

Welcome

144 Avenue N.W.

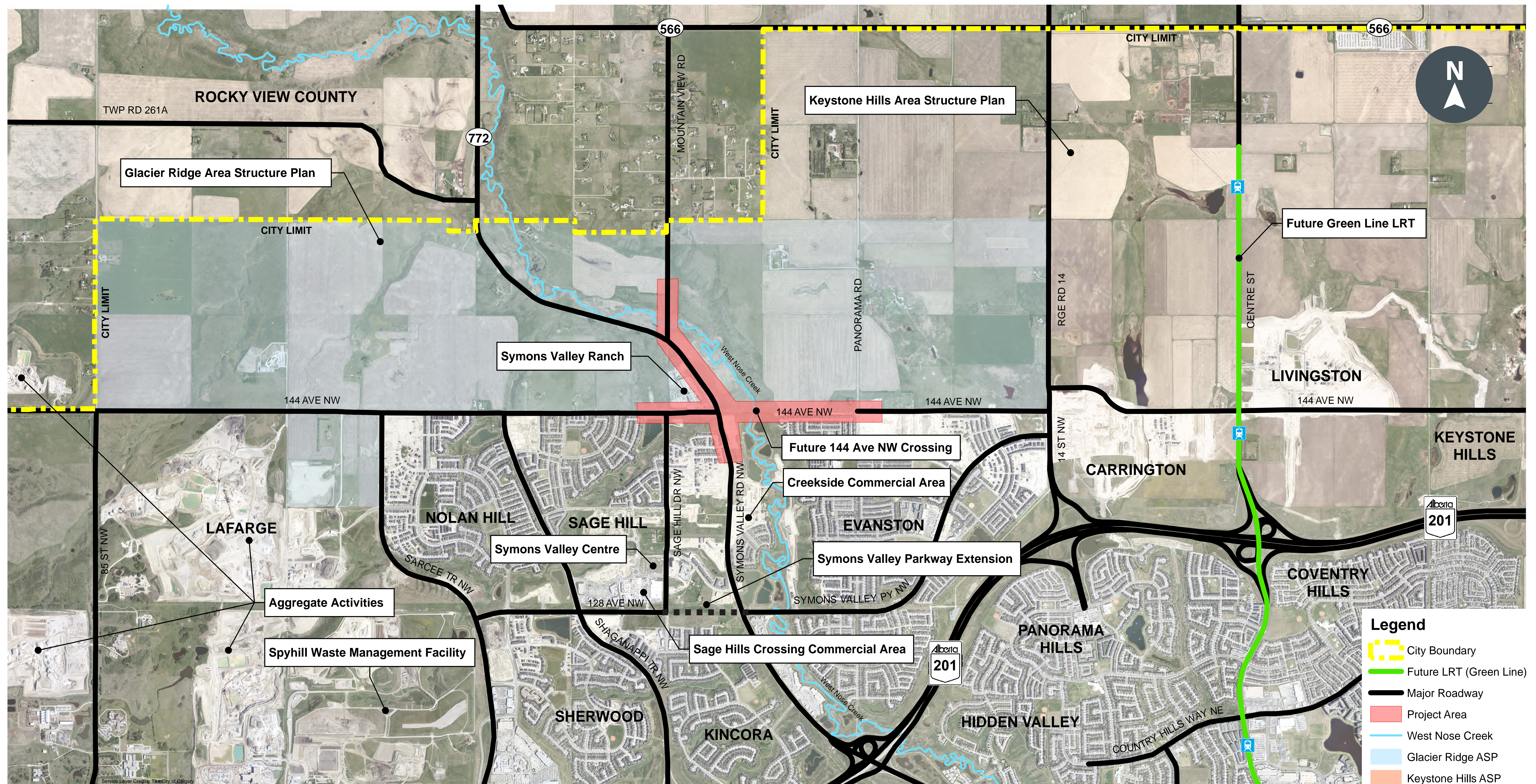
Functional Planning Study

The City of Calgary is undertaking a functional planning study for 144 Avenue N.W. which includes the West Nose Creek crossing and the future realignment of Symons Valley Road onto Mountain View Road.

At this information session, we will:

- Reveal the creek crossing options and recommended plans for the 144 Avenue N.W. study area
- Discuss the creek crossing options and recommended plans with you
- Gather your feedback on the creek crossing options, recommended plans and information session

Study area overview

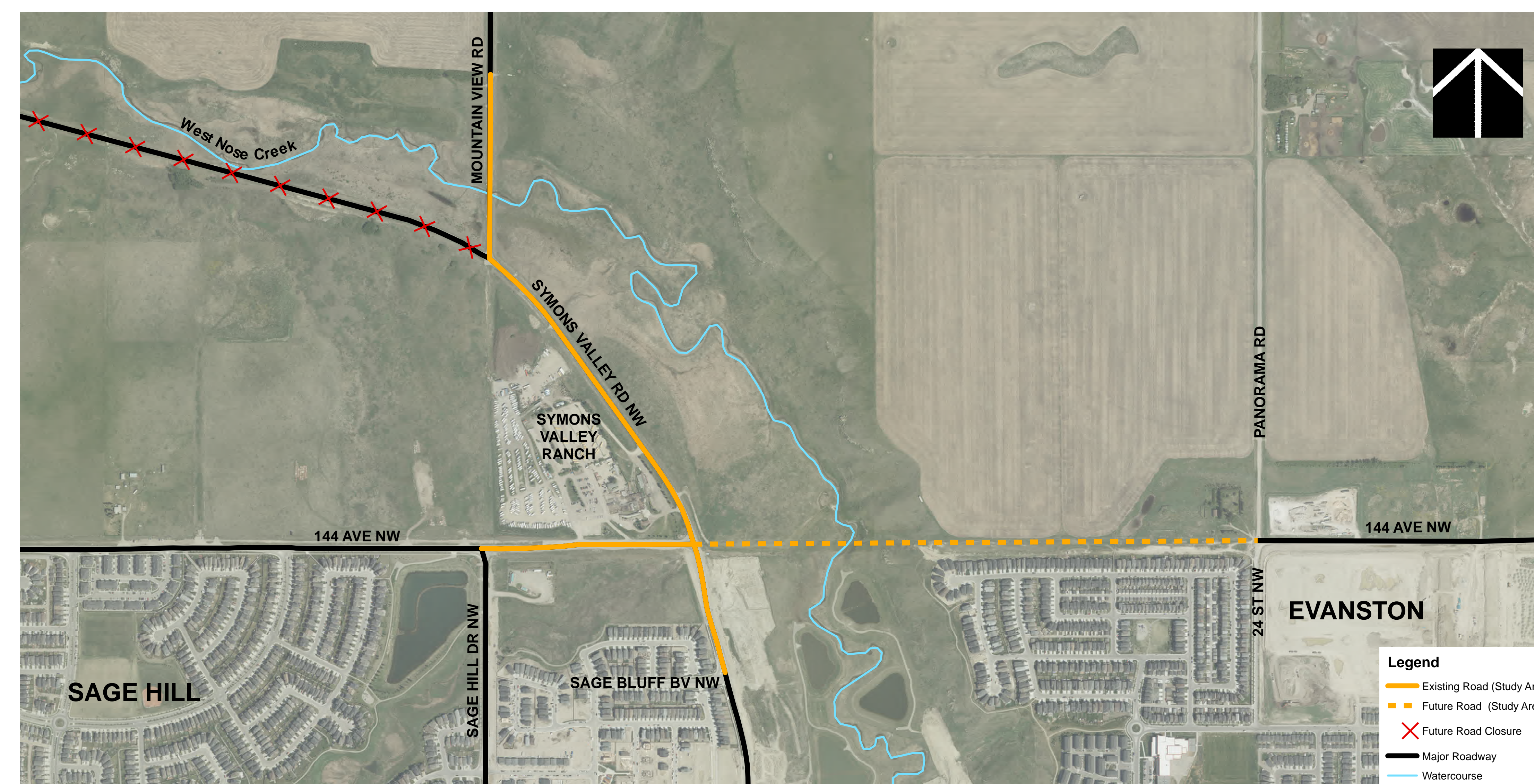


Study objectives

The study will provide future recommendations within the 144 Avenue N.W. study area that will:

