

A stylized, colorful illustration of a neighborhood renewal project. The scene is set in a green, hilly landscape. In the foreground, a person in a wheelchair is being pushed by another person. A child is riding a bicycle, and another person is riding a bicycle with a basket. In the background, there is a house with a green roof, a tree, and a dog. The overall style is flat and modern, with a focus on community and accessibility. The background is a solid teal color.

Exploring Options and Trade-offs Report: Malmo Plains Neighbourhood Renewal

September 2020

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Introduction

The Malmo Plains Neighbourhood Renewal project team has developed design options for a number of key spaces within the neighbourhood based on public input, technical requirements and City policies and programs. The options are described in the following pages, along with summaries of any other options considered and considerations to refine the design to summarize the Exploring Options and Trade-offs stage of the neighbourhood renewal.

The Exploring Options and Trade-offs stage comes after Starting the Conversation, Building a Project Vision Together and Exploring Opportunities stages (which were explored in the Malmo Plains Background Report). This stage will be followed by the development of the Draft Design as shown in the Neighbourhood Renewal roadmap on the following page.



Introduction

Neighbourhood Renewal Roadmap



Introduction

The purpose of the Exploring Options and Trade-offs stage is to:

- + Develop options which bring the community vision to life
- + Evaluate the feasibility of each option and explore the benefits and trade-offs
- + Gain insights of the community, all project team members and coordinate with other City programs and projects
- + Build the project team's understanding and knowledge about the neighbourhood to help inform their future contributions

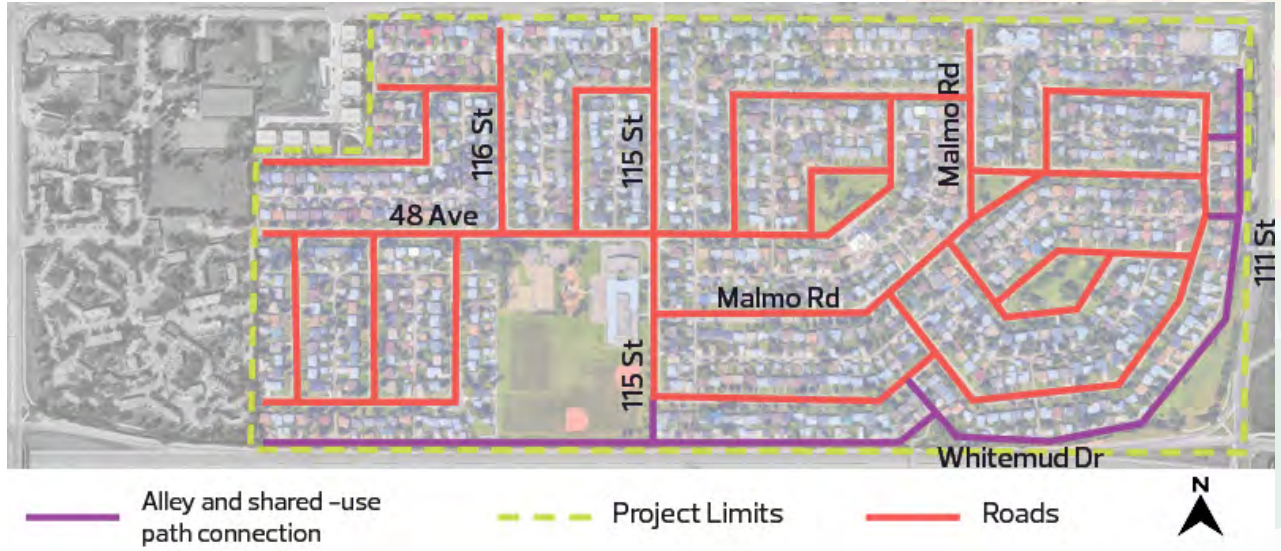
Options are developed through collaborative activities and preferences while priorities are identified through engaging the community. The following list shows the steps undertaken during this stage:

- + The opportunities and ideas that were identified by the community through previous engagement activities are further developed into draft design options
- + The options are evaluated to ensure that the opportunities and constraints that were identified during the Exploring Opportunities stage are being addressed. Refer to the Malmo Plains Background Report for a summary of the Exploring Options stage
- + Trade-offs are identified through discussions with the project team and other City groups to ensure that the options are reasonably possible and that any common constraints are identified. Options are refined to reflect the input gathered
- + The options are presented to the community for feedback and comments and to identify priorities and preferences. Additional trade-offs may be identified by the community



Project Area

The project area for the Malmo Plains Neighbourhood Renewal is illustrated on the plan below:



Project Area

The alley that runs along Whitemud Drive and 111 Street was added to the project area based upon input received by the community identifying this as a major active transportation link. The alley acts as a key link for people walking and biking to/from the Southgate LRT station/transit centre pedway and connects to the pedestrian bridge over Whitemud Drive that leads to Confederation Park and the neighbourhoods to the south. Additionally, the existing shared-use path links to a shared-use path along 114 Street (due to the pedestrian foot bridge over Whitemud Drive) to 43 Avenue and then transitions to a shared street connecting to 34 Avenue. Residents can access Royal Gardens and Aspen Gardens from this route as well.

The arterial roadways of 122 Street, 51 Avenue and 111 Street and Whitemud Drive freeway are not included with the Malmo Plains Neighbourhood Renewal project. The Michener Park development, owned by the University of Alberta, is also excluded. Although these areas will not be included for upgrades with Neighbourhood Renewal, they will still be reviewed to ensure we are considering how people move through these areas and get in, out and around Malmo Plains.

Please refer to the Malmo Plains Neighbourhood Renewal Background Report for additional information.









Vision and Guiding Principles

The draft design options were developed with the intention of bringing the community's vision to life. The project vision and guiding principles were created to guide the neighbourhood design and act as reminders of the priorities of the Malmo Plains community. The vision and guiding principles were co-created by the project team and the community through public engagement that took place from June to September 2019.

Vision

Malmo Plains is a family-friendly neighbourhood that welcomes people of all ages and diverse backgrounds. We are an active, enthusiastic and engaged community that enjoys connecting with and looking out for our neighbours. We appreciate that our neighbourhood is walkable, bikeable and safe, with easy access to transit, schools, the University of Alberta and shopping. We take pride in the character of Malmo Plains including the mature trees, park spaces and quiet atmosphere.

Guiding principles

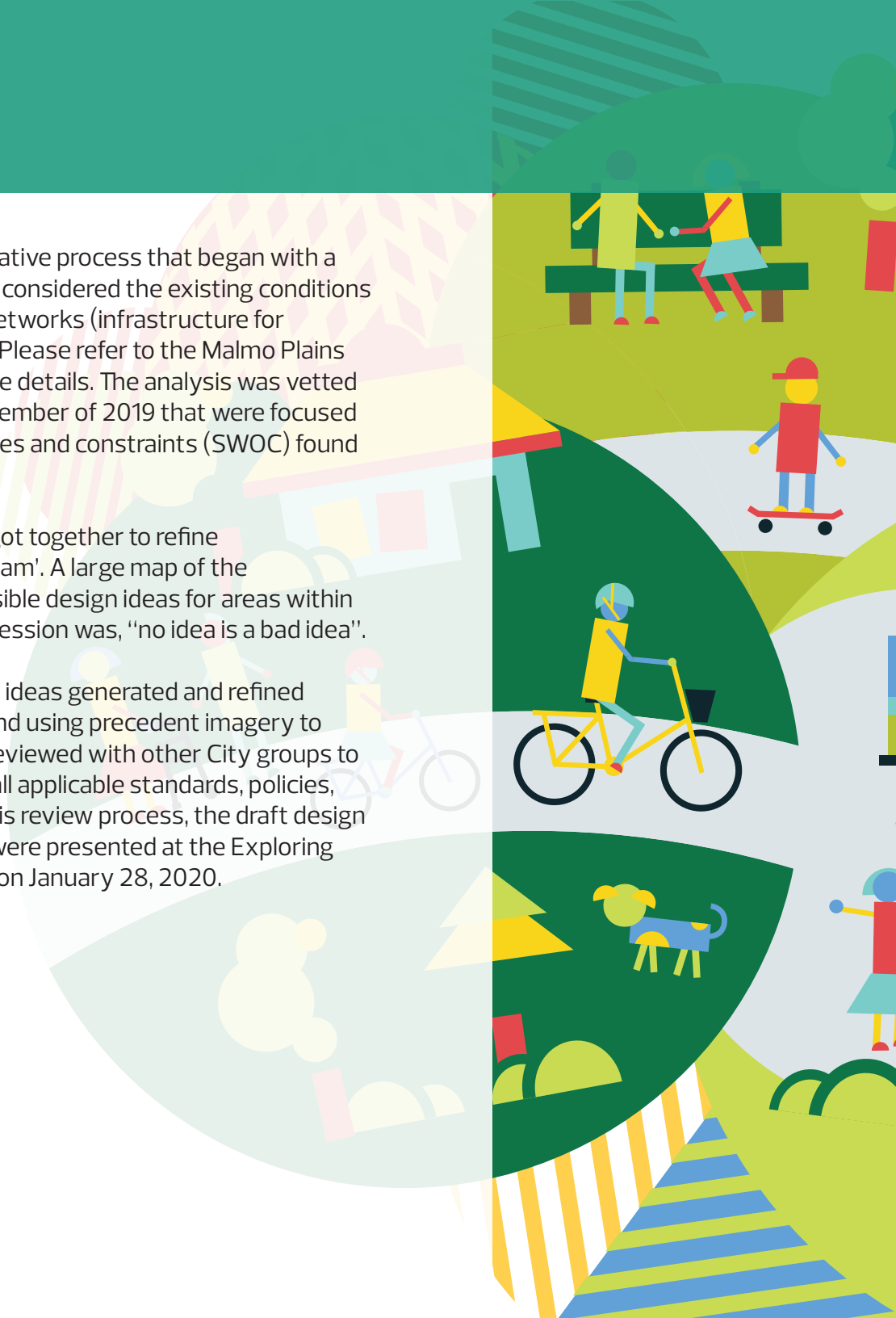
-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities
-  Creating welcoming spaces that encourage and make it easy for community members of all ages to come together and gather
-  Respecting and preserving the natural character of the neighbourhood and its mature trees
-  Adding basic amenities to create parks and open spaces where people of all ages can gather, connect and play in all seasons
-  Creating safe and well-lit spaces within the community

Developing Options

The draft design options were refined through an iterative process that began with a detailed analysis of the neighbourhood. The analysis considered the existing conditions within the neighbourhood with a focus on mobility networks (infrastructure for people walking, biking and driving) and open spaces. Please refer to the Malmo Plains Neighbourhood Renewal Background Report for more details. The analysis was vetted by community engagement activities in June to September of 2019 that were focused on exploring the strengths, weaknesses, opportunities and constraints (SWOC) found within the neighbourhood.

