



MEMORANDUM

CITY OF TUALATIN

TO: Honorable Mayor and Members of the City Council

FROM: Sherilyn Lombos, City Manager

DATE: November 13, 2017

SUBJECT: Work Session for November 13, 2017

6:00 p.m. (40 min) – Garden Corner Curves Concept Study Update. The design team will update Council on the work that has been completed for the Garden Corner Curves Concept Study, discuss the design alternatives, and present the preferred alternative.

6:40 p.m. (10 min) – Council Meeting Agenda Review, Communications & Roundtable. Council will review the agenda for the November 13th City Council meeting and brief the Council on issues of mutual interest.

6:50 p.m. (10 min) – Record Holiday Greeting



MEMORANDUM

CITY OF TUALATIN

TO: Honorable Mayor and Members of the City Council

THROUGH: Jeff Fuchs, Public Works Director/City Engineer

FROM: Tony Doran, Engineering Associate
Dominique Huffman, Assistant to the City Engineer

DATE: 11/13/2017

SUBJECT: Garden Corner Curves Concept Study Update

ISSUE BEFORE THE COUNCIL:

The design team will update Council on the work that has been completed for the Garden Corner Curves Concept Study, discuss the design alternatives, and present the preferred alternative.

EXECUTIVE SUMMARY:

The Garden Corner Curves corridor consists of three narrow roadways within the City of Tualatin: SW 108th Avenue, SW Blake Street, and SW 105th Avenue. The roadways are narrow, have limited visibility, and lack bicycle or pedestrian facilities. This project evaluated the corridor to identify potential solutions for providing a safer facility for bicycles, pedestrians, and motor vehicles. The City worked with Wallis Engineering and Alta Planning + Design to lead the public outreach program and develop alternatives that address safety concerns and meet the needs of the neighborhoods.

This concept study began in August 2016 and was based on an extensive public involvement program that shaped the alternatives that were developed. Council was updated in May 2017 on the public input received to date and was introduced to the four design alternatives. The alternatives were then vetted with the public and the preferred alternative was developed.

The public involvement program included meetings with key stakeholders, kitchen table meetings with interested neighbors, a Saturday road closure and on-site open house, a project website, an open house, and detailed public opinion polls.

The top concerns heard from the community included:

- People do not feel safe walking or biking on this corridor
- Safe and convenient routes for walking or biking between neighborhoods do not exist
- There are no sidewalks or bike lanes
- The corner of SW Blake Street and SW 108th Avenue has been the site of several crashes
- Concern about speeding and tailgating

- There is limited visibility
- There is a desire to minimize the project's impact on trees along the corridor

Four alternatives were developed to address concerns expressed during the public involvement effort. A brief summary of each option is included below. Graphics illustrating each alternative are included as Attachment B.

Alternative A – a shared use path on the east side of the corridor

- Two 10-foot wide vehicle lanes
- A 12-foot wide shared use path on the east side of the roadway
- Pedestrians and bicyclists have a continuous route on one side of the street through the corridor
- 36 foot minimum paved width
- Safety improvements
- Additional right of way needed: 44,000 SQ. FT.
- Total Estimated Cost = \$3.1 million (includes construction, engineering, permitting, and right-of-way acquisition)

Alternative B – a shared use path on the west side of the corridor

- Two 10-foot wide vehicle lanes
- A 12-foot wide shared use path on the west side of the roadway
- Pedestrians and bicyclists have a continuous route on one side of the street through the corridor
- 36 foot minimum paved width
- Safety improvements
- Additional right of way needed: 50,500 SQ. FT.
- Total Estimated Cost = \$3.4 million (includes construction, engineering, permitting, and right-of-way acquisition)

Alternative C – a sidewalk on the east side and bike lanes on both sides of the corridor

- Two 10-foot wide vehicle lanes
- Sidewalk on the east side of the roadway
- Bike lanes on both sides
- Pedestrians have a continuous route on one side of the road, and bicyclists have a continuous route on both sides of the road through the corridor
- 38 foot minimum paved width
- Safety improvements
- Additional right of way needed: 40,000 SQ. FT.
- Total Estimated Cost = \$3.1 million (includes construction, engineering, permitting, and right-of-way acquisition)

Alternative D – sidewalks and bike lanes on both sides of the corridor

- Two 10-foot wide vehicle lanes
- Sidewalks and bike lanes on both sides of the roadway
- Pedestrians and bicyclists have a continuous route on both sides of the road through the corridor
- 41 foot minimum paved width
- Safety improvements
- Additional right of way needed: 52,000 SQ. FT.
- Total Estimated Cost = \$3.6 million (includes construction, engineering, permitting, and right-of-way acquisition)

right-of-way acquisition)

The alternatives were evaluated based on public input, impacts to right of way and environment, project cost, the ability to implement the alternative, and what interchangeable features could be applied.

Based on the feedback received at the open house and the online survey, 68% of the public preferred Alternative A, with the shared use path on the east side, 48% preferred Alternative C, 47% preferred Alternative B, and 39% preferred Alternative D.

The community also provided feedback on their preferred interchangeable features. They like speed feedback signs, raised/separated bicycle/pedestrian facilities, landscape planters and buffers, and cobbled texturing. They dislike speed bumps and stops signs in the corridor; their dislike of those elements was largely based on concerns about noise caused by speed humps and vehicles stopping and starting at stop signs.

From a safety standpoint, all alternatives reduce vehicle speed in the corridor, address the higher frequency crash location at SW 108th Avenue and SW Blake Street, and provide safer facilities for pedestrians to cross the street. Alternatives A and B use separated shared use paths to eliminate conflicts between motor vehicles and bicycles and pedestrians. Alternative C provides one buffered bike lane, one regular bike lane, and one sidewalk. Alternative D provides buffered bike lanes and sidewalks in each direction. Neither Alternative C or D provide positive separation of bicycles from motor vehicles.

