

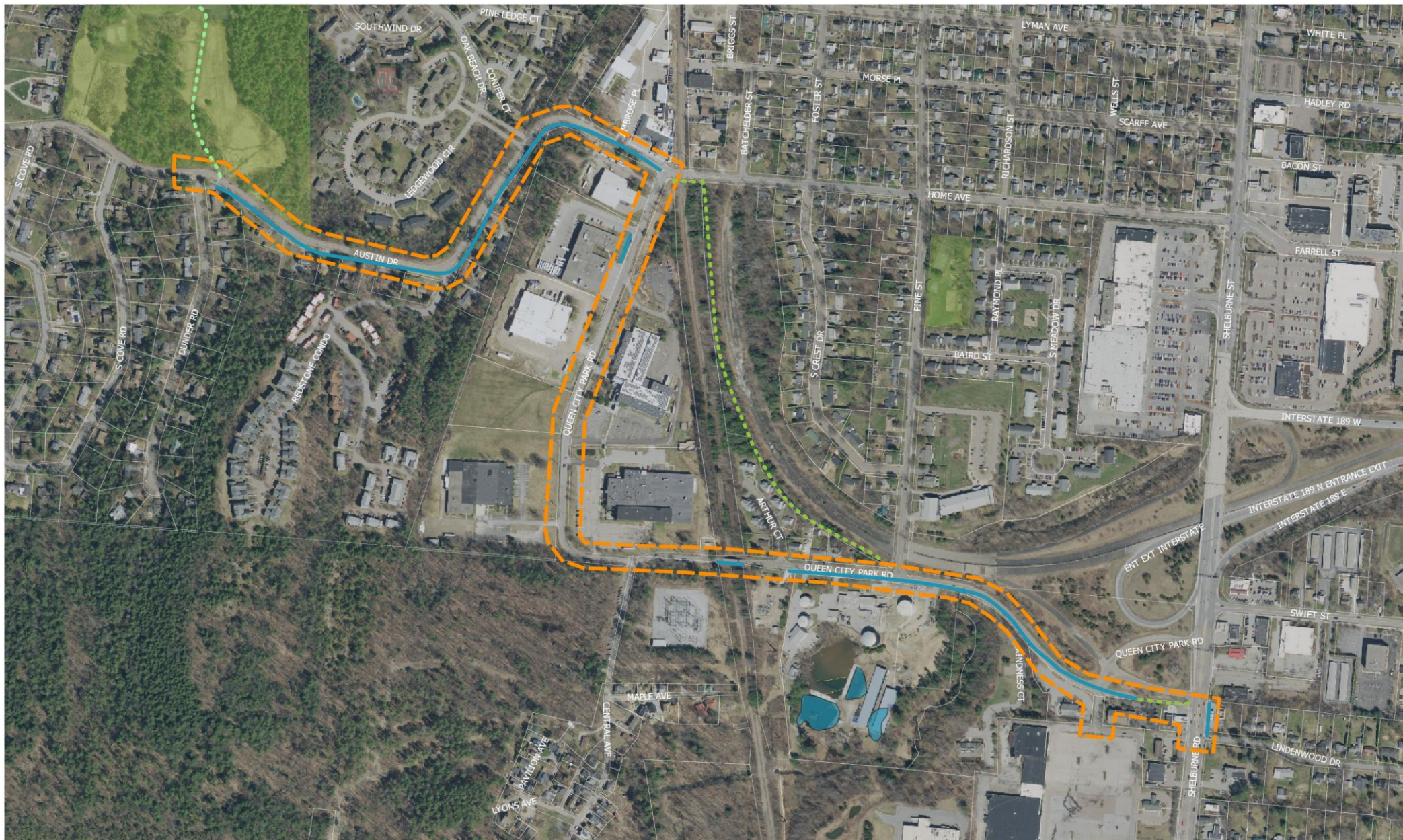
Queen City Park / Austin Scoping Study



Initial alternatives

Agenda

- Update on recent progress
- Review and discuss alternatives
- Schedule and next steps

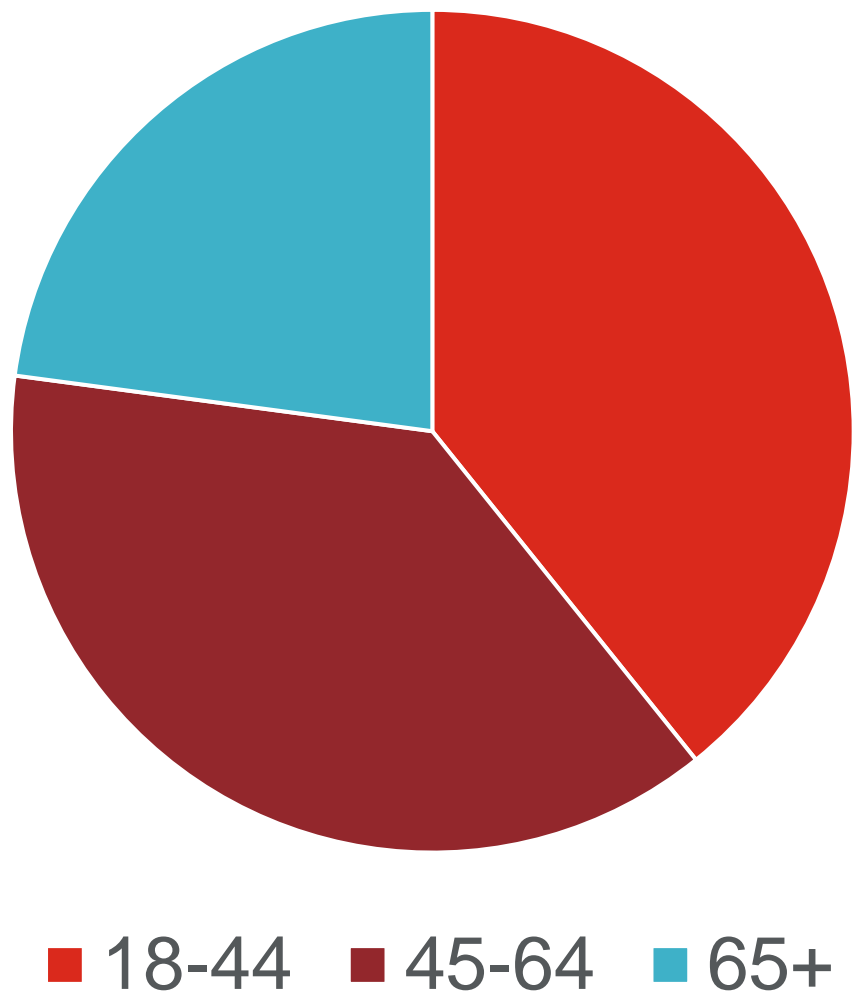


What we have been doing

- Storymap of existing conditions
- Collecting public feedback from an interactive map and survey
- Defining project purpose and need
- Developing alternatives



Age Distribution



Survey Results

- 43% South Burlington/57% Burlington
- 48% female/1% non-binary/51% male
- Very few non-English speakers (French)
- Vast majority white; Asian and Latinx

Project Goals

- A. Safe movement for people walking, biking, taking transit and driving throughout study area
- B. Fill the gap in the regional bicycle network between South Burlington's paths and the Burlington Bike Path/Island Line with a low stress facility

Bicycle Facility Types

- Shared use path
- Separated bike lanes
 - One way/directional
 - Two way on side of street
- Conventional bike lanes
- Advisory lanes



Separated Bike Lanes

One-way

- Safest at intersections as riders are moving in the same direction as traffic

Two-way

- Many prefer for side-by-side riding that feels more like a path
- Greater width allows side-by-side riding and passing
- Sometimes preferred for maintenance reasons (easier to plow)

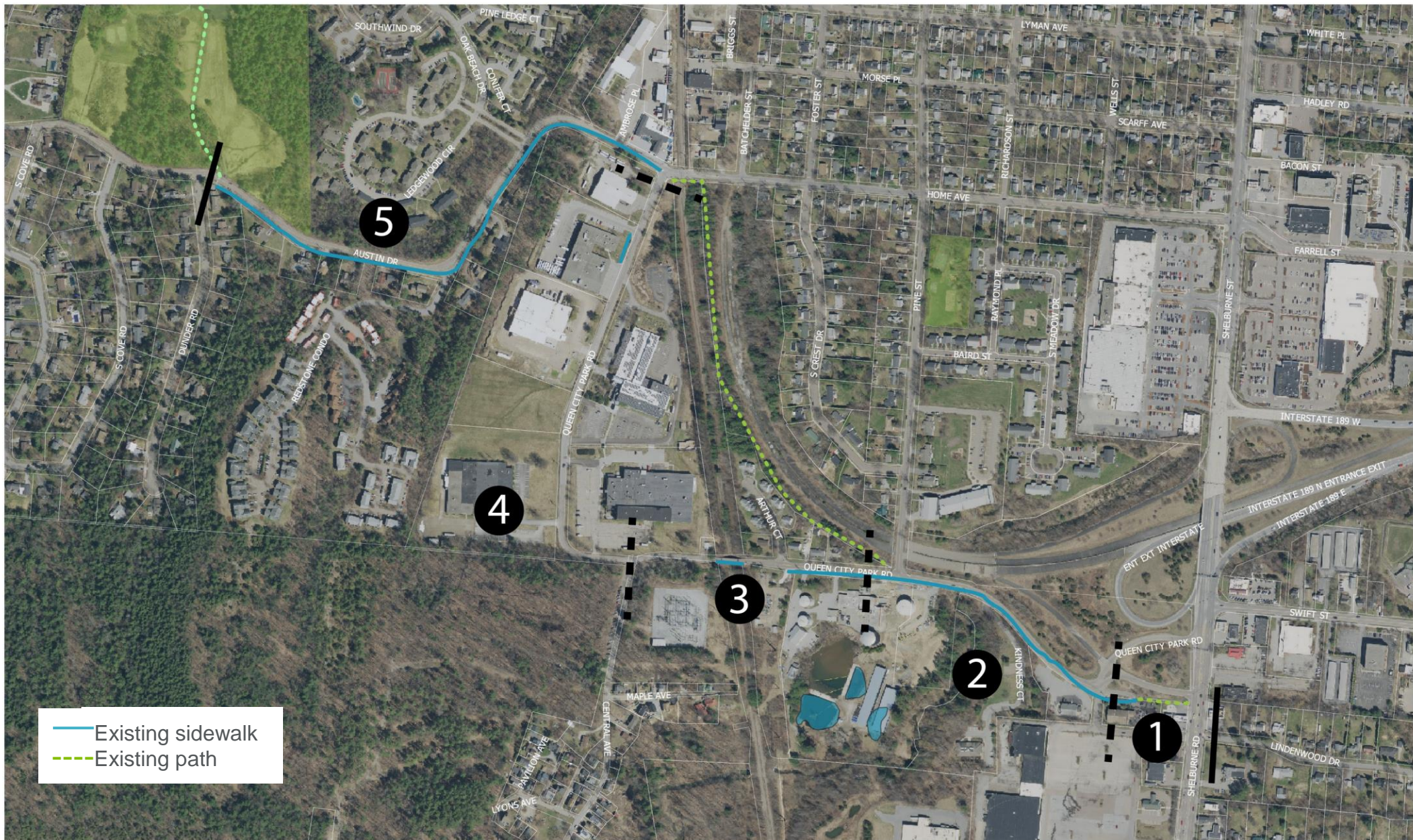
One-way – Two-way



Alternatives

No Build/Existing

- A. Shared use path along all study area streets**
- B. Shared use path** connecting Route 7 to Island Line/Burlington Bike Path; **sidewalk and bike lanes** on Queen City Park between path and Austin Drive
- C. Sidewalk and bike lanes** on Queen City Park Rd and Austin Drive