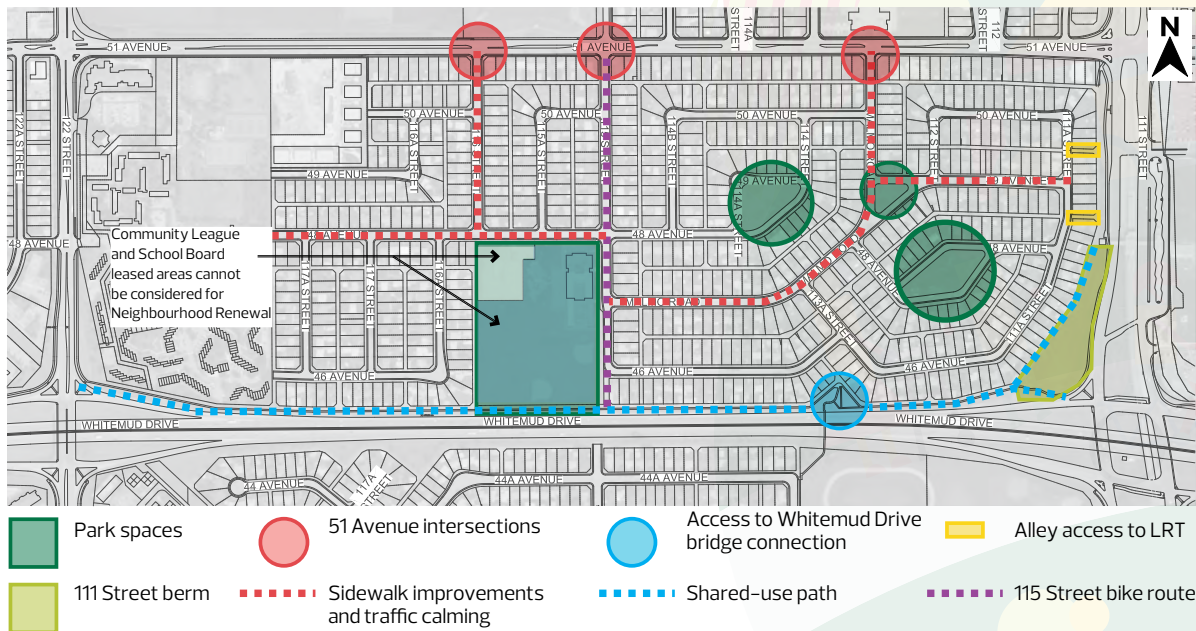
With a focus on the opportunities, the project team got together to refine the opportunities into design ideas through an 'Idea Jam'. A large map of the neighbourhood was used to record the different possible design ideas for areas within the neighbourhood. The motto of this collaborative session was, "no idea is a bad idea".

Following the Idea Jam, the consultant team took the ideas generated and refined them into draft design options, preparing sketches and using precedent imagery to convey the design intent. These draft options were reviewed with other City groups to verify that they were feasible and were considering all applicable standards, policies, guidelines and maintenance capabilities. Following this review process, the draft design options were further refined into the materials that were presented at the Exploring Options and Trade-offs community workshops held on January 28, 2020.



Potential Neighbourhood Improvements

The following draft design options were developed based on public feedback and by using a holistic approach to design, where the neighbourhood is viewed as a series of interconnected networks: privately owned lands, public open space and mobility. Changes to any one of the networks may have an impact on the others and so the project team paid close attention to the trade-offs required for each design option to ensure that the impacts were minimized.



Potential Neighbourhood Improvements

During the Strengths, Weaknesses, Opportunities, and Constraints analysis completed in the Exploring Opportunities stage, neighbourhood ideas were grouped into three themes: Community Spaces, Getting Around and Safety. Each location in the overall neighbourhood plan fits into one or more of these three themes. The icons for the themes are used below to reference which is applicable to each option.

Applicable policies, standards and guidelines for the Malmo Plains project are described in the Background Report. Those applicable for each theme are:



Community Spaces

- + Breathe: Edmonton's Green Network Strategy
- + Urban Parks Management Plan



Getting Around

- + Complete Streets Design and Construction Standards
- + Active Transportation Policy
- + Access Design Guide
- + Community Traffic Management Policy
- + Sidewalk Strategy
- + Walkable Edmonton Strategy
- + Edmonton Bike Plan (in progress)



Safety

- + Vision Zero Initiative
- + Crime Prevention Through Environmental Design



Malmo Plains Park

What we heard in September 2019

- + Improve conditions for people walking and biking on the shared-use path that runs along the south end of the park
- + The neighbourhood has limited facilities/amenities for the community to gather in parks and community spaces
- + There is a lack of up-to-date programmed recreation spaces for all ages, such as a skate park or playground
- + Bring programmed areas to Malmo Plains Park, such as tennis courts, winter activities and spectator benches for the existing soccer field and baseball diamonds
- + Create a unique visual identity for Malmo Plains in community spaces through well designed signage and landscaping beautification

Constraints





Malmo Plains Park is made up of two parcels of land. The first is joint-use land owned by the Edmonton Public School Board and the second is City-owned parkland with a licensed area held by the Malmo Plains Community League.

The City, as a partner in both agreements (Joint-Use and Tripartite agreements) requires the support and approval from the partners for any changes to or development of these spaces.

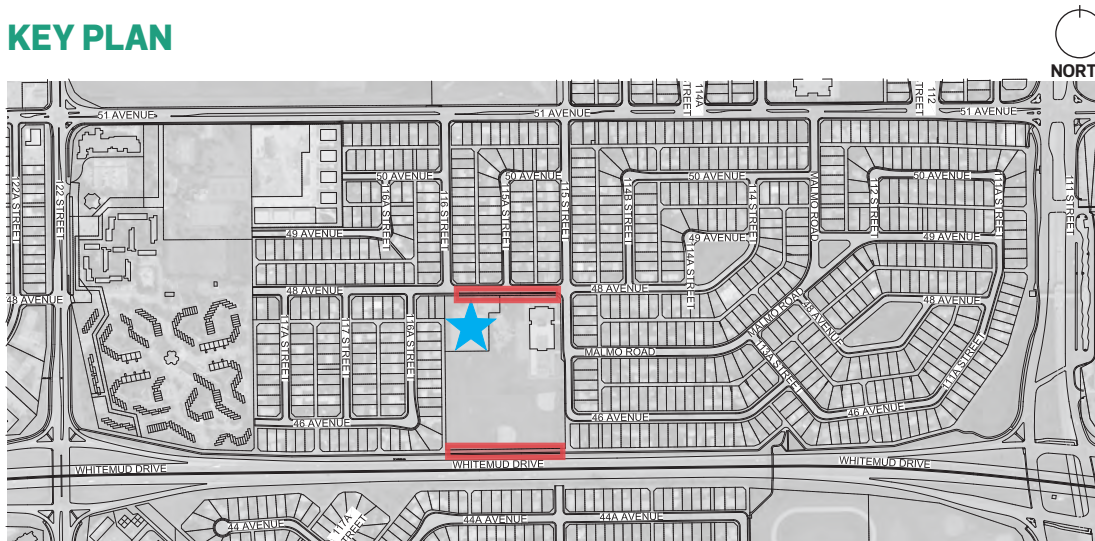



Malmo Plains Park

Guiding principles for option presented

-  Making the places where people travel safer for all users, ages and abilities
-  Creating welcoming spaces that encourage and make it easy for community members of all ages to come together and gather
-  Respecting and preserving the natural character of the neighbourhood and its mature trees
-  Creating safe and well-lit spaces within the community

KEY PLAN

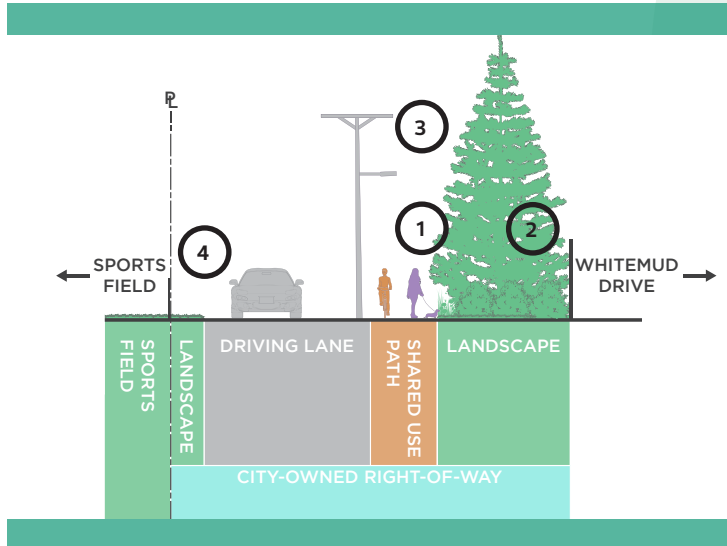


 Malmo Plains Community League Hall



Malmo Plains Park

Existing conditions: alley at south end of park



- 1 Existing shared-use path is narrow
- 2 Existing landscaping is overgrown
- 3 Existing lighting is dim, creating dark spots
- 4 Existing fence separates shared-use path from park