The Preferred Alternative:

The preferred alternative is Alternative A with additional elements that were identified by the community during the evaluation process. A graphic illustrating the preferred alternative is included as Attachment A. The preferred alternative includes:

Alternative A – East Shared Use Path

- A 12-foot wide shared use path on the east side of the roadway to provide pedestrians and bicyclists a continuous separated route on one side of the corridor
- Two 10-foot wide vehicle lanes to slow vehicles down
- Cobbled corner treatment on the shared use path to slow cyclist before the downhill
- Pedestrian activated flashing beacon at SW Moratoc Drive
- Pedestrian activated flashing beacon at SW 108th Avenue and SW Paulina Drive
- A raised crosswalk at Paulina Drive

Plus

- Speed feedback signs to raise awareness about speed
- Revised centerline striping to slow down traffic
- A raised crossing at SW 108th Avenue and SW Blake Street

The project also identified elements that could be implemented while funding options are being explored. Those "nearer term" improvements include better signage, visibility improvements, revised pavement markings, speed feedback sign(s), and an anti-speeding public awareness campaign.

Next Steps

- Present the preferred alternative to the community via the City newsletter, social media platforms, and the project website
- Identify funding
- Build components as funding is available

Project website: <http://gardencornercurves.org/public-input>

Attachments: Preferred Alternative
 Design Alternatives
 PowerPoint Slides

ALTERNATIVE A PLUS



Alternative A

12' shared use path on east side

10' vehicle lanes

Cobbled corner treatment

RRFB at Moratoc

RRFB at 108th and Blake

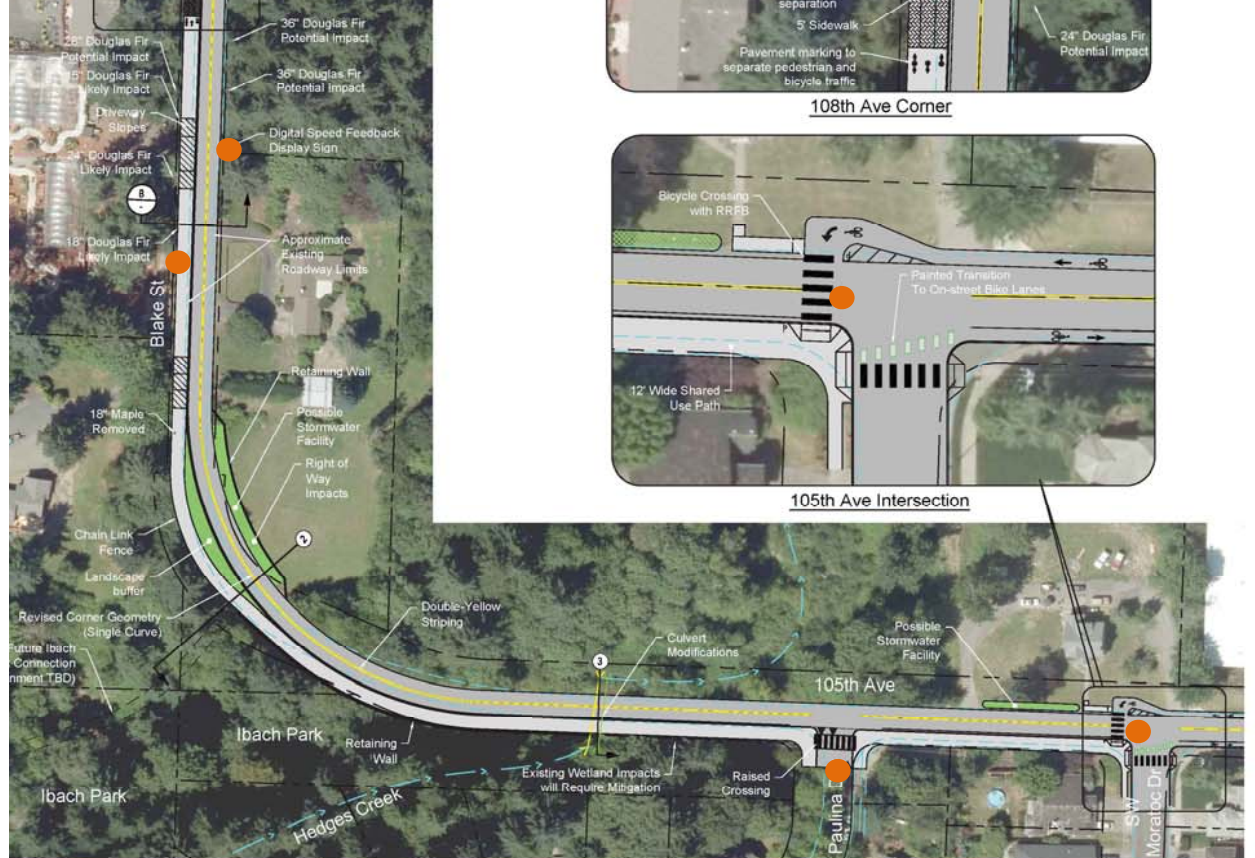
Raised crossing at Paulina

Plus

Speed feedback sign(s)