- Better accommodate people who walk, bike, take transit and drive
- Improve safety for those who travel through, or live along, the study area
- Extend 144 Avenue N.W. to provide a primary transit route and connection to the future Green Line LRT and provide missing east-west link
- Accommodate the future Symons Valley Road closure / realignment to provide more direct connection to Highway 566
- Minimize impacts within the study area

Study area



Background

- 2009** **Calgary Transportation Plan** classifies 144 Avenue N.W. as an Arterial Street. It is planned to be the only continuous east-west connection north of Stoney Trail.
- 2009** **Calgary North Northwest Network Study 144 Avenue North** recommends 144 Avenue N.W. right-of-way be protected for a future 6 lane divided roadway.
- 2015** **Investing in Mobility: Transportation Infrastructure Investment Plan (TIIP)** identifies the bridge crossing of West Nose Creek as a leading infrastructure requirement for development of any new communities north of 144 Avenue N.W.
- 2015** **Glacier Ridge Area Structure Plan** identifies and approves roadway network improvements that will allow for the realignment of Symons Valley Road to Mountain View Road.
- July 2018** **Council approves 14 new suburban communities** to be built in the coming years. Four of the approved communities are located in the Glacier Ridge ASP.
- Sept. 2018** **144 Avenue N.W. Functional Planning Study** begins. The 144 Avenue N.W. Functional Planning Study will result in design recommendations that will guide the development of the future transportation network. This project will move forward with preliminary and detailed design in 2020.

What we heard

Combining feedback received from Calgarians and City priorities, the following list identifies the key priorities for the project:

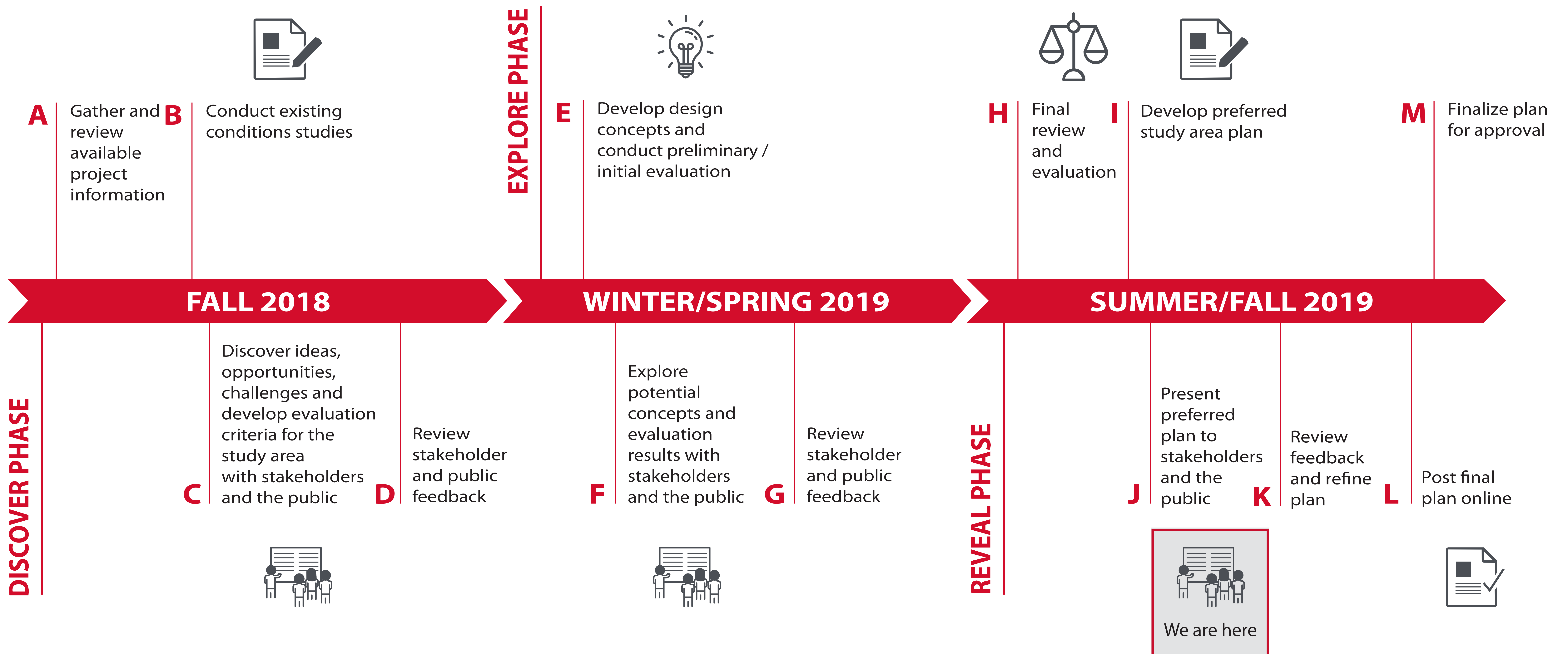
- Minimize property impacts
- Traffic safety
- Creek alignment / protection
- Environmental sustainability
- Pathway connectivity
- Improve vehicle travel times
- Construction costs

Key themes that were heard during public engagement throughout the Explore phase included:

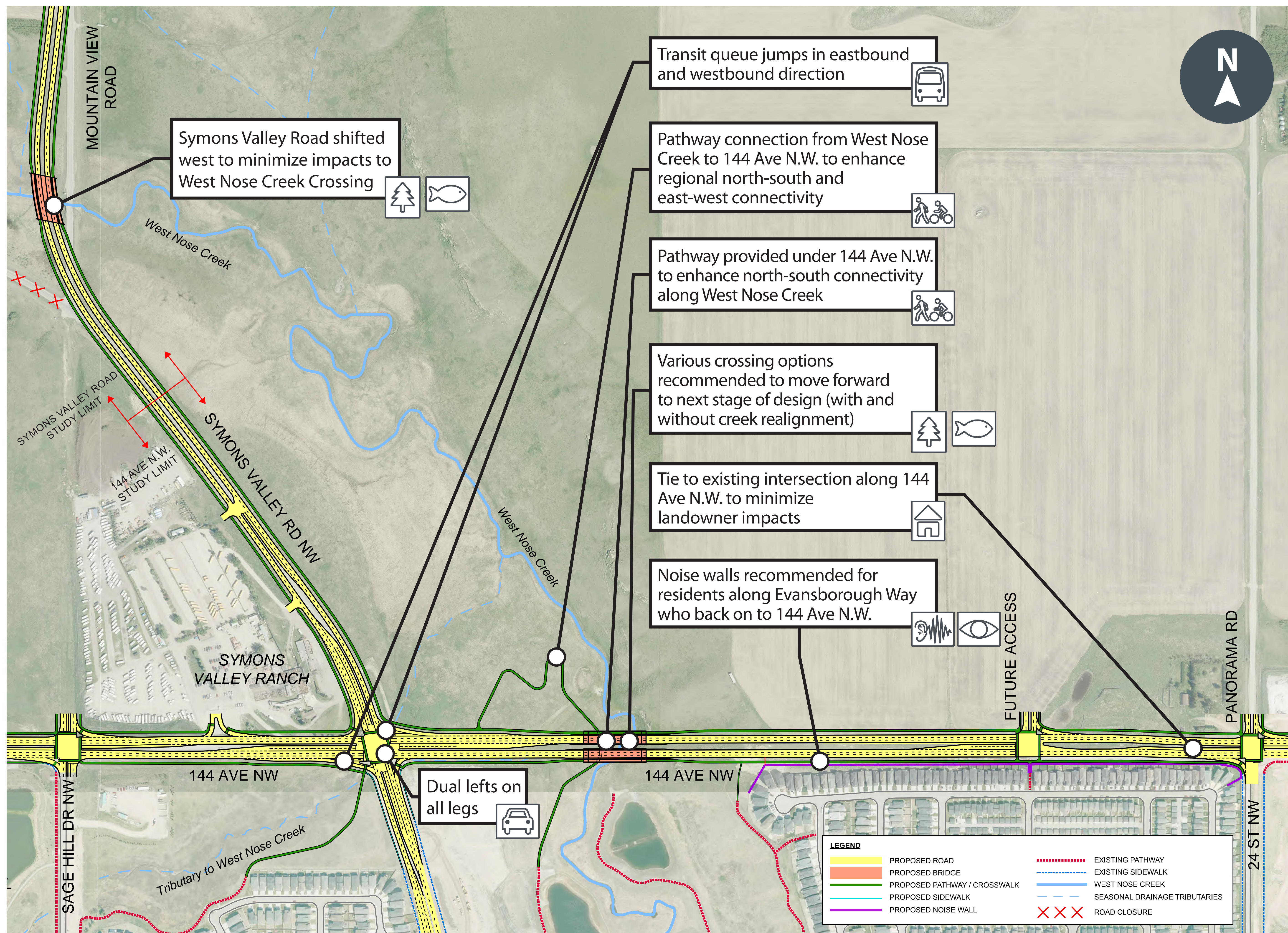
- Continue to consider minimizing adjacent landowner impacts, accommodating people who walk, bike and take transit, exploring mitigation measures to reduce noise and visual impacts and reducing environmental impacts, particularly to West Nose Creek.
- More details were requested regarding the elevation of the road, how the roadway will look through the study area and information about the costs of construction.



