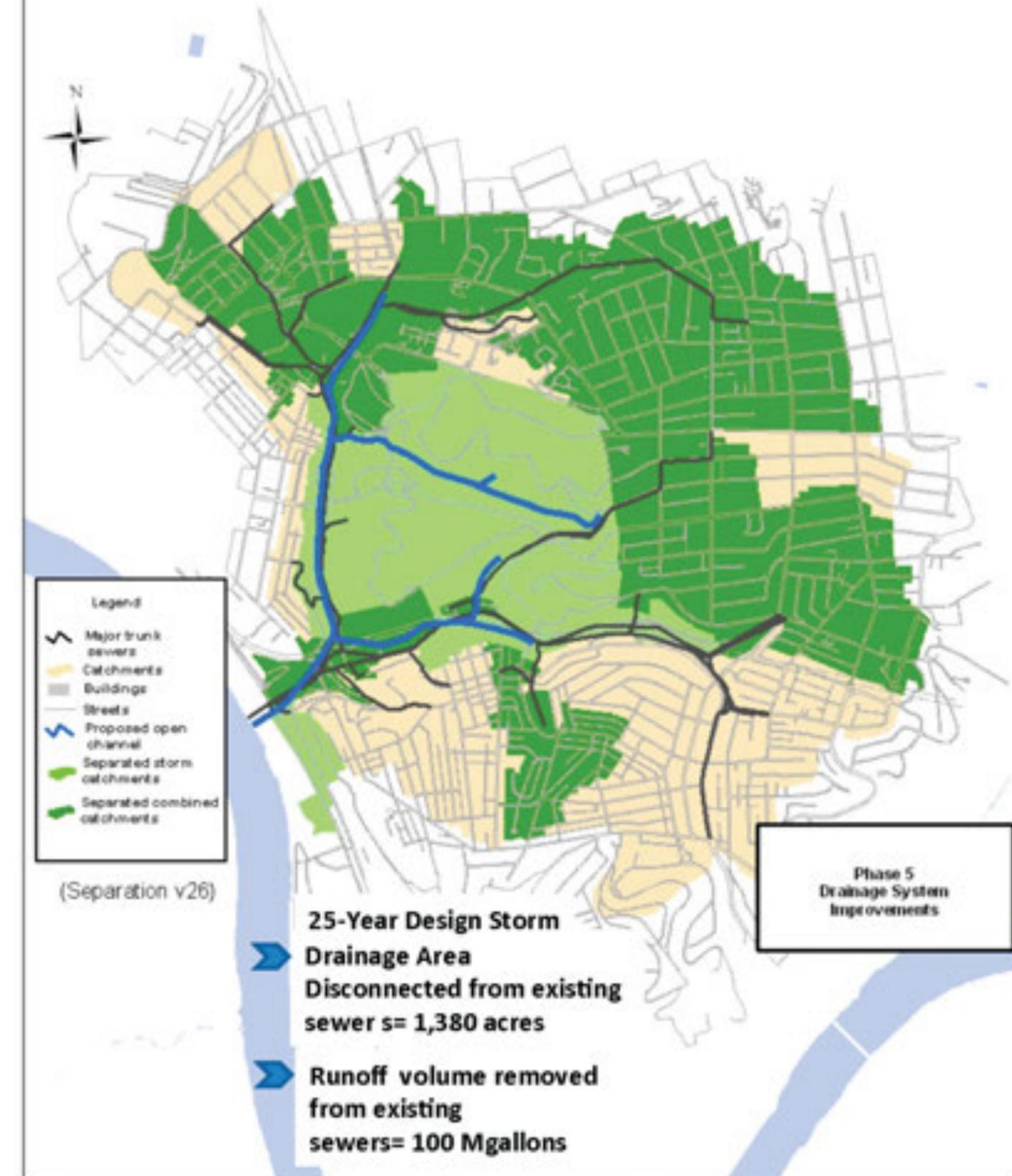
Junction Hollow Watershed Restoration

- 2009 4-mile Watershed Study
- Restored 4-mile run stream course
- Trail Connection Across Train Tracks

Preliminary Conclusions

1. The capacity of most of the existing trunk sewer system is undersized under 25, 50 and 100 year design storm conditions and is a principle cause of flooding.
2. Sufficient amounts of stormwater runoff can be removed from the existing conveyance system to eliminate flooding under 25 year design storm conditions.
3. This could be accomplished by effectively removing 1,400 acres from the existing trunk sewer system (including 500 acres currently draining to storm sewers).
 - This removal could be accomplished by a combination of stormwater redirection to new storm conveyance channels and the implementation of green stormwater infrastructure practices.
4. The required capacity of the new storm drainage channels to convey the all of redirected flows ranges from 270 to 3,070 cfs (25-year design storm).
5. The ALCOSAN diversion chamber creates an hydraulic restriction that contributes to the flooding problems that have been experienced.

PHASE 5 IMPROVEMENTS



Restored 4-mile run stream course

REACH 01:02 - OUTLET TO RAILROAD TUNNEL
 REACH 02:03 - RR TUNNEL
 REACH 03:04 - RR TUNNEL TO BIKE PATH
 REACH 04:05 - BIKE PATH TO ALLIES BRIDGE
 REACH 05:06 - ALLIES BRIDGE TO BIKE PATH
 REACH 06:07 - BIKE PATH TO SOCCER FIELDS
 REACH 07:08 - SOCCER FIELDS TO RR CROSSING
 REACH 08:09 - ALONG BOUNDARY STREET
 REACH 09:10 - ALONG BIKE PATH
 REACH 10:11 - ALONG BALBE STREET
 REACH 11:12 - ALONG GREENFIELD STREET
 REACH 12:13 - MONKAMBLA RIVER CORRIDOR
 (SEE CONCEPTUAL DESIGN REPORT)



PRELIMINARY
 NOT FOR
 CONSTRUCTION

JUNCTION HOLLOW
 PITTSBURGH, PENNSYLVANIA
 STREAM DAYLIGHTING

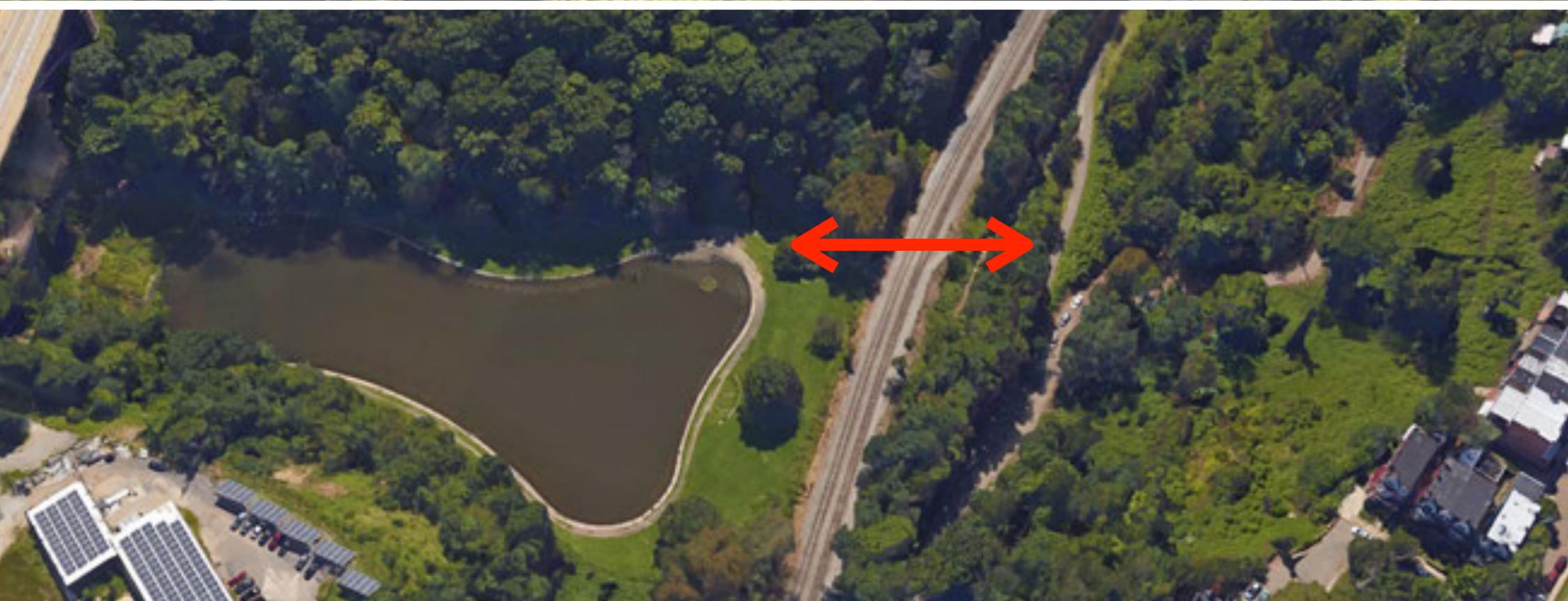
NSI

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DATE: 05 JUN 2009
 REVISIONS

DRAWN BY: RR
 CHECK BY: EE
 APPROV BY: PM
 JOB NO. 200942

Potential Trail Connection Across Train Tracks



IV. Potential Transit Improvements Study

Transit Connection from Oakland to Hazelwood,
ALMONO Development & PTC

- 2009 Oakland Transit Connector Study
- Current Junction Hollow Connector Feasibility Study - City + RIDC & ALMONO Partnership
Consultants: Studio for Spatial Practice + TRANS Associates

Transit Study Goal:

Test the feasibility and cost of creating a first phase transit connection between Oakland ALMONO, Hazelwood and PTC using small transit shuttles.