Revised centerline striping

Raised crossing at SW 108th and SW Blake



108th Ave Corner



105th Ave Intersection

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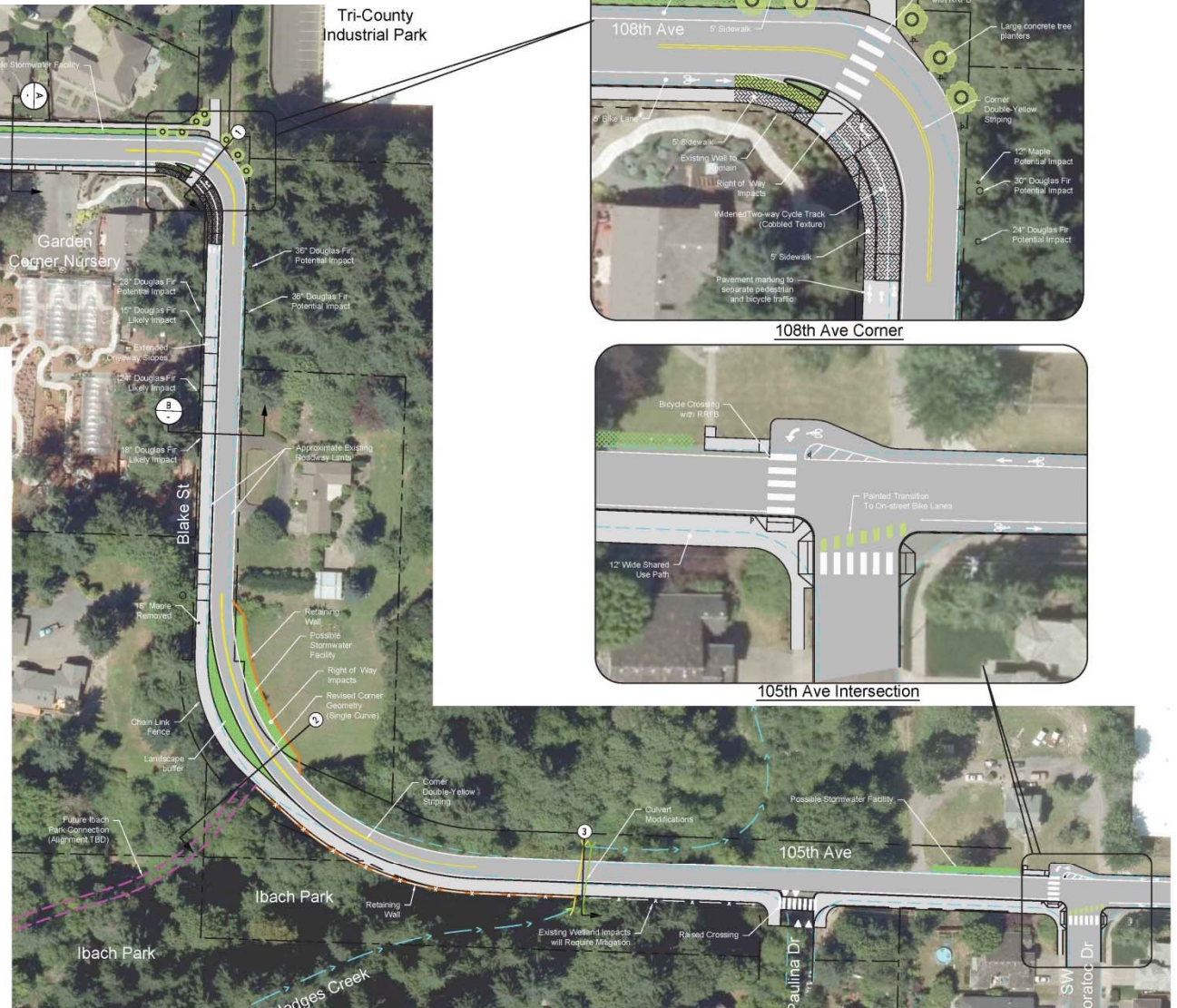
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ALT A - EAST SIDE SHARED USE PATH



- Two – 10' vehicle lanes
- 12' shared use path on east side
- Safety improvements include:
 - Cobbled corner treatment
 - RRFB at Moratoc
 - RRFB at 108th and Blake
 - Raised crossing at Paulina



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ALT B - WEST SIDE SHARED USE PATH



- Two – 10' vehicle lanes
- 12' shared use path on east side
- Safety improvements include:
 - Speed hump on Blake
 - RRFB at Moratoc
 - RRFB and Raised crossing at Willow

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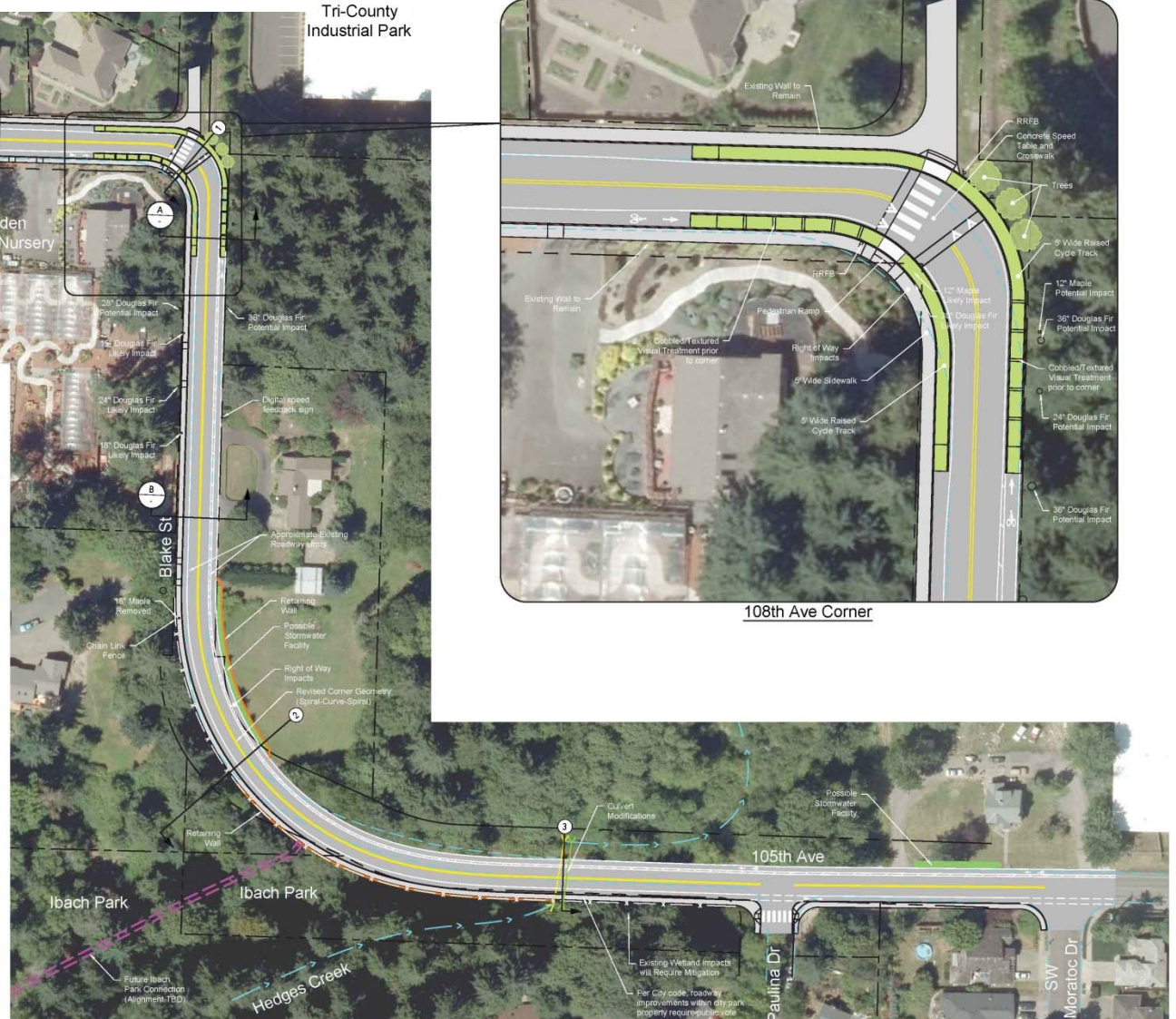
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ALT C - SIDEWALK AND BIKE LANES