Study process



Recommended ultimate plan



What we heard from Calgarians

- Minimize adjacent landowner impacts
- Accommodate people who walk, bike, and take transit
- Explore mitigation measures to reduce noise and visual impacts
- Minimize environmental impacts, particularly to West Nose Creek

How the concept was refined

- Maintain 144 Ave N.W. at the centre line of the original road right-of-way to reduce potential impacts to landowners north and south of 144 Ave N.W.
- Parallel dual left turn treatment to reduce overall road right-of-way width
- It is recommended that noise walls are integrated with the surrounding area to reduce noise and visual impact
- Pathway connection along both sides of 144 Ave N.W. and Symons Valley Road and pathway underpass on the west side of West Nose Creek

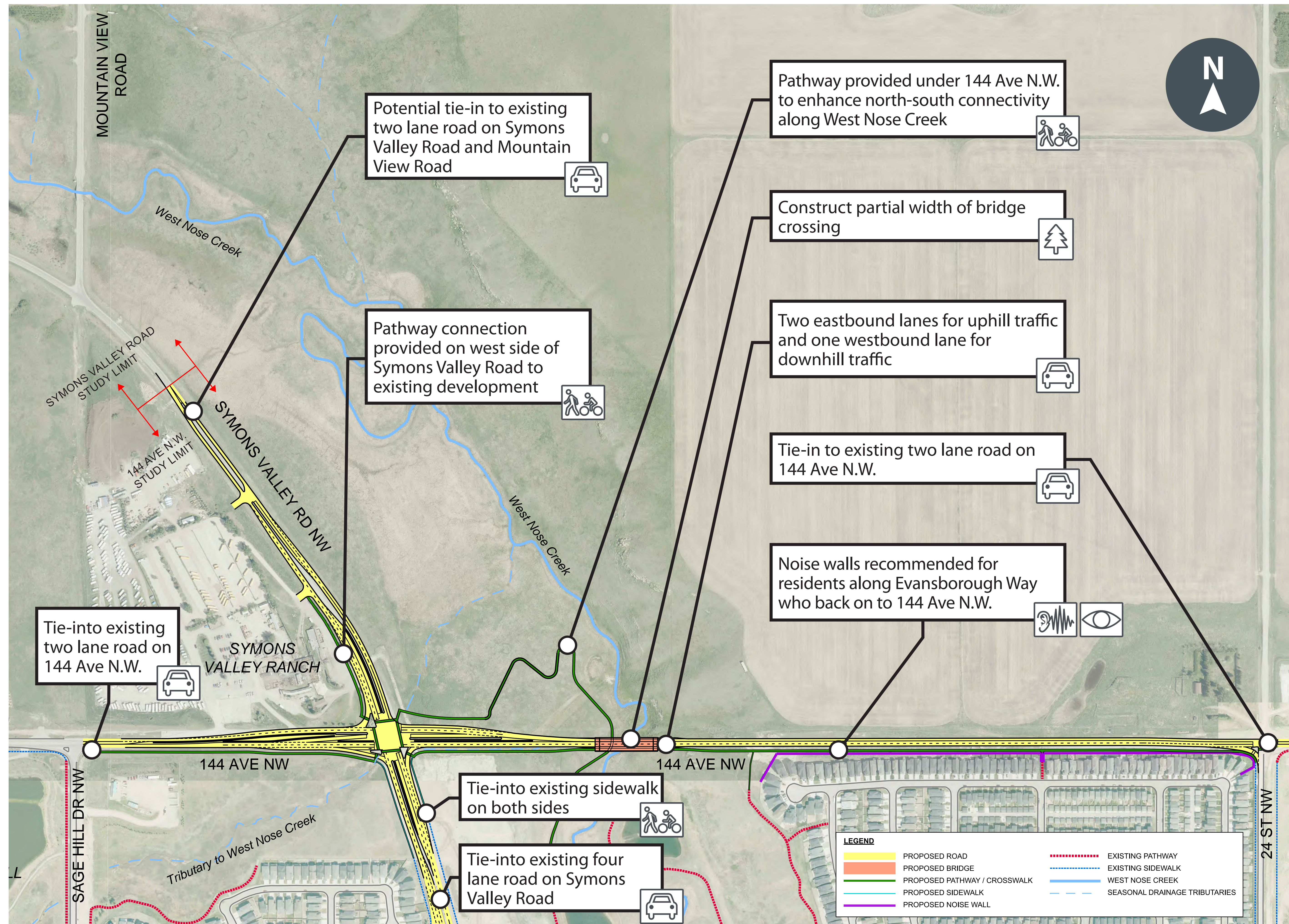
Cost to implement

	Total Construction Cost	- 30%	+ 50%
Symons Valley Road	\$35 million	\$25 million	\$53 million
144 Ave N.W.	\$85 million	\$60 million	\$128 million

Construction cost is based on an assumption using Class 4 estimate (-30%/+50%). Potential for savings depending on bridge options.

- Accommodate eastbound and westbound transit queue through 144 Ave N.W. and Symons Valley Road intersection

Potential stage 1 plan



What we heard from Calgarians

- Minimize adjacent landowner impacts
- Accommodate people who walk, bike, and take transit
- Explore mitigation measures to reduce noise and visual impacts
- Minimize environmental impacts, particularly to West Nose Creek

How the concept was developed

- Building the transportation infrastructure in multiple stages is proposed to accommodate the near and long-term mobility needs
- Single left turn bays and two through lanes provided at Symons Valley Road
- Noise walls typically built to the ultimate condition height requirements
- Pathway connection to be provided along the south side of 144 Ave N.W.