Transit Service Scenario:

- Small Shuttle: capacity of 5-25 people
- Shuttle vehicles will run on a mix of dedicated right of way and city streets
- Accessible to the public
- Carbon neutral vehicle (zero emissions)
- Speed: 15-25 mph
- Hours: work hours only

Conceptual System

Downtown

U. Pitt

UPMC

CMU

Oakland

PTC

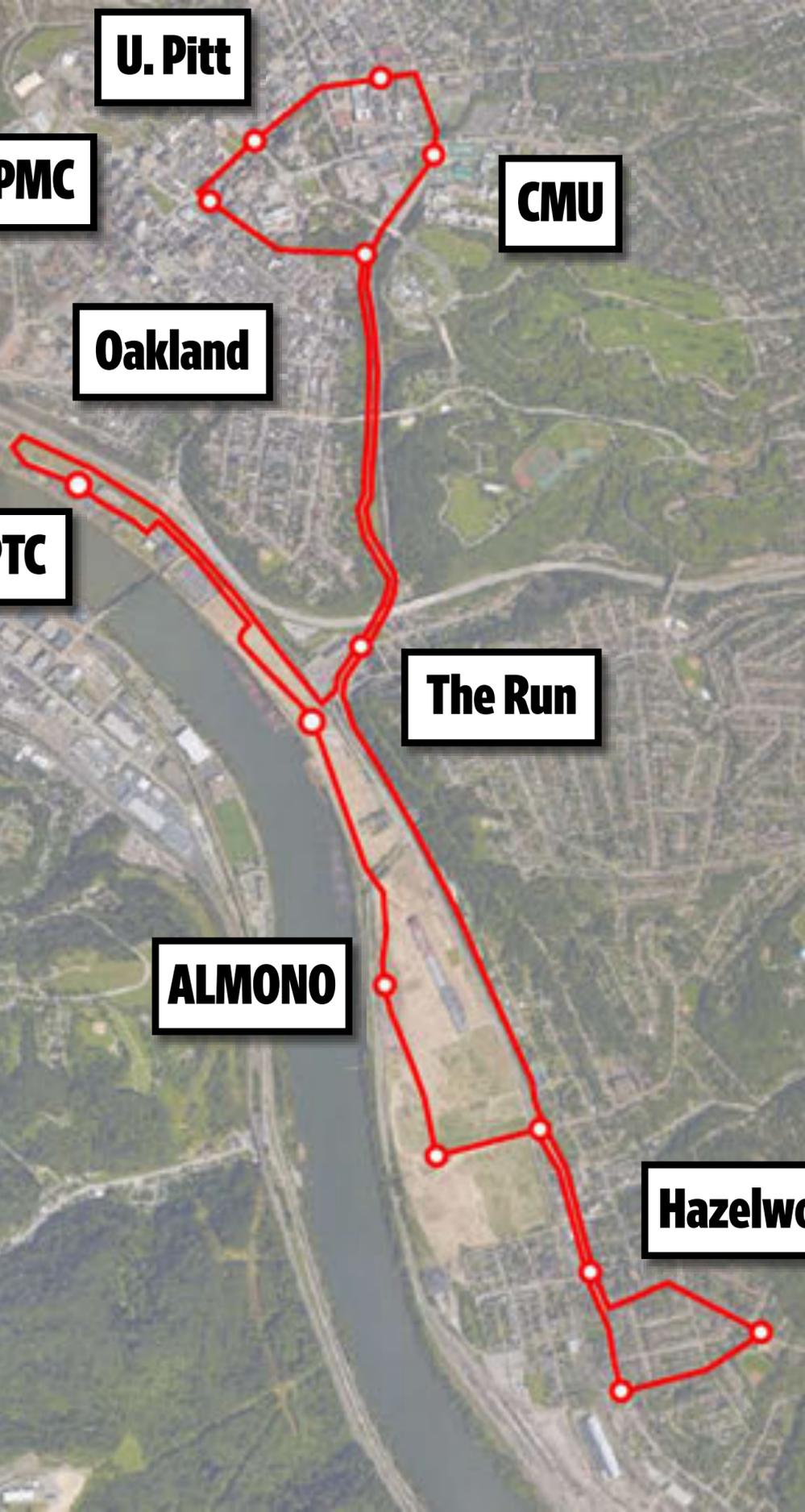
The Run

Electric Shuttle

ALMONO

Hazelwood

Automated PRT



Benefits:

- Connect people to jobs in Oakland and PTC and future jobs at ALMONO
- ALMONO to Oakland travel time scenario:
 - 20+ minutes faster than driving
 - 45+ minutes faster than existing transit options
- Reduce Congestion on 2nd Avenue, Greenfield Avenue and Bates Street

Conceptual System



UPMC

U. Pitt

Craig & Fifth

CMU

Junction Hollow

PTC

ALMONO - West

The Run

ALMONO - East + Hazelwood

From Hazelwood

Junction Hollow Scenario:

- New transit-only alignment through the Hollow
- Not a public street
- Test-fit scenarios for 24' & 12' transit alignments
- Existing soccer field & trail connections remain, and if needed shifted and enhanced
- Integrate transit alignment with proposed 4-mile run stream course and wetlands in the park
- Transit route can also function for emergency access