- Two – 10' vehicle lanes
- 6' sidewalk on east sides
- Bike lanes on both sides (buffered on west side)
- Safety improvements include:
 - RRFB and raised crossing at 108th and Blake
 - Digital feedback speed signs



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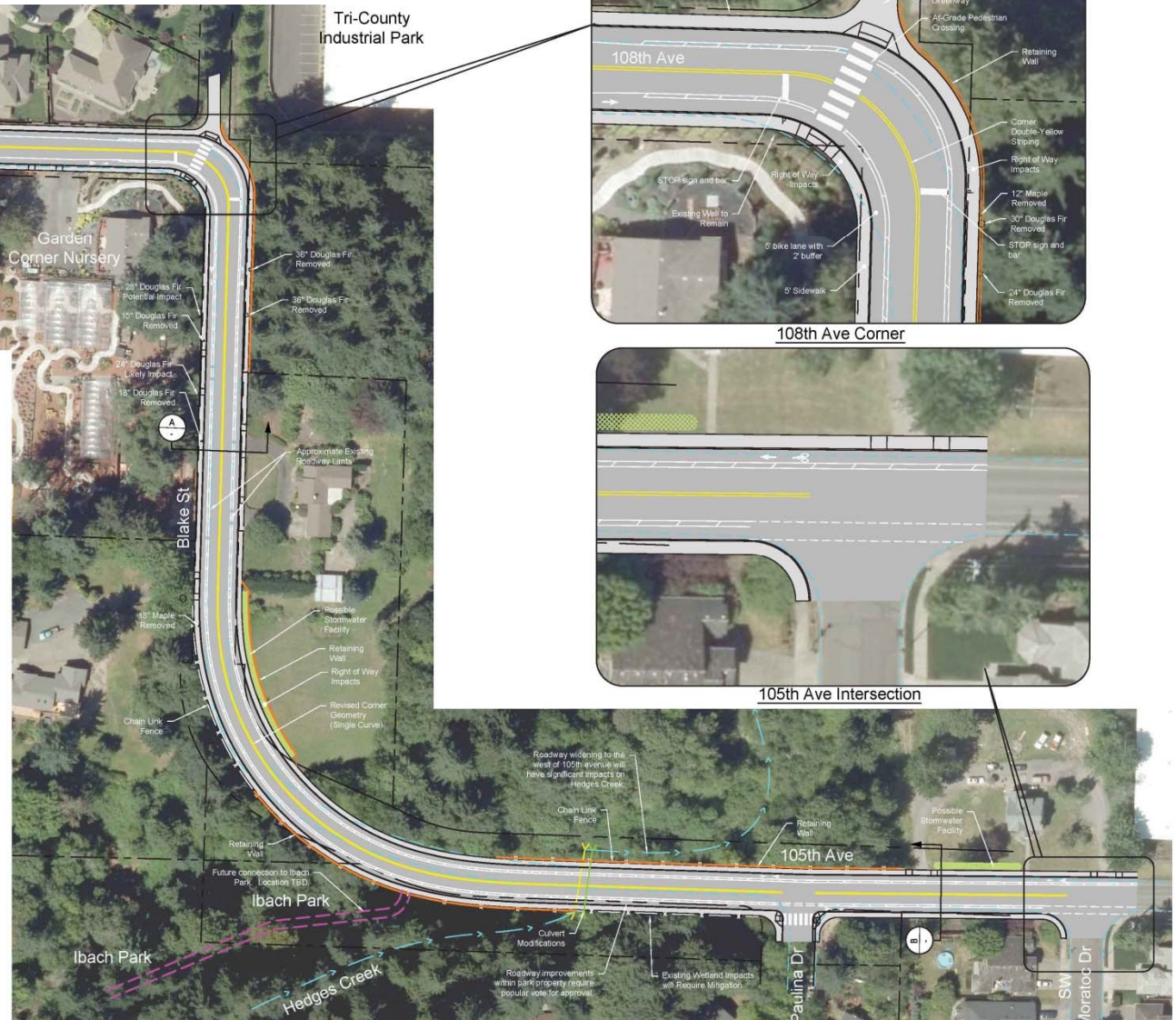
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ALT D - SIDEWALK AND BIKE LANES - BOTH SIDES



- More traditional design
- “Baseline”
- Two – 10’ vehicle lanes
- Sidewalks on both sides
- Buffered bike lanes on both sides
- Bigger footprint & higher cost
- Safety improvements include:
 - Stop Signs at 108th and Blake



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Tualatin City Council
Preferred Alternative
November 13, 2017