Proposed Project Segments
Queen City Park Rd / Austin Drive Scoping Study
10/20/2021

Alternatives by segment

Segments in green are
redundant with the
Champlain Parkway
shared use path

Segment	Existing/No Build	A	B	C
1	Sidewalk/path/ Shared lane	Path	Path	Path/shared lane
2	Sidewalk/bike lanes	Path	Path	Sidewalk with bike lanes
3	Advisory bike/walk lanes	Path	Sidewalk with bike lanes	Sidewalk with advisory bike lanes
4	Advisory lanes	Path	Sidewalk with bike lanes	Sidewalk with advisory bike lanes
5	Sidewalk/bike lanes/ shared lanes	Path	Path	Sidewalk with bike lanes

Alternatives by segment



No-build



Alt. A



Alt. B



Alt. C

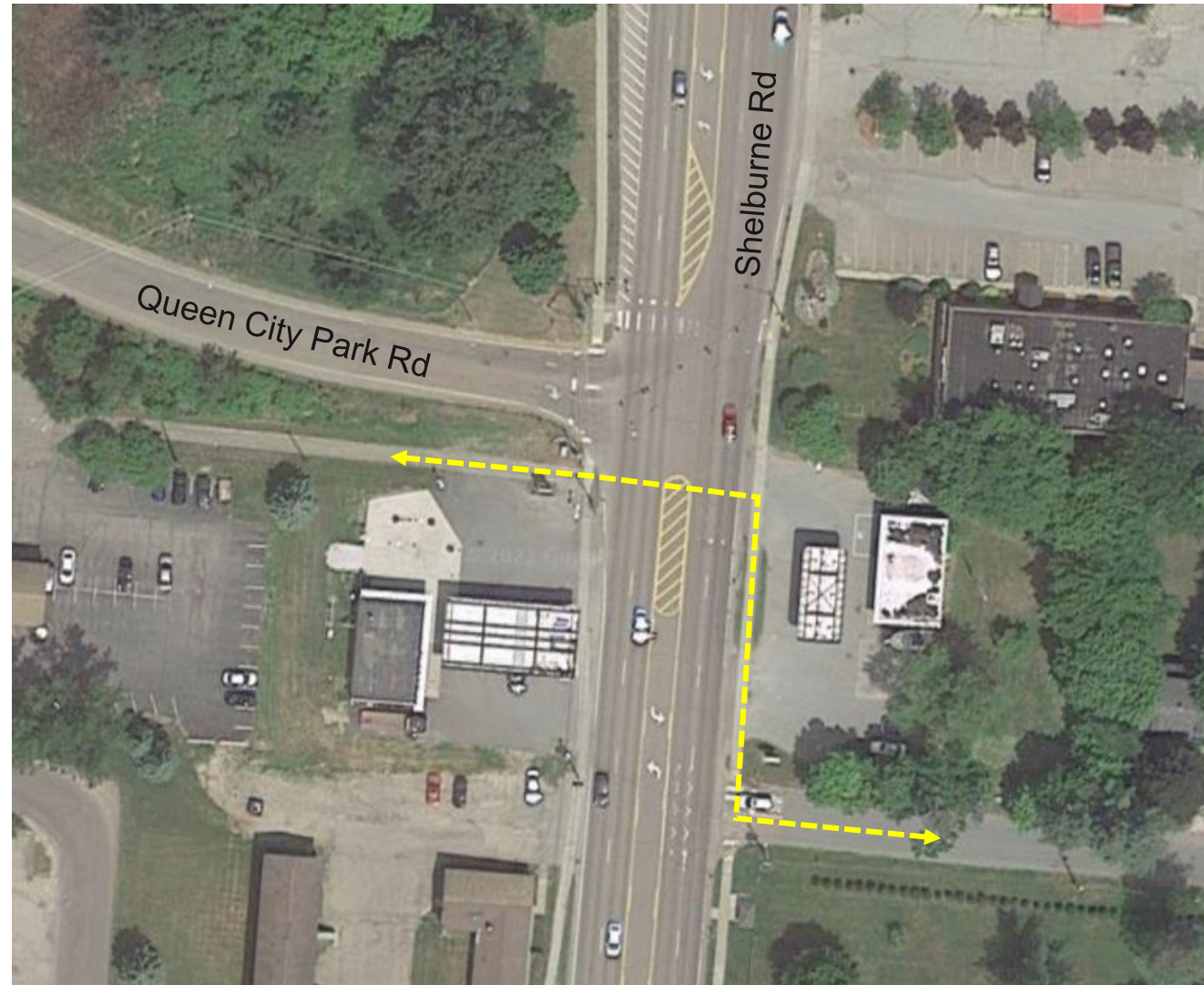


- All options provide for biking and walking on all streets
- A and B provide continuity in facility type in regional network.

1

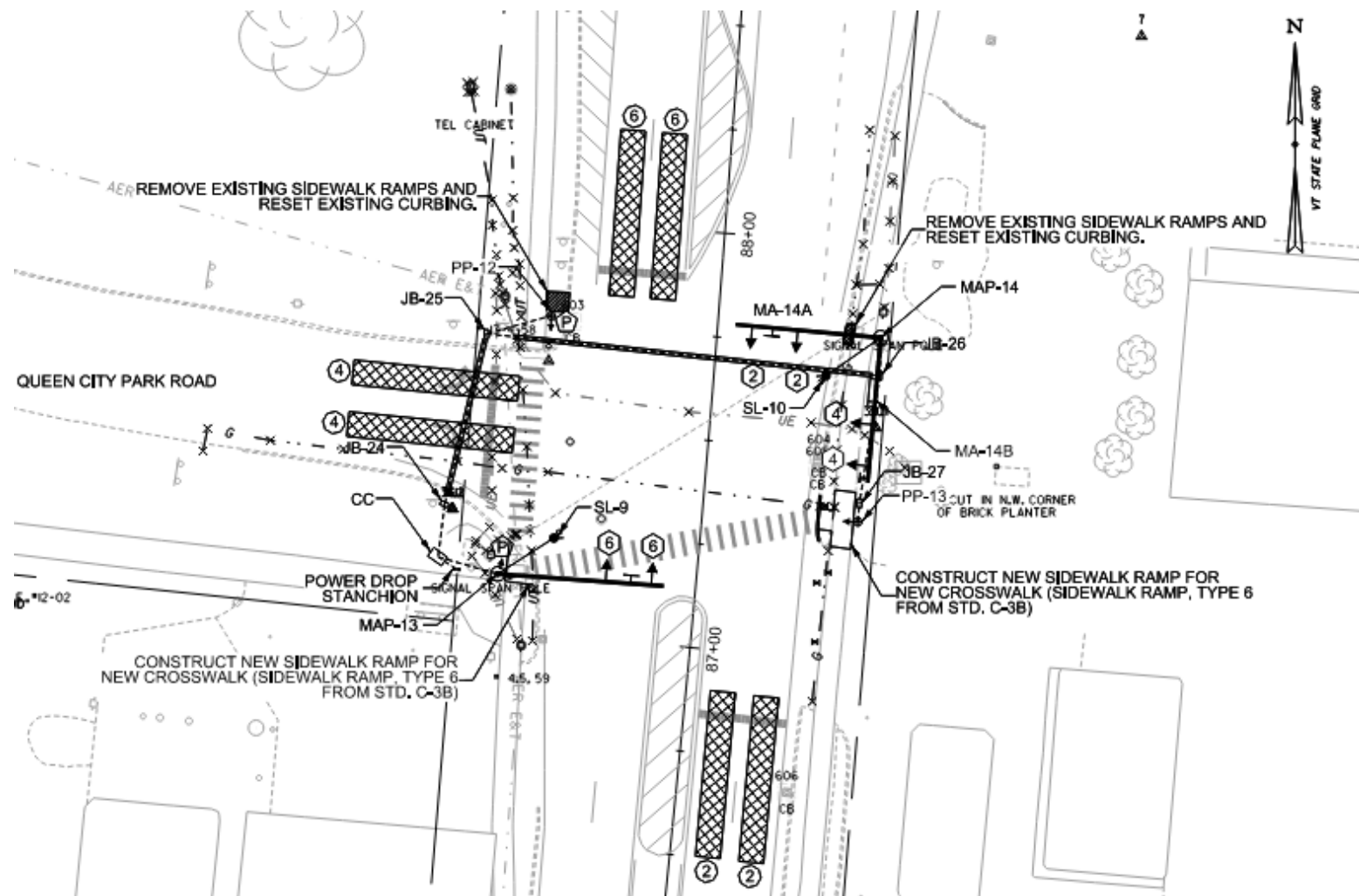
Queen City Park @ Shelburne

- Opportunity: connect Southern Connector path and Queen City Park Road path to Lindenwood Drive
- Challenge: gas station driveway access and space for a bicycle crossing + ramp

