GAC - MUSCATINE, IA

DESIGN CHARRETTE

JANUARY 4 – 6, 2017

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

STOCKWELL

MUSCATINE Iowa

"Pearl of the Mississippi"

Meeting Agenda

01 WHAT we are doing for you

02 your ASSESSMENT of existing facilities

03 your DESIRES for future improvements

04 your OPINION of design options

05 moving FORWARD

Planning Limits

- **Grandview Ave.**
  - 2.2 miles
  - US 61 to Franklin St.

Project Approach

01 inventory & ANALYSIS

02 stakeholder INPUT

03 preliminary DESIGN & review

04 refine & final master REPORT

Complete Streets

aim to improve quality of life and promote healthy living for users by creating streets that are both great public spaces and sustainable transportation networks.

Multimodal

Integrate:
Pedestrians
People with Disabilities
Bicyclists
Transit Users
Motor Vehicle Drivers

Goal:
to ensure that streets are shared by all users and not dominated by cars

Green

Integrate:
Street Trees
Rain Gardens
Bio-Swales
Paving Materials
Permeable Surfaces

Goal:
promote an environmentally sensitive, sustainable use of the public right-of-way

Smart

Integrate:
Intelligent Signals
Smart Meters
Electric Vehicle Sharing
Car and Bicycle Sharing
Way-Finding
Social Networks

Goal:
greater system efficiencies and user convenience

Key Grandview Avenue Locations

01 US Hwy 61 Intersection

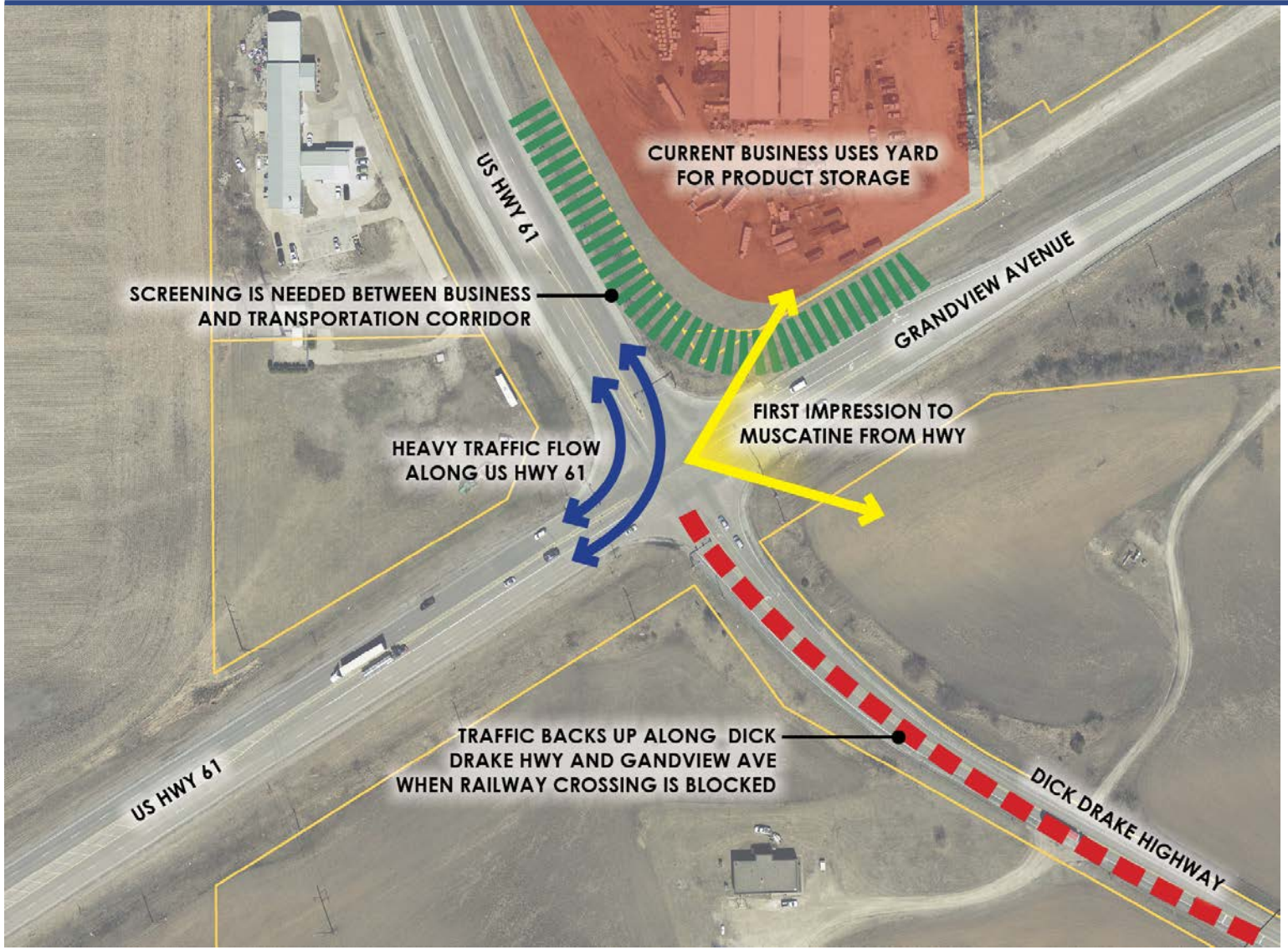
02 Houser & Sampson Street Intersection

03 Brier's Ditch

04 Warren & Oregon Street Intersection

05 Block between Bond & Franklin Streets

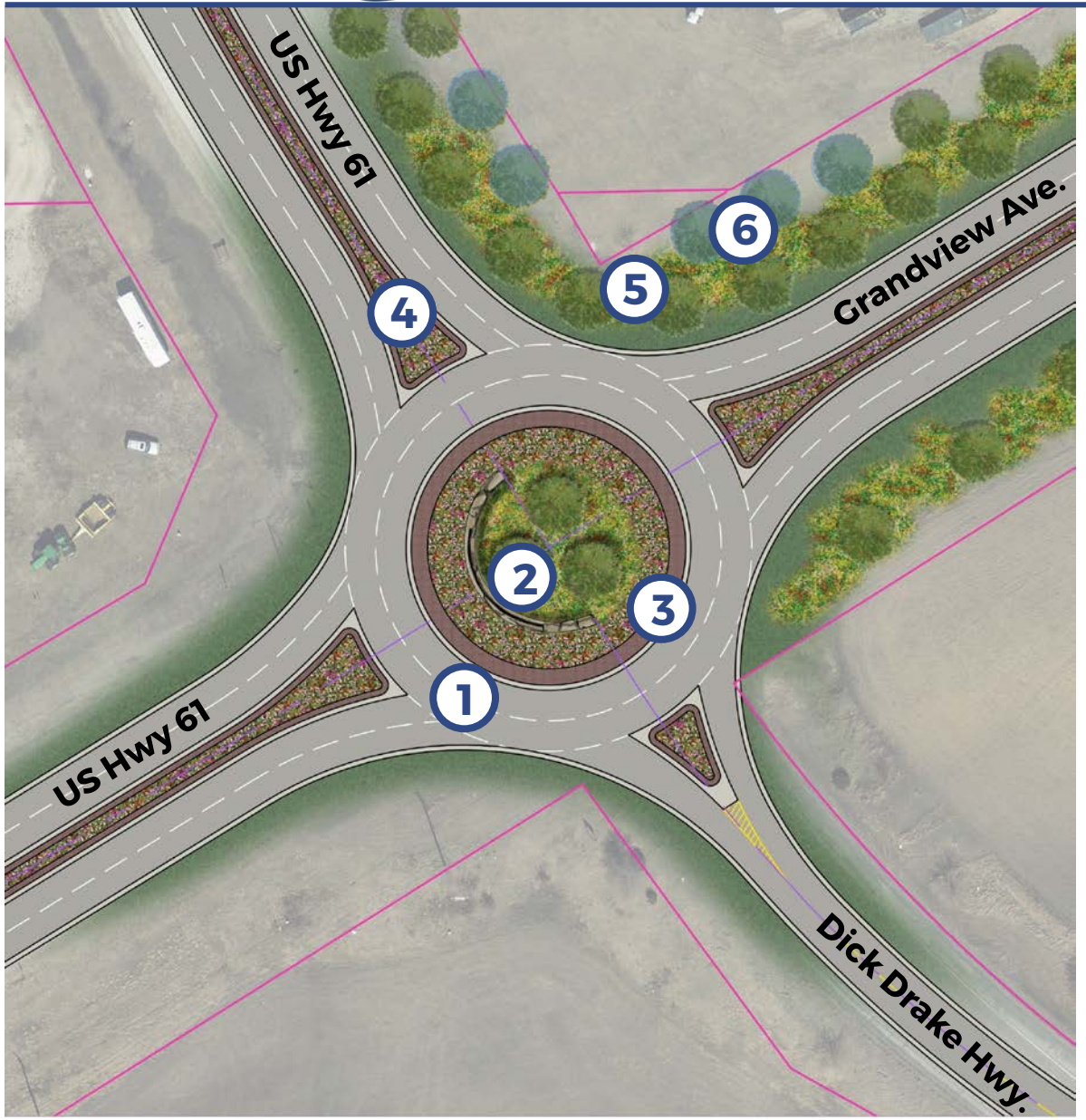
Site 01: US 61 / Dick Drake Hwy. Intersection