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OVERVIEW

← to SW Ibach Street



to SW Avery Street →

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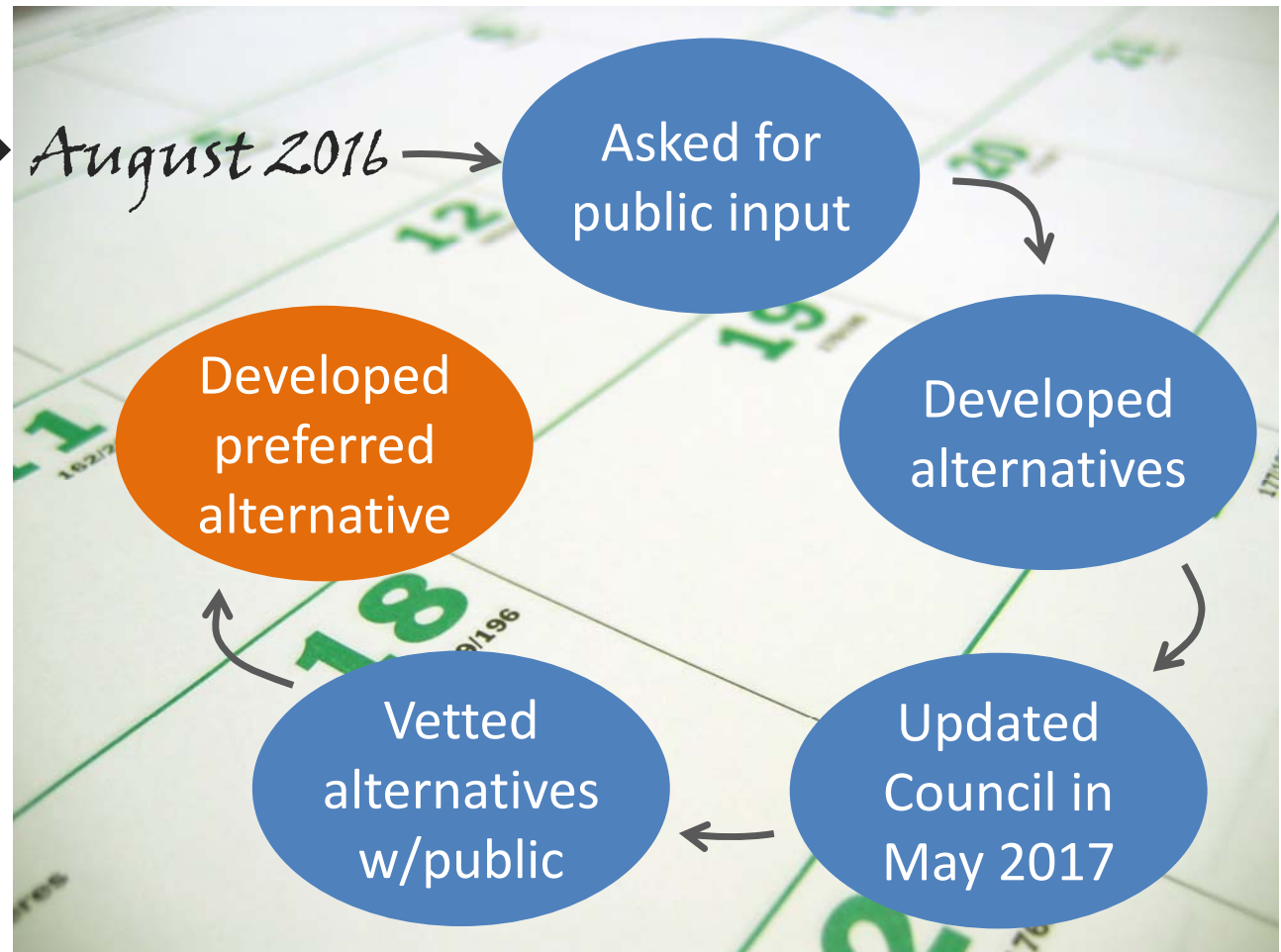
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REVIEW THE PROCESS

Started → August 2016 →



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OUTREACH

OUTREACH MEETING	MEETING DATE	ATTENDANCE
Stakeholder Meeting	September 19, 2016	One property owner
CIO Meeting - Project Update	October 3, 2016	18 people
Closed Street Site Tour	October 8, 2016	Est. 45-50 people
Stakeholder Meeting	October 8, 2016	Two property owners
Kitchen Table Meeting #1	November 7, 2016	Five people
Kitchen Table Meeting #2	November 29, 2016	Five people
Stakeholder Meeting	April 3, 2017	Two property owners
Stakeholder Meeting	April 3, 2017	Two property owners
Stakeholder Meeting	April 12, 2017	Two property owners
City Council Presentation	May 22, 2017	30 people
Open House	June 13, 2017	20 people
Online Surveys	October – September 2017	286 people



Great participation!