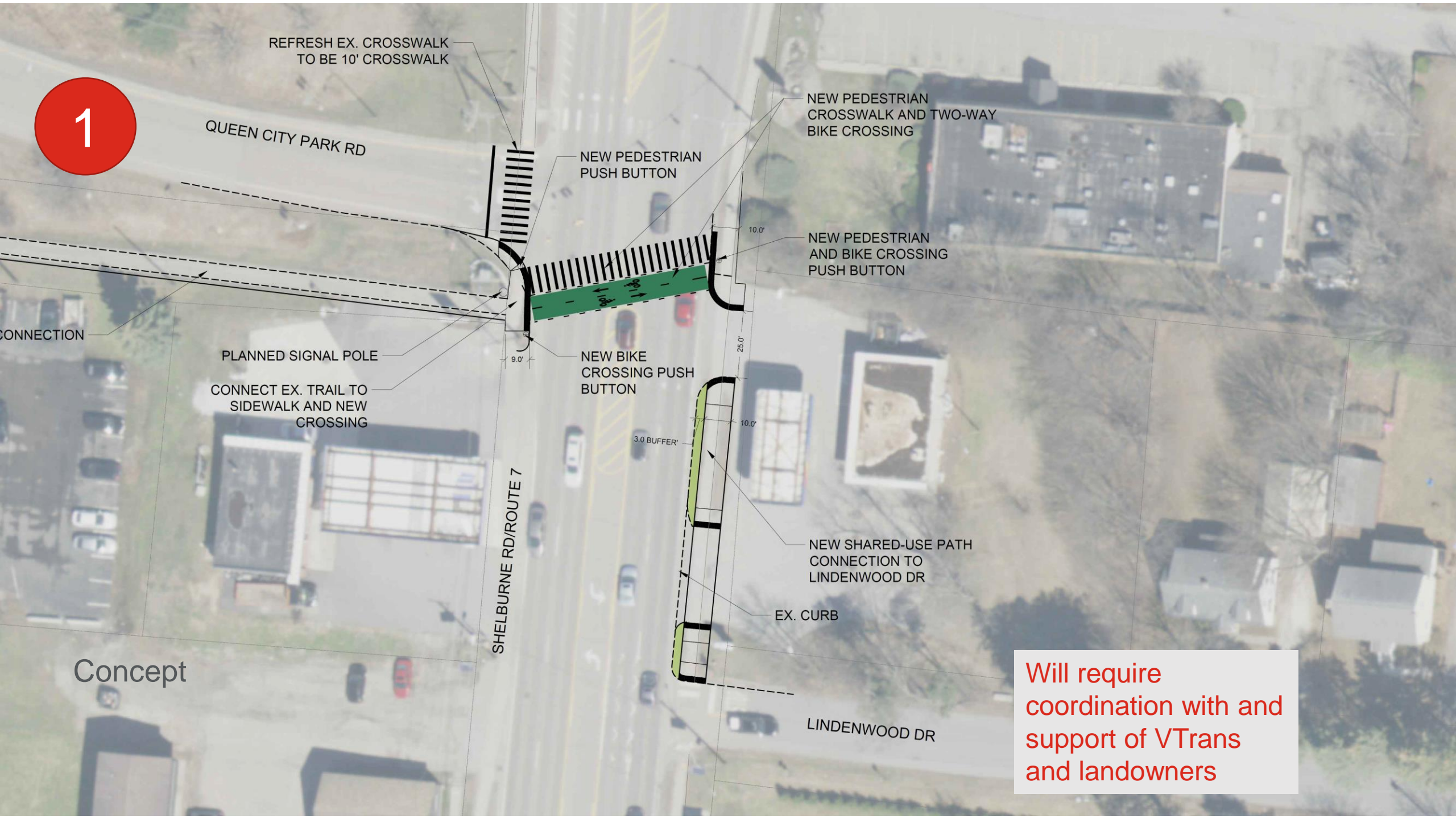


1

Queen City Park @ Shelburne – other plans



1



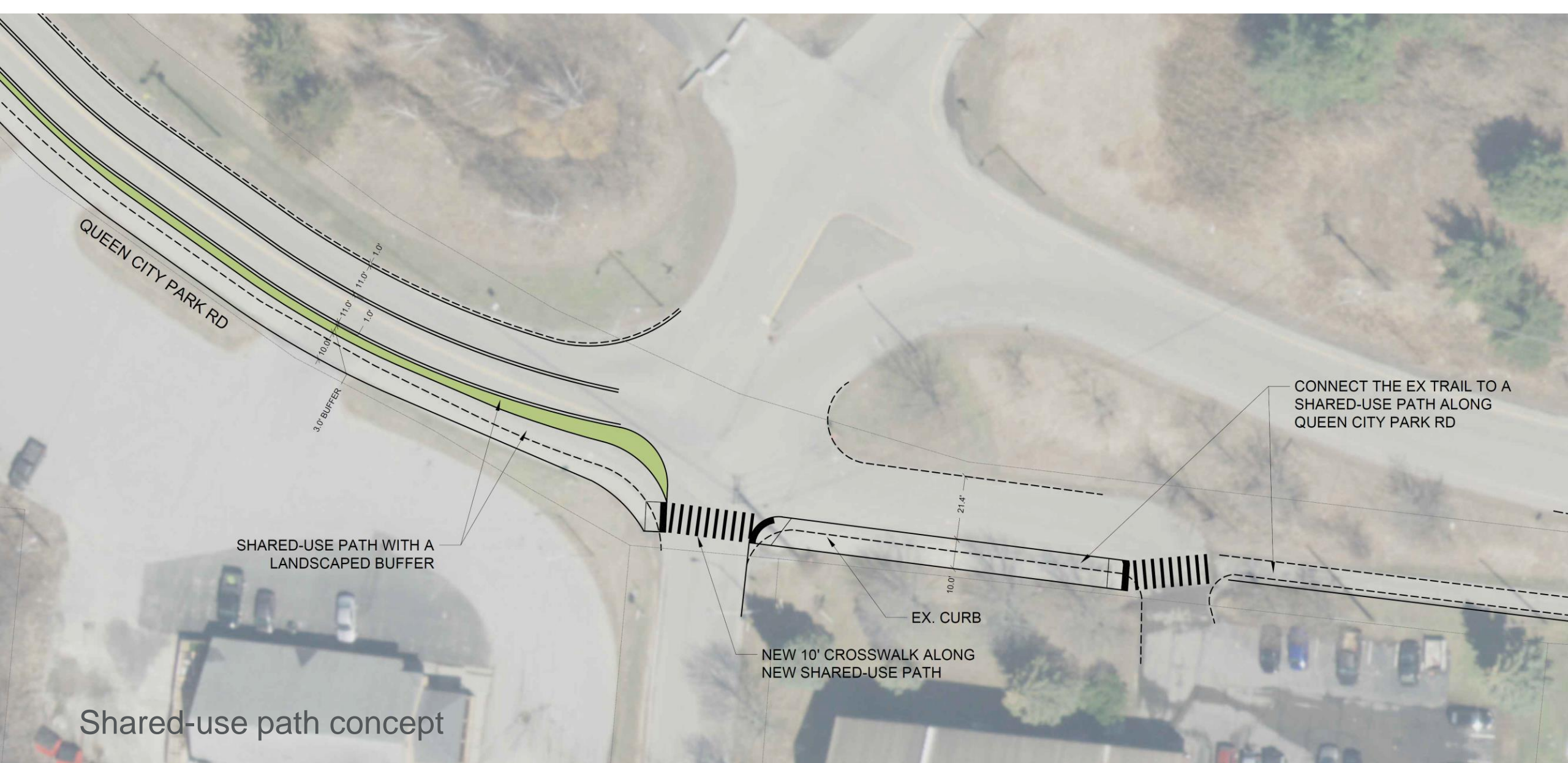
Concept

Will require coordination with and support of VTrans and landowners

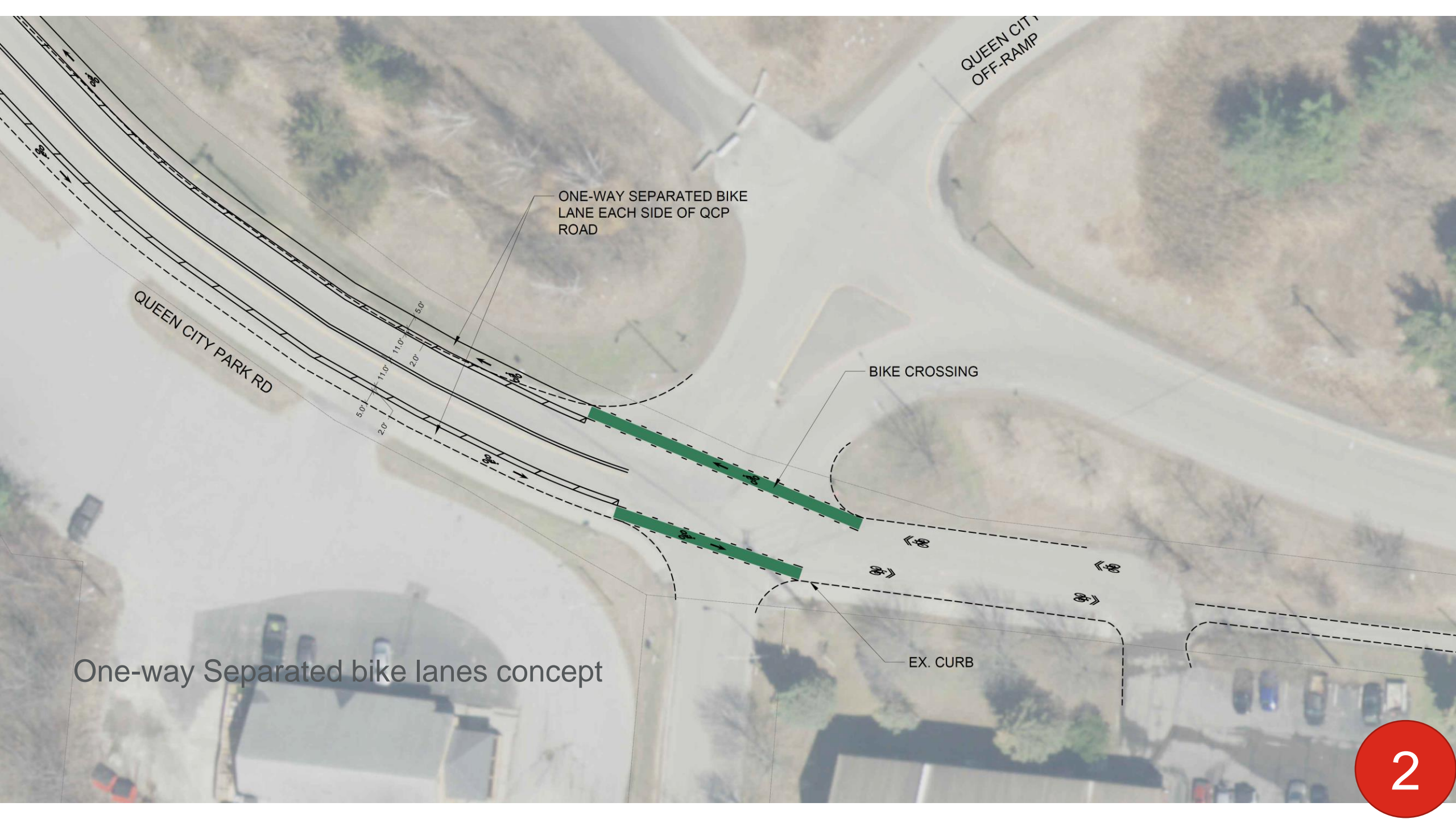
2

Queen City Park @ The Old Post

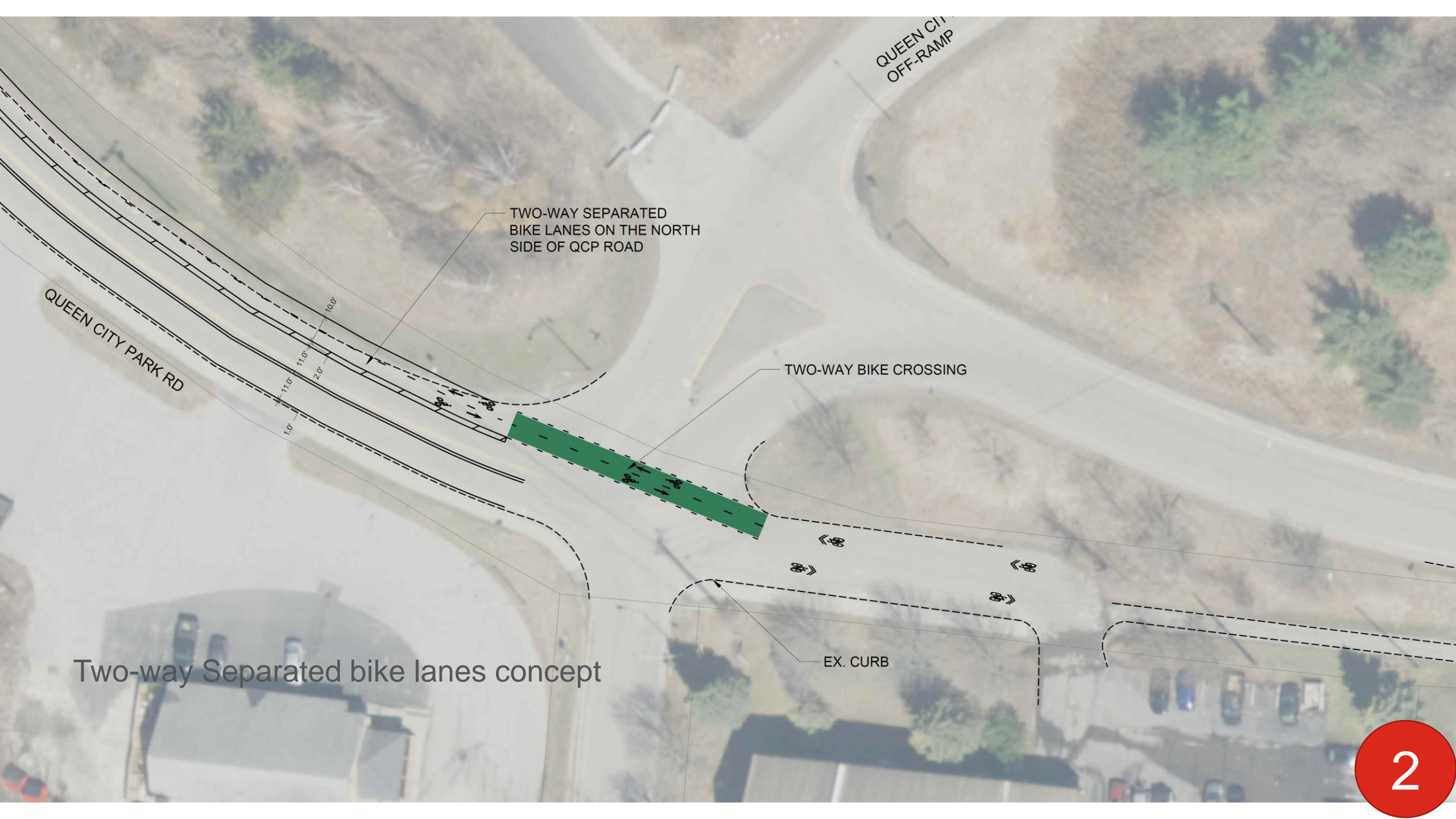