Junction Hollow: Existing Conditions



Carnegie Mellon

Schenley Drive

Phipps Conservatory

Panther Hollow Rd

Panther Hollow Lake

Schenley Park

Parkway - I-376

Boundary St

Alexis St

Greenfield Ave

CSX Railroad
AV Railroad

Junction Hollow Trail

Frazier St Bridge

Carnegie Museums

Swinburne St

Saline St

Joncaire St

Boundary St

Parkview Ave

Blvd of the Allies

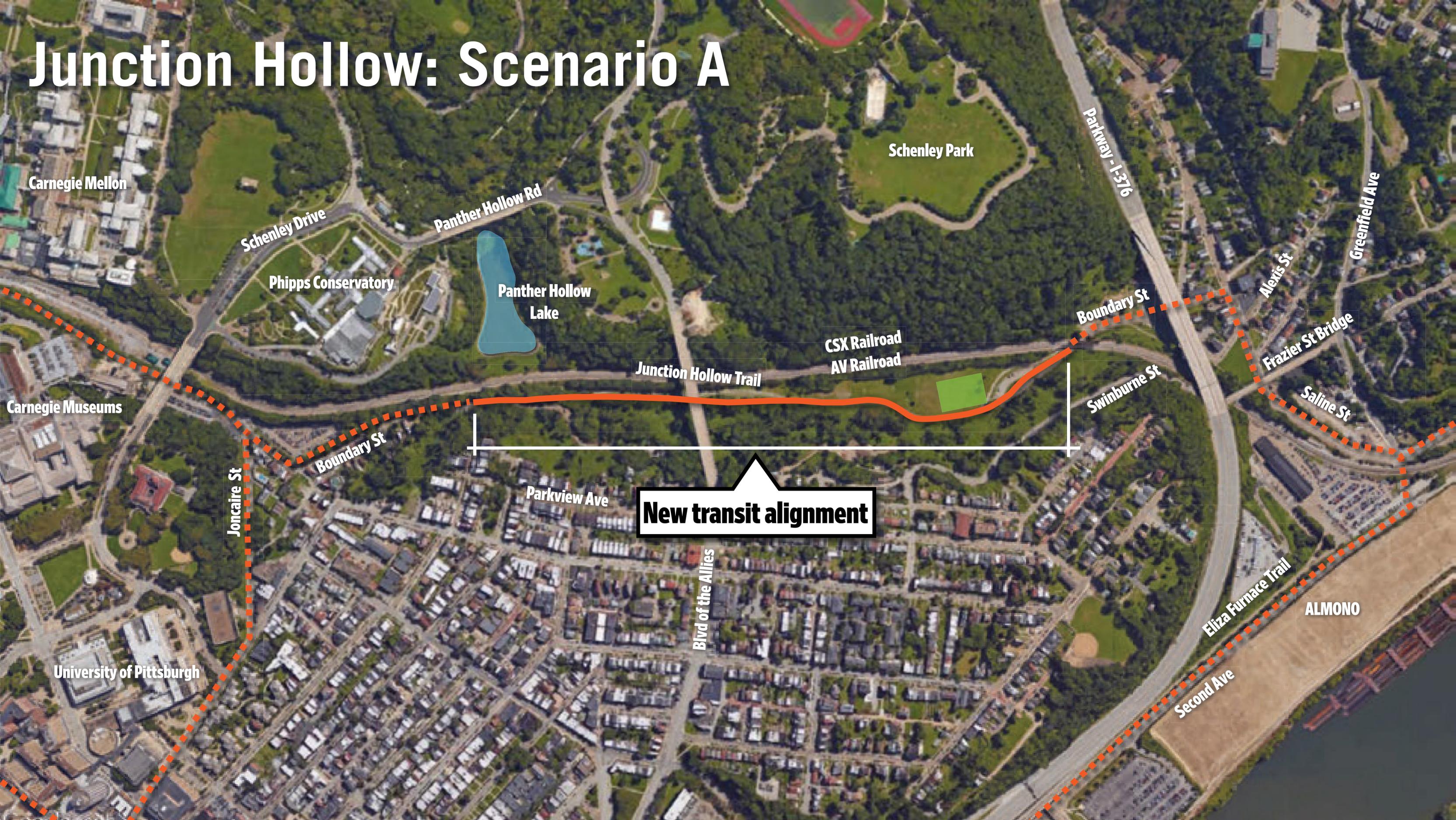
University of Pittsburgh

Eliza Furnace Trail

ALMONO

Second Ave

Junction Hollow: Scenario A



Carnegie Mellon

Schenley Drive

Panther Hollow Rd

Phipps Conservatory

Panther Hollow Lake

Schenley Park

Parkway - I-376

Junction Hollow Trail

CSX Railroad
AV Railroad

Boundary St

Alexis St

Greenfield Ave

Frazier St Bridge

Swinburne St

Saline St

Carnegie Museums

Joncaire St

Boundary St

Parkview Ave

New transit alignment

Blvd of the Allies

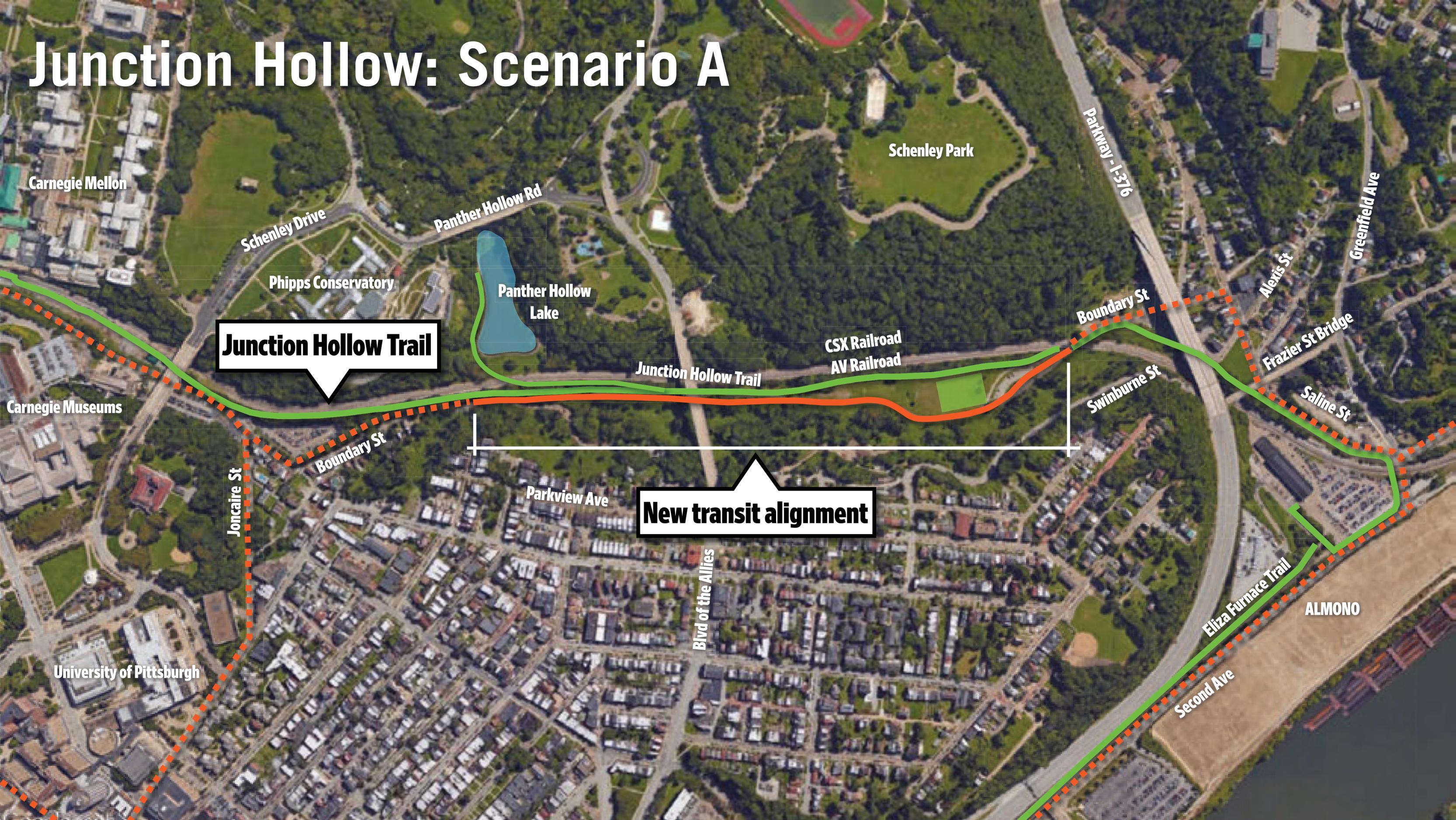
University of Pittsburgh

Eliza Furnace Trail

ALMONO

Second Ave

Junction Hollow: Scenario A



Junction Hollow Trail

New transit alignment