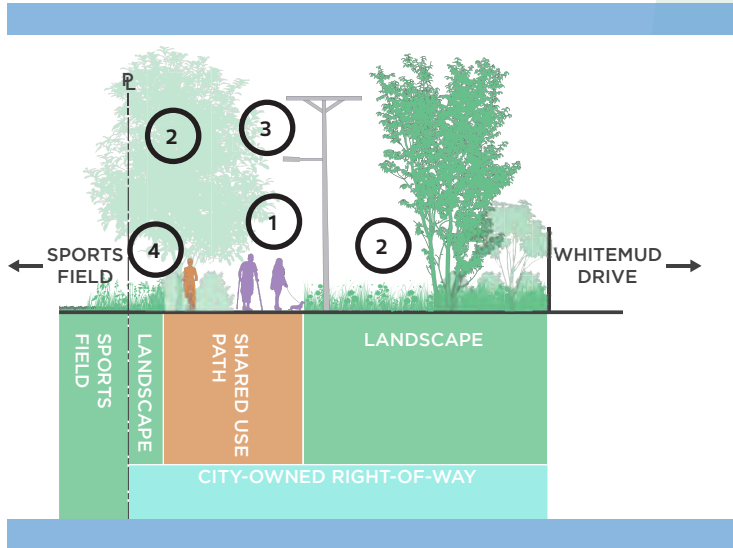
Malmo Plains Park

Potential improvements



Create a 'welcome garden' with planting along the south side of 48 Avenue

Remove chain link fence, close alley to vehicle traffic, increase the width of the shared-use path and add new planting and seating



- 1 Alley is removed and shared-use path is widened adding green space
- 2 New planting creates a more pleasant environment for people walking and biking
- 3 Upgrade existing lighting to LED lighting
- 4 Fence is removed, expanding the open green space to the noise wall



Malmo Plains Park

Benefits

- + Planting along 48 Avenue creates a welcoming arrival at the school and Community League Hall
- + Planting can create habitat for wildlife such as butterflies and bees
- + More space is created to widen the shared-use path and adds seating
- + Removing the chain link fence creates a more open environment

Trade-offs

- + Alley is closed to vehicle traffic, requiring people driving to find different routes



Malmo Plains Park

Additional options considered

Initially, a more extensive 'Welcome Garden' with planting was proposed along 48 Avenue. This planting extended into the park site around the existing sidewalks that lead to the playground and in between the Community League parking lot and 48 Avenue. It also was proposed to wrap around the parking lot at the school. However, because that land is leased to the Community League and the Edmonton Public School Board, the proposed planting was reduced to remain within City road right-of-way.

Considerations to refine the design option

- + A discussion will need to be had with the school to confirm whether the existing chain link fence at the south end can be removed
- + A road closure bylaw will be required to close the existing alley to vehicle traffic. Timelines for acquiring the bylaw should be factored into project timelines





111 Street Berm

What we heard in September 2019

- + Encourage purposeful activity on and around the berm
- + Improve accessibility for people walking and biking to/from the Southgate LRT station pedway
- + The berm reduces noise from Whitemud Drive and 111 Street but is an underused green space and limits sightlines
- + Expand connections and shared-use paths through the alley network
- + Include protected bike lanes or other options to create a safe space for people to ride bikes through the alleys and along 46 Avenue and 115 Street
- + Improve lighting throughout the neighbourhood, including at alley connections to the Southgate LRT station and the shared-use path

Constraints

The berm is relatively steep on the east and west sides, which limits the types of development that could occur. The west side of the berm is fairly hidden from view, except from the surrounding homes, which makes it unsuitable for use by smaller children. It is bordered by an alley on the west side and by 111 Street and a shared-use path on the east side, which limits the ability to use it for sledding in the winter as there is not space for safe run-out zones. It is not reasonable to remove the berm as it provides noise attenuation from 111 Street and the cost of removal would be prohibitive. The design should also consider minimizing impacts to existing trees and large shrubs along the base of the berm on both the east and west sides to align with past community feedback and the guiding principle to respect and preserve the natural character of the neighbourhood.





111 Street Berm

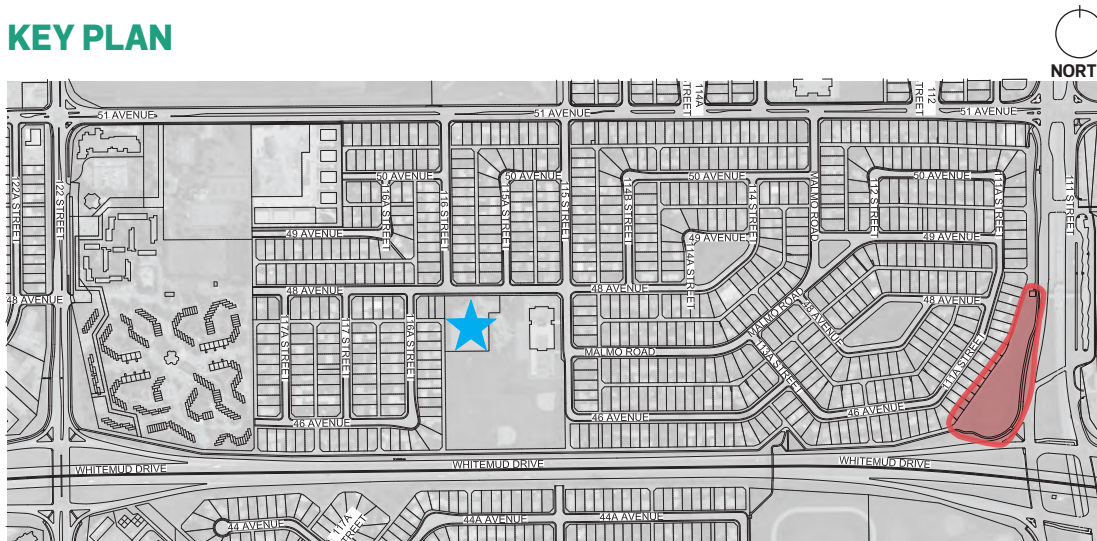
Options Presented


Two options are shown on the following pages.

Guiding principles for options presented

-  Making the places where people travel safer for all users, ages and abilities
-  Creating welcoming spaces that encourage and make it easy for community members of all ages to come together and gather

KEY PLAN

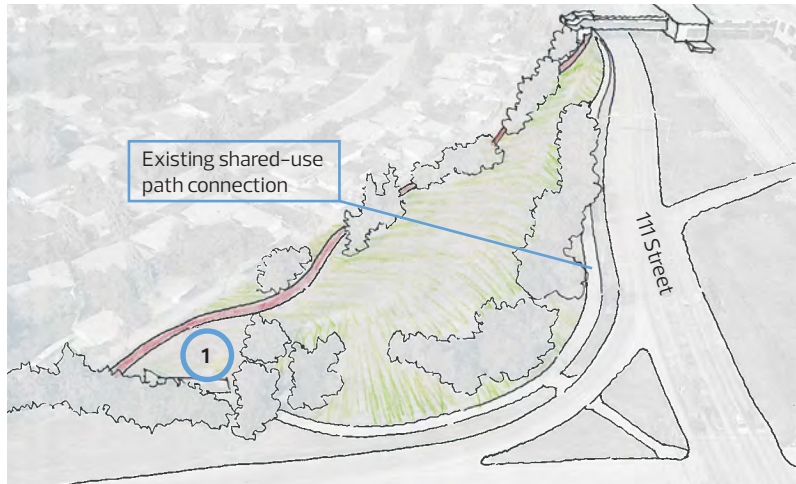


 Malmo Plains Community League Hall



111 Street Berm

Option 1



New shared-use path connection to the LRT pedway entrance along the east side of the alley where people currently walk in the grass

Benefits

- + New shared-use path connection to the LRT pedway entrance along the east side of the alley provides a more direct connection for people walking and biking

Trade-offs

- + Potential tree or shrub removal to fit the shared-use path



111 Street Berm

Option 2



Add a new trail and seating along the top of the berm to encourage people to use the space

Benefits

- + New trail will encourage people to walk along the top of the berm exposing the berm to regular foot traffic

Trade-offs

- + New trail may encourage more people to travel to the top of the berm, which may result in a greater number of people viewing the nearby backyards.



111 Street Berm

Additional options considered

A third option was considered which proposed a fenced dogs off-leash area be developed on the west side of the berm, facing the alley. However, it was determined that this was not an appropriate location for a dogs off-leash facility based on criteria contained within the City of Edmonton Dogs in Open Spaces Strategy. This Strategy states that neighbourhood level off-leash areas should be available to communities within a 20 minute walk or 1.67 km. Within 1.67 km of the Malmo Plains community are two off-leash areas, Royal Gardens pipeline corridor and Duggan/Rideau Park Roadway. Due to the proximity of these existing off-leash areas, the addition of an off-leash area to Malmo Plains is not supported by the Edmonton Dogs in Open Spaces Strategy.