Shared-use path concept



One-way Separated bike lanes concept



QUEEN CITY PARK RD

TWO-WAY SEPARATED
BIKE LANES ON THE NORTH
SIDE OF QCP ROAD

TWO-WAY BIKE CROSSING

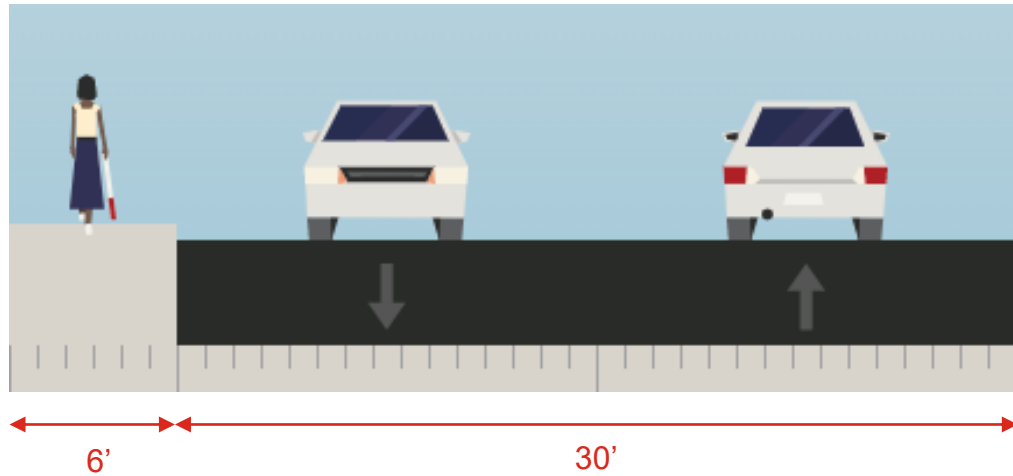
EX. CURB

QUEEN CITY
OFF-RAMP

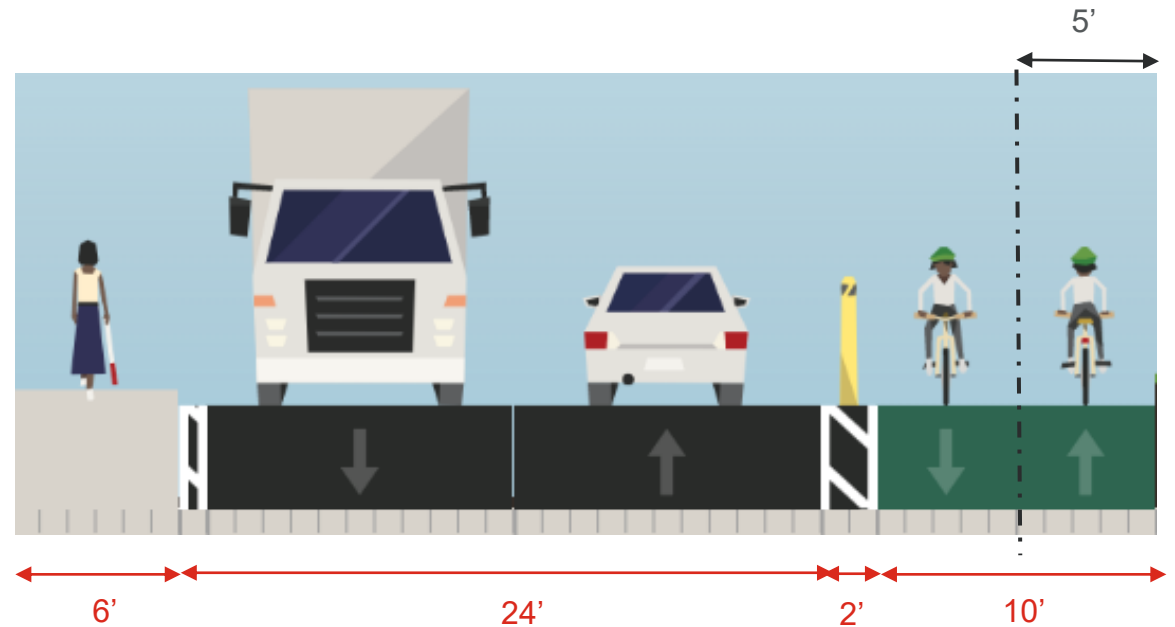
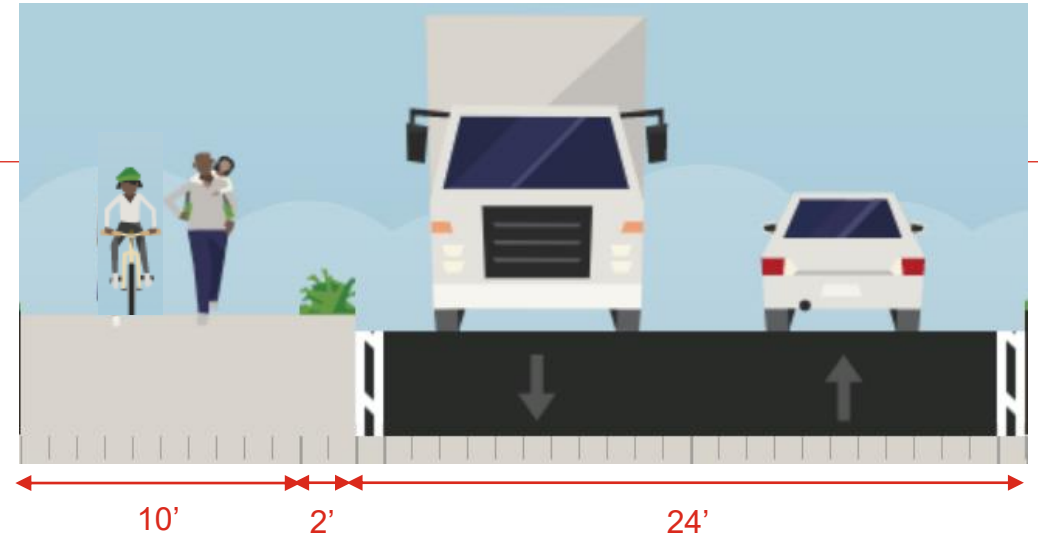
Two-way Separated bike lanes concept