Carnegie Mellon

Schenley Park

Schenley Drive

Panther Hollow Rd

Phipps Conservatory

Panther Hollow Lake

Parkway - I-376

Greenfield Ave

Alexis St

Boundary St

CSX Railroad AV Railroad

Junction Hollow Trail

Frazier St Bridge

Swinburne St

Saline St

Carnegie Museums

Boundary St

Joncaire St

Parkview Ave

Blvd of the Allies

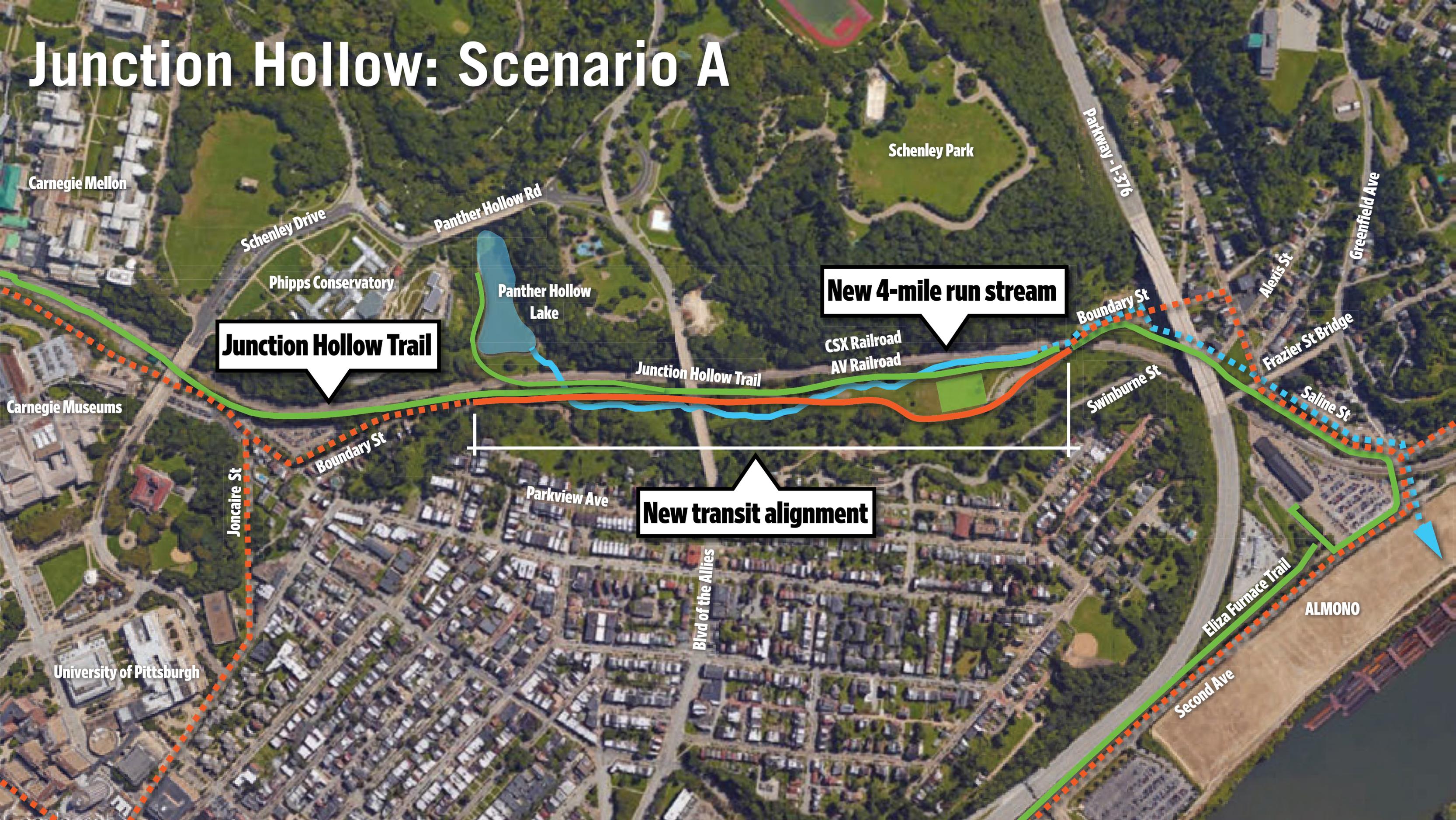
Eliza Furnace Trail

ALMONA

University of Pittsburgh

Second Ave

Junction Hollow: Scenario A



Junction Hollow Trail

New 4-mile run stream

New transit alignment

Carnegie Mellon

Schenley Park

Schenley Drive

Panther Hollow Rd

Phipps Conservatory

Panther Hollow Lake

New 4-mile run stream

CSX Railroad
AV Railroad

Junction Hollow Trail

Boundary St

Alexis St

Greenfield Ave

Frazier St Bridge

Saline St

Swinburne St

Carnegie Museums

Boundary St

Joncaire St

Parkview Ave

New transit alignment

Blvd of the Allies

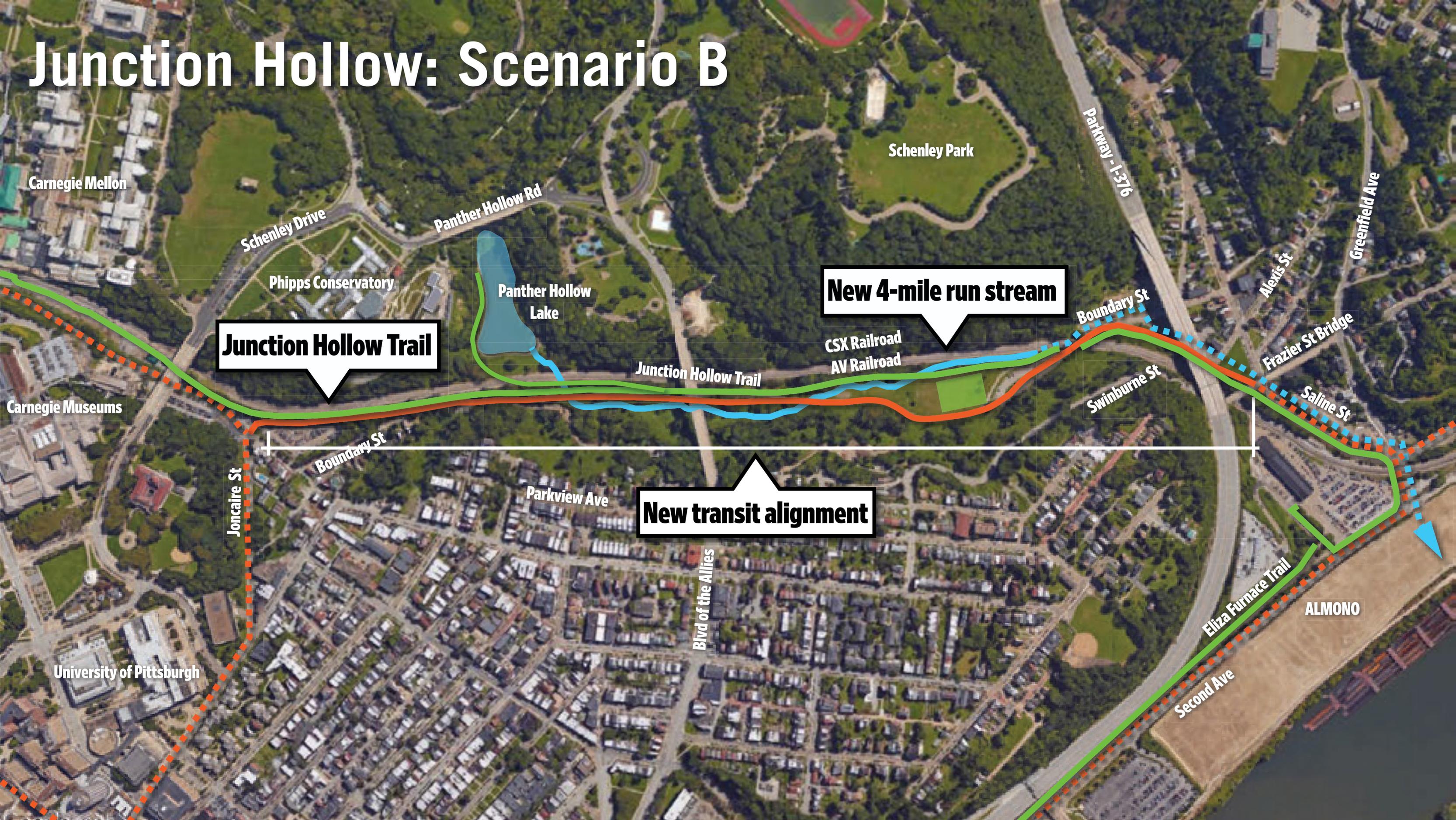
Eliza Furnace Trail

ALMONO

University of Pittsburgh

Second Ave

Junction Hollow: Scenario B