Cost to implement

Total Construction Cost	- 30%	+ 50%
\$60 million	\$42 million	\$90 million

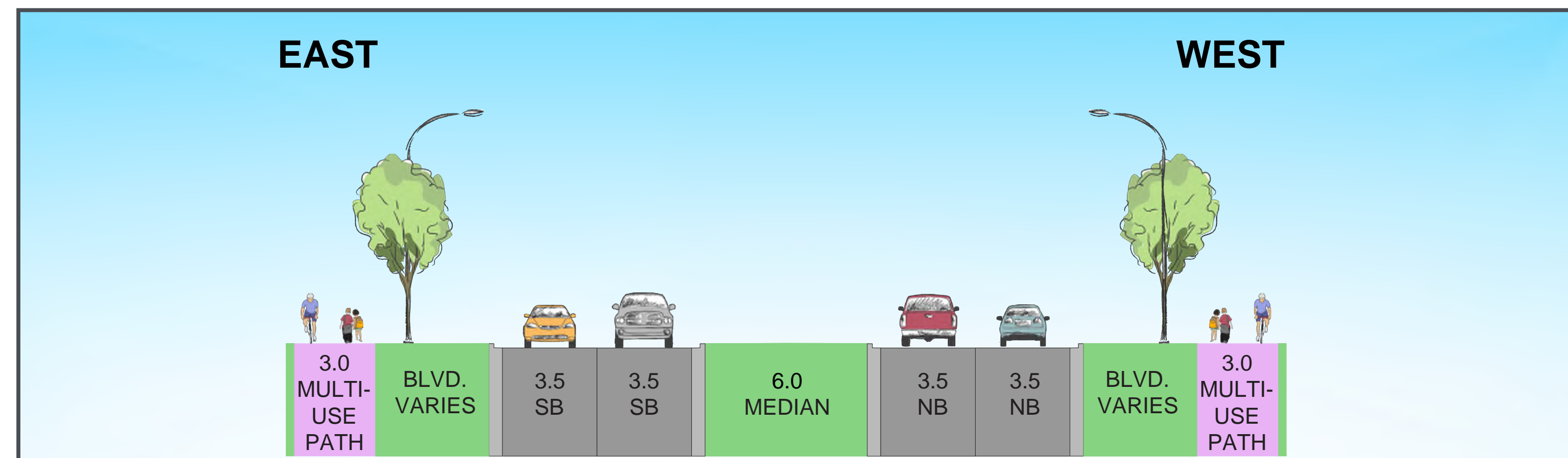
Construction cost is based on an assumption using Class 4 estimate (-30%/+50%). Potential for savings depending on bridge options.

Timeline

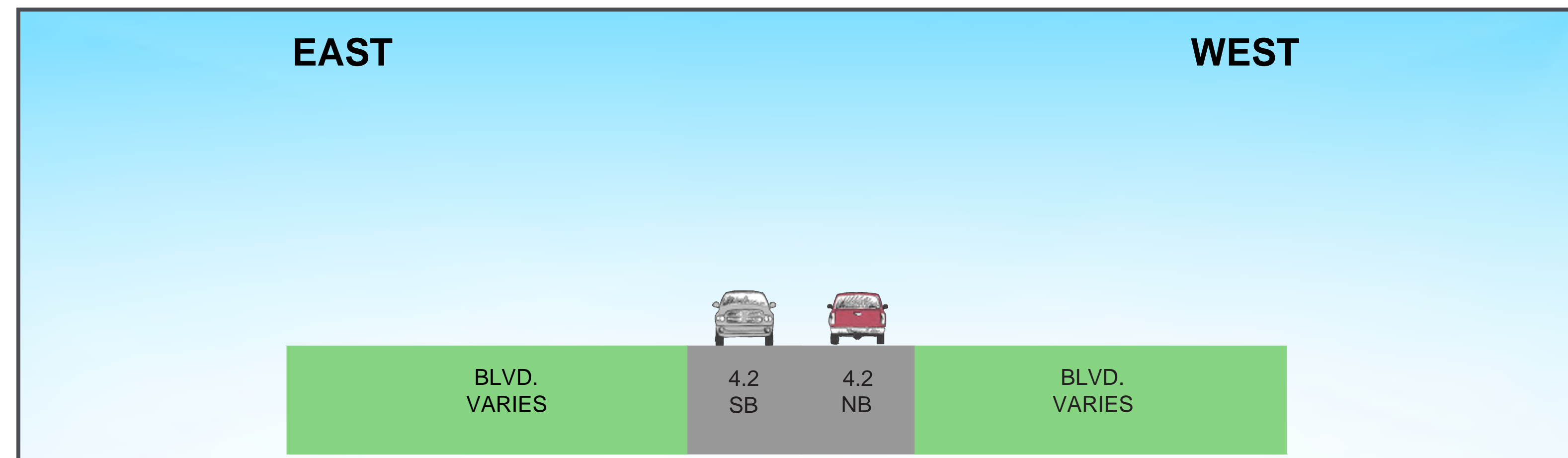
Addresses needs in near term until area communities reach 60% of full development

Recommended typical cross sections

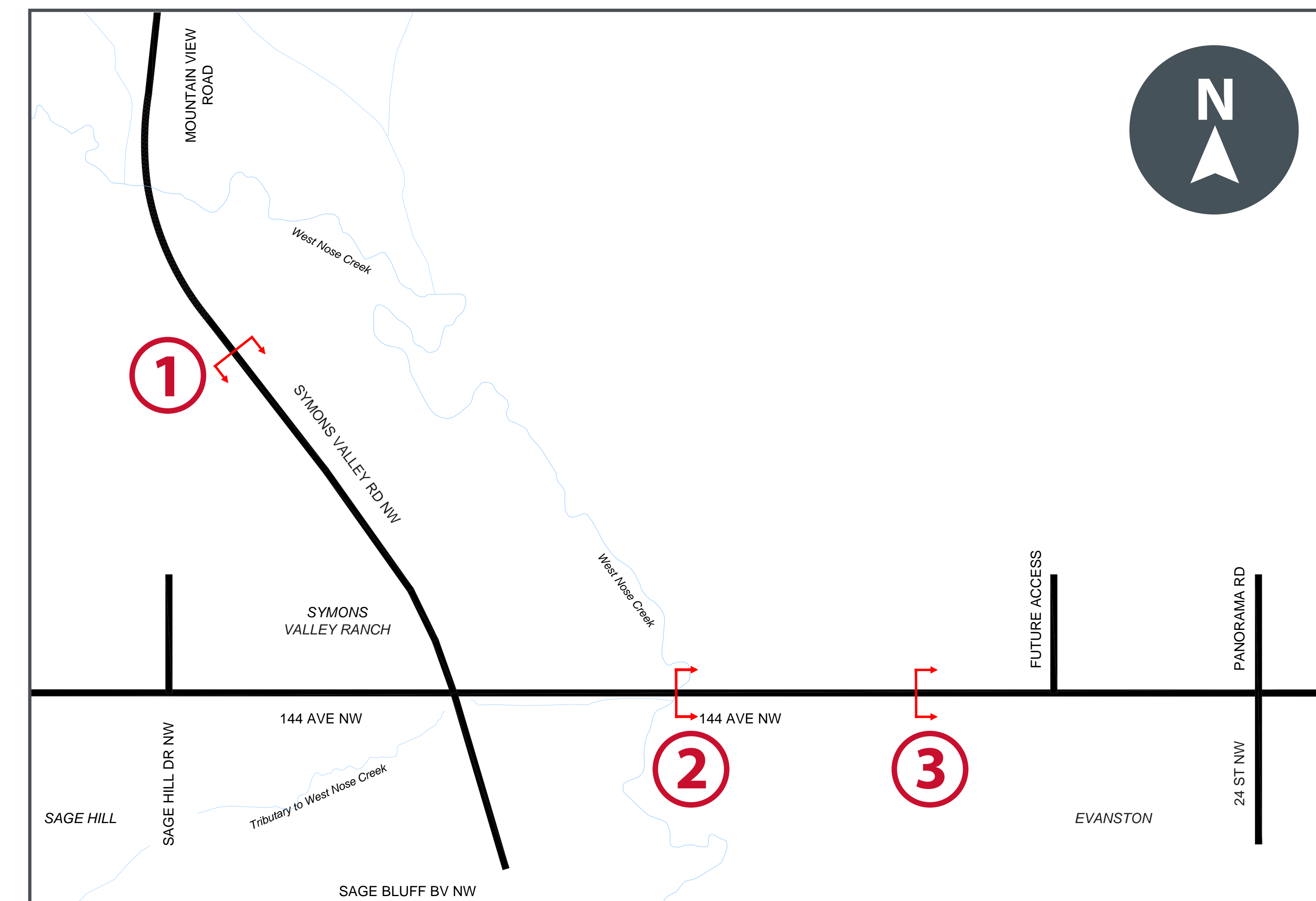
1 Symons Valley Road (looking South) North of Symons Valley Ranch - Ultimate Plan cross section (36m)