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RESULTS

Top concerns

Feels unsafe



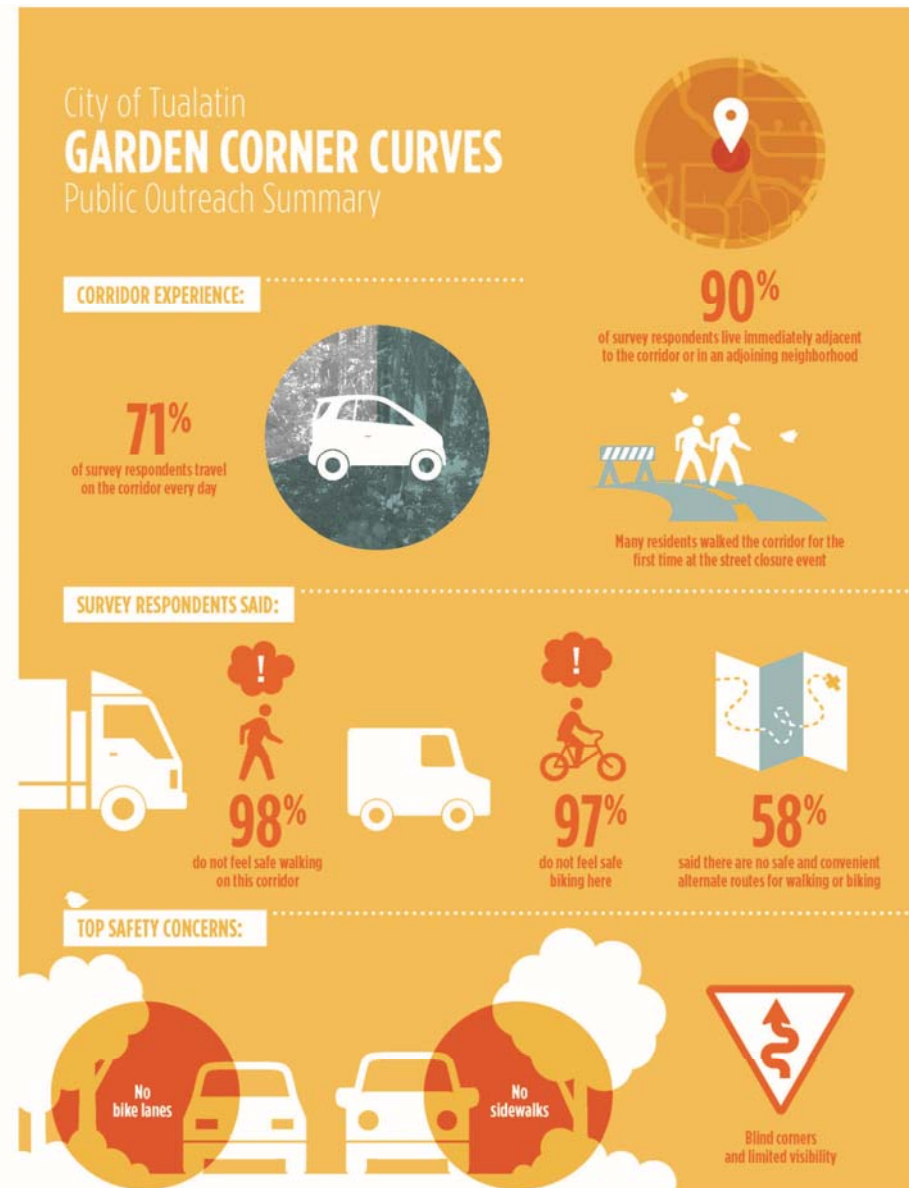
No bike lanes

No sidewalks

Speeding

Blind corners / limited visibility

No neighborhood connection



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FOUR ALTERNATIVES

A shared use path on east side

B shared use path on west side

C sidewalk on east side bike lanes on both sides

D sidewalk and bike lanes on both sides



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EVALUATION

Considered

Public input

Impacts - right of way, environmental, greenway

Cost

“Implementability” 😊

Interchangeable elements



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"IMPLEMENTABILITY"



Is the project realistic, affordable, constructible?

Is land available for the project?

Are there elements of the project that can be phased in?

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SAFETY

How do the alternatives compare?



A & **B** completely separate peds and bikes from cars

C → one buffered bike lane and one sidewalk

D → two buffered bike lanes and two sidewalks

All reduce vehicles speeds and address “the corner”

All provide safe crossing locations

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PUBLIC PREFERENCE



A shared use path on the east side 68%



B shared use path on the west side 47%

C sidewalk on east side, bike lanes on both sides 48%

D sidewalk and bike lanes on both sides 39%

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PUBLIC FEEDBACK

LIKED

Speed feedback signs

Raised/separated facilities

Landscape planters and buffers

Cobbled texturing



DISLIKED

Speed bumps

Stop signs

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COST ESTIMATES

A shared use path on the east side \$3.1m

B shared use path on the west side \$3.4m

C sidewalk on east side, bike lanes on both sides \$3.1m

D sidewalk and bike lanes on both sides \$3.6m

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NEW FOOTPRINT

→ increased footprint beyond existing roadway

A shared use path on the east side +1 acre

B shared use path on the west side +1.15 acre

C sidewalk on east side, bike lanes on both sides +0.9 acre

D sidewalk and bike lanes on both sides 1.2 acre

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RIGHT OF WAY NEEDED

→ Right of way that needs to be purchased in square feet

A shared use path on the east side + 3,200 ft²

B shared use path on the west side + 2,800 ft²

C sidewalk on east side, bike lanes on both sides + 2,500 ft²

D sidewalk and bike lanes on both sides + 7,200 ft²

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And the preferred alternative is

ALTERNATIVE A PLUS



Alternative A

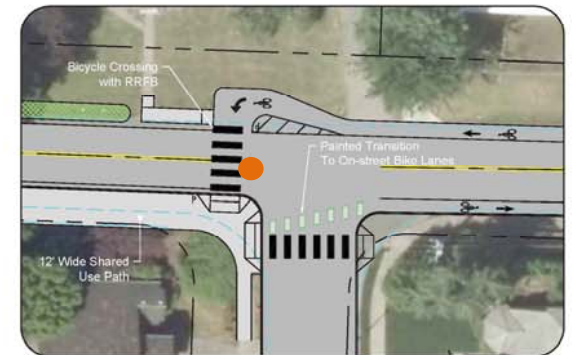
- 12' shared use path on east side
- 10' vehicle lanes
- Cobbled corner treatment
- RRFB at Moratoc
- RRFB at 108th and Blake
- Raised crossing at Paulina

Plus

- Speed feedback sign(s)
- Revised centerline striping
- Raised crossing at 108th and Blake



108th Ave Corner



105th Ave Intersection



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POSSIBLE “NEARER TERM” IMPROVEMENTS