Existing Conditions & Considerations:

- Very busy intersection
- No community gateway elements
- Lots of truck traffic
- Primarily a vehicular intersection with no pedestrian traffic

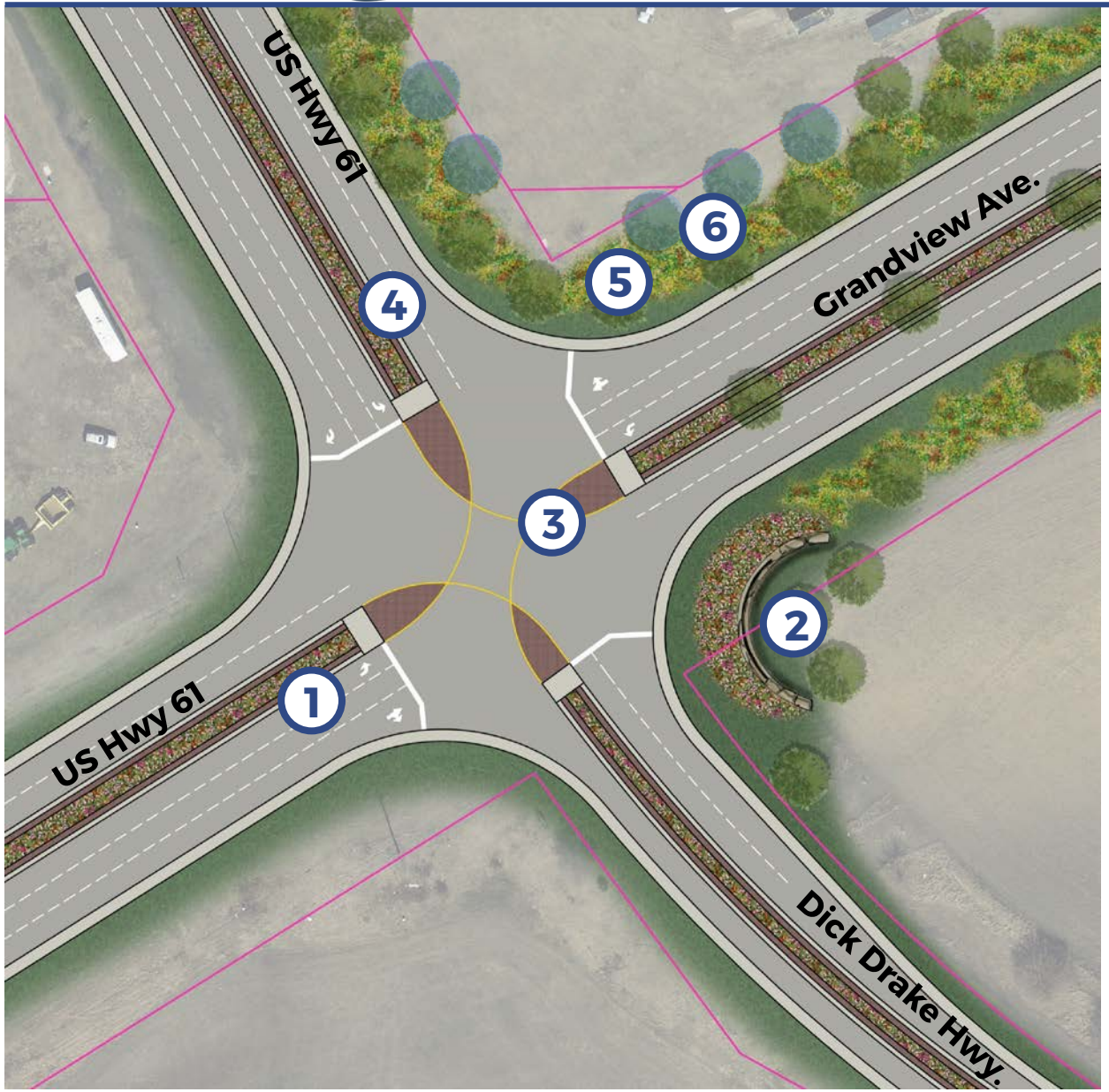
Site 01: US 61 / Dick Drake Hwy. Intersection



Option 'A' Design Components:

1. Two-lane round-a-bout
2. Muscatine monument signage
3. Paver island apron
4. Landscaped median with paver splash pad (typ.)
5. Storm water swales with native plants and trees (typ.)
6. Evergreen screening (typ.)

Site 01: US 61 / Dick Drake Hwy. Intersection



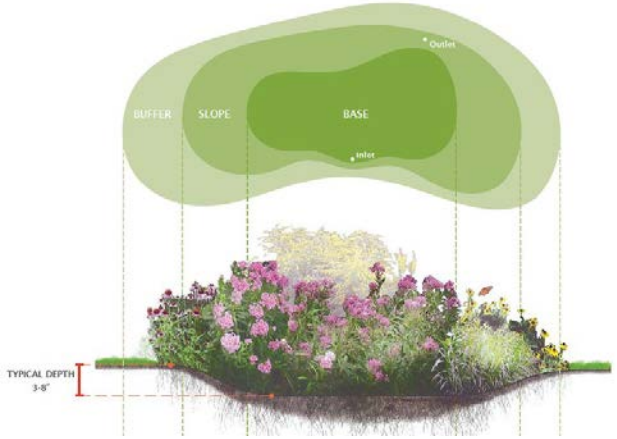
Option 'B' Design Components:

1. Designated left turn lane (typ.)
2. Muscatine monument signage
3. Intersection specialty paving
4. Landscaped median with paver splash pad (typ.)
5. Storm water swales with native plants and trees (typ.)
6. Evergreen screening (typ.)

Site 01: US 61 / Dick Drake Hwy. Intersection

Design Precedents:

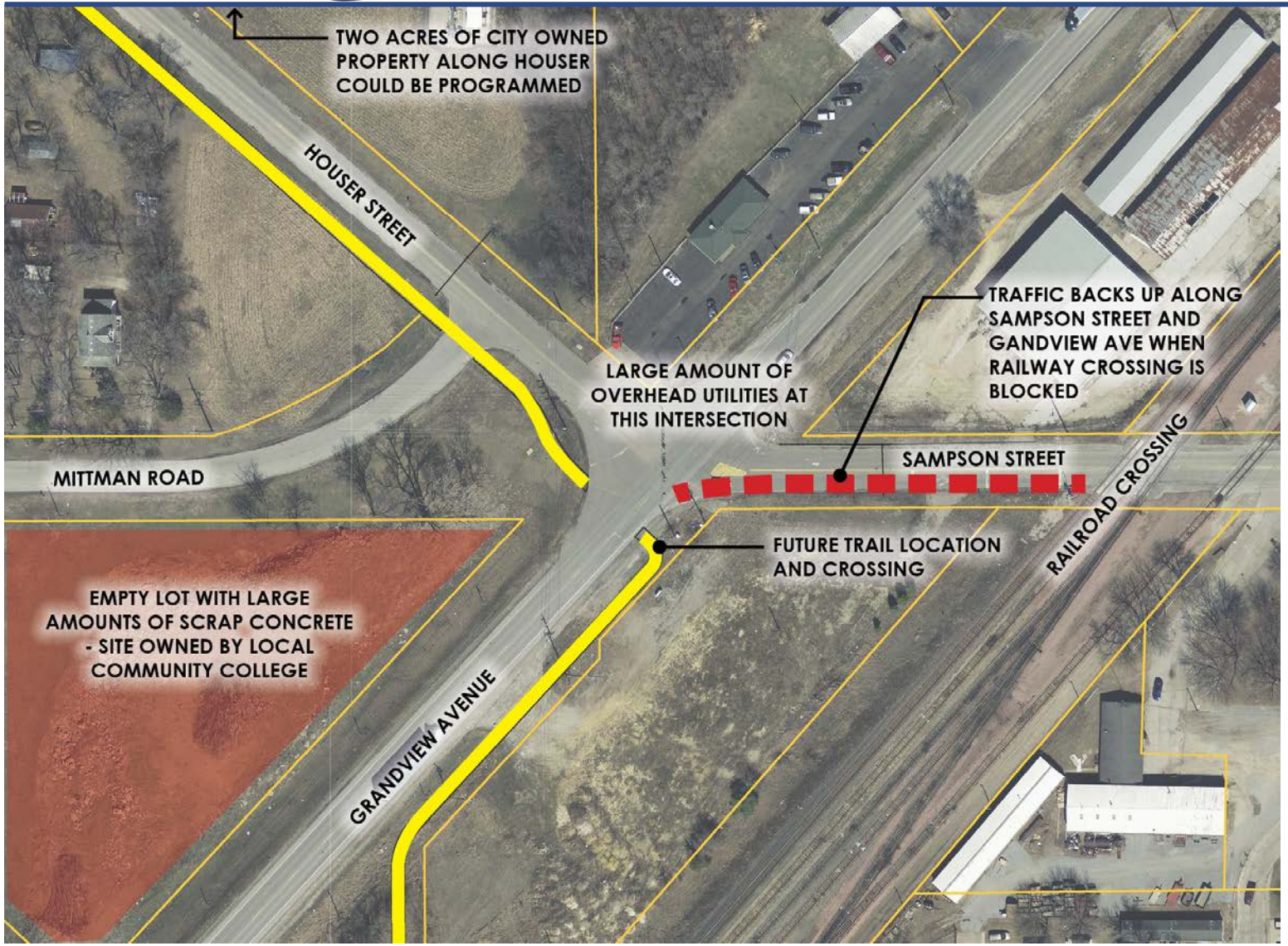
Bioswale



Round-a-bout

Applicable Areas:

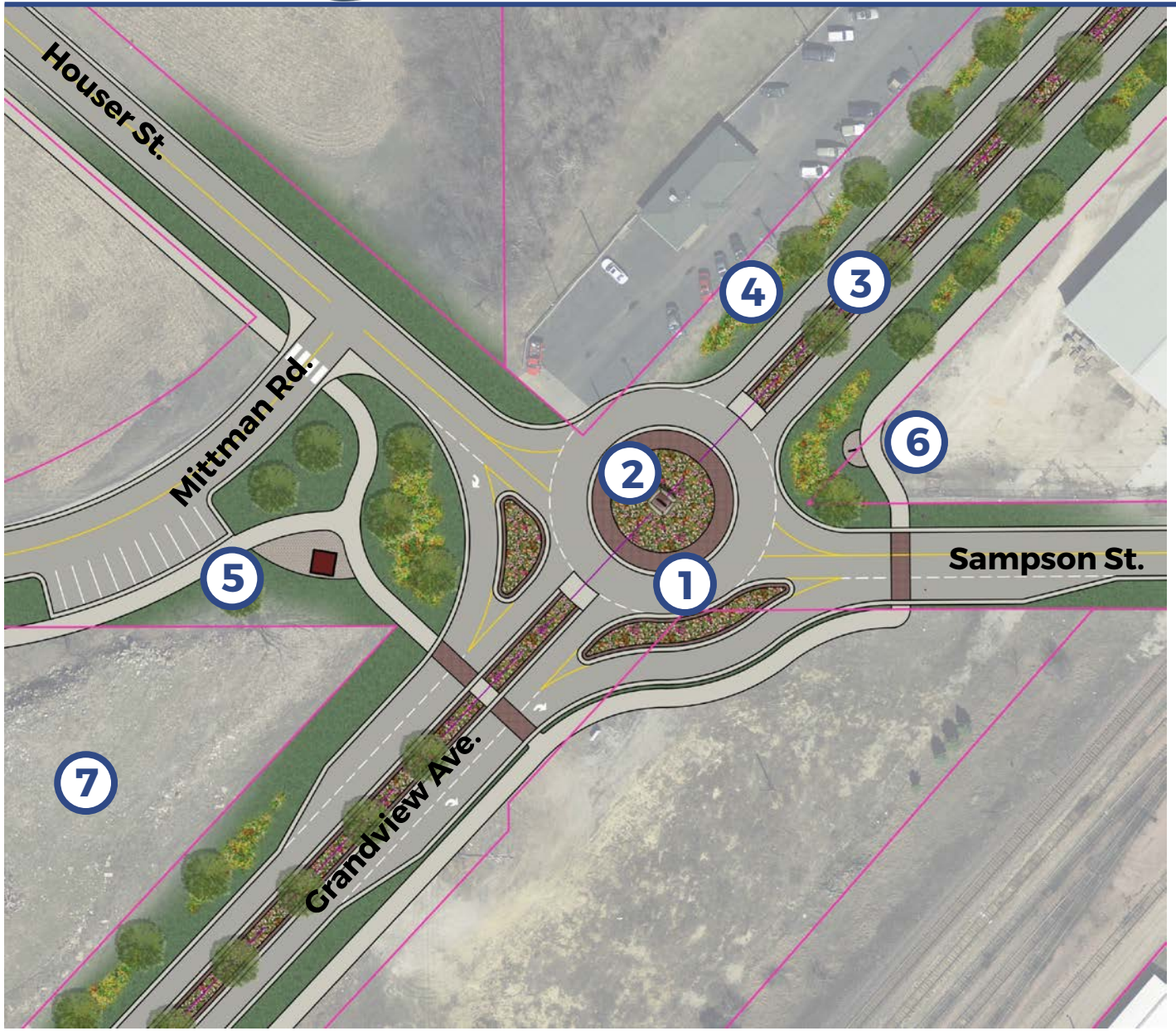
Site 02: Houser St. / Sampson St. Intersection



Existing Conditions & Considerations:

- Could act as a smaller scale community gateway
- Atypical intersection
- Hazardous conditions for pedestrians
- New trail crossing