Considerations to refine the design options

- + It will need to be determined whether there are any tree or shrub removals required in order to create a safe alignment of the shared-use path and how the path and trail connect to the existing shared-use path and LRT station pedway entrance on 111 Street
- + In order to advance the draft design, the community will need to be engaged to get additional feedback about the path location being beside the alley, on top of the berm, or both
- + The design of the trail to the top of the berm will need to address the existing slope. This will impact both the trail alignment and surface treatment.



Shared-Use Path along Whitemud Drive

What we heard in September 2019

- + Improve conditions for people walking and biking on the shared-use path
- + Include protected bike lanes or other options to create a safe space for people to ride bikes through the alleys and along 46 Avenue and 115 Street
- + Shared-use path along Whitemud Drive has poorly maintained landscaping, does not have full snow removal in winter and poor lighting in areas
- + Improve lighting throughout the neighbourhood, including at alley connections to the LRT station and the shared-use path
- + Prune trees along Whitemud Drive and the berm to improve visibility in the area and reduce loitering




Constraints (see photo on pg. 25)

The shared-use path is located directly beside the alley and there is no room to widen the path to the north without encroaching into the alley and restricting vehicle access. There is also not sufficient room in the right-of-way to shift the alley to the north to accommodate widening the shared-use path. There is extensive planting between the existing shared-use path and the noise wall to the south. This planting consists of mature trees and large shrubs with some shrubby undergrowth. The planting does not provide noise attenuation benefits for the traffic noise from Whitemud Drive. The majority of this planting will likely need to be removed in order to widen the shared-use path beyond its current width. Additionally, there are existing wooden power poles directly beside the shared-use path. Some of these power poles have guy wires which run either parallel to the shared-use path or cross over the shared-use path. These power poles and guy wires will need to be avoided in any realignment or widening of the shared-use path. The existing lighting in the alley is located on these power poles.

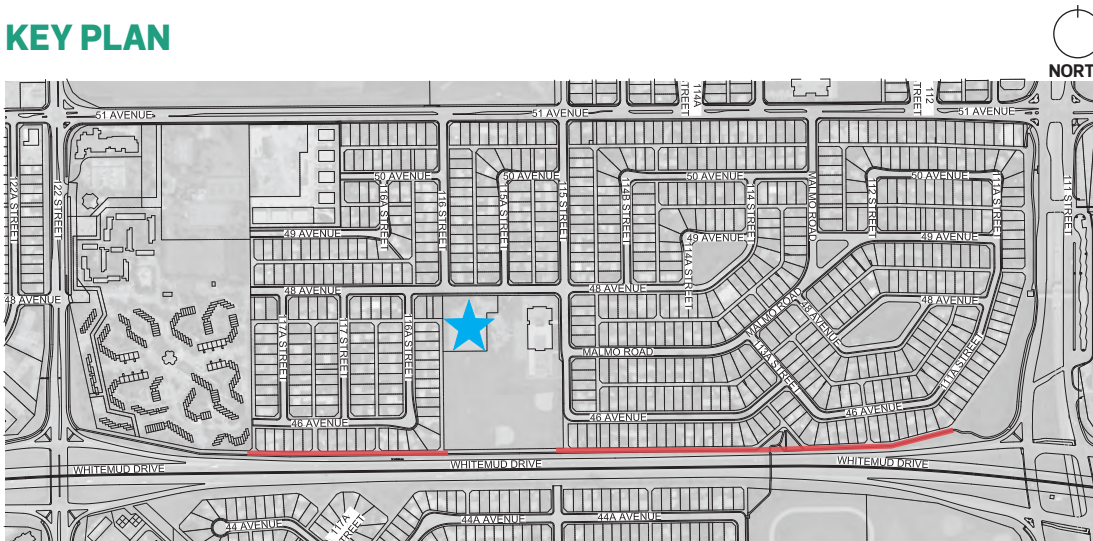



Shared-Use Path along Whitemud Drive

Guiding principles for option presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities
-  Creating safe and well-lit spaces within the community

KEY PLAN

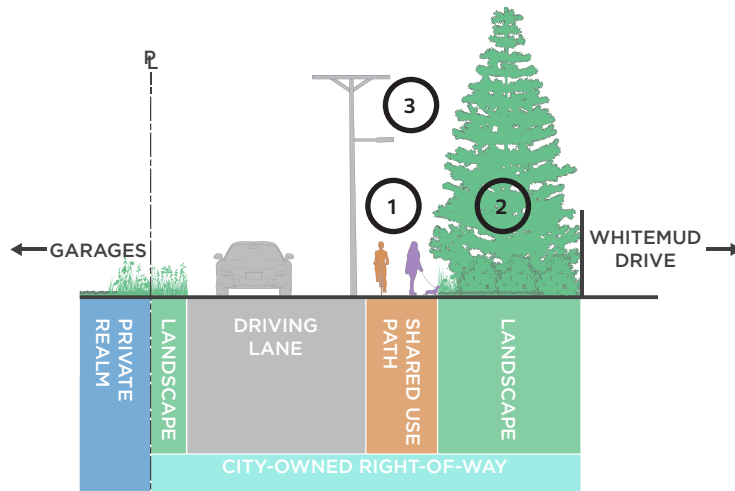


 Malmo Plains Community League Hall



Shared-Use Path along Whitemud Drive

Existing conditions



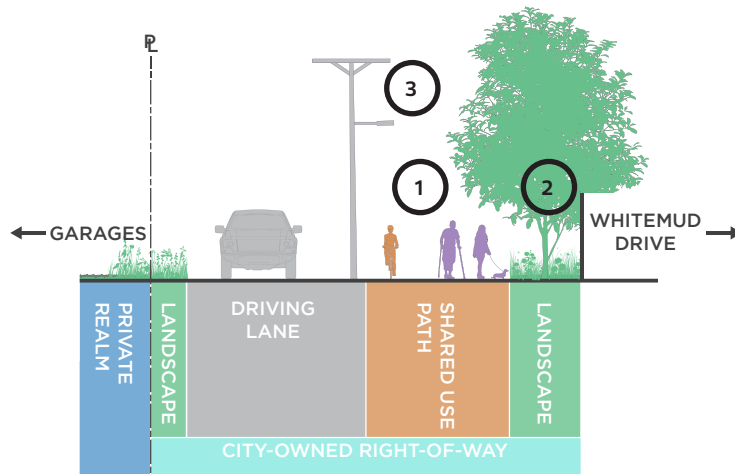
- ① Existing shared-use path is narrow
- ② Existing landscaping is overgrown
- ③ Existing lighting is dim, creating dark spots





Shared-Use Path along Whitemud Drive

Potential improvements



- 1 Existing shared-use path is widened
- 2 Sight lines are improved by removal of existing shrubs
- 3 Upgrade existing lighting to LED lighting

Benefits

- + Increased width of shared-use path provides a more comfortable space for people walking or biking
- + Removal of existing shrubs reduces issues with visibility and security
- + Improved lighting enhances safety for people walking or biking in the alley

Trade-offs

- + Removal of existing shrubs and some existing trees is required



Shared-Use Path along Whitemud Drive

Additional options considered

There were no additional options considered for this area based on the existing constraints in the area.

Considerations to refine the design option

- + A detailed assessment of the existing trees and planting will need to be completed with the City of Edmonton Urban Forester to determine what would need to be removed in order to widen the shared-use path. Any trees to be removed will be evaluated by the Urban Forester for monetary value as per the City's Corporate Tree Management Policy
- + It is possible to leave the shared-use path at its existing width, which is the minimum width allowable for a shared-use path, without impacting the alley or the existing planting. The project team will need to discuss the benefits and trade-offs of maintaining the minimum width upon review of the tree impacts





Pocket Parks A, B, & C – General Enhancements

What we heard in September 2019

- + The existing trees and green spaces should be maintained as they contribute positively to the character of Malmo Plains
- + The neighbourhood has limited opportunities for the community to gather in parks and community spaces
- + There is a lack of up-to-date programmed recreation spaces for all ages, such as a skate park or playground
- + Encourage more use and participation in the pocket parks and green spaces throughout the neighbourhood, such as fitness activities and equipment, winter activities, community gardens, mountain bike paths, natural play elements, benches and pocket libraries, while maintaining open space for other uses like kids soccer, family volleyball, and playing tag
- + Create unique visual identity for Malmo Plains in community spaces through well designed signage and landscaping beautification
- + Encourage dog walking, such as off and on leash park areas and to add more waste receptacles for responsible waste disposal

Constraints

Constraints specific to pocket park A and B are described on page 39 and 43.