Better signage

Visibility improvements

Revised pavement markings

Speed feedback display sign

Anti-speeding public awareness campaign



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NEXT STEPS

Inform the community

Newsletter, Facebook, NextDoor

Website: gardencornercurves.org

Identify funding

Build components as funding is available



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DISCUSSION



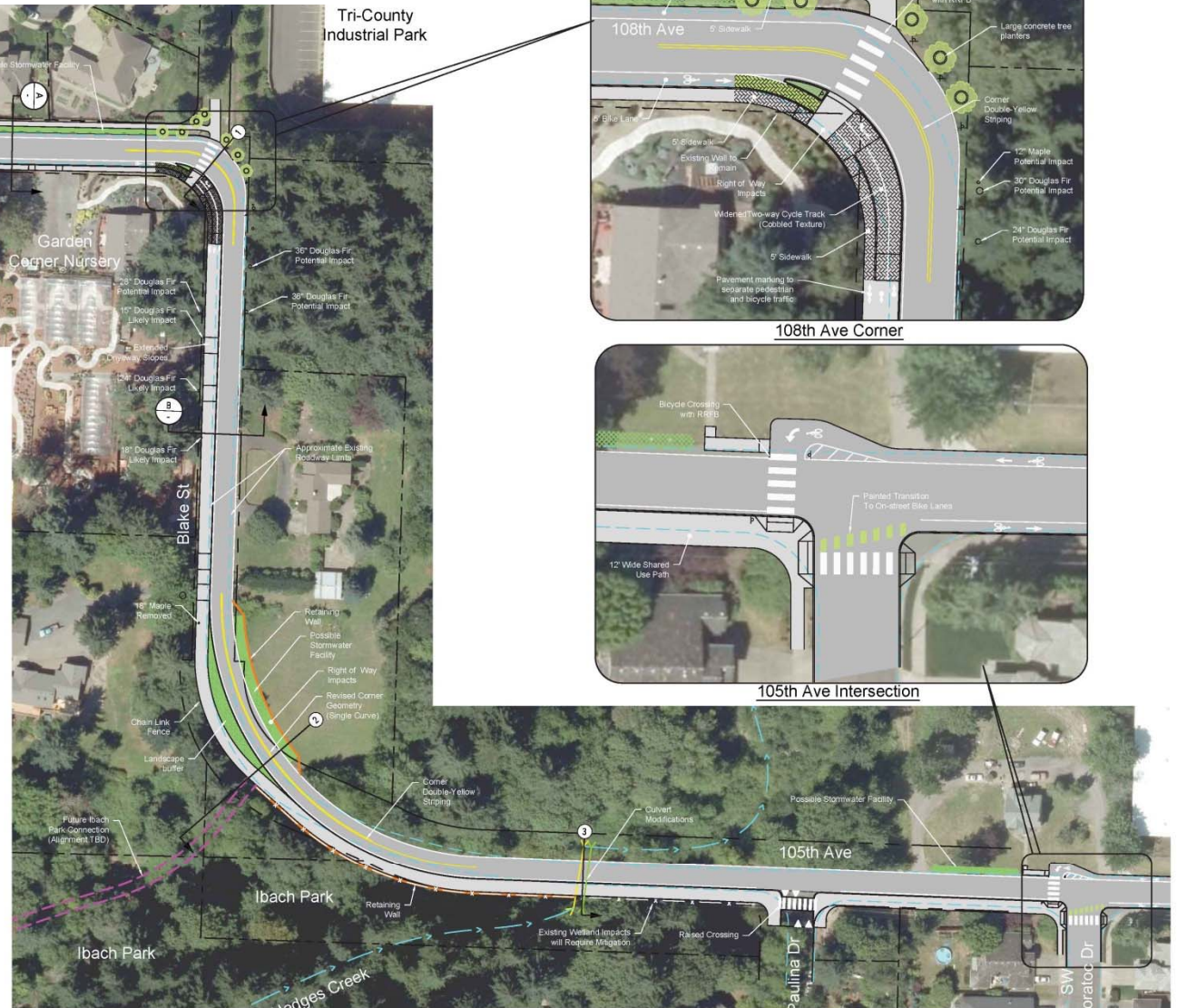
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Alternatives A through D

ALT A - EAST SIDE SHARED USE PATH



- Two – 10' vehicle lanes
- 12' shared use path on east side
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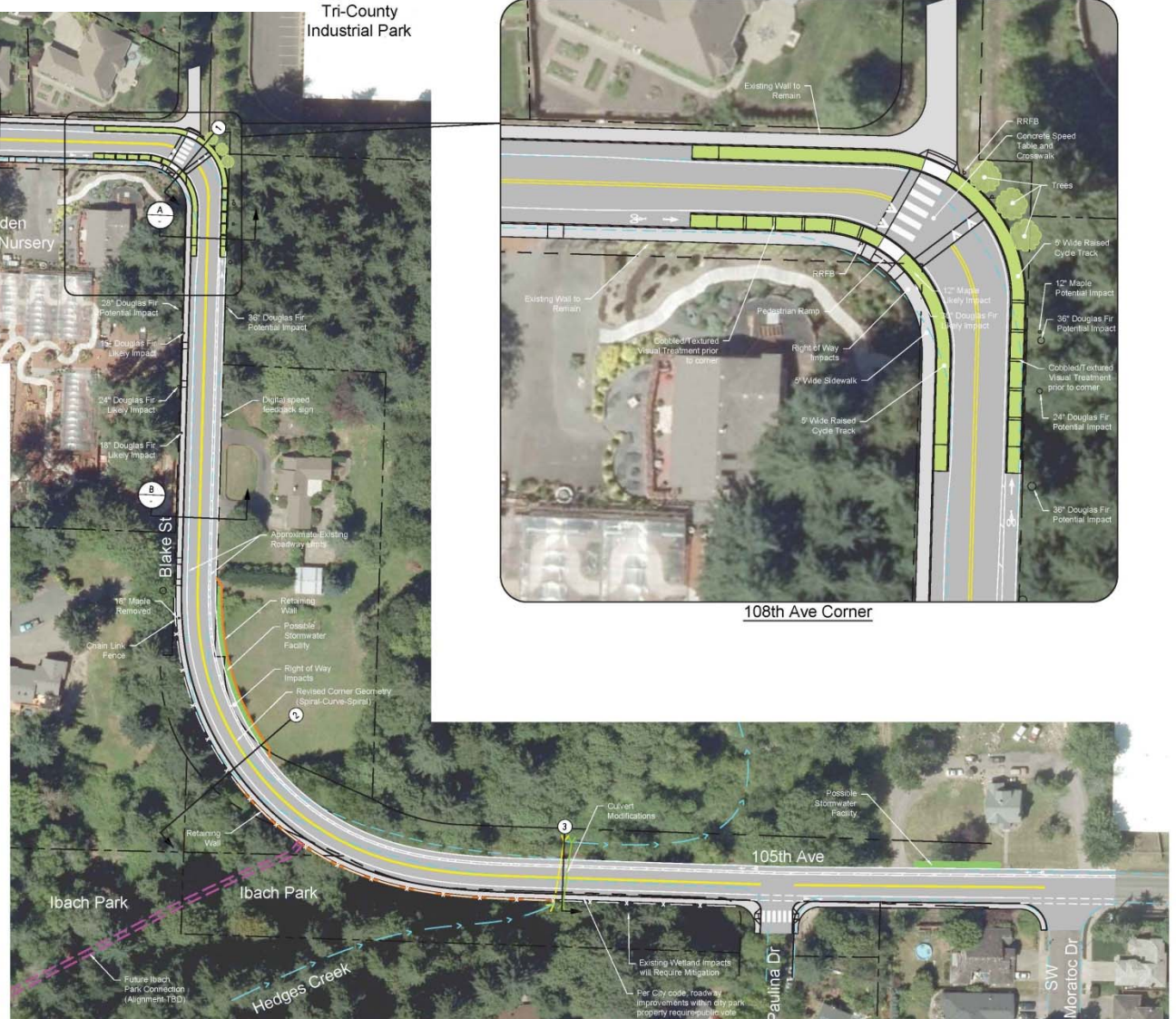
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ALT C - SIDEWALK AND BIKE LANES