Junction Hollow Trail

New 4-mile run stream

New transit alignment

Carnegie Mellon

Schenley Drive

Panther Hollow Rd

Phipps Conservatory

Panther Hollow Lake

Schenley Park

Parkway - I-376

CSX Railroad
AV Railroad

Junction Hollow Trail

Boundary St

Alexis St

Greenfield Ave

Frazier St Bridge

Swinburne St

Saline St

Joncaire St

Boundary St

Parkview Ave

Blvd of the Allies

Eliza Furnace Trail

ALMONO

University of Pittsburgh

Second Ave

The Run: Existing Conditions



Schenley Park

Junction Hollow Trail

Second Ave
Eliza Furnace Trail

AV Railroad
CSX Railroad

Parkway - I-376

Swinburne St

Swinburne St

Alexis St

Boundary St

Four Mile Run Rd

Saline St

Frazier St Bridge

Acorn St

Greenfield Ave

The Run: Scenario A



New transit alignment-Off Street

Junction Hollow Trail

New transit alignment-On Street

Possible Stop

Second Ave

Eliza Furnace Trail

Parkway - I-376

Swinburne St

AV Railroad
CSX Railroad

Schenley Park

Swinburne St

Alexis St

Boundary St

Four Mile Run Rd

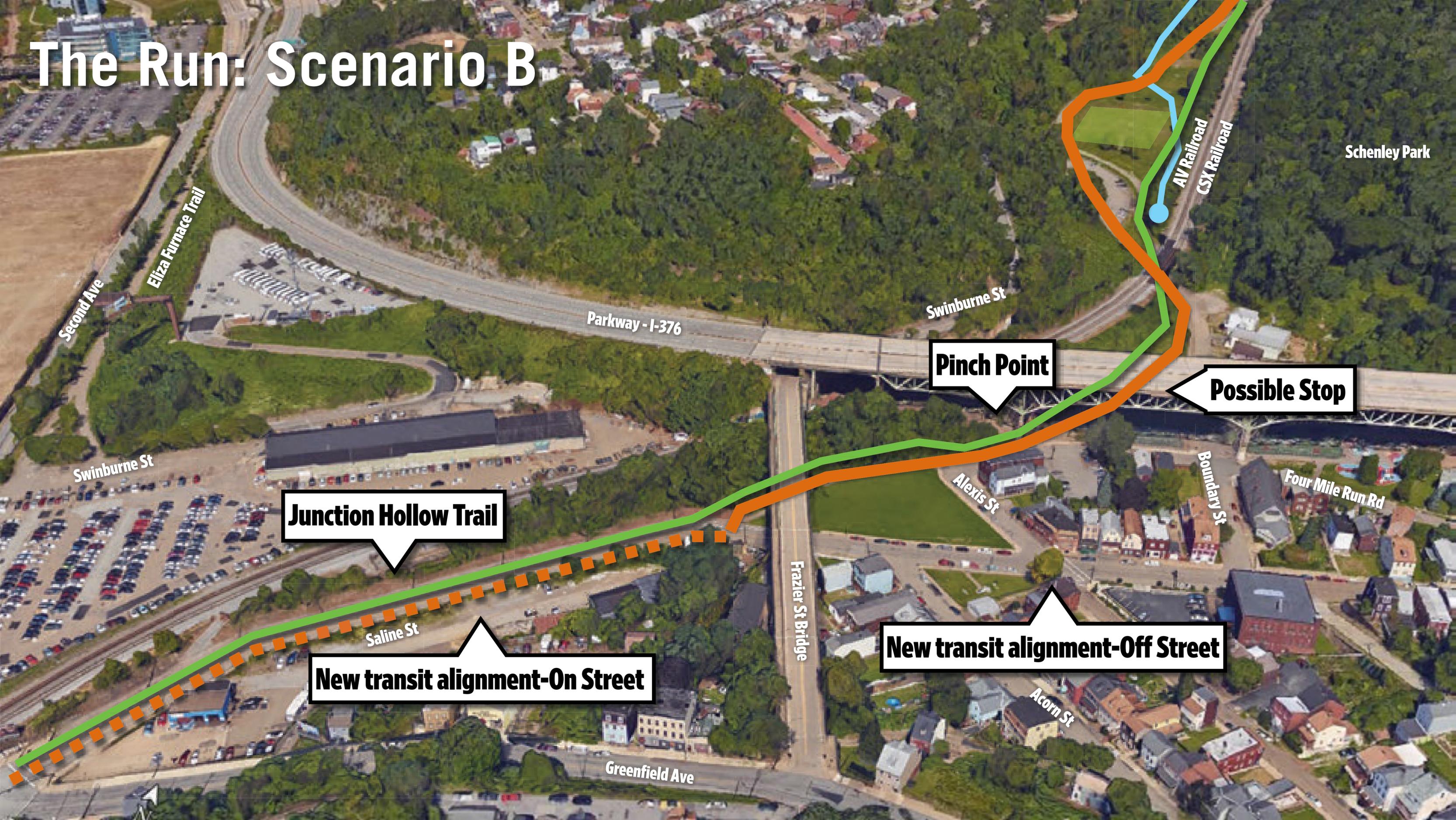
Saline St