North of Symons Valley Ranch - Existing/Stage 1 cross section (31m to 36m)

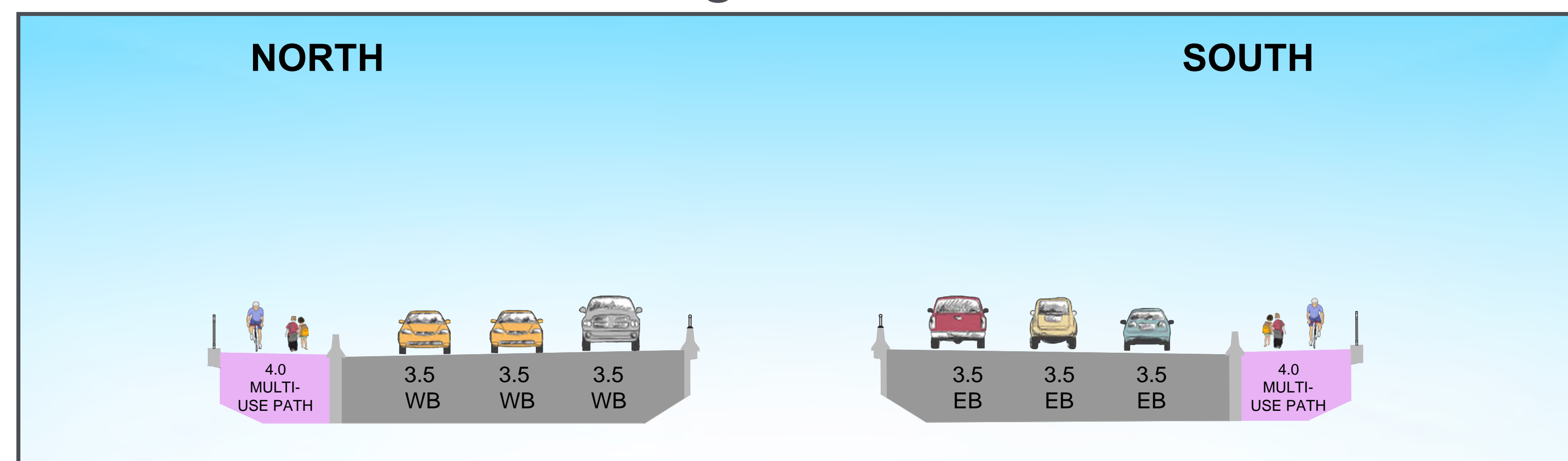


Key Plan

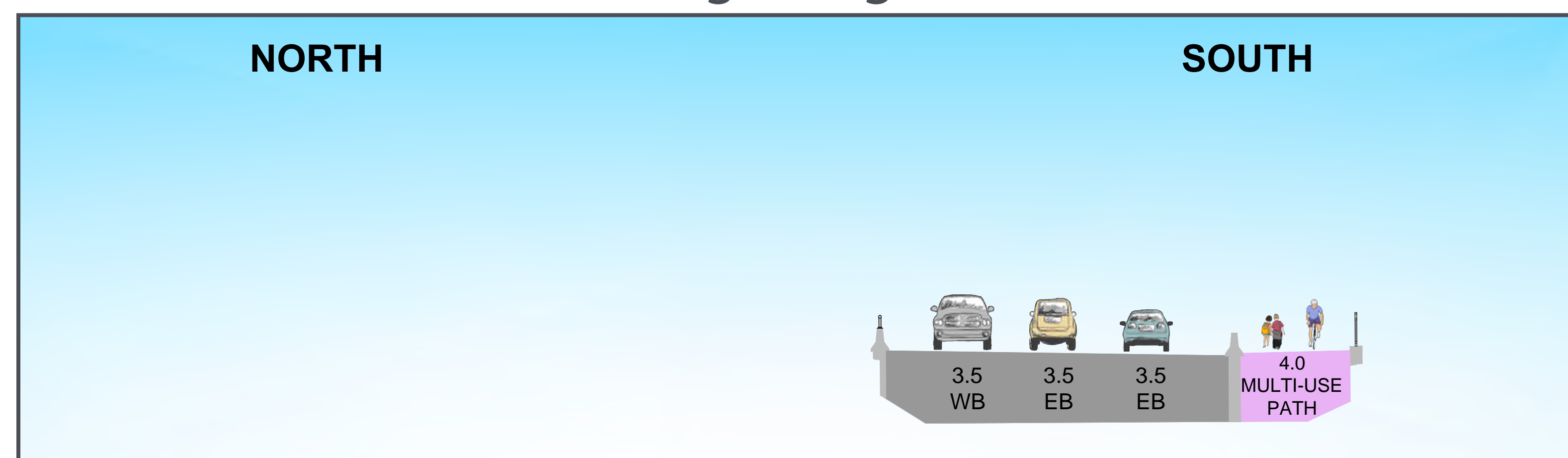


EB = Eastbound
SB = Southbound
WB = Westbound
NB = Northbound

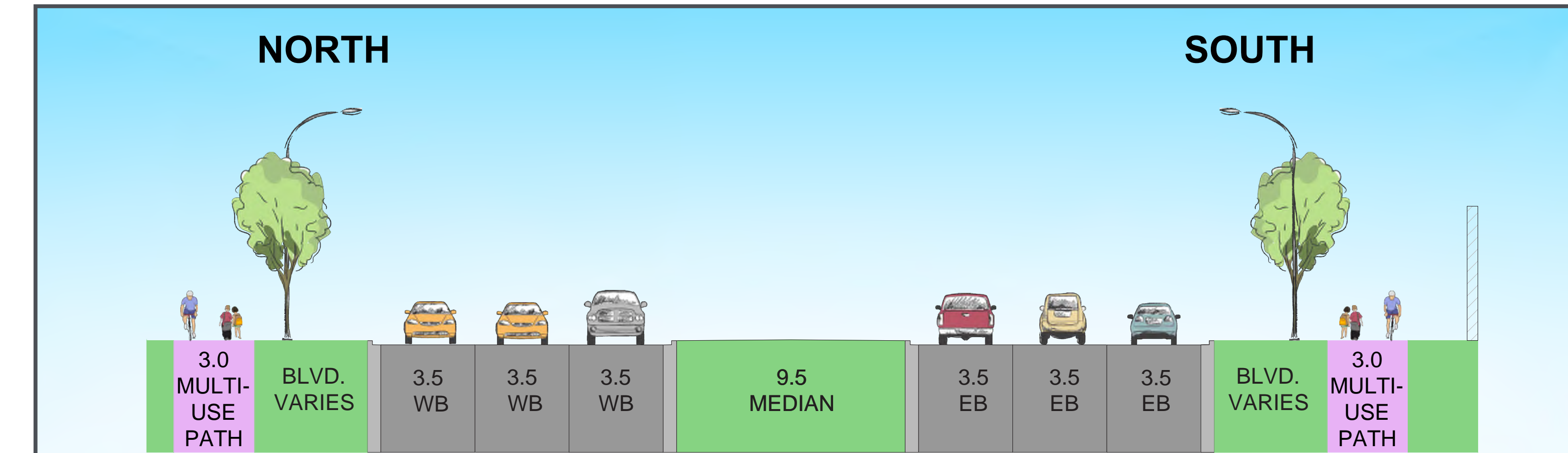
2 144 Ave N.W. (looking East) At West Nose Creek Crossing - Ultimate Plan cross section (43m)