Constraints that apply to all of the pocket parks are:

- + The pocket parks are relatively small, which makes them unsuitable for types of active recreation that requires a lot of open space
- + The pocket parks are surrounded by roadway, increasing the potential risk for conflict between park users and people driving








Pocket Parks A, B, & C – General Enhancements

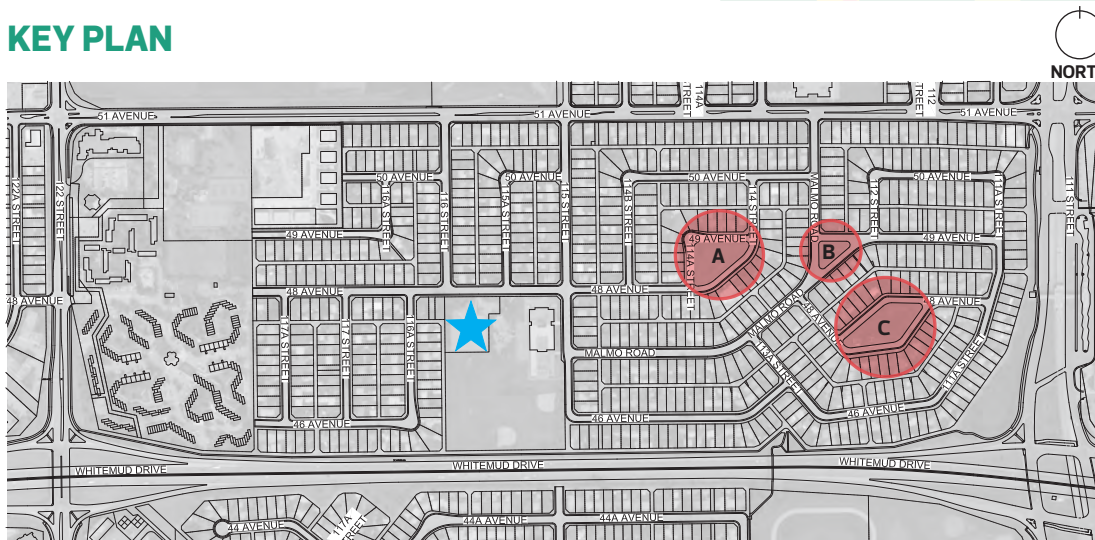
Options Presented

Options for general enhancements in the pocket parks are shown on the following pages. These enhancements are not location specific and could be considered in any of the three pocket parks.

Guiding principles for options presented

-  Creating welcoming spaces that encourage and make it easy for community members of all ages to come together and gather
-  Respecting and preserving the natural character of the neighbourhood and its mature trees
-  Adding basic amenities to create parks and open spaces where people of all ages can gather, connect and play in all seasons

KEY PLAN



 Malmo Plains Community League Hall



Pocket Parks A, B, & C – General Enhancements

New trees



Benefits

- + Physically separates people from the roadway if planted next to the curb
- + Trees provide shade as well as some protection from the wind
- + Trees provide habitat for animals such as birds and squirrels
- + Improves the appearance of the street
- + Opportunity for trees to collect rain water run-off

Boulder play features



Benefits

- + Provides an opportunity for imaginative play
- + Supports the development of gross motor skills in young children
- + Can be used for seating
- + Encourages activity in the park as well as social interaction



Pocket Parks A, B, & C – General Enhancements

Game boards



Benefits

- + Encourages activity in the park as well as social interaction

Community gardens



Benefits

- + Provides an opportunity to grow food locally in the neighbourhood
- + Encourages social interaction



Pocket Parks A, B, & C – General Enhancements

Seating area



Benefits

- + Provides an opportunity to sit in the park and appreciate the natural surroundings for people of all ages
- + Encourages social interaction
- + Picnic tables can be used for larger gatherings

Shade structure



Benefits

- + Combined with benches or picnic table to provide some weather protection
- + Creates a focal point for community gathering



Pocket Parks A, B, & C – General Enhancements

Planting



Benefits

- + Provides visual interest, through all seasons
- + Creates habitat for insects and other small animals
- + Opportunity for planting to collect and use rain water run-off



Pocket Parks A, B, & C – General Enhancements

Additional options considered

- + Natural play areas with timber play elements were proposed, but due to the inspection and maintenance requirements for these elements and safety concerns with a playground location in small pocket park surrounded by roadway they were removed from consideration
- + Fenced dogs off-leash areas were proposed within the pocket parks. Refer to the 111 Street Berm section above for the reasons why dogs off-leash facilities were removed from consideration
- + Outdoor fitness equipment was proposed, however fitness pods are proposed in the concept master plan for Confederation Park, which is just south of this neighbourhood and accessible by the Whitemud Drive pedestrian bridge. Also, fitness equipment that is not stationary requires a lot of space. Therefore, due to the small size of the pocket parks and proximity to Confederation Park, fitness equipment was removed from consideration
- + Barbeques were proposed for the pocket parks to support picnicking and outdoor dining. However, barbeques are only permitted in district level parks
- + Bike bumps (see image on the following page), a small cycling track for young children, were proposed for the pocket parks. However, due to maintenance concerns, safety concerns (eg. kids gaining momentum and being surrounded by roads on all sides) and grading issues (ie. since these sights are all relatively flat it may be difficult to have proper drainage) they were removed from consideration





Pocket Parks A, B, & C – General Enhancements

Example of bike bumps



Considerations to refine the design options

- + Based on review of public feedback, the project team will review applicable trade-offs at each pocket park location to determine which area works best for different design options

Specific improvements were proposed for both Pocket Park A and B because there are opportunities to provide improved direct connections for people walking by adding new sidewalks along the parks. No site-specific improvements were proposed for Pocket Park C as the project team determined that the existing sidewalks on the residential side were sufficient given the size of the park and that no new sidewalks were required inside the park.

Some of the potential enhancements may be able to be implemented by the community at a later date, if they are not constructed in coordination with the Neighbourhood Renewal project. The community could work together with the City to identify potential funding sources and to work through any partnership or maintenance agreements.






Pocket Park A

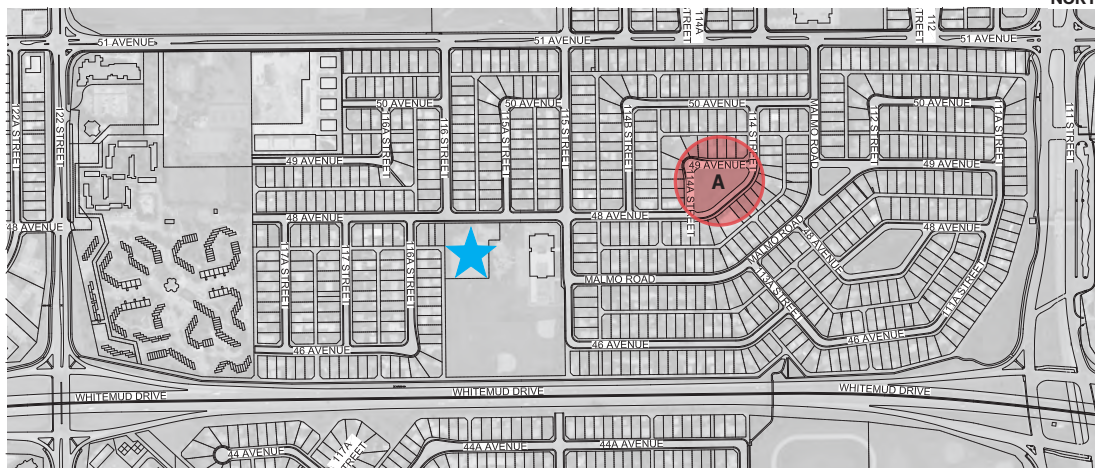
Constraints


There are existing tree planting and shrub beds in Pocket Park A that limit the ability to develop the space without removals. In particular, the planting bed beside 48 Avenue limits how far a new sidewalk can be offset from the roadway. Removing many trees/shrubs in one area would not align with the guiding principles and feedback provided by the community to respect and preserve the natural beauty in the neighbourhood.

Guiding principles for option presented

-  Making the places where people travel safer for all users, ages, and abilities
-  Creating welcoming spaces that encourage and make it easy for community members of all ages to come together and gather
-  Respecting and preserving the natural character of the neighbourhood and its mature trees

KEY PLAN



 Malmo Plains Community League Hall





Pocket Park A

Existing conditions



Potential improvements



New sidewalk along the north side of 48 Avenue

Benefits

- + New sidewalk connection is created, improving the connection for people who walk along 48 Avenue and improving access to the park for people of all ages and ability year round

Trade-offs

- + A small amount of green space is taken up by the sidewalk
- + Retaining the existing planting bed rather than creating a wider boulevard that could accommodate street tree planting



Pocket Park A

Additional options considered

There were no additional site-specific options considered for this area. The improvements described in the section above (General Enhancements) can be applied to any of the three pocket parks.

Considerations to refine the design options

- + It will need to be determined how far the new sidewalk can be offset from 48 Avenue without impacting the planting bed that is nearby. The purpose of offsetting the sidewalk from the roadway is to create a boulevard where trees could be planted between the sidewalk and the roadway
- + Review opportunity to narrow the road to maximize the size of the pocket park while minimizing impacts to on-street parking





Pocket Park B

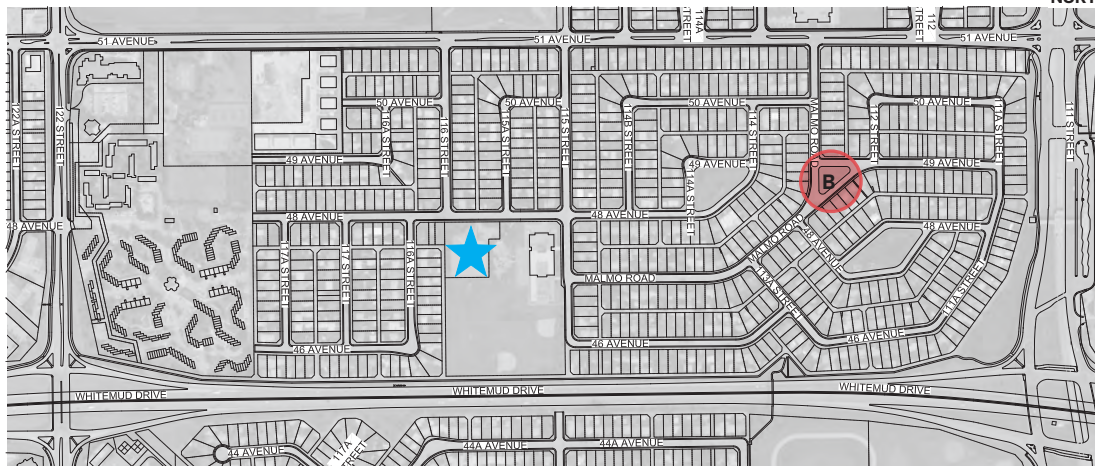
Constraints

There are existing tree planting and shrub beds in Pocket Park B that limit the ability to develop the space without removals. Removing many trees/shrubs in one area would not align with the guiding principles and feedback provided by the community to respect and preserve the natural beauty in the neighbourhood. Additionally, Pocket Park B is located beside Malmo Road, which is a relatively busy road (it is designated as a collector roadway and is one of the three entrances into the neighbourhood for people driving) and is a bus route.