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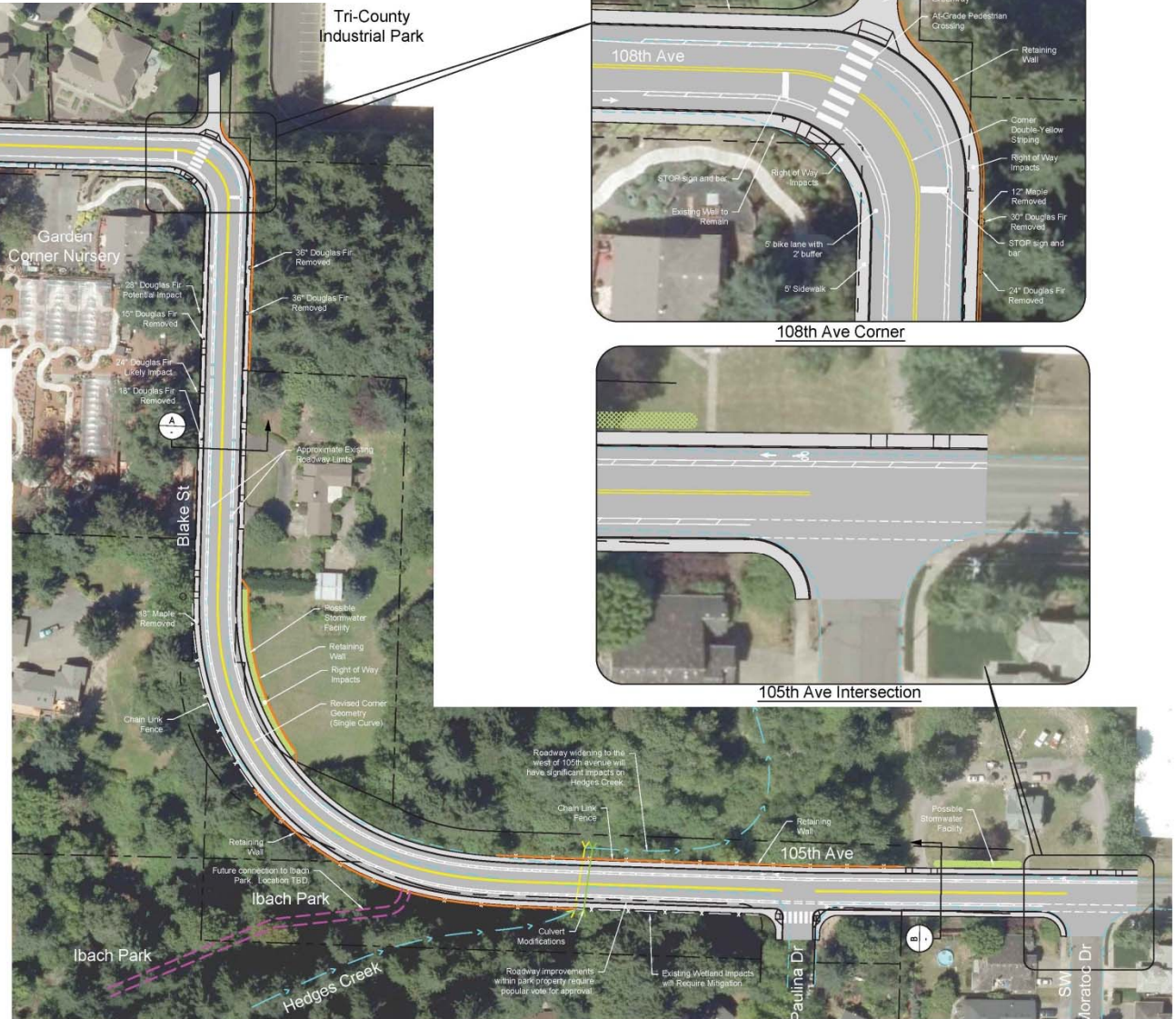


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ALT D - SIDEWALK AND BIKE LANES - BOTH SIDES



- More traditional design
- “Baseline”
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