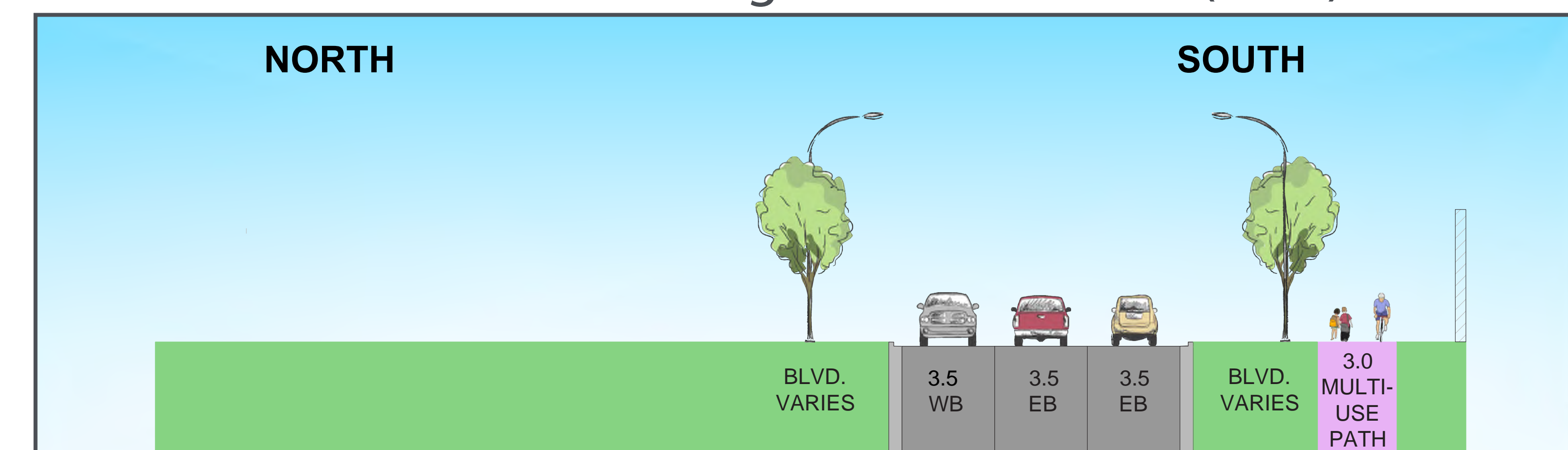
At West Nose Creek Crossing - Stage 1 cross section (19m)



3 144 Ave N.W. (looking East) East of West Nose Creek - Ultimate Plan cross section (46m to 51m)



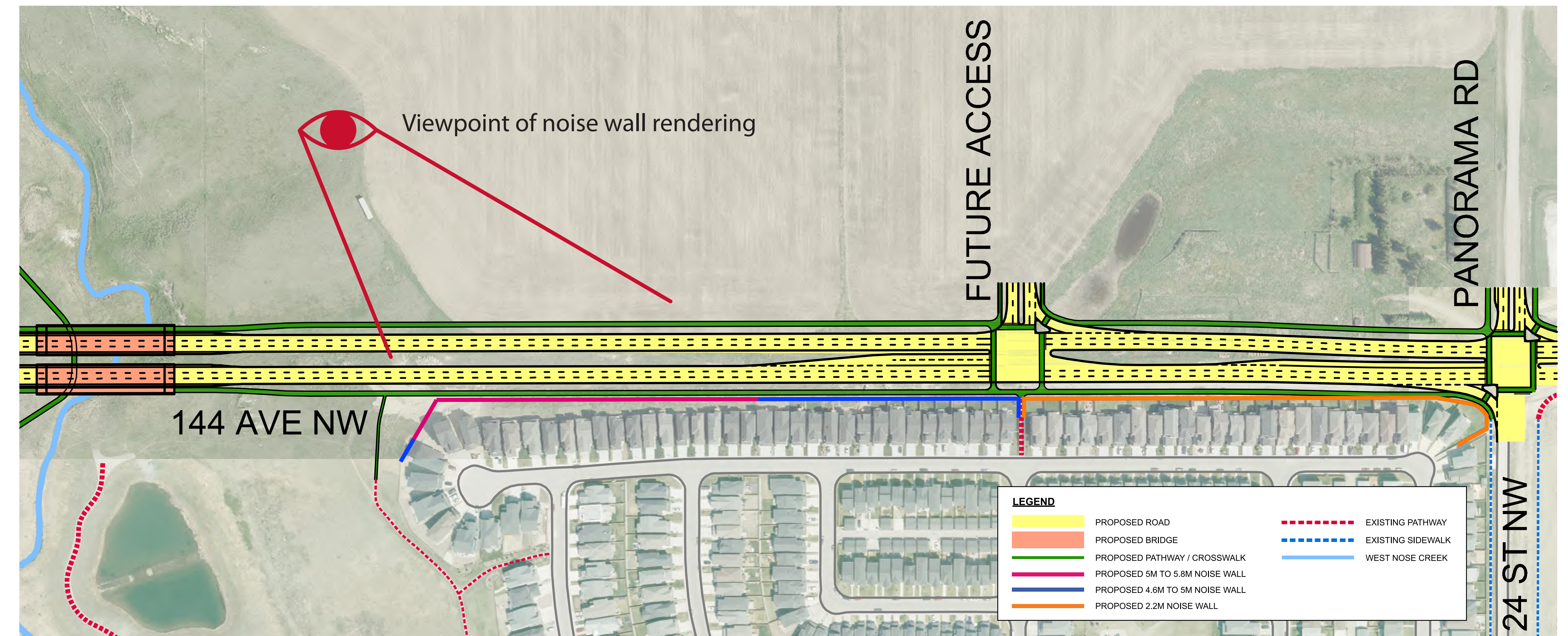
East of West Nose Creek - Stage 1 cross section (26m)



Recommended pathway connections



Noise attenuation



* Noise wall rendering. Noise wall height may vary based on topography and height/style of housing.

Draft recommendations

- Noise walls recommended for houses on Evansborough Way that back on to 144 Ave N.W.
- The community will be engaged prior to construction to review wall details including appearance and height