Frazier St Bridge

Greenfield Ave

Acorn St

The Run: Scenario B



Junction Hollow Trail

New transit alignment-On Street

Pinch Point

New transit alignment-Off Street

Possible Stop

Second Ave

Eliza Furnace Trail

Parkway - I-376

Swinburne St

Frazier St Bridge

Greenfield Ave

Acorn St

Alexis St

Boundary St

Four Mile Run Rd

Schenley Park

AV Railroad

CSX Railroad

Schenley Park: Existing Conditions



Junction Hollow Trail

Field

CSX Railroad

AVRR

Railroad setback

Existing Condition



Schenley Park: Scenarios

Relocated Junction Hollow Trail

Maintain space for a field



Schenley Park: Scenarios

New transit alignment

Maintain space for a field

Relocated Junction Hollow Trail



Schenley Park: Scenarios

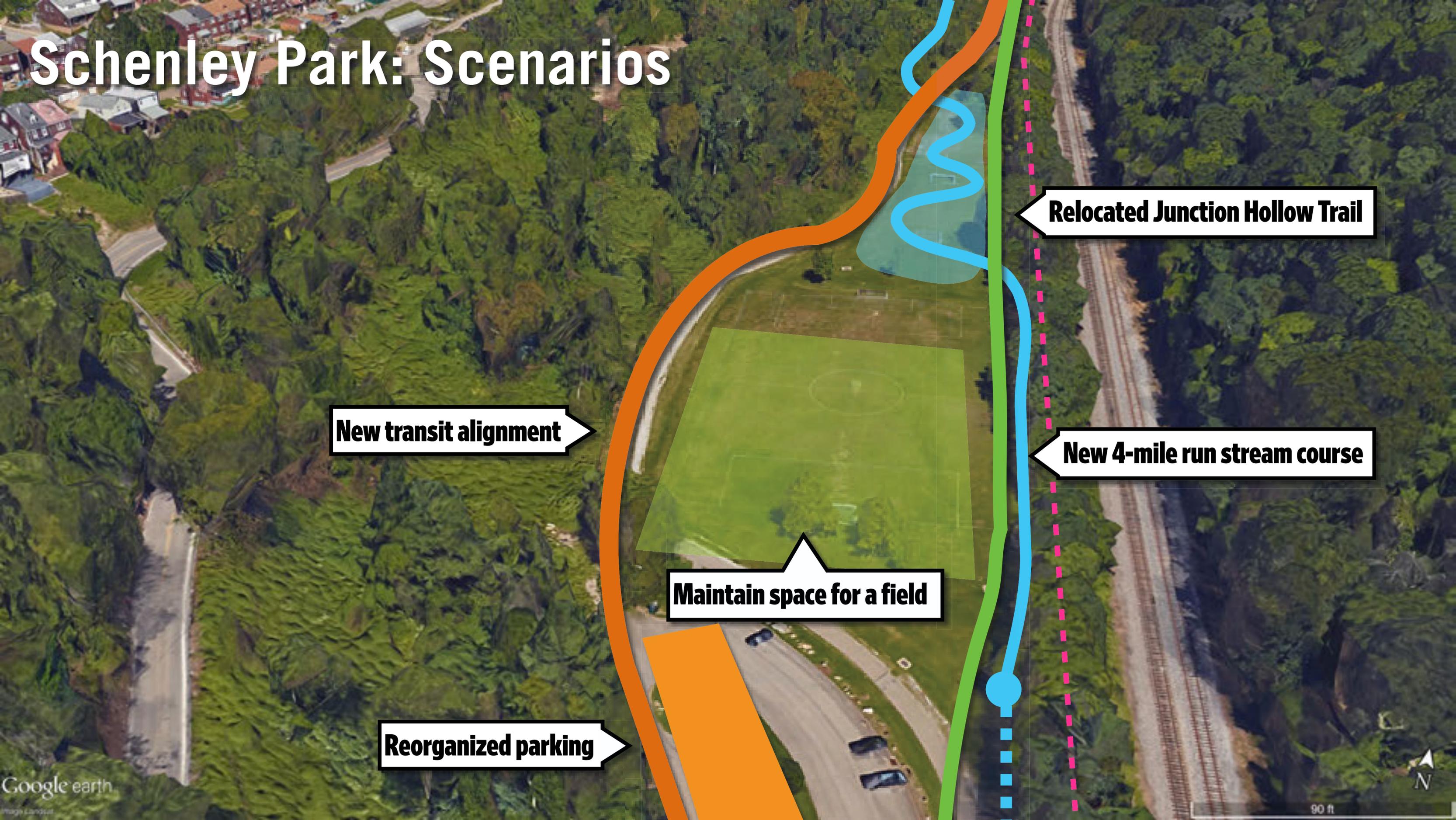
New transit alignment

Relocated Junction Hollow Trail

New 4-mile run stream course

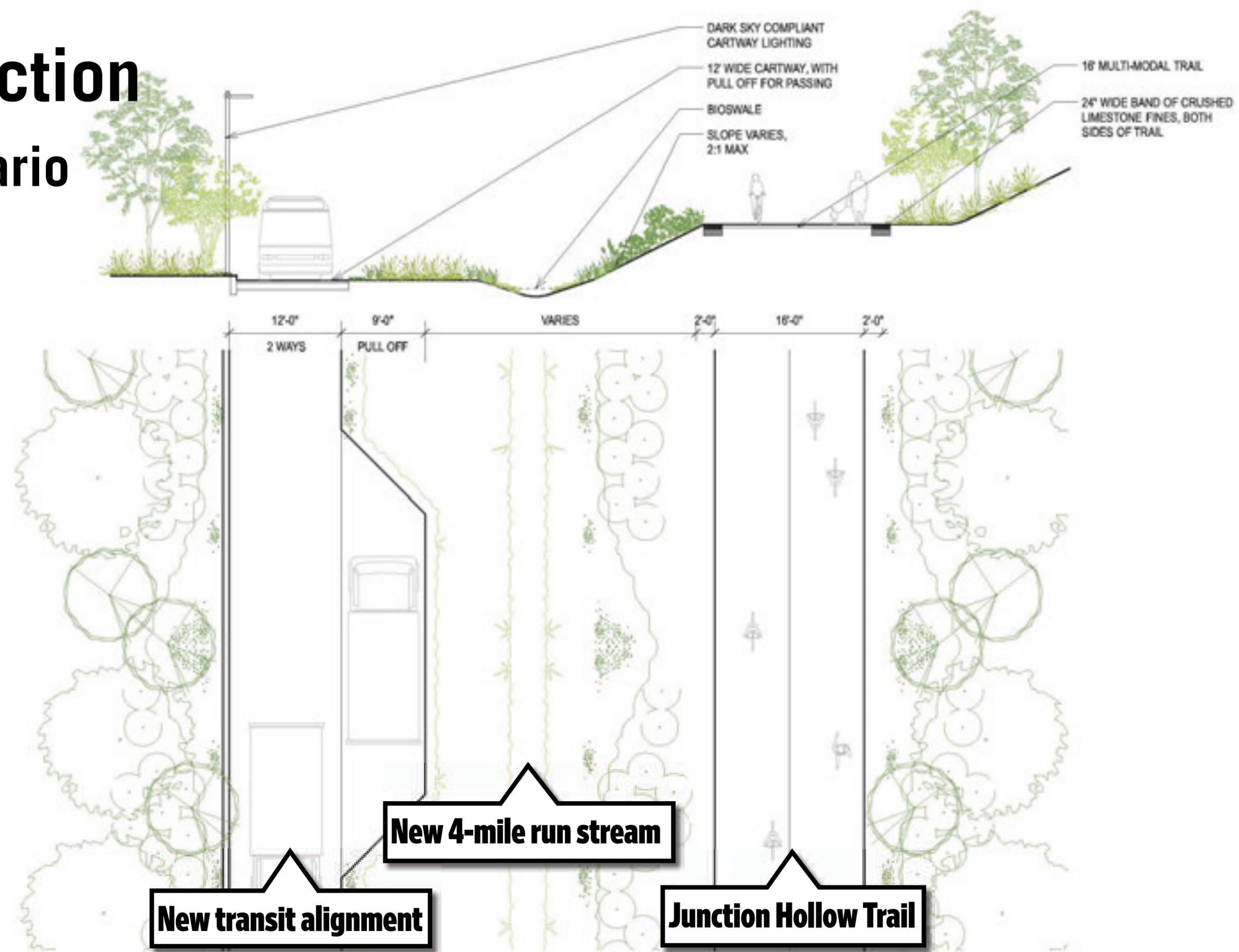
Maintain space for a field

Reorganized parking



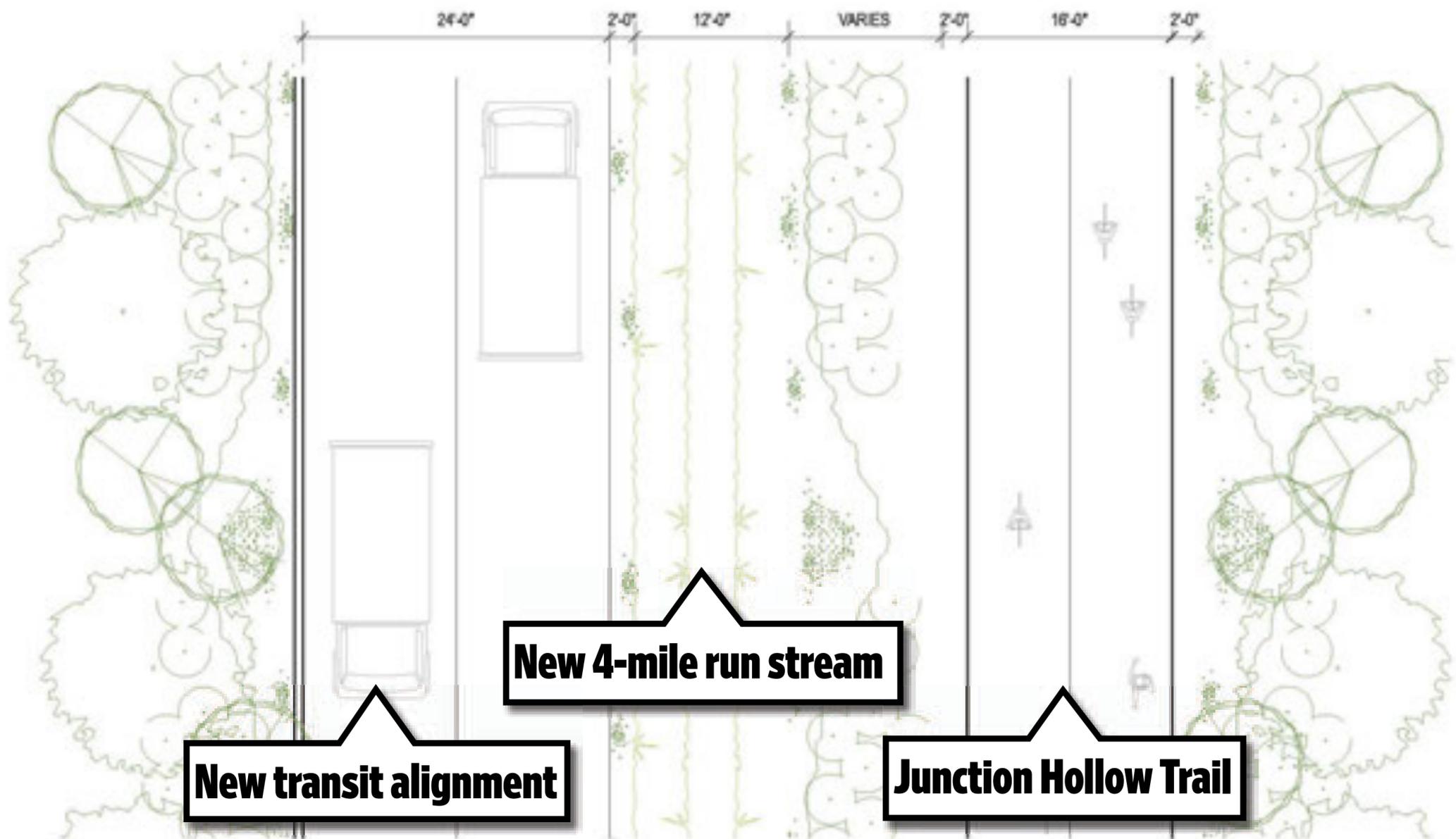
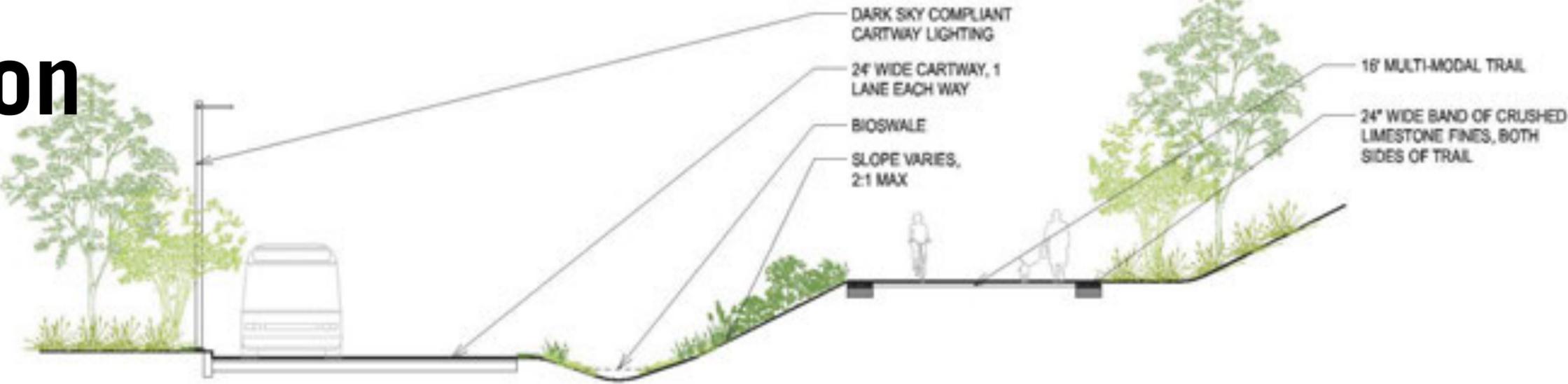
Conceptual Section