Guiding principles for option presented

- ✓ Making the places where people travel safer for all users, ages, and abilities
- 🌳 Creating welcoming spaces that encourage and make it easy for community members of all ages to come together and gather
- 🌳 Respecting and preserving the natural character of the neighbourhood and its mature trees

KEY PLAN



★ Malmo Plains Community League Hall



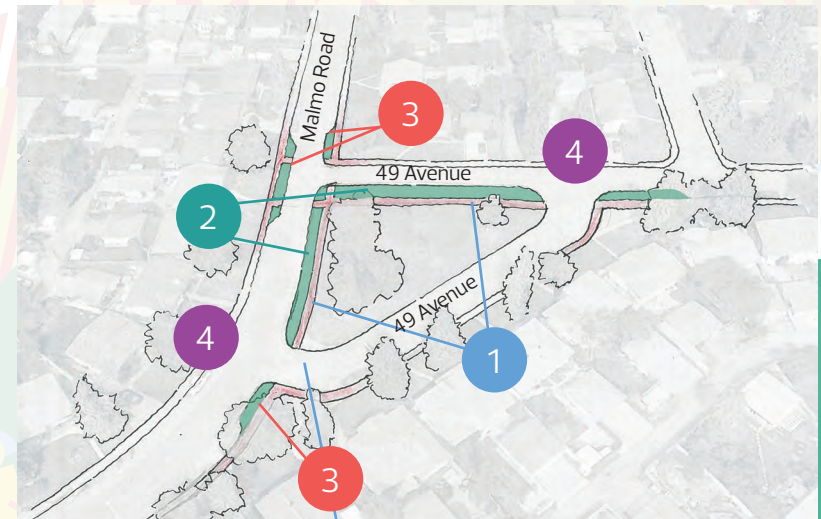


Pocket Park B

Existing conditions



Potential improvements



- 1 New sidewalks
- 2 Parking removed to increase the size of the park and add curb extensions
- 3 New curb extensions to slow vehicles on Malmö Road
- 4 Intersections re-aligned to improve sight lines for drivers of all ages



Pocket Park B

Benefits

- + Adding curb extensions will help slow traffic down, reduce the crossing distance for people to cross the street and improve visibility for people driving and walking
- + Opportunities for landscaping
- + Improved sight lines for people who walk and drive
- + New sidewalk connections provided along east side of Malmo Road and south side of 49 Avenue to improve connections for people who walk along 49 Avenue and Malmo Road
- + New boulevards provide an opportunity for tree planting and increase the green space of the park

Trade-offs

- + Loss of parking on the east side of Malmo Road and the south side of 49 Avenue
- + May result in some loss of parking directly in front of homes on Malmo Road where curb extensions are added at 49 Avenue
- + Intersection realignment creates additional 'front yard' space for residents to maintain



Pocket Park B

Additional options considered

There were no additional site-specific options considered for this area. The improvements described in the section above (General Enhancements) can be applied to any of the three pocket parks.

Considerations to refine the design option

- + It will need to be determined how the new sidewalks on the south side of 49 Avenue should be aligned in order to provide the most direct route for people walking, minimizing the impacts of people cutting through the landscape areas created in the new curb extensions
- + Consideration will be given to the design of the realigned intersections in order to minimize impacts to the nearby properties, such as loss of on-street parking
- + Review opportunity to narrow the road to maximize the size of the pocket park while minimizing impacts to parking





51 Avenue Intersections

What we heard in September 2019

- + The intersection at 51 Avenue and 115 Street feels unsafe for people of all ages trying to cross the street
- + Add crosswalks at key intersections, such as 116 Street and 51 Avenue for people to safely cross to the bus stop or the Lendrum Place neighbourhood
- + Crossing 51 Avenue at 115 Street does not feel safe for families walking to school in Lendrum Place



Constraints

- + 51 Avenue is an arterial roadway that sees higher traffic during peak hours. This makes it difficult to implement geometric or signalization changes that might impact traffic volumes or movements
- + Arterial roadways are outside of the scope of the Neighbourhood Renewal project, unless connectivity will be impacted (e.g. completing bike route connections)
- + Arterial roadways have significant amounts of road salt applied, making it hard to sustain plant material in curb extensions
- + Malmo Plains is not a grid neighbourhood and the only entry/exit points that exist are at 51 Avenue, which may impact decisions on traffic calming and the type of bike facility chosen

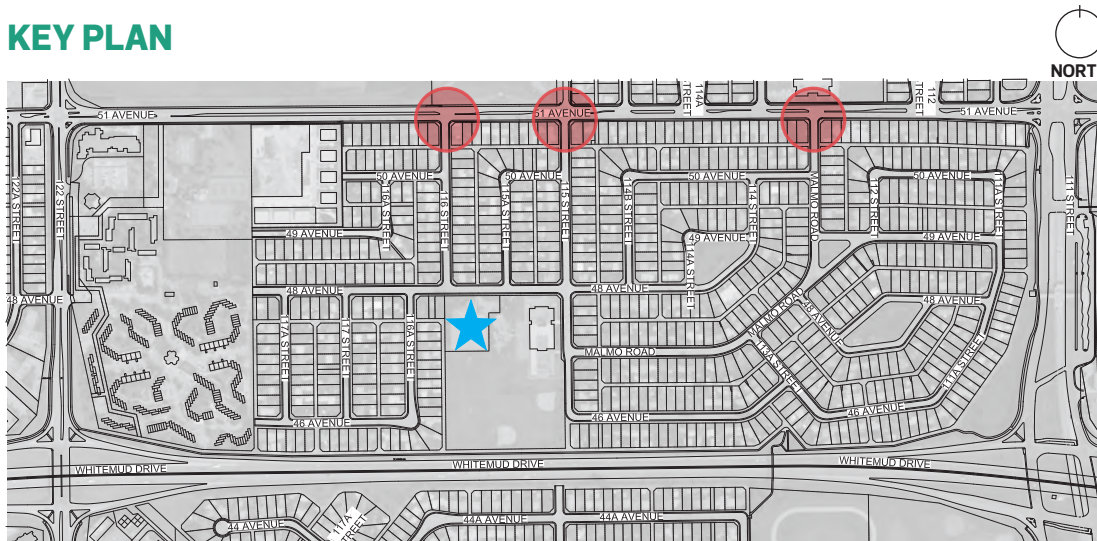



51 Avenue Intersections

Guiding principles for options presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities

KEY PLAN

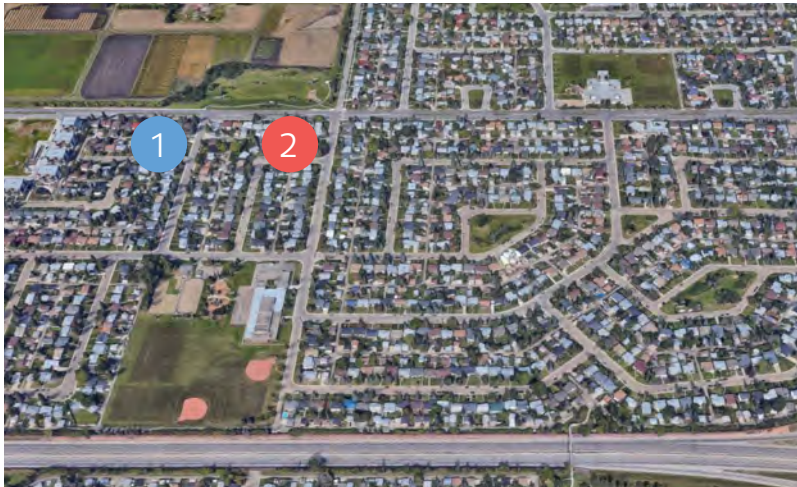


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51 Avenue Intersections

Proposed signal upgrades



- 1 *116 Street: new pedestrian activated flashing yellow lights
- 2 *115 Street: new pedestrian and bike activated traffic signal

*All signal upgrades are subject to assessment

Proposed curb extension entry features



- 1 New curb extensions and planting on 51 Avenue and intersecting streets (116 Street, 115 Street, and Malmo Road)



51 Avenue Intersections

Benefits

- + New traffic signals will improve safety and accessibility for people crossing 51 Avenue
- + New curb extensions with planting will create a welcoming entrance to the neighbourhood
- + Curb extensions will help slow traffic down entering the neighbourhood
- + Curb extensions reduce the crossing distance for people to cross the street
- + Curb extensions improve visibility for people driving and walking

Trade-offs

- + Some parking may be lost on 51 Avenue and on the intersecting streets (116 Street, 115 Street, and Malmo Road) due to the curb extensions



51 Avenue Intersections

Additional options considered

There were no additional options considered for this area.