Site 02: Houser St. / Sampson St. Intersection

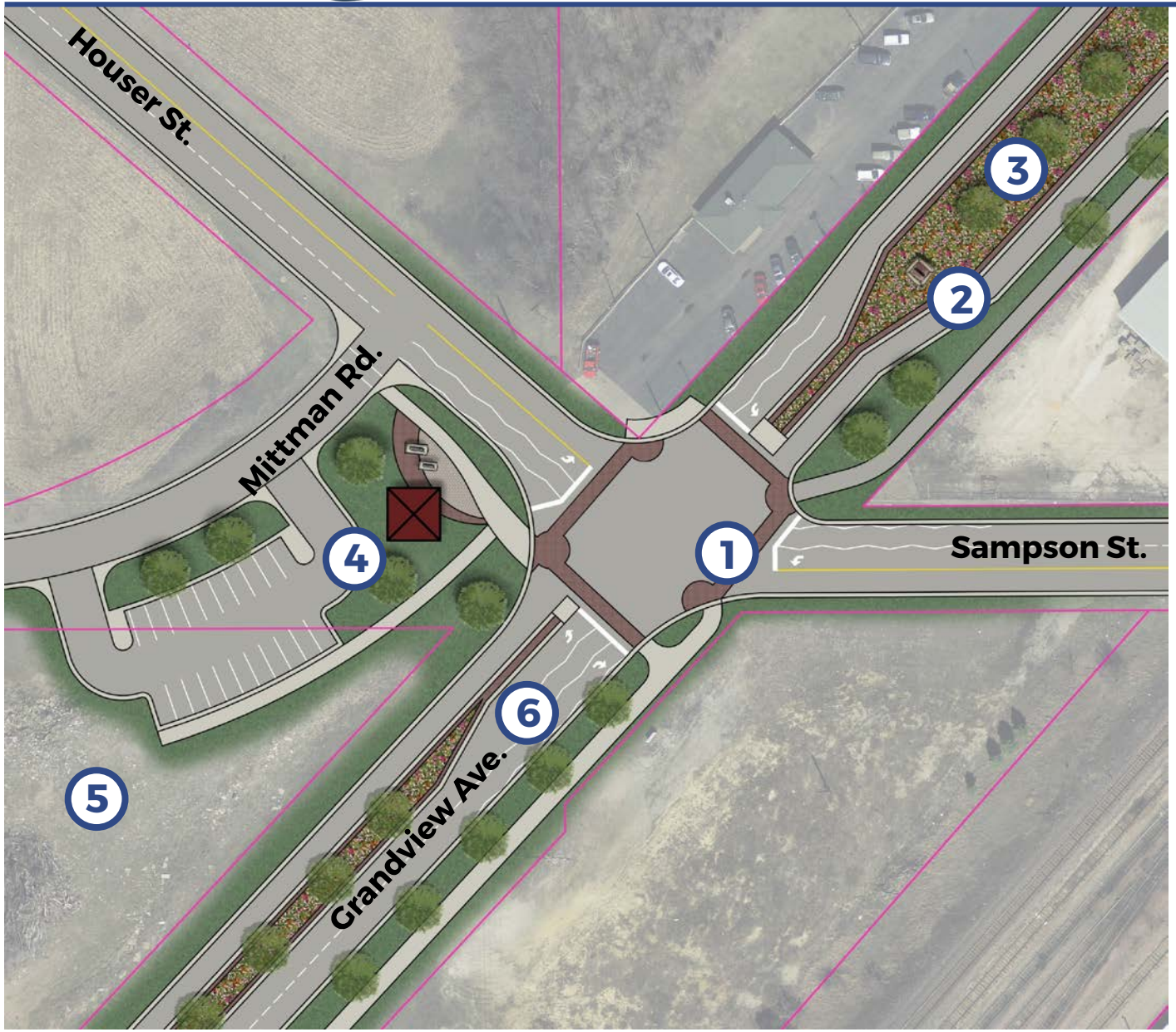


Option 'A' Design

Components:

1. Single-lane round-a-bout
2. Muscatine monument signage
3. Landscaped median with paver splash pad (typ.)
4. Storm water swales with native plants and trees (typ.)
5. Trailhead with shelter
6. Trail system signage
7. Bike terrain park

Site 02: Houser St. / Sampson St. Intersection



Option 'B' Design

Components:

1. Specialty paving crosswalks
2. Muscatine monument signage
3. Bioswale median with paver splash pad (typ.)
4. Trailhead with shelter
5. Neighborhood park
6. Zig-zag pavement markings

Site 02: Houser St. / Sampson St. Intersection

Design Precedents:

Round-a-bout

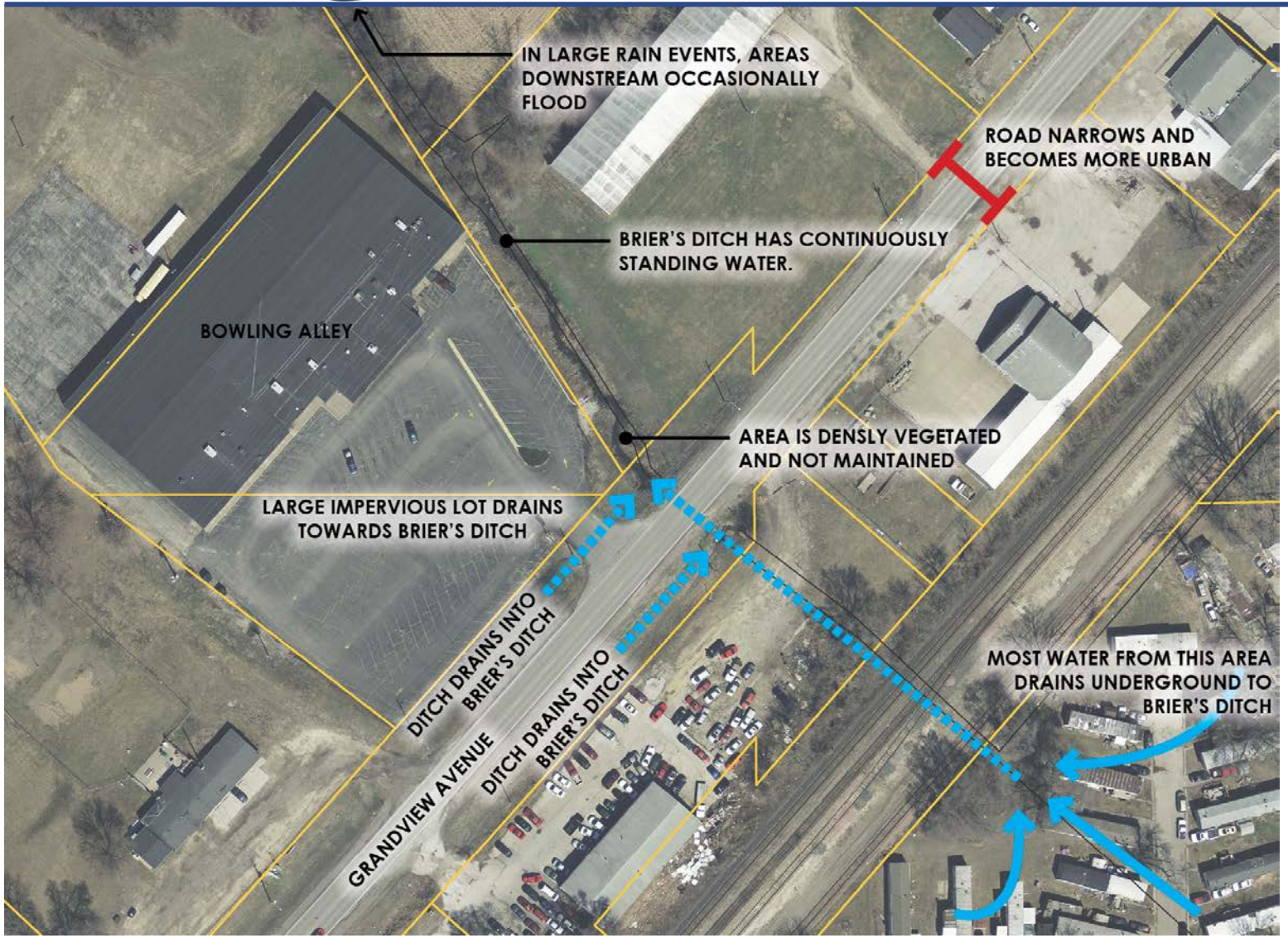
Zig-zag Pavement Markings

Art Shelter

Bike Terrain Park

Applicable Areas:

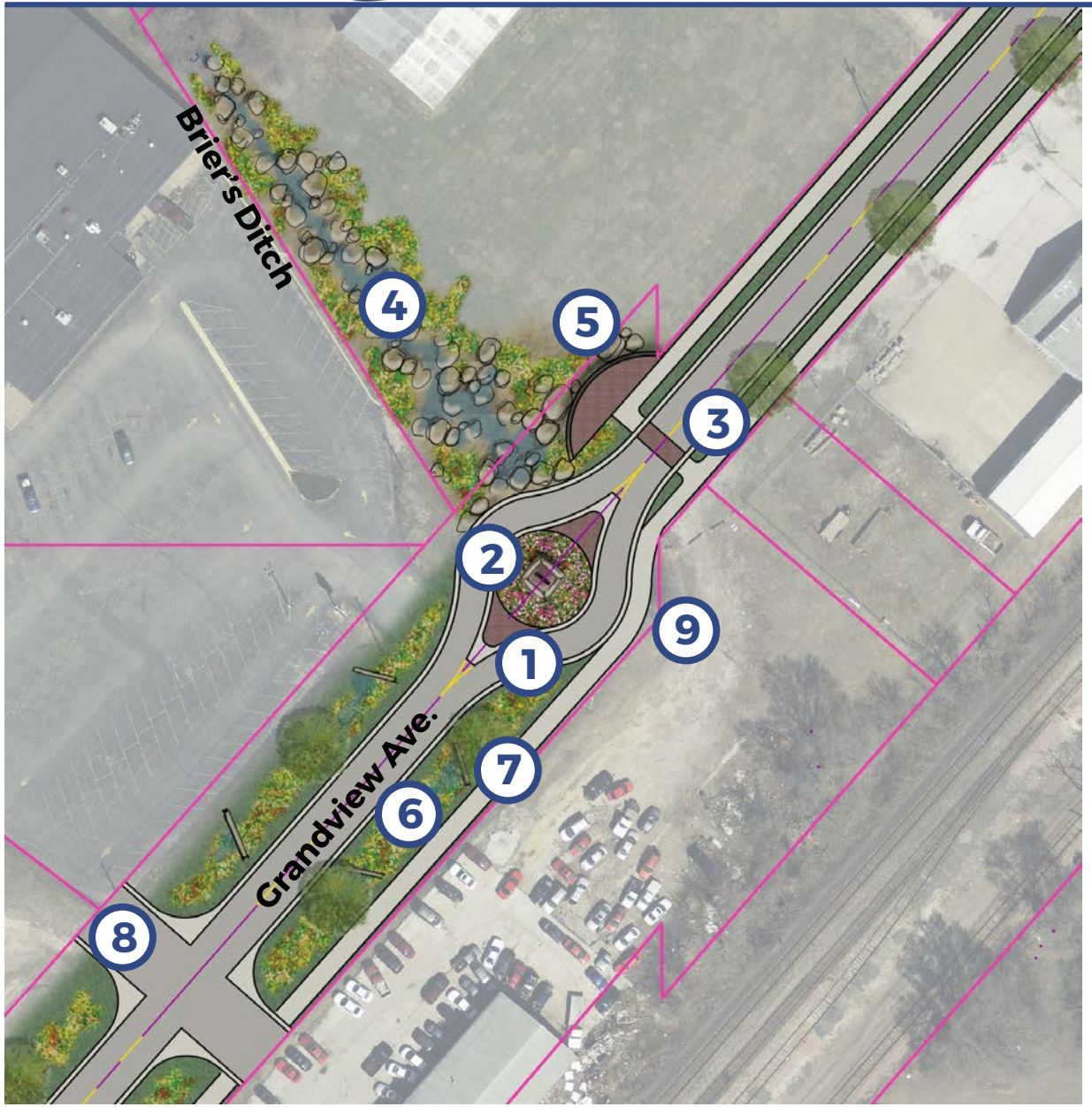
Site 03: Brier's Ditch



Existing Conditions & Considerations:

- Major drainageway for corridor
- No pedestrian routes

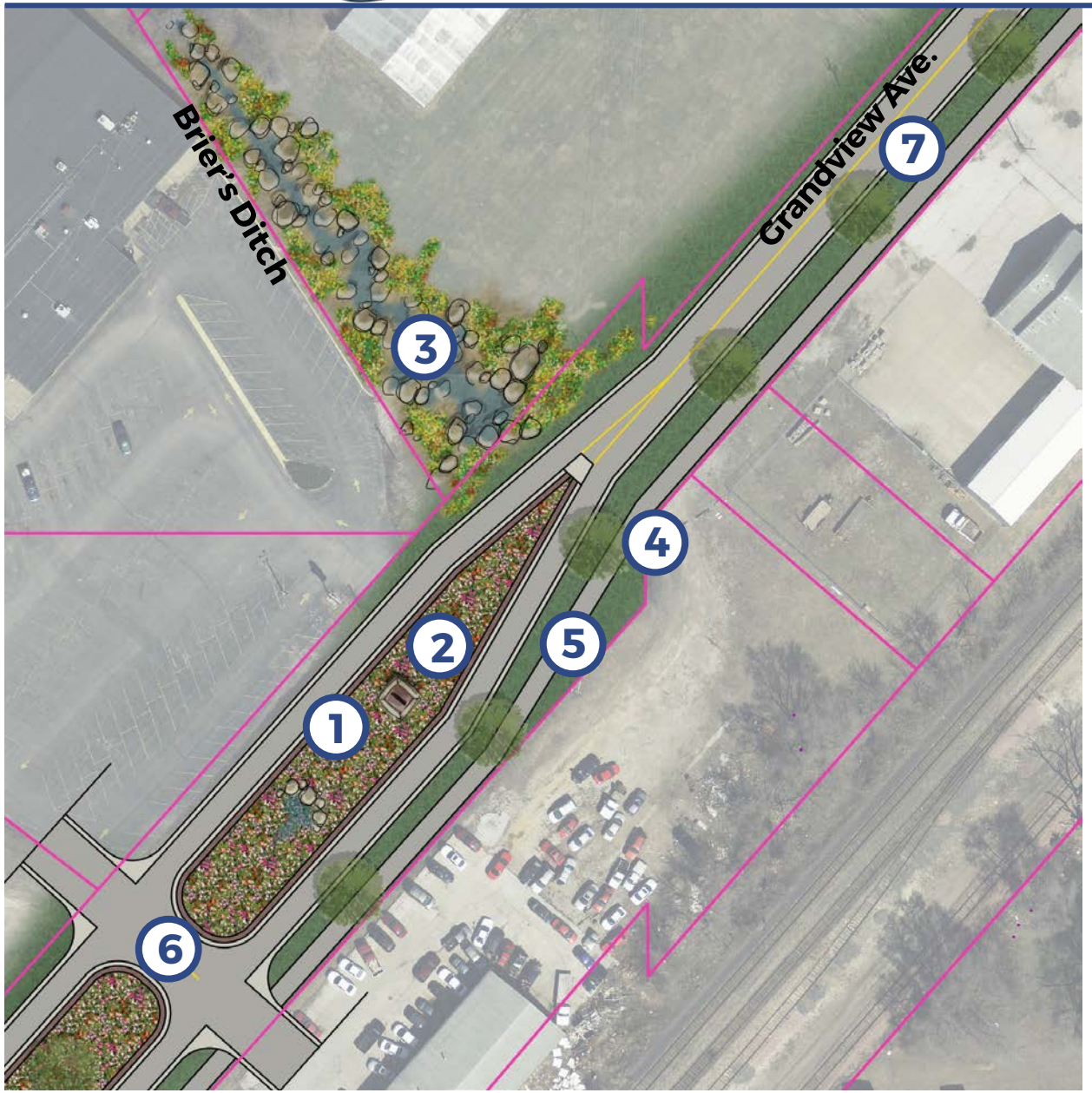
Site 03: Brier's Ditch



Option 'A' Design Components:

1. Single lane "eye-brow"
2. Muscatine monument signage
3. Specialty paving crosswalk
4. Add rock outcroppings and river rock bottom with native plants
5. Brier's overlook with trail head
6. Storm water swales with native plants, trees, and stone (typ.)
7. Continuation of trail
8. Consolidate business driveways
9. Extend storm sewer under road

Site 03: Brier's Ditch



Option 'B' Design Components:

1. Bioswale median with landscaping and stone elements
2. Muscatine monument signage
3. Add rock outcroppings and river rock bottom with native plants
4. Extend storm sewer under road
5. Continuation of trail
6. Consolidate business driveways
7. Offset roadway for trail buffer

Site 03: Brier's Ditch

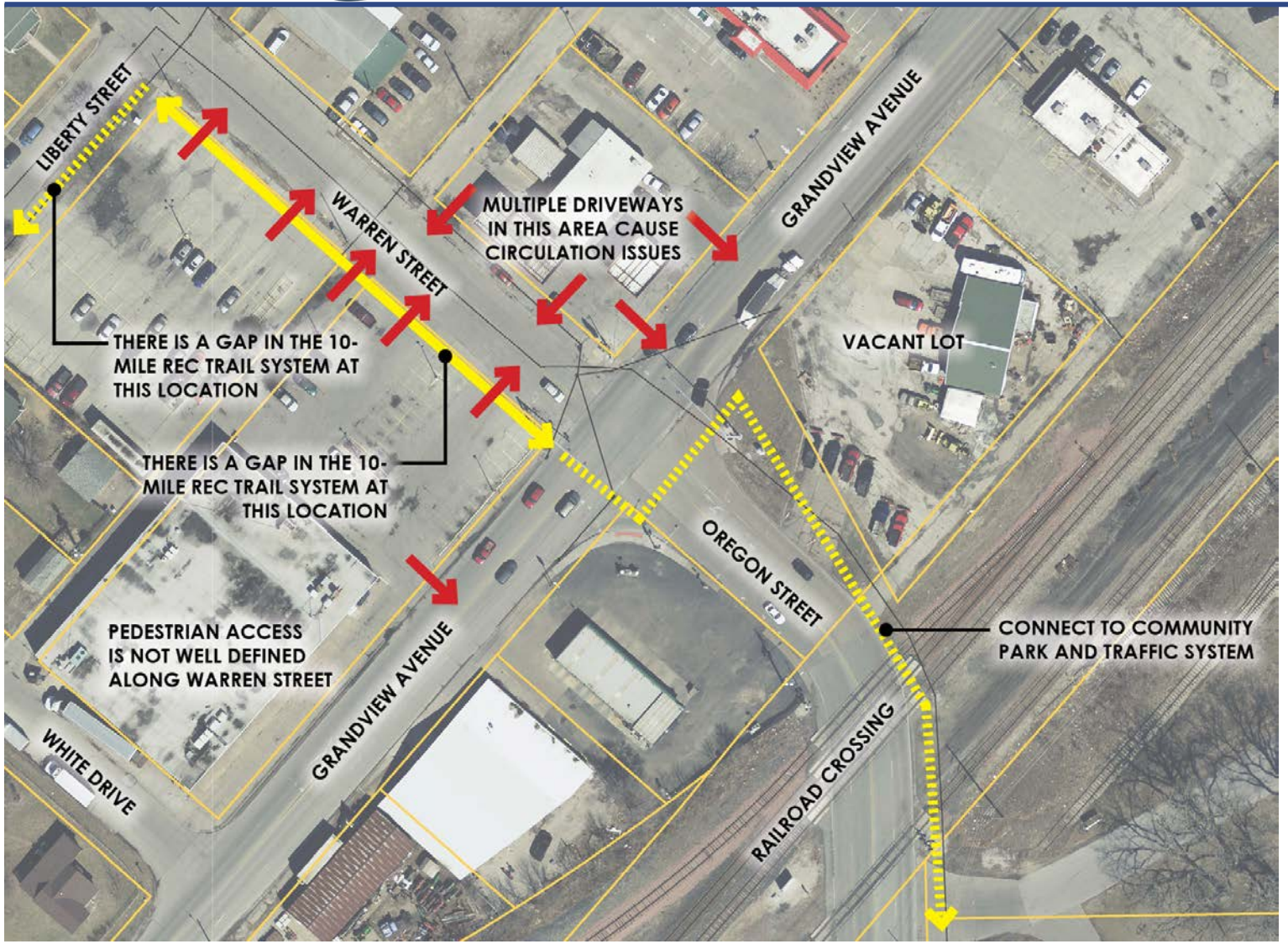
Design Precedents:

Boulder Stream

Bioswale Median

Applicable Areas:

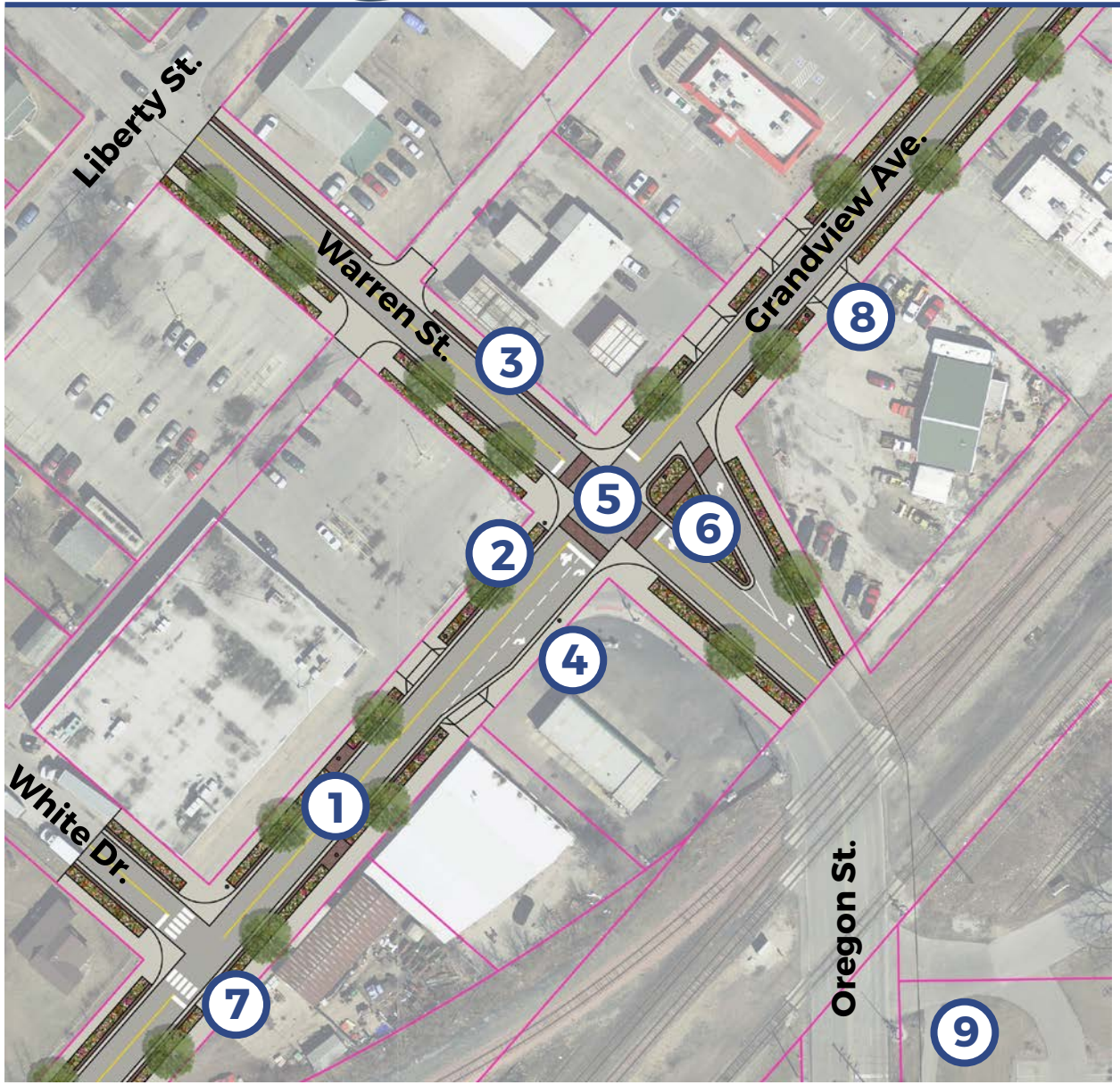
Site 04: Warren St. / Oregon St. Intersection



Existing Conditions & Considerations:

- Narrow sidewalks and fast moving traffic
- No green space or shade
- Hazardous pedestrian crossings

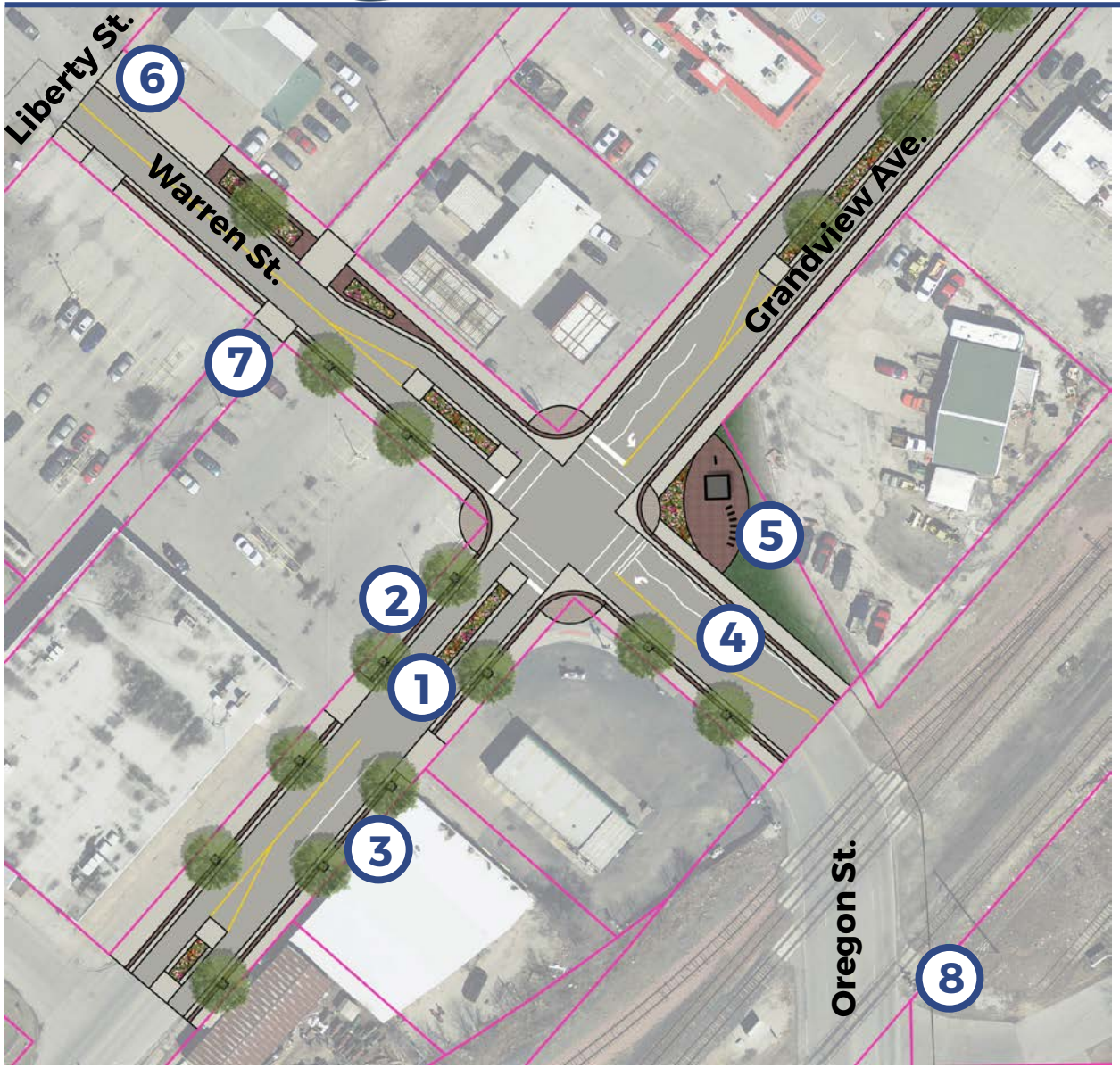
Site 04: Warren St. / Oregon St. Intersection