12' One Lane Scenario

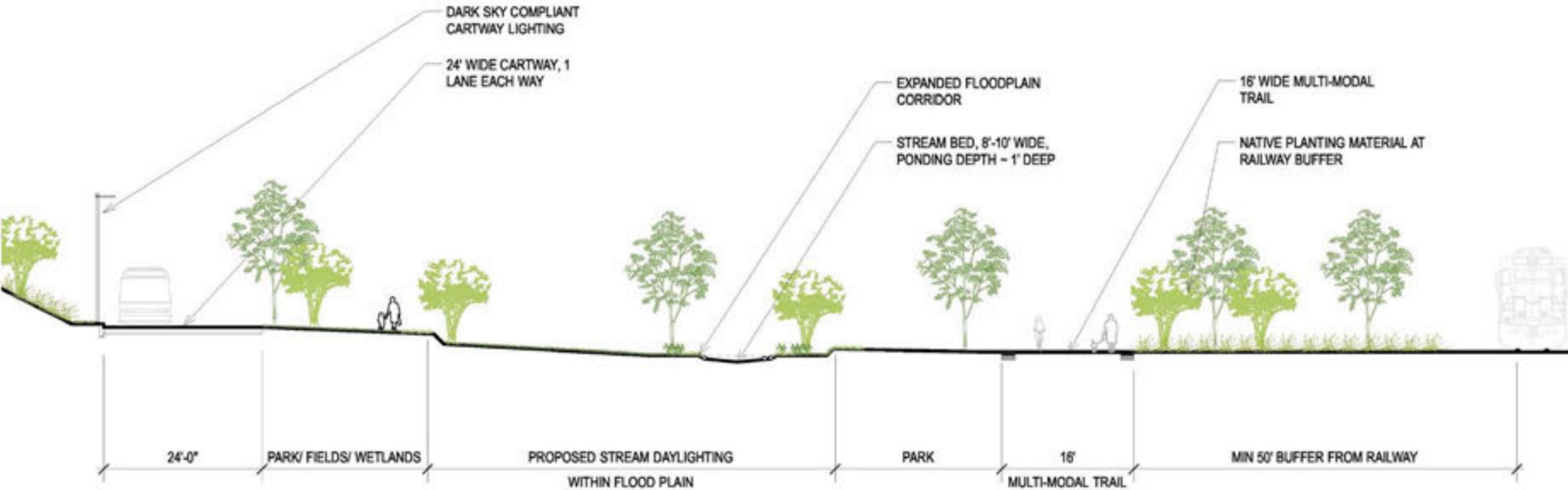


Conceptual Section

24' Two Lane Scenario



Scenarios: Schenley Park

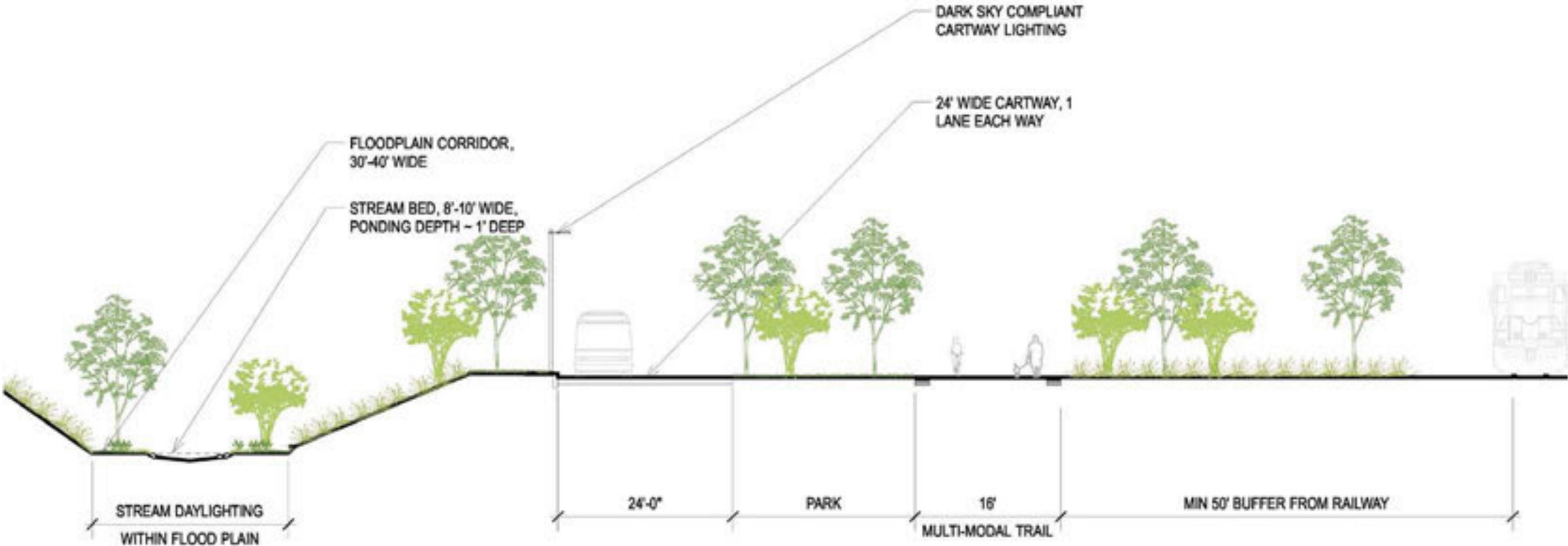


New transit alignment

New 4-mile run stream

Junction Hollow Trail

Scenarios: Schenley Park



New 4-mile run stream

New transit alignment

Junction Hollow Trail

Junction Hollow: Existing Conditions

Junction Hollow Trail

Panther Hollow
Lake

Phipps Conservatory

Schenley Drive

Boundary St

Dawson St

Bates St

S Bouquet

Joncaire St

Parkview Ave

Junction Hollow: Scenario A

Junction Hollow Trail

Possible Trail Bridge

Panther Hollow Lake

Phipps Conservatory

Schenley Drive

Boundary St

Dawson St

Parkview Ave

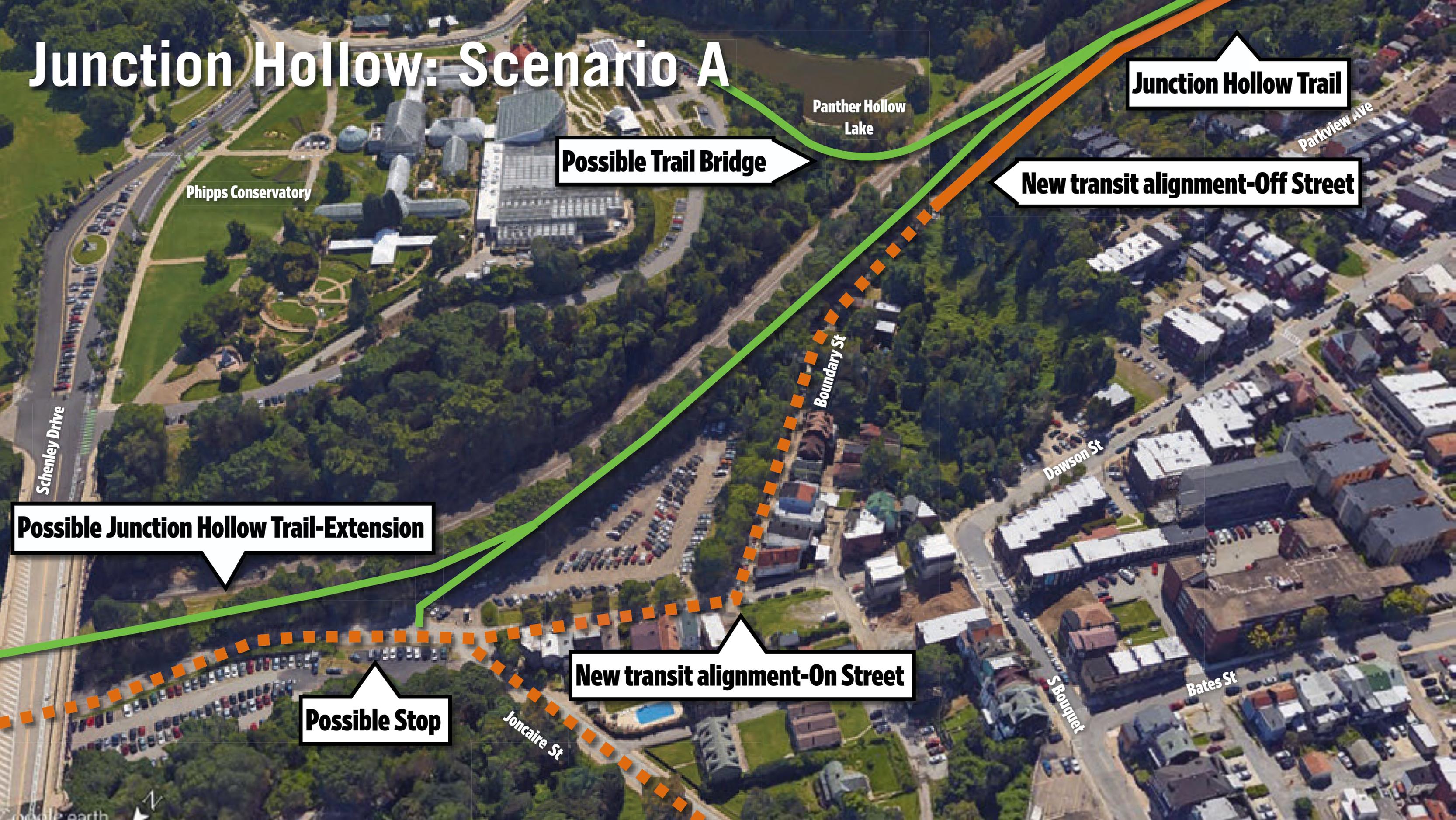
Possible Junction Hollow Trail-Extension