2 Queen City Park Rd

Existing cross-section:



Alternative cross-section:



Comparison

Shared Use Path

- ✓ Provides continuity with other facility types
- ✓ Does not expand impervious area (slight reduction)
- Requires storm drain relocations

Separated bike lanes

- ✓ Can be one way or two way
- ✓ Can be aligned on north side of Queen City Park to avoid need for bike crossing
- ✓ Eliminates conflicts between walking and biking
- Requires widening over steep slopes and possible utility relocations
- Expansion of impervious surface
- Moving traffic is adjacent to pedestrians in 2-way option

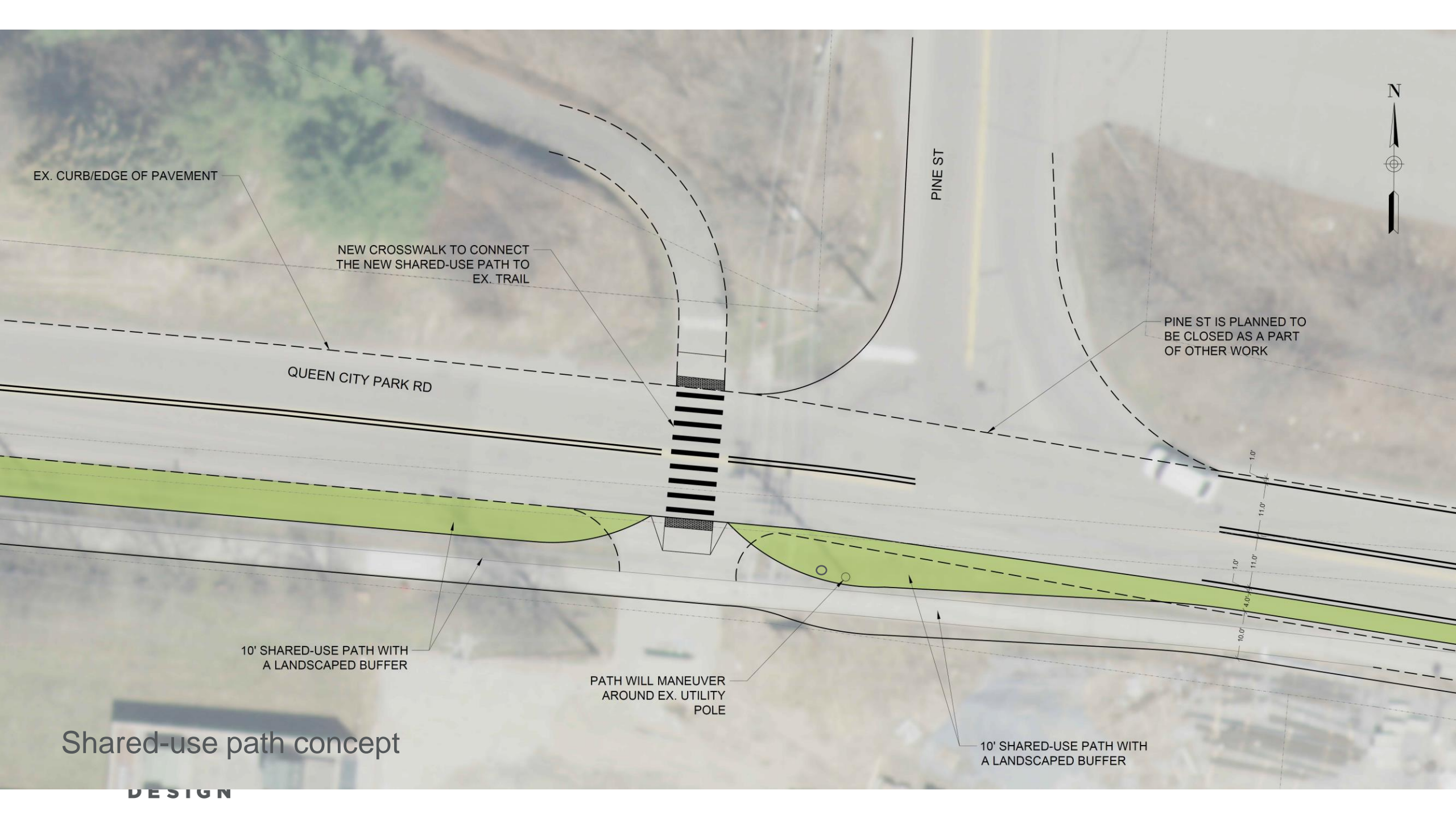
Discussion – Segments 1-2



Pine Street Crossing

- Existing curb cut on south side
- Driveway across the south side is closed
- Opportunity for a crossing to connect to the bike path from QCP Road





EX. CURB/EDGE OF PAVEMENT

NEW CROSSWALK TO CONNECT
THE NEW SHARED-USE PATH TO
EX. TRAIL

PINE ST

PINE ST IS PLANNED TO
BE CLOSED AS A PART
OF OTHER WORK

QUEEN CITY PARK RD

10' SHARED-USE PATH WITH
A LANDSCAPED BUFFER

PATH WILL MANEUVER
AROUND EX. UTILITY
POLE

10' SHARED-USE PATH WITH
A LANDSCAPED BUFFER

Shared-use path concept

DESIGN

Pine Street to Bridge

- Alternative A: Shared use path on south side
- Alternative B & C: Continuous Sidewalk on south side with bike lanes (may require some widening)
 - Conventional bike lanes
 - Separated bike lanes

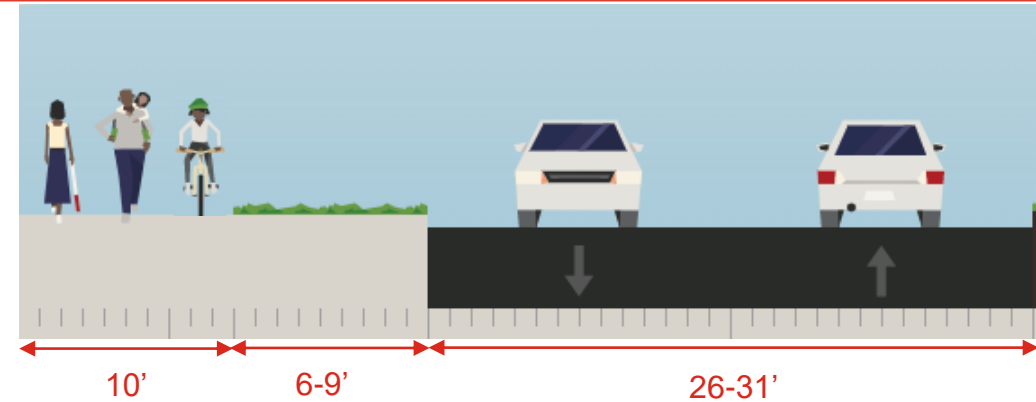
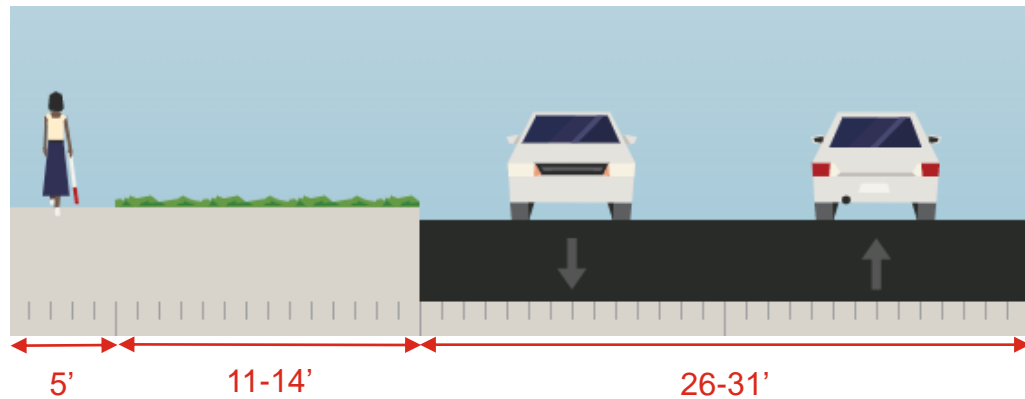


Pine Street to Bridge

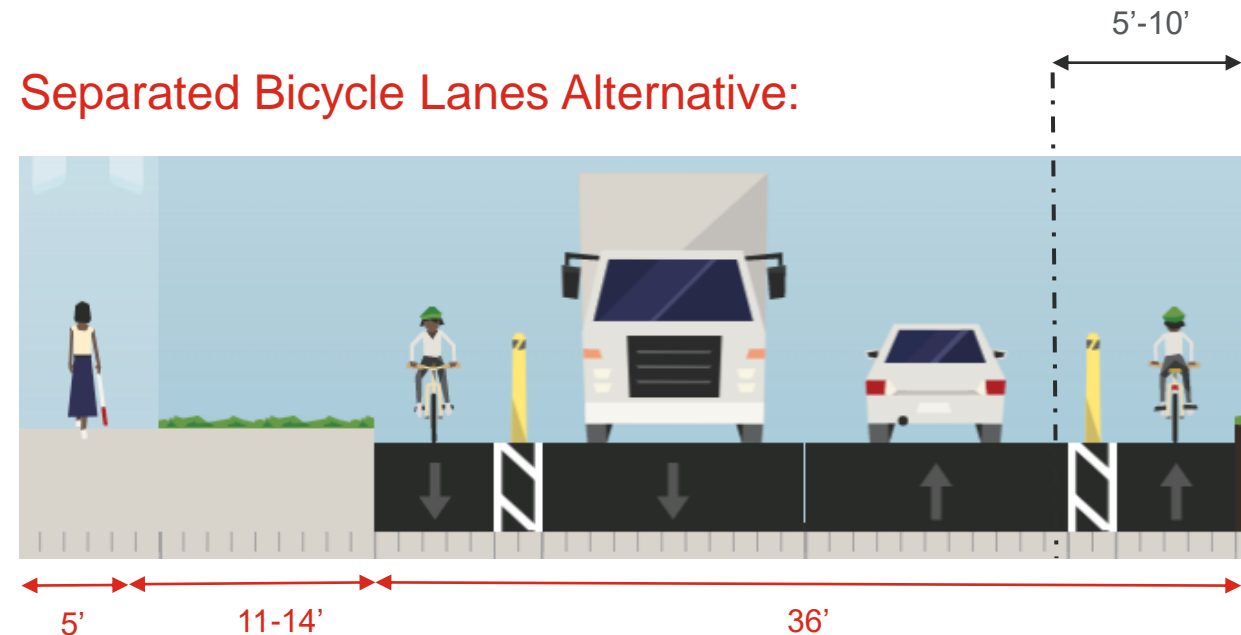
Shared Use Path Alternative:

- Alternative A: Shared use path on south side

Existing cross-section:



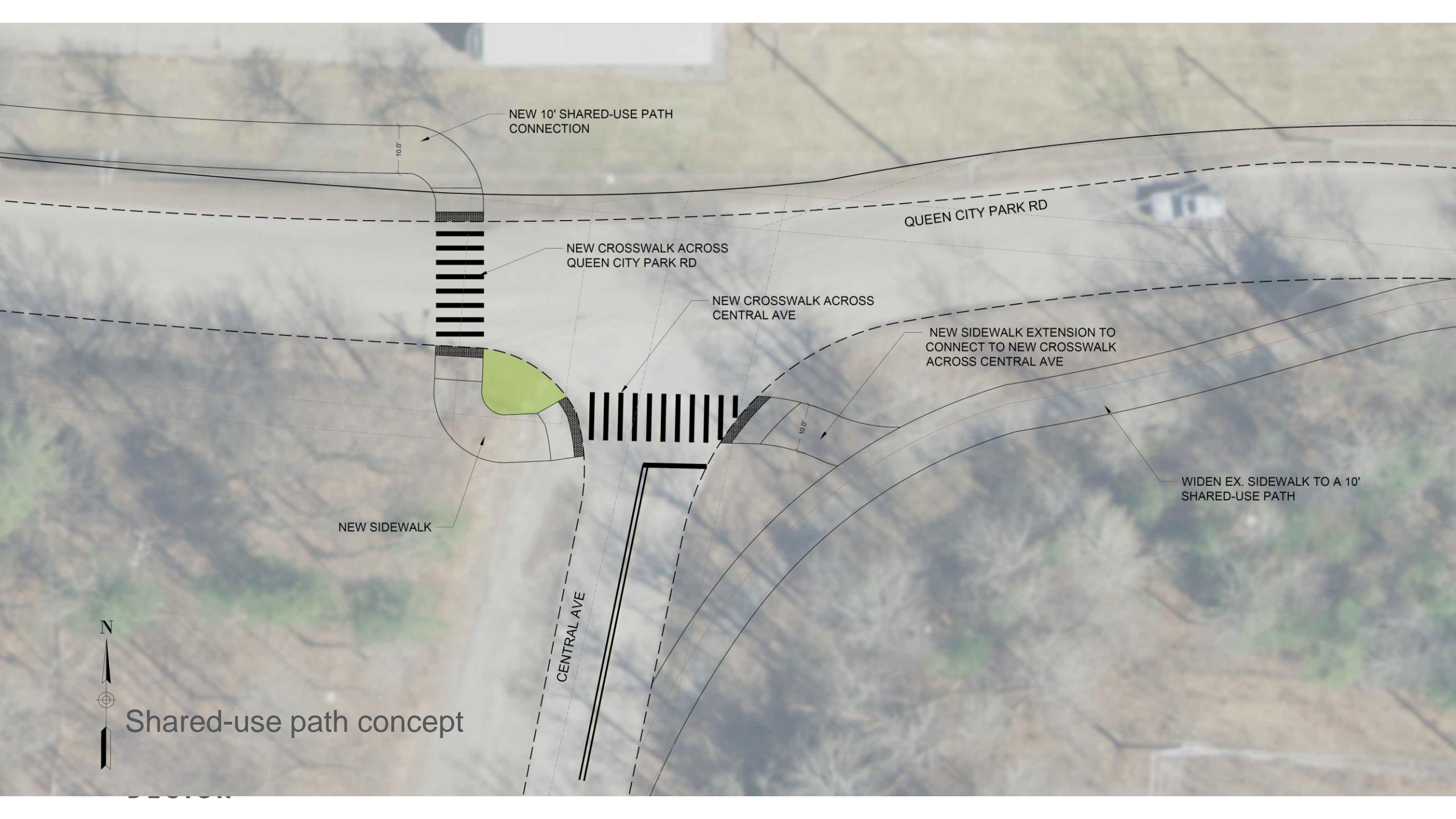
Separated Bicycle Lanes Alternative:



Central Ave

- Alternatives

- A. shared use path crossing QCP Road at Central Ave to switch over to the north side
- B. bike lane crossing across Central St



NEW 10' SHARED-USE PATH
CONNECTION

10.0'

NEW CROSSWALK ACROSS
QUEEN CITY PARK RD

NEW CROSSWALK ACROSS
CENTRAL AVE

QUEEN CITY PARK RD

NEW SIDEWALK EXTENSION TO
CONNECT TO NEW CROSSWALK
ACROSS CENTRAL AVE

10.0'

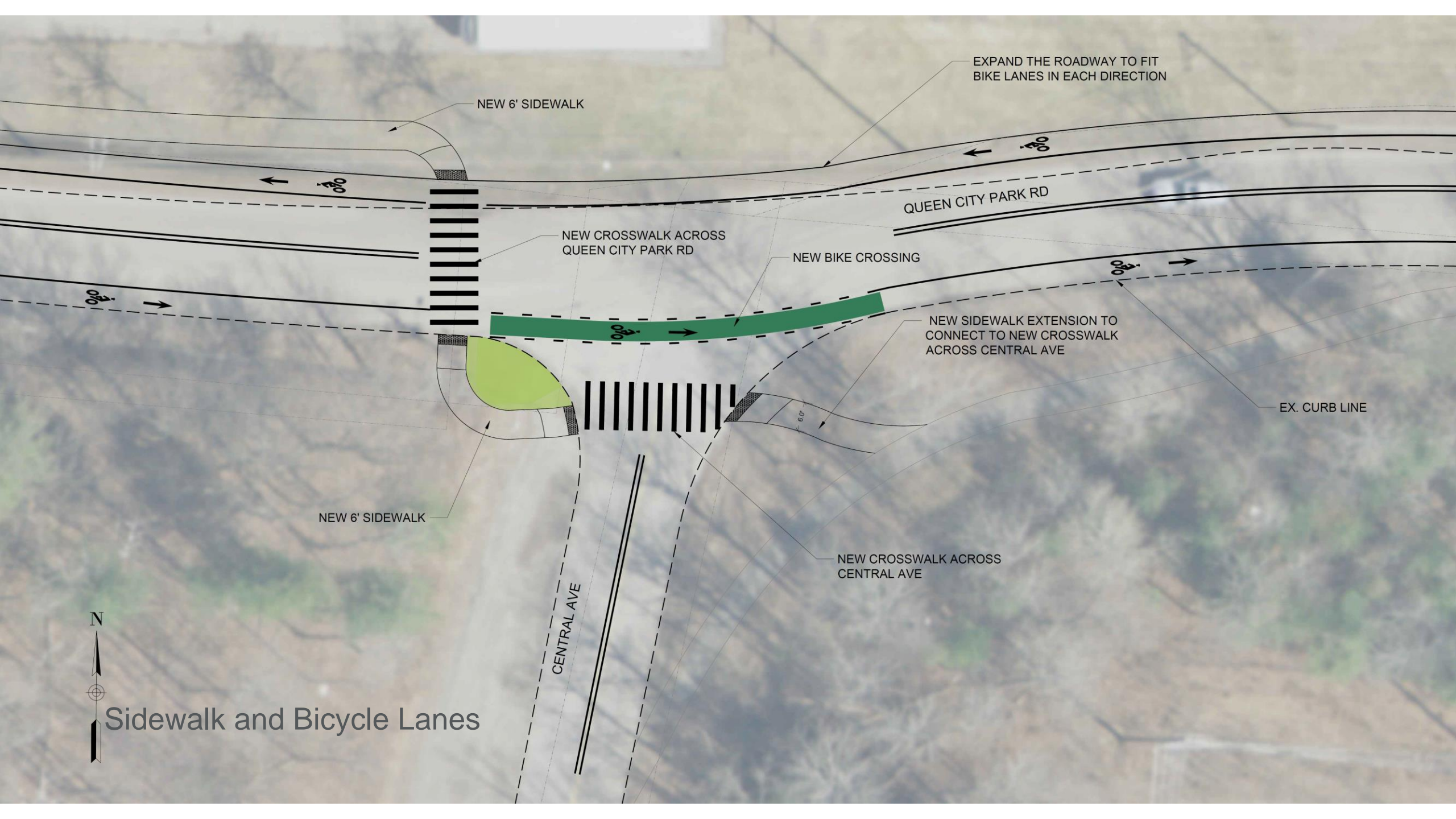
WIDEN EX. SIDEWALK TO A 10'
SHARED-USE PATH

NEW SIDEWALK

CENTRAL AVE



Shared-use path concept



NEW 6' SIDEWALK

EXPAND THE ROADWAY TO FIT
BIKE LANES IN EACH DIRECTION

QUEEN CITY PARK RD

NEW CROSSWALK ACROSS
QUEEN CITY PARK RD

NEW BIKE CROSSING

NEW SIDEWALK EXTENSION TO
CONNECT TO NEW CROSSWALK
ACROSS CENTRAL AVE

EX. CURB LINE

NEW 6' SIDEWALK

NEW CROSSWALK ACROSS
CENTRAL AVE

CENTRAL AVE



Sidewalk and Bicycle Lanes

Central St to Austin Drive

- Small section of sidewalk on west side
- Utility poles line west side
- Drainage swales