Option 'A' Design Components:

1. Two-lane road
2. Storm water planter (typ.)
3. Pervious paving system and splash pad (typ.)
4. Decorative street lighting (typ.)
5. Specialty paving crosswalks (typ.)
6. Right turn only and landscape median
7. Trail continuation
8. Relocate business driveway
9. Trail head in park

Site 04: Warren St. / Oregon St. Intersection



Option 'B' Design Components:

1. Landscape median (typ.)
2. Tree grate with pervious paving (typ.)
3. Decorative street lighting (typ.)
4. Zig-zag pavement markings (typ.)
5. Trail head with signage
6. Trail continuation
7. Relocate business driveway
8. Continue trail to park

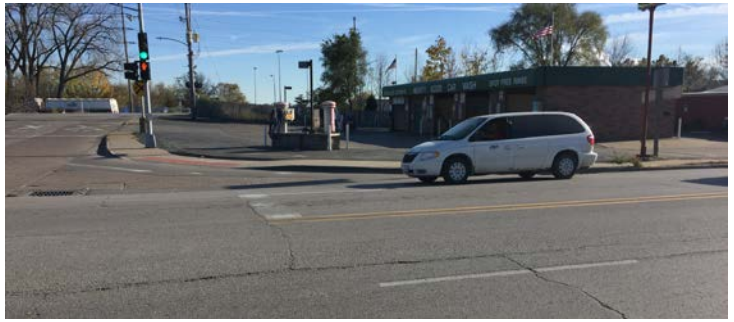
Site 04: Warren St. / Oregon St. Intersection

Design Precedents:

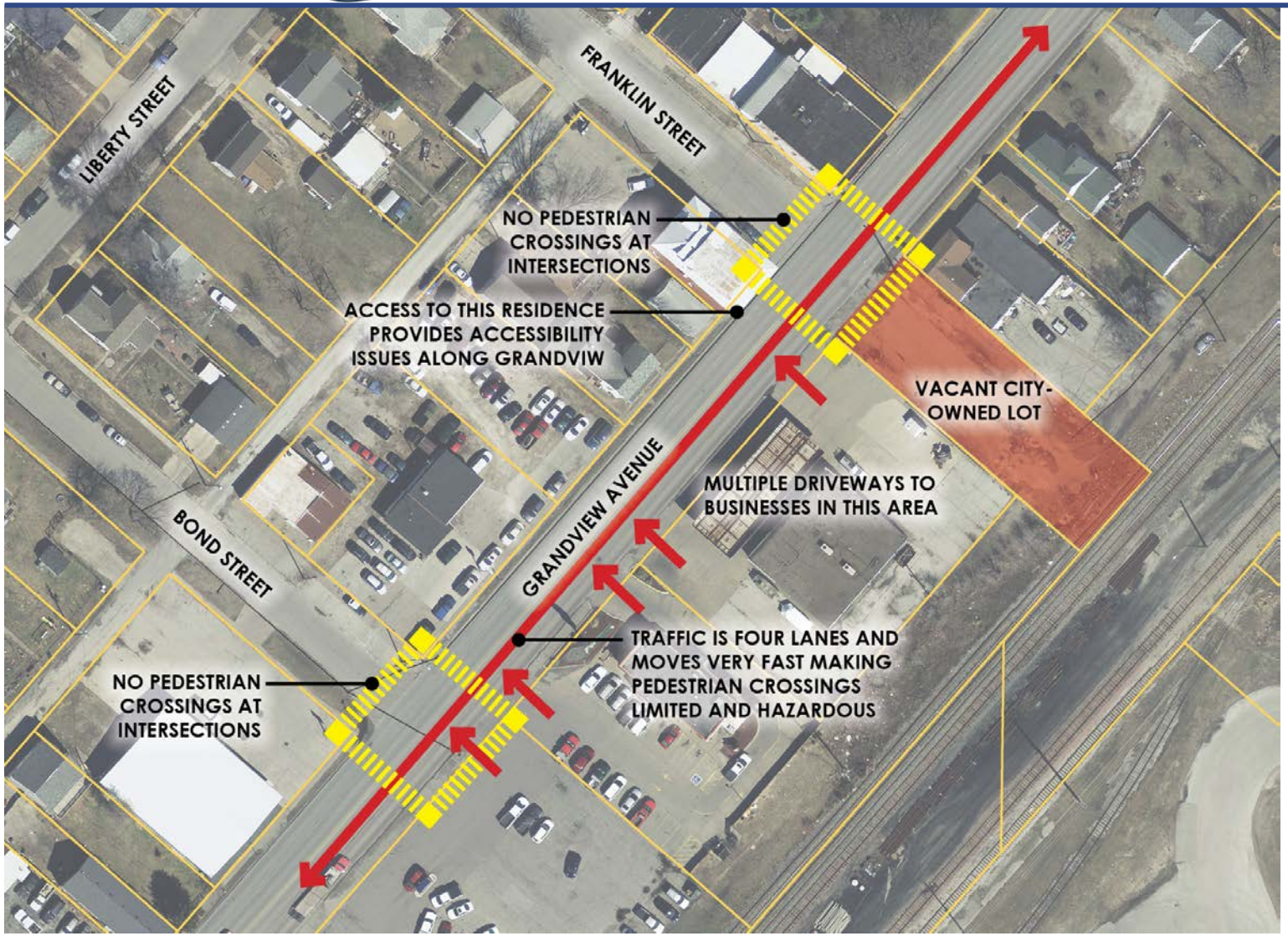
Storm Water Planter

Storm Water Tree Trench

Applicable Areas:



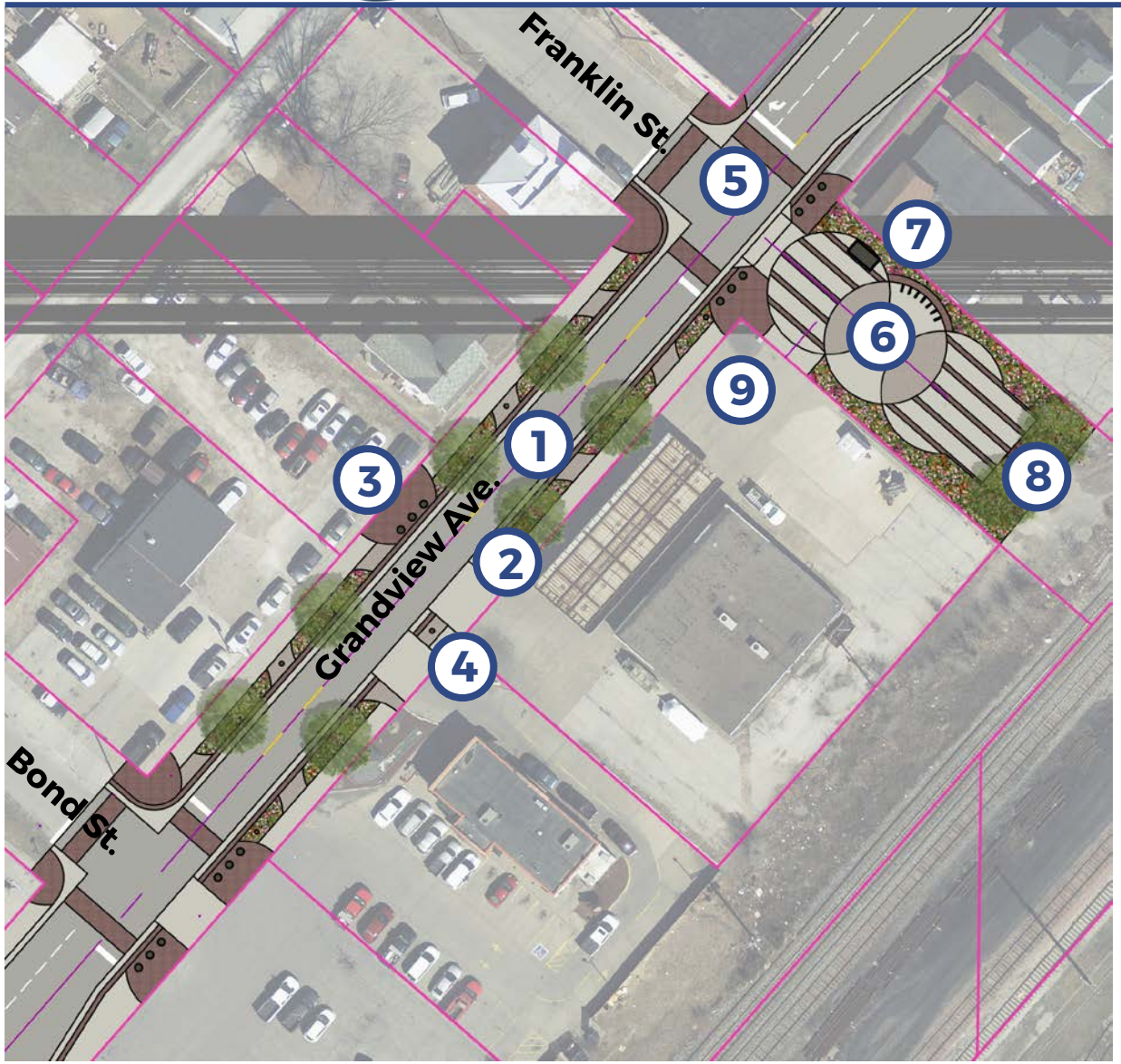
Site 05: Bond St. to Franklin St.



Existing Conditions & Considerations:

- True urban section of corridor
- Narrow sidewalks
- Uncomfortable pedestrian environment and no crossings
- No green space or shade

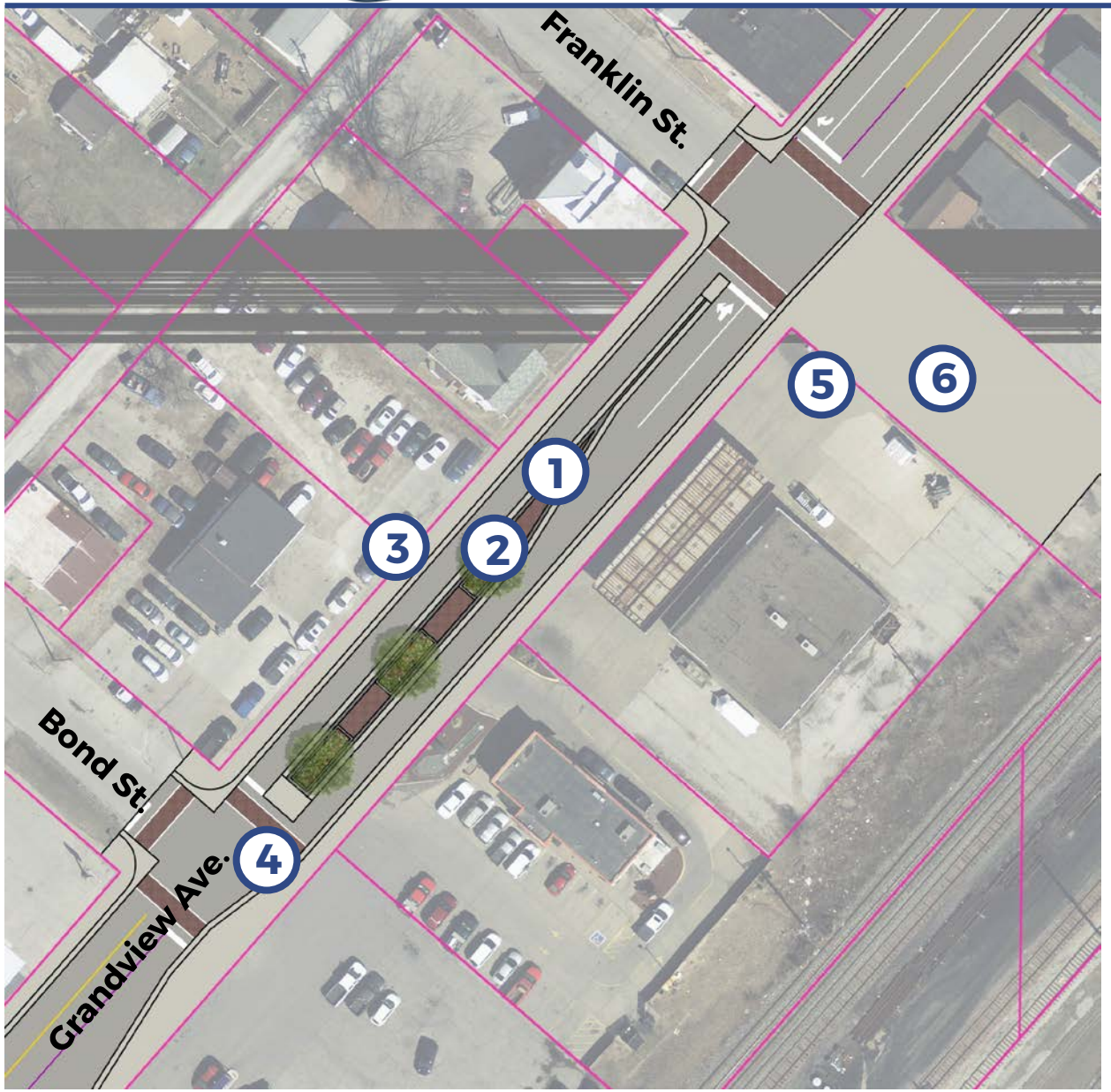
Site 05: Bond St. to Franklin St.



Option 'A' Design Components:

1. Two-lane road
2. Storm water planter (typ.)
3. Pervious paving system and splash pad (typ.)
4. Decorative street lighting (typ.)
5. Specialty paving crosswalks (typ.)
6. Pervious paving plaza/trailhead
7. Trail system signage and bike racks
8. Parking stalls for trailhead
9. Relocate business driveway

Site 05: Bond St. to Franklin St.



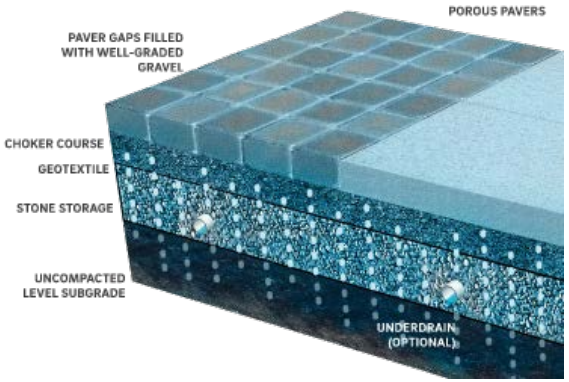
Option 'B' Design Components:

1. Pervious paving median
2. Raised landscape planter
3. Decorative street lighting (typ.)
4. Specialty paving crosswalks (typ.)
5. Relocate business driveway
6. Redevelopment opportunity

Site 05: Bond St. to Franklin St.

Design Precedents:

Pervious Paving



Storm Water Planter

Applicable Areas:

Moving Forward…

- ~~Site **Visit** – Nov. 9~~
- ~~Project Area **Assessment** – Dec. 2~~
- ~~**Initial Design** Schematics & Charrette Presentation – Dec. 9~~
- Three-Day Design **Charrette** – **TODAY**
- Design Options **Submitted** – Feb. 3
  - *EPA staff review*
- **Final** Design Options – Early March
- **First Draft** of Report – Mid-April
- **Final Report** Due – July

Now…

We want to know what you think!

Write your thoughts on a sticky note and place them on the printed images.

Thank you for your time!!!

Project Contacts:

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