Joncaire St

S Bouquet

Bates St

Junction Hollow: Scenario A



Junction Hollow Trail

Possible Trail Bridge

New transit alignment-Off Street

Possible Junction Hollow Trail-Extension

Possible Stop

New transit alignment-On Street

Panther Hollow Lake

Phipps Conservatory

Schenley Drive

Boundary St

Dawson St

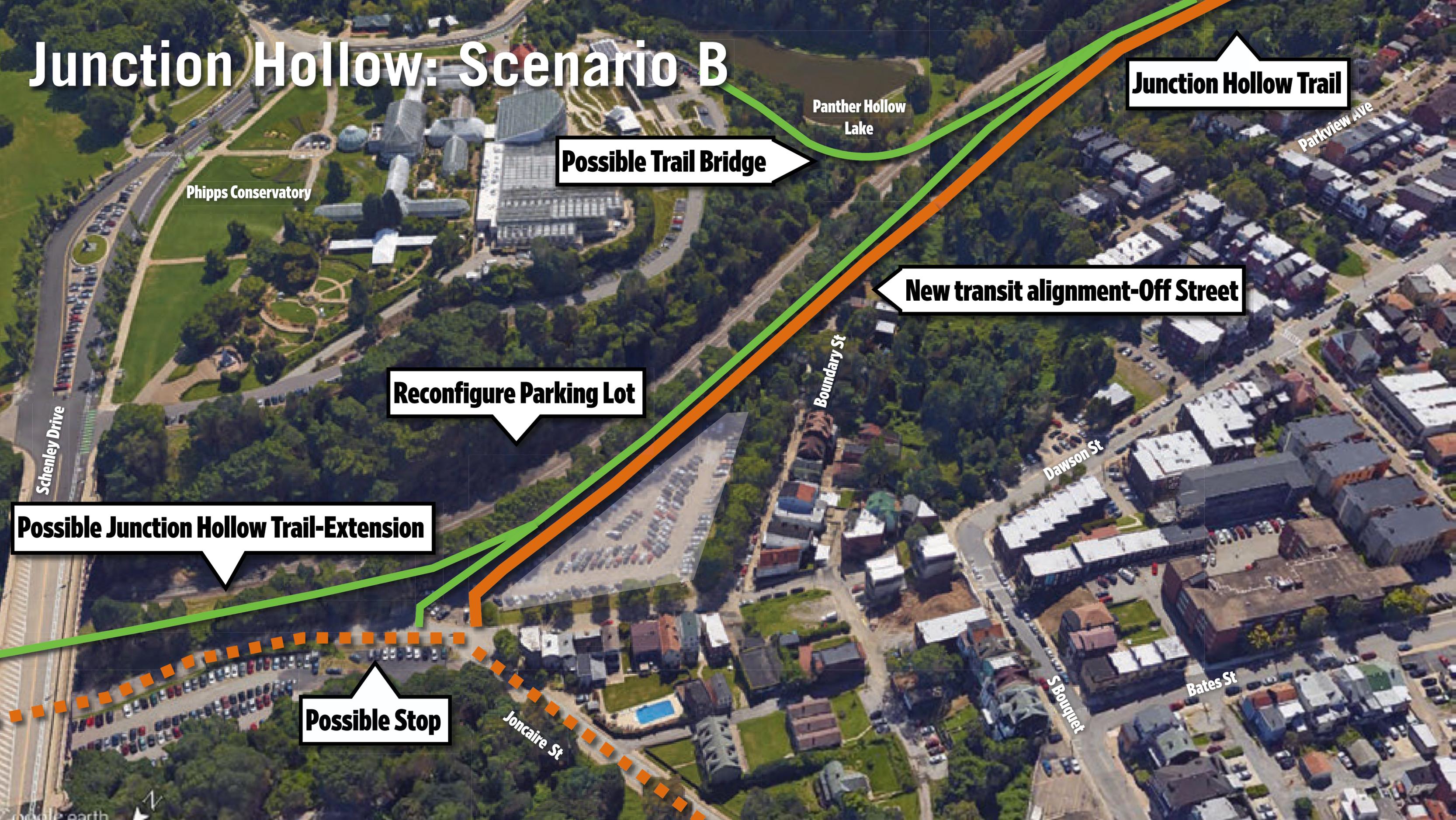
S Bouquet

Bates St

Joncaire St

Parkview Ave

Junction Hollow: Scenario B



Junction Hollow Trail

Possible Trail Bridge

New transit alignment-Off Street

Reconfigure Parking Lot

Possible Junction Hollow Trail-Extension

Possible Stop

Phipps Conservatory

Panther Hollow Lake

Schenley Drive

Boundary St

Dawson St

S Bouquet

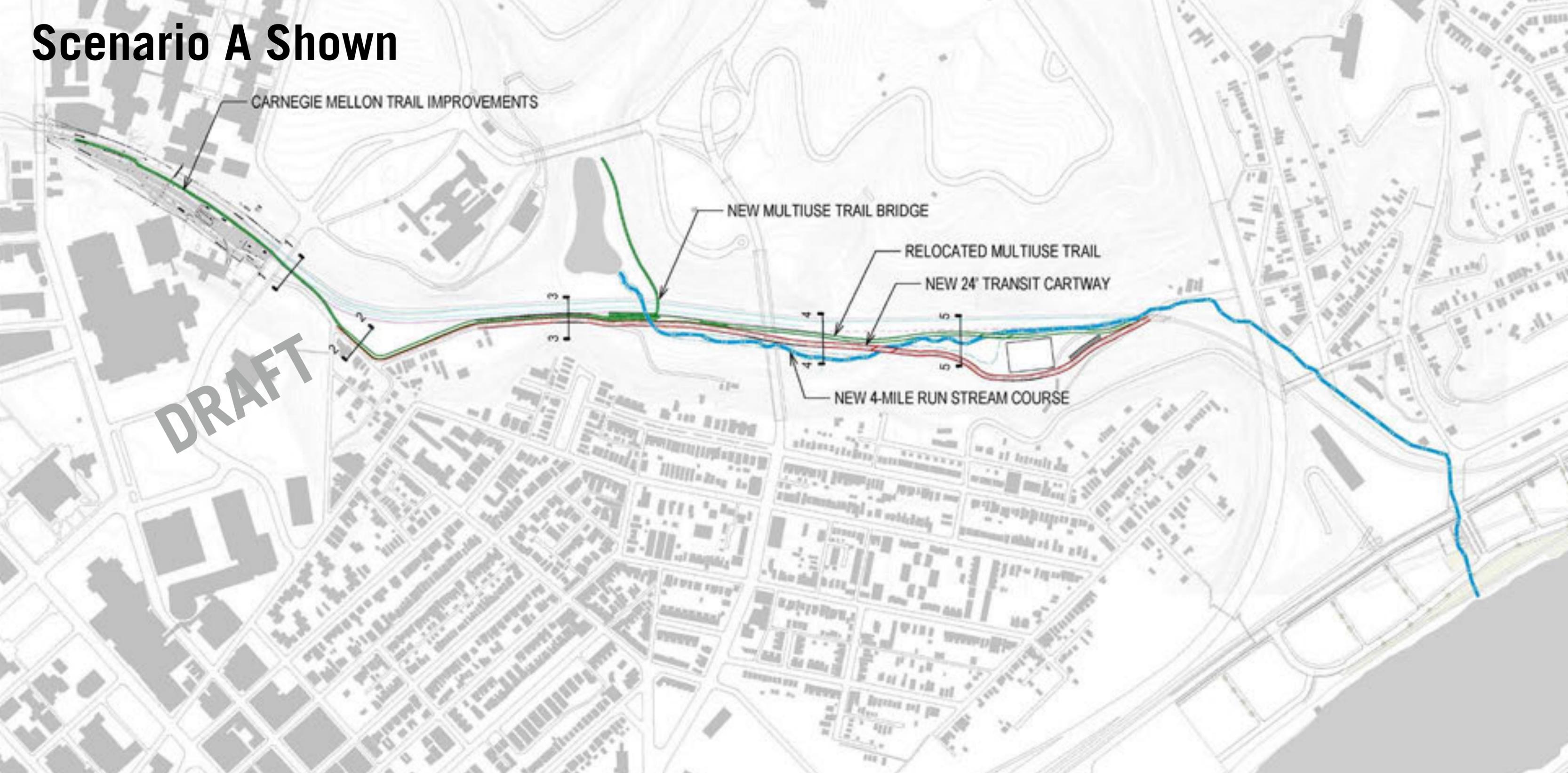
Bates St

Joncaire St

Parkview Ave

Conceptual Alignment Scenarios in Process

Scenario A Shown



V. Community Presentation

VI. Discussion