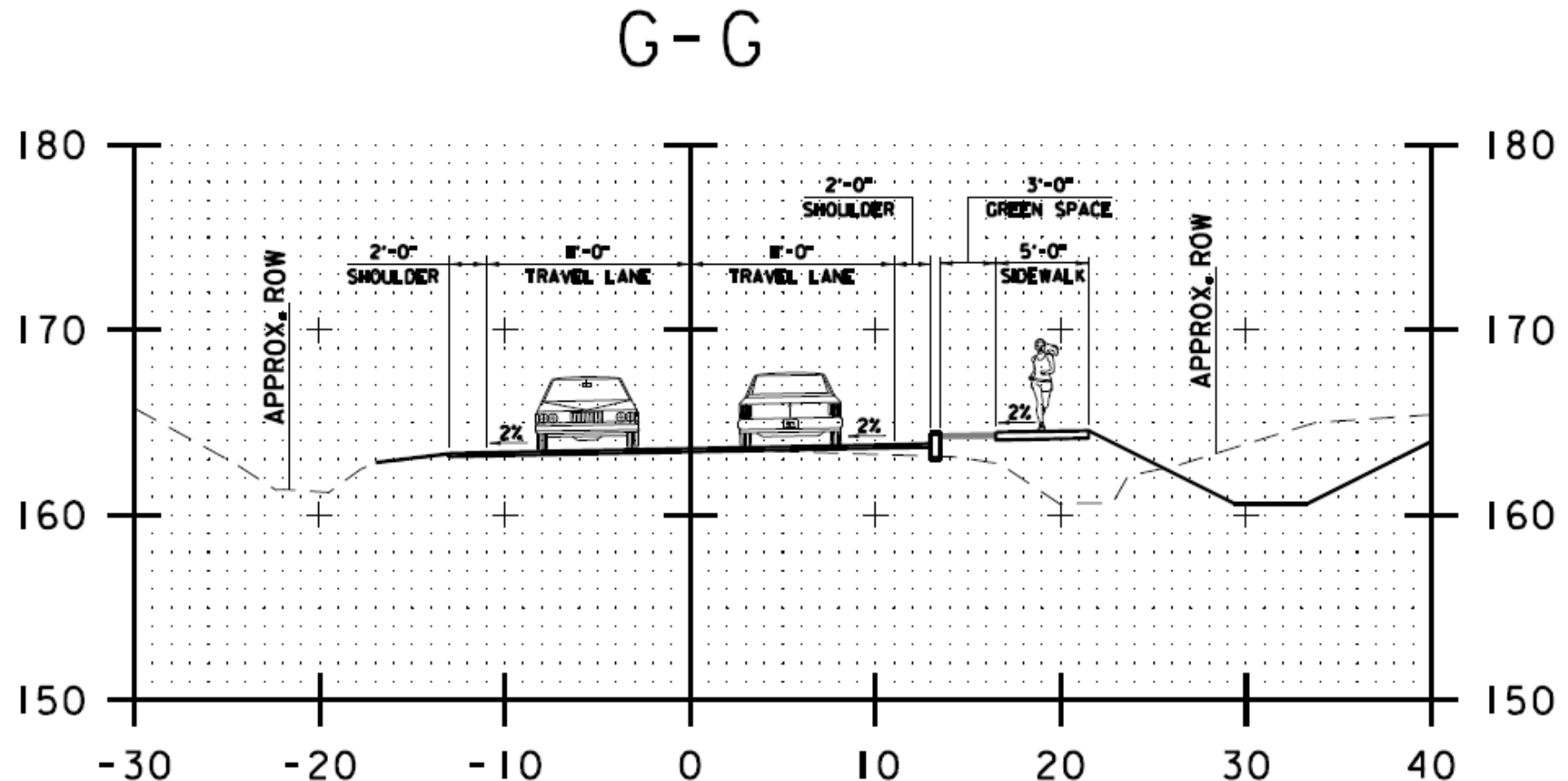
CHA Study

- 2020 Study by City of Burlington
- Sidewalk and path on east side of Queen City Park



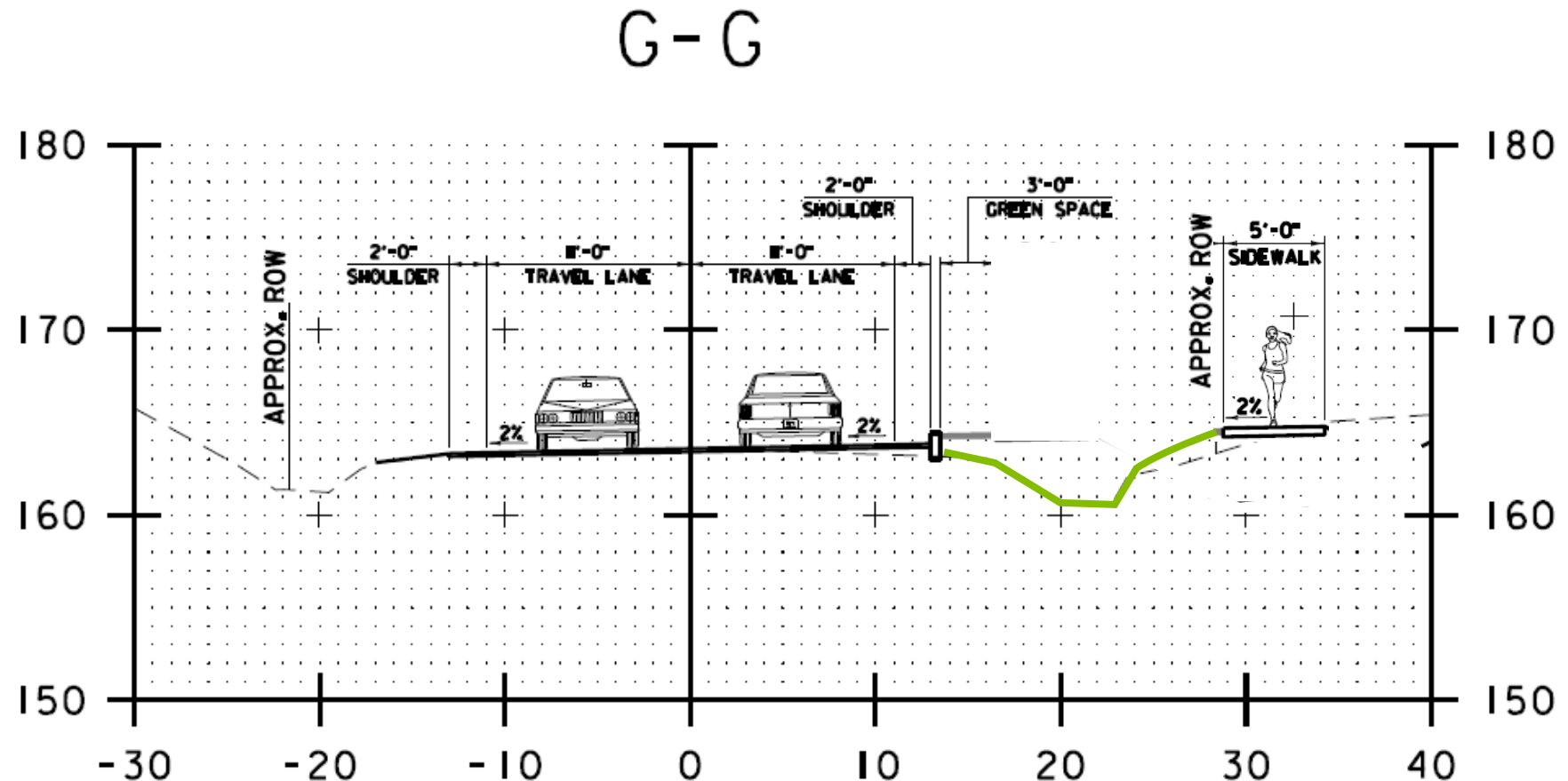
CHA Study

- Alternatives of path or sidewalk on east side;
- Impacts for drainage outside ROW



Potential Alternative *path or sidewalk with bike lanes outside ROW*

- Avoids need for granite curb and drainage changes
- Provides buffer to traffic and stormwater treatment
- Use permeable pavement to reduce impact on future development