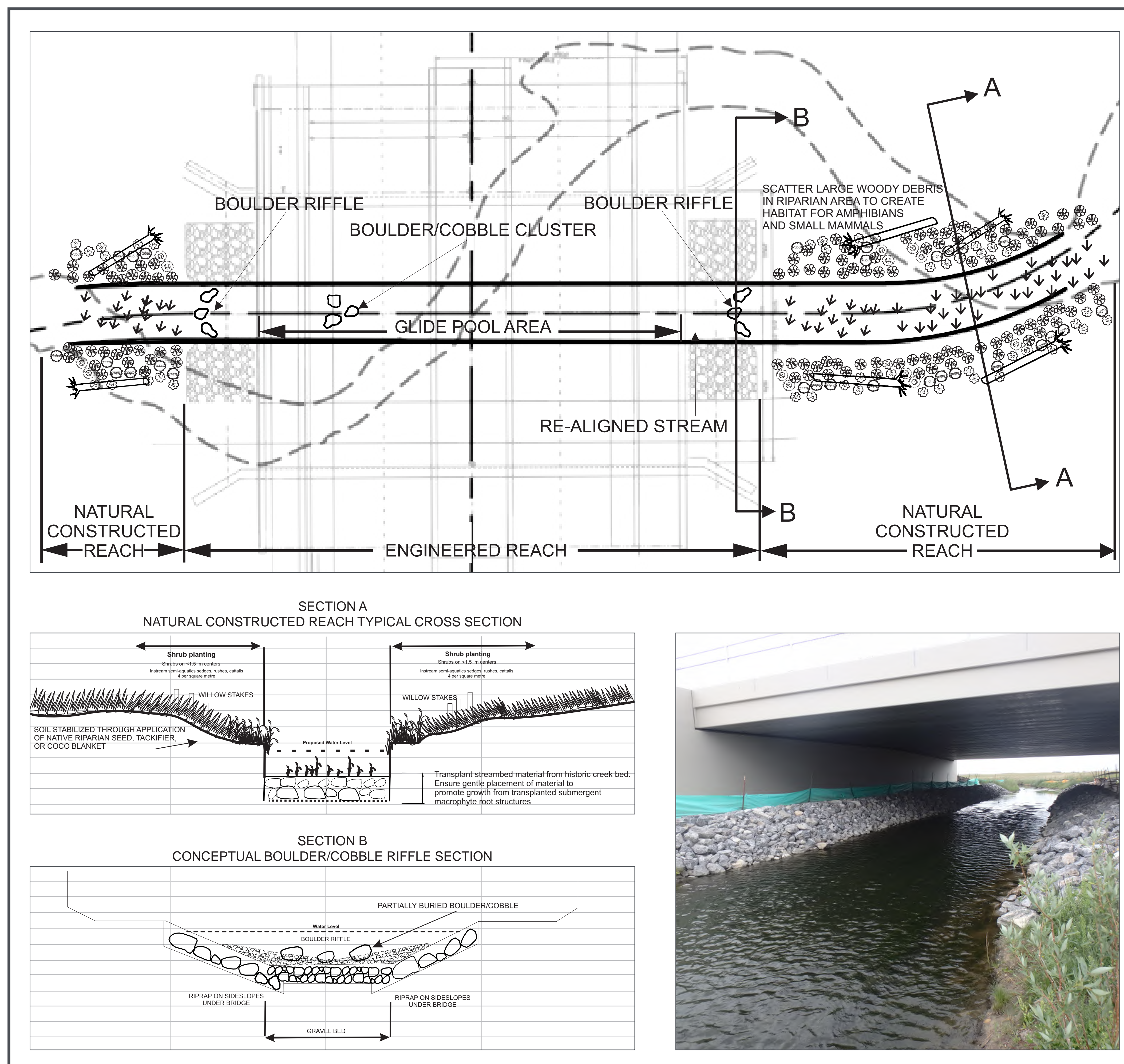
Noise wall examples

- See examples of potential noise walls that could be used
- Modern computer printing techniques allow virtually any pattern or colour to be adopted on concrete wall panels
- Absorptive materials and cantilevered walls can also be used to further mitigate noise



Creek realignment and restoration

Creek realignment of West Nose Creek is an alternative that could simplify the 144 Avenue bridge layout and constructability. **The following information discusses creek realignment in general and provides some non-project specific imagery.**



Impacts:

- Loss or change of fish habitat
- Loss or change of riparian habitat
- Loss of non-permanent stream length

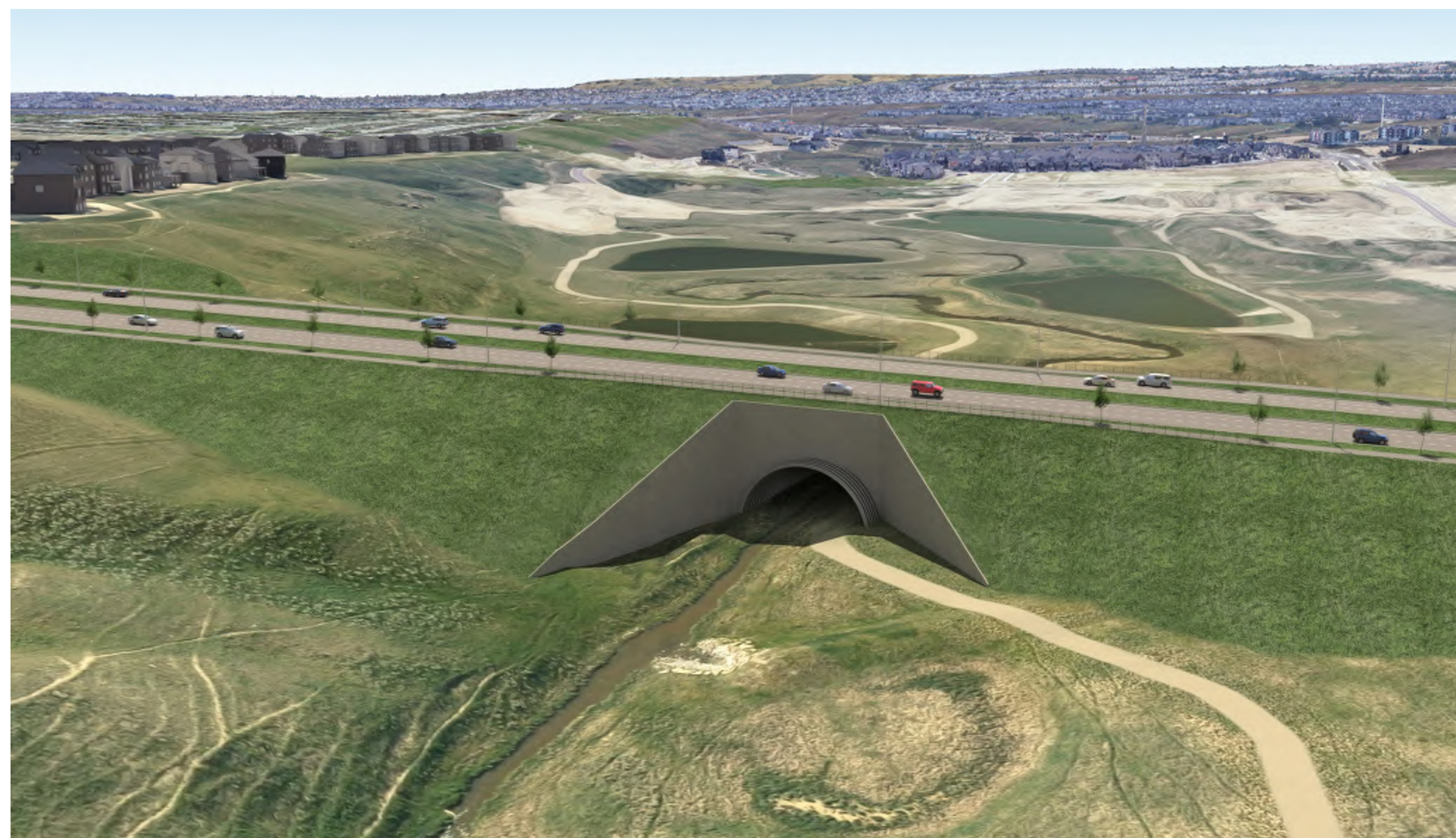
Mitigation:

- Limit stream realignment to extent feasible
- Compensate for loss of fish habitat by creating fish habitat compensation adjacent to the project, or within realigned channel
- Consider riparian plantings in the area that is currently limited for riparian habitat