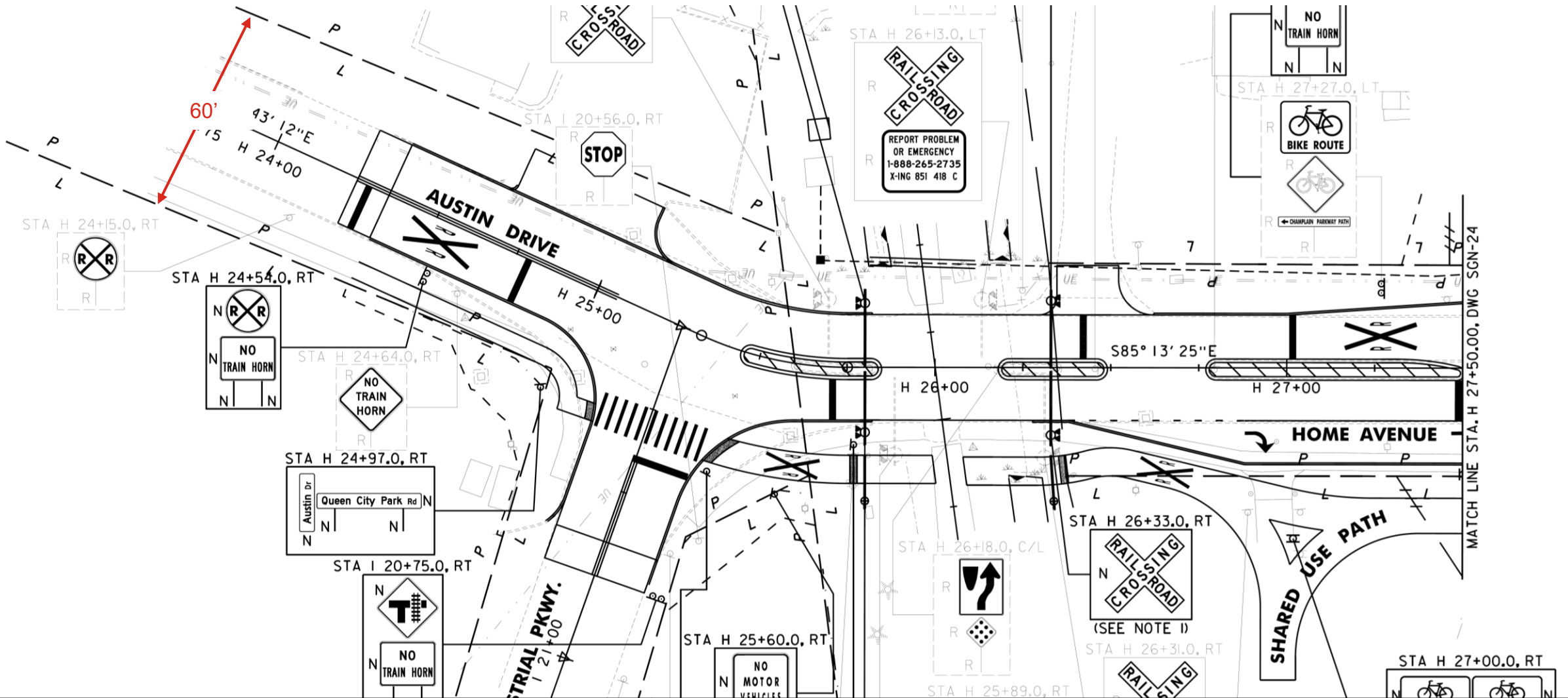


Constraints

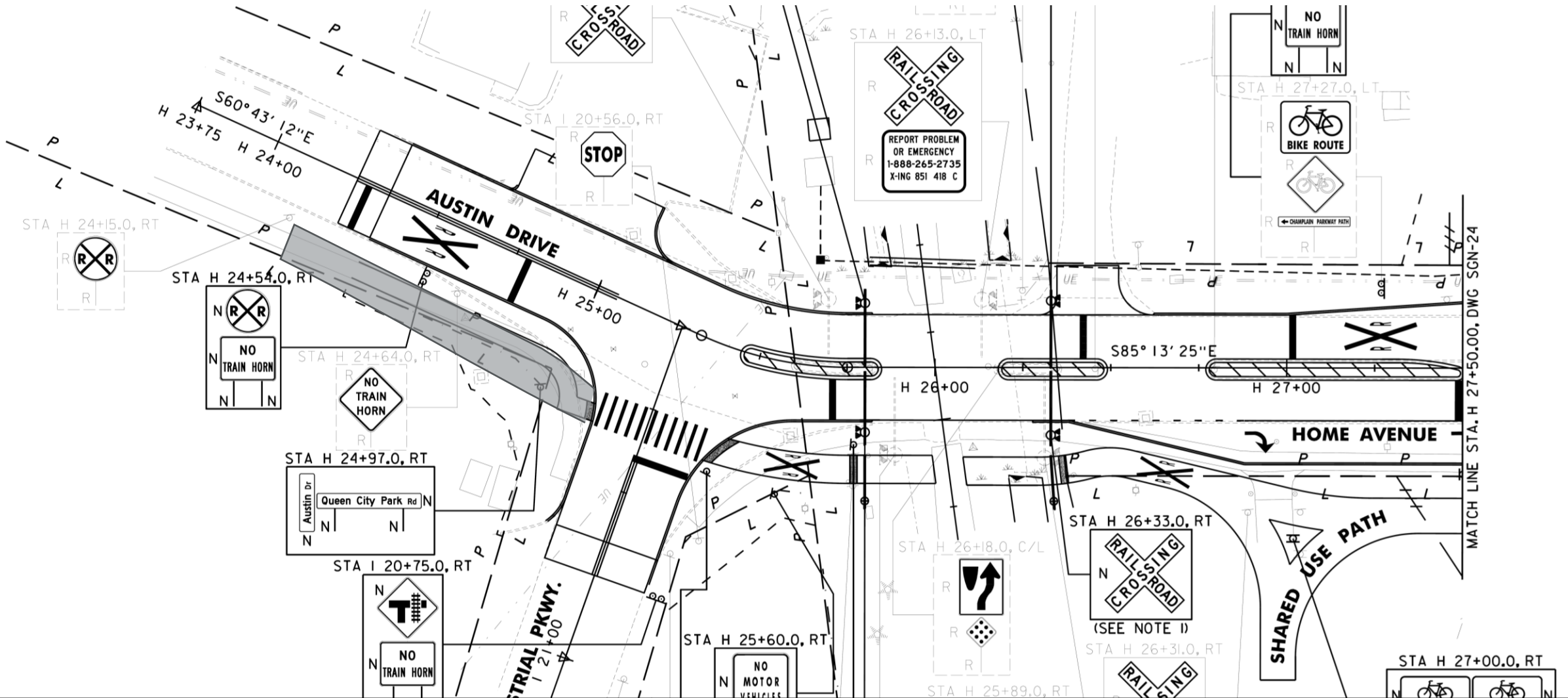
- Wetlands at north end on east side of road will require mitigation or avoidance
- Cross to east side of street
- Boardwalk or other low impact treatments



QCP @ Home Ave/Austin Dr Champlain Parkway Project Plans



Alternative A: Shared Use Path



Alternative B: Bicycle Lanes

- bike lanes crossing to meet existing bike lanes starting past Ambrose Place



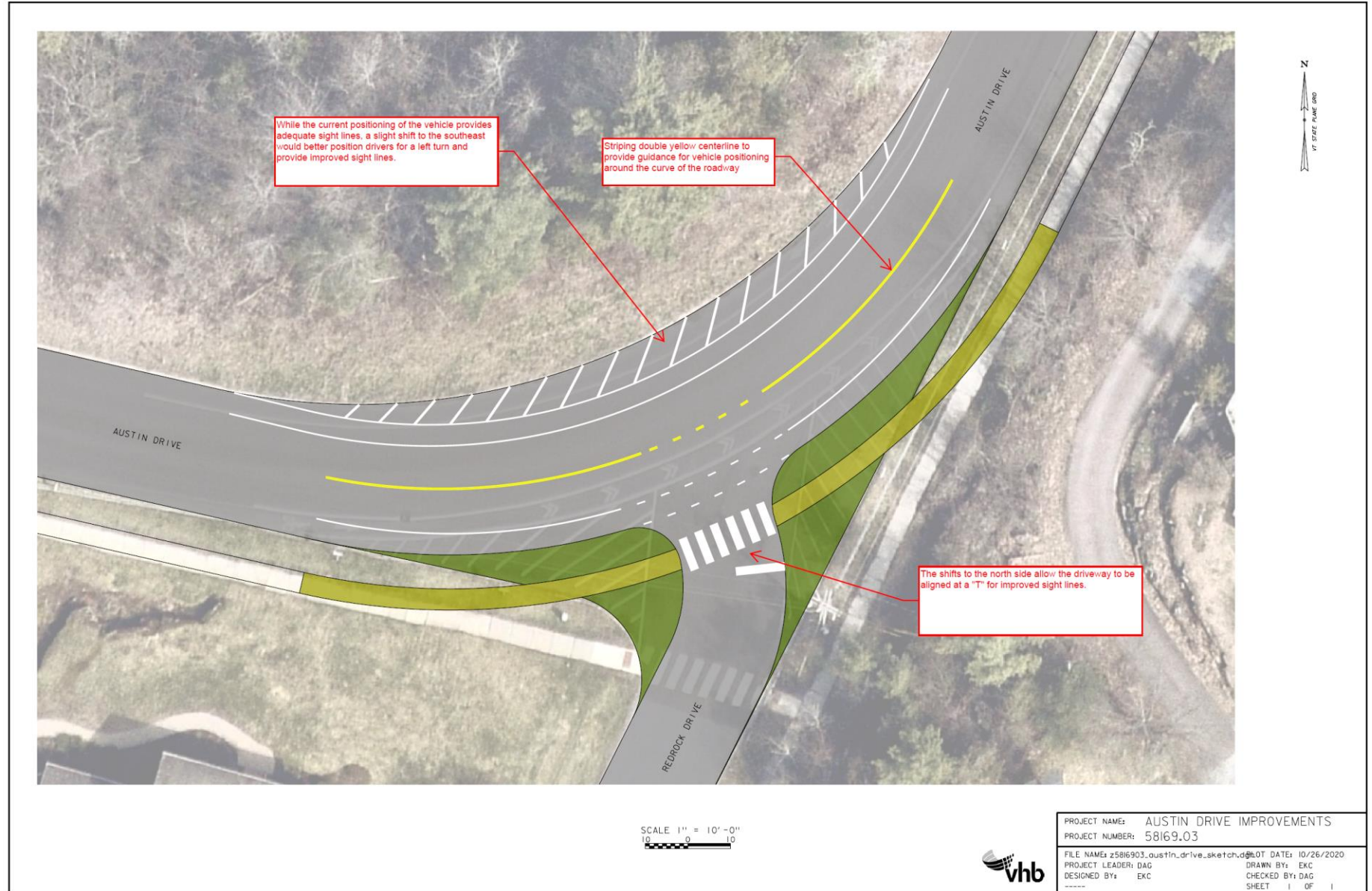
Austin Dr @ Ledgewood Circle

- Curb ramp to connect to Ledgewood is in place
- City is discussion options to connect to residential development with community



Austin Dr @ Redrock Dr/ Redstone Condo

- ROW available for shared used path or widening street for bicycle lanes



Austin Dr @ Island Line Crossing

- A. Shared use path option
(design on next slide)
- B. Bicycle lane option
 - Would eliminate on-street parking
 - Widening required for separated bicycle lanes





Concept
DUNDER RD

10' SHARED-USE PATH AND
LANDSCAPED BUFFER
ALONG AUSTIN DR

REFRESH AND REALIGN
EX. CROSSWALK

NEW CURB EXTENSIONS TO
REDUCE CROSSWALK LENGTH AND
DELINEATE EX. PARKING SPACES

AUSTIN DR

10.0'
5.0'

Purpose and Need

Alternative	Pedestrians	Bicycles
A	Shared use path along entire corridor	+++ Shared use path throughout project area
B	Shared use path or sidewalk along entire corridor	++ Shared use path connecting South Burlington to Oakledge; Bike lanes on Queen City Park Road
C	Shared use path or sidewalk along entire corridor	+ Conventional bike lanes connecting existing shared use paths; Advisory lanes on Queen City Park Road

Concept Cost Estimates

Alternative	Total Construction Cost
A	\$2,617,000.00
B	\$2,882,200.00
C	\$1,424,000.00

- Use Vtrans typical unit total construction costs
- Includes allowance for drainage, fencing, landscaping and other amenities
- Does not include right-of-way or utility relocation
- B is highest because some segment include both sidewalk construction and road widening



Questions/Discussion

Next Steps

- Refine alternatives based on today's feedback
- More detailed analysis of alternatives
 - Environmental, Utilities, Cost
- Public Alternatives Presentation
 - early January
- Final Presentation
 - February