**Possible restoration concepts. Example provided by Forest Lawn Creek project.*

Exploring bridge options 144 Avenue N.W. at West Nose Creek

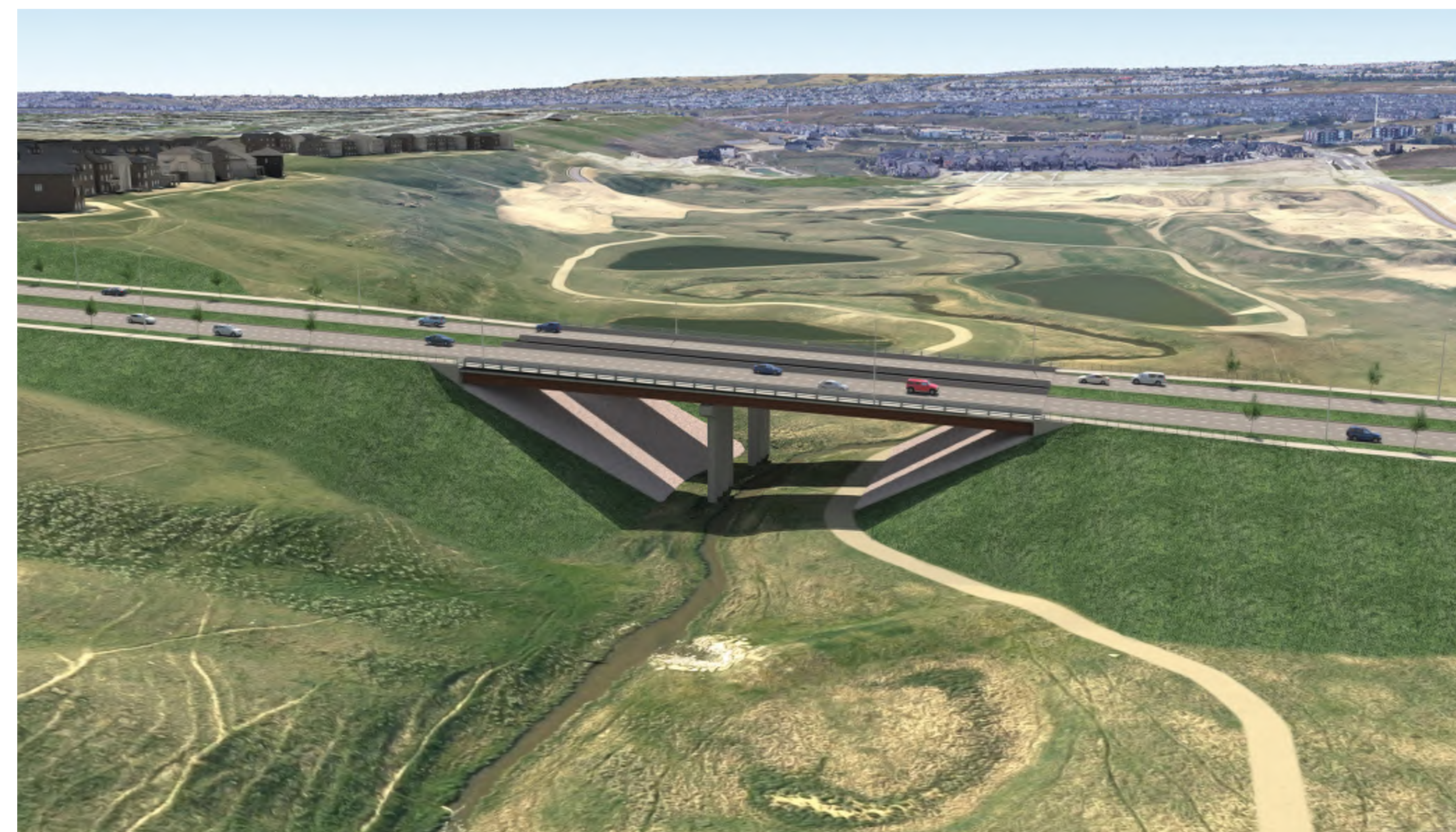
Option 1: Realigned creek with culvert



**The creek crossing options shown above are looking south.*

- Approximately 18m wide x 50m long culvert
- Retaining headwalls used to limit culvert length
- Less functional for pedestrians
- Highest hydraulic and environmental impact
- Lowest bridge structure cost

Option 2: Realigned creek with squared bridge



- 2-span bridge, approximately 70m long
- Shortest bridge possible
- Approximately 100m of creek realignment
- Higher environmental impact
- Lower bridge structure cost

Option 3: Existing creek alignment with skewed bridge



- 2-span bridge, approximately 75m long
- 40 degree skew aligns with existing creek
- Retaining walls used to limit span lengths and minimize impacts
- Lowest environmental impact
- Highest bridge structure cost

Recommended West Nose Creek crossing at Mountain View Road



(View looking east)

- 3-span bridge approximately 65m long
- No creek realignment required
- Options for pathway connectivity below bridge
- Potential for 4 lanes with pathways on both sides

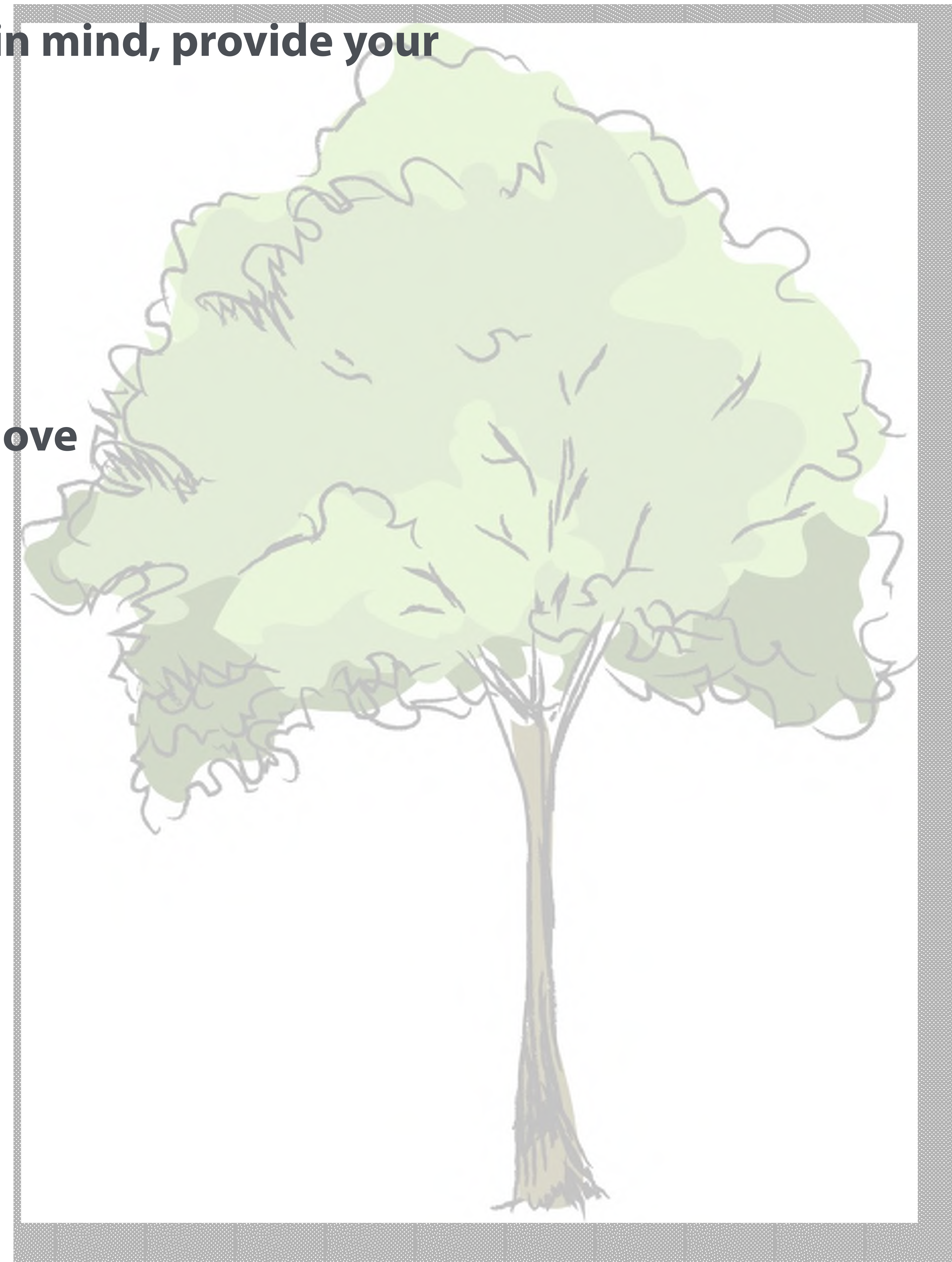
Tell us more

Keeping the top public and City priorities in mind, provide your feedback on the:

- 144 Avenue N.W. recommended plan
- Symons Valley Road recommended plan
- Creek crossing options

What do you like or not like?

What else should we keep in mind as we move into preliminary design?



Next steps



Reveal phase display boards and feedback will be online at calgary.ca/144AveNW
Online feedback opportunity available until Nov. 6, 2019.

Finalize and approve the 144 Avenue N.W. Functional Plan in Fall 2019.

Preliminary Design will begin in 2020. Construction and staging timeline will depend on funding and engineering design decisions.



How will public feedback be used?

The City will prepare a What We Heard report summarizing all feedback following this public engagement session. Your input will help finalize the recommended plan for the 144 Avenue N.W. study area.

Thank you for coming

Please take a moment to fill out a feedback form or provide your feedback online. Your feedback will help us improve our future engagement events.