Considerations to refine the design options

- + The addition of new traffic signals, or the modification of existing signals, is subject to further assessment
- + The plant material proposed in the curb extensions will need to be reviewed by the City to ensure that it can reasonably be maintained, given the impact caused by road salt
- + The curb extensions proposed on Malmo Road, 115 Street and 116 Street will need to be reviewed to understand the potential impact on right turns onto 51 Avenue since people driving currently use the parking lane as a right turn lane



Sidewalk Improvements

What we heard in September 2019

- + Improve accessibility and comfort for people walking along key walking routes
- + Improve the appearance of the street by adding tree planting
- + Creating tree lined streets may negatively impact accessibility by having a grassed boulevard instead of a hard surface immediately beside the curb
- + Existing landscaping may be impacted if the sidewalk moves toward private property lines

Constraints



There is space between the back of the sidewalk and property line that is part of the road right-of-way. However, in some instances this space has been landscaped with shrub beds and trees and is maintained by the homeowners. This space looks, and is likely considered to be, part of the residences' front yards. Any widening or relocating of sidewalks will impact this landscaped space.





Sidewalk Improvements

Guiding principles for options presented

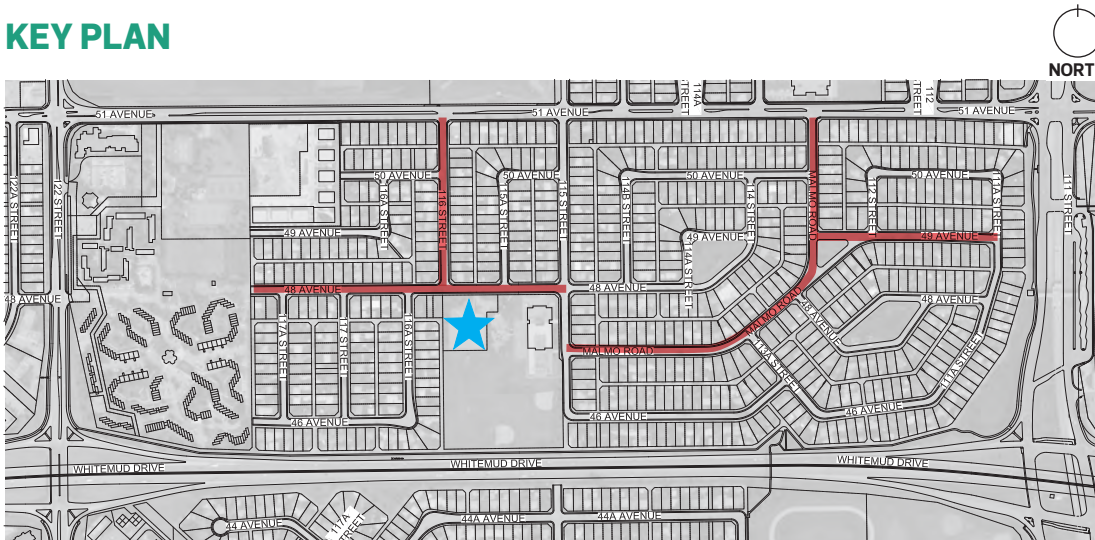
-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities


Locations

These improvements are proposed for the following streets:

- + 116 Street between 51 Avenue and 48 Avenue
- + 48 Avenue between Michener Park and 115 Street
- + Malmo Road between 51 Avenue and 115 Street
- + 49 Avenue between Malmo Road and 111A Street

KEY PLAN



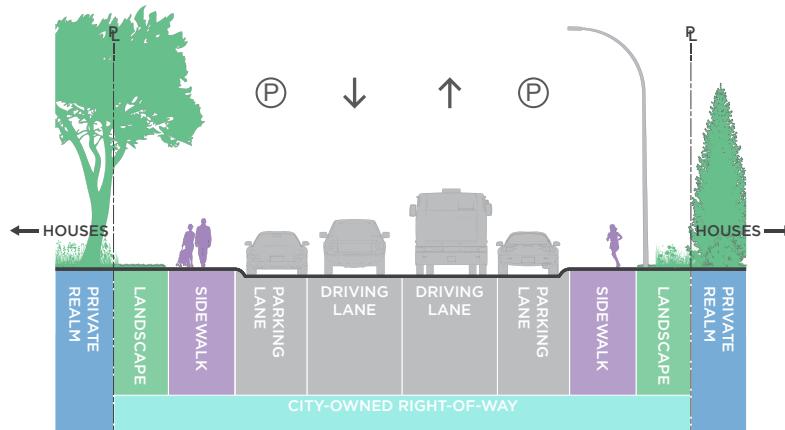
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Sidewalk Improvements

Option 1: widened sidewalk beside the curb



Benefits

- + Wider sidewalk provides more walking space for people of all abilities and increases the distance from vehicle traffic

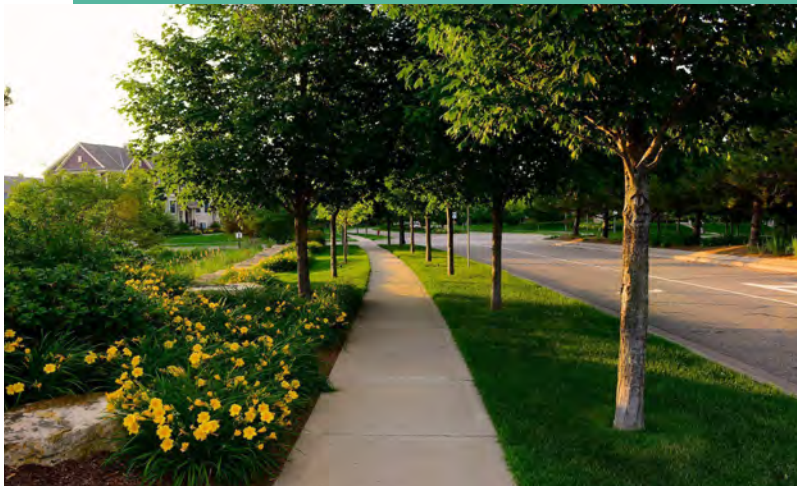
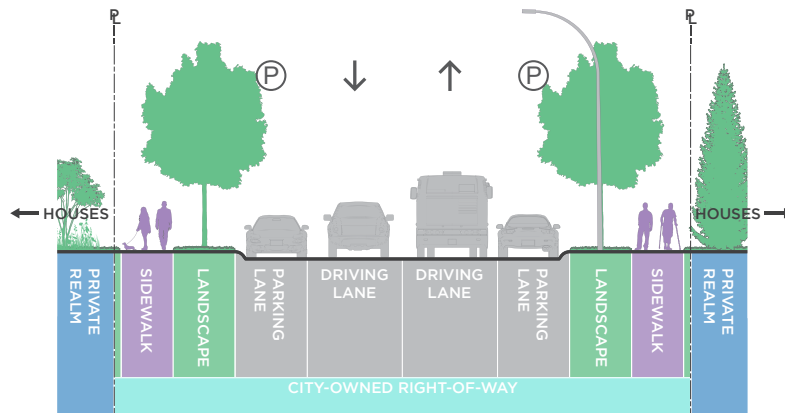
Trade-offs

- + Sidewalk may impact existing private landscaping on City right-of-way



Sidewalk Improvements

Option 2: separate sidewalk and boulevard with tree planting



Benefits

- + Wider separate sidewalk provides more walking space for people of all abilities and further increases the distance from vehicle traffic
- + Trees can be planted in the boulevard, providing shade and protection from the wind as well as improving the appearance of the street

Trade-offs

- + Sidewalk is shifted closer to the property line which may impact existing private landscaping on City right-of-way



Sidewalk Improvements

Additional options considered

There were no additional options considered for sidewalk improvements.

Considerations to refine the design options

- + An evaluation of the impacts to the existing landscaping and utilities behind the sidewalk will need to be completed
- + The Complete Streets Design and Construction Standards state that sidewalks along local and collector roadways may be separate or located beside the curb. On local roadways the sidewalk is to be a minimum of 1.8m wide, whether it is separate or located beside the curb. On collector roadways, separate sidewalks are to be a minimum of 1.8m wide while sidewalks beside the curb are to be a minimum of 2.3m wide
- + Confirm whether there is enough clear road right-of-way to shift the sidewalk and street lights to create boulevards
- + Confirm whether there are any impacts to roadway function, such as space for the operation of buses, if the roadway is proposed to be narrowed
- + Review adding boulevard connector walks for residents if the option for separate sidewalk is moved forward



Traffic Calming – Curb Extensions

What we heard in September 2019

- + Improve visibility of people walking
- + Improve the appearance of the street through planting
- + Slow traffic in key areas

Constraints



- + Existing driveways may limit the size of curb extensions in some locations
- + Curb extensions may impact surface drainage and require additional drainage infrastructure such as catch basins to ensure the area drains



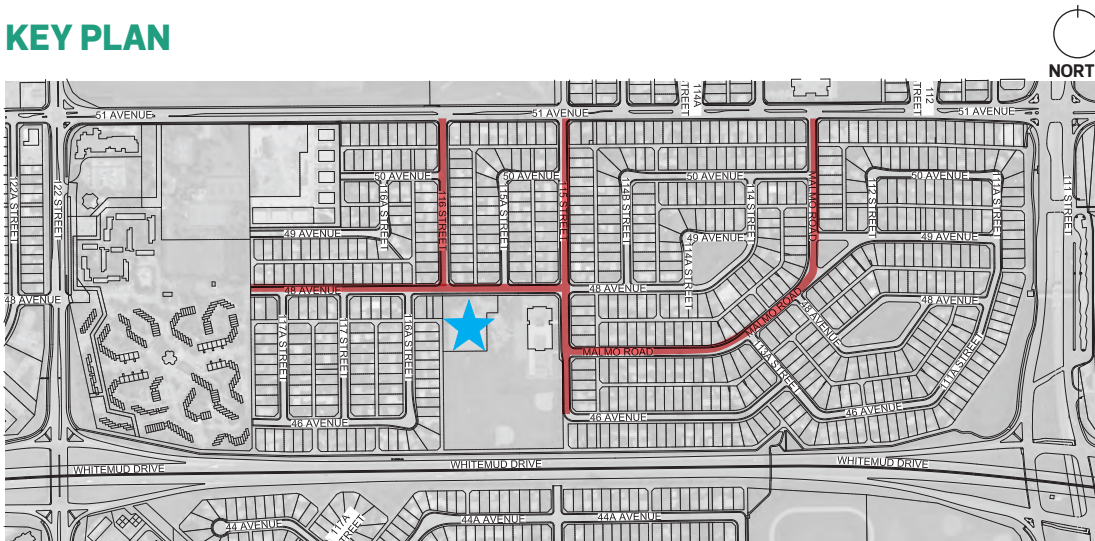



Traffic Calming – Curb Extensions

Guiding principles for option presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities

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Traffic Calming – Curb Extensions

Proposed curb extension locations



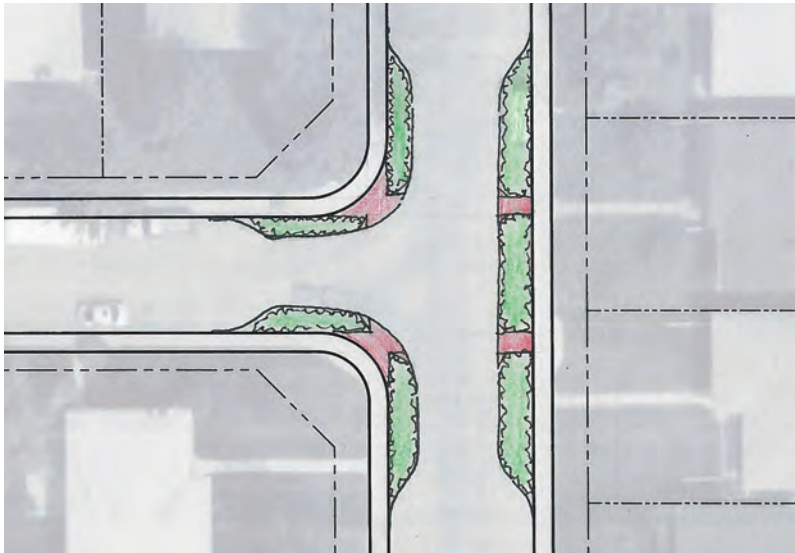
-  Curb extensions not on a bike route
-  Curb extensions on 115 Street are dependent on which bike facility type is selected. Refer to pages 63–72





Traffic Calming – Curb Extensions

Potential improvements



Benefits

- + Encourages slower traffic speeds
- + Curb extensions make people walking more visible to people driving
- + Planting in curb extensions improves the appearance of the roadway and is maintained by the City
- + Reduced crossing distances for people walking
- + Opportunity for planting in curb extensions to collect rain water run-off

Trade-offs

- + Some on-street parking may be lost where curb extensions are located



Traffic Calming – Curb Extensions

Additional options considered

No additional options were considered for this improvement as the traffic issues identified were not significant enough to add additional traffic calming measures, outside of raised crosswalks (discussed in following section).

Considerations to refine the design option

- + The appropriate length of curb extensions will be determined with a consideration to the amount of on-street parking that would be removed
- + The curb extension located on the 'T' side of the intersection will be evaluated with a consideration to the amount of on-street parking that would be removed
- + Options for planting will be developed, with a focus on low-growing plant material that will not obstruct sight lines





Traffic Calming – Raised Crosswalks



What we heard in September 2019

- + Slow traffic in key areas
- + Improve visibility of the crosswalk
- + Improve comfort of people walking in all seasons

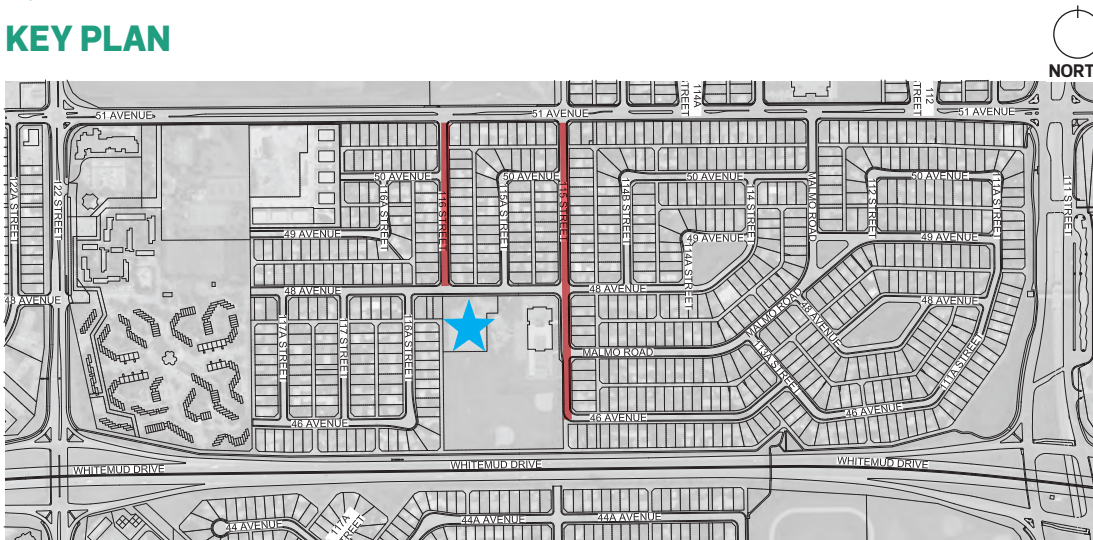
Constraints


Raised crosswalks may impact surface drainage and require additional drainage infrastructure such as catch basins to ensure the area drains.

Guiding principles for option presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities

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Traffic Calming – Raised Crosswalks

Proposed raised crosswalk locations



Example



Benefits

- + Encourages slower traffic speeds
- + Makes crosswalk more visible
- + Increases driver awareness of the crosswalk
- + Reduces the slope of curb ramps
- + May keep crossing drier in all seasons
- + May enhance accessibility for people of all ages and abilities

Trade-offs

- + Can be uncomfortable for transit passengers
- + May increase traffic noise due to braking and accelerating
- + Some people who drive may avoid roads with raised crosswalks resulting in more traffic in other areas
- + Where combined with curb extensions, there is an impact to on-street parking



Traffic Calming – Raised Crosswalks

Additional options considered

Additional raised crosswalks were considered along Malmo Road at the intersections with 113A Street, 48 Avenue, 49 Avenue and 50 Avenue. However, it was determined that curb extensions would be a more appropriate form of traffic calming for Malmo Road.

Considerations to refine the design options

- + Confirm which side of the intersection the raised crosswalk should be located on based on primary walking route and predominant vehicle turning movements
- + Confirm that there is drainage infrastructure in the area to tie into should additional catch basins be required
- + Although there is no evidence of speeding now, the project team should consider that the default speed limit will change to 40km/hr in the future



115 Street

What we heard in September 2019

- + Improve accessibility and comfort for people walking and biking
- + Opportunity to include protected bike lanes or other options to create a safe space for people to ride bikes through the alleys and along 46 Avenue and 115 Street



Constraints

- + Two-way traffic needs to be maintained on 115 Street as it is a bus route
- + The current crossing at 51 Avenue for people walking is located on the east side of 115 Street. Signalization is currently limited to a pedestrian activated flashing yellow signal
- + North of 51 Avenue, people biking share the road with people driving rather than travel on separated infrastructure like a shared-use path or raised bike lane
- + As 115 Street is a bus route (north of Malmo Road) it must remain at a width sufficient to accommodate buses. This means that it cannot be significantly narrowed to create space for bike infrastructure

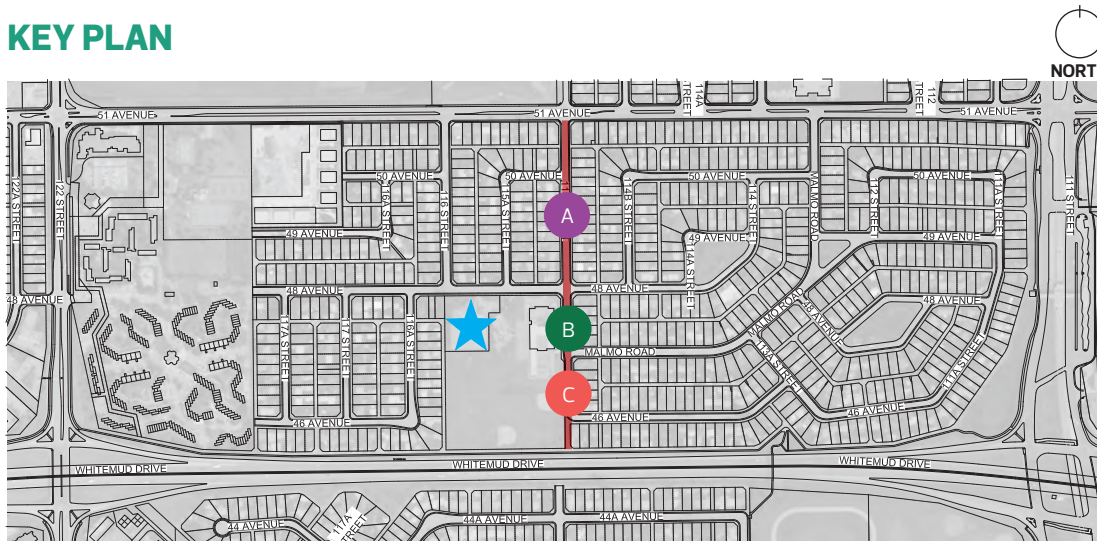



115 Street

Guiding principles for options presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities

KEY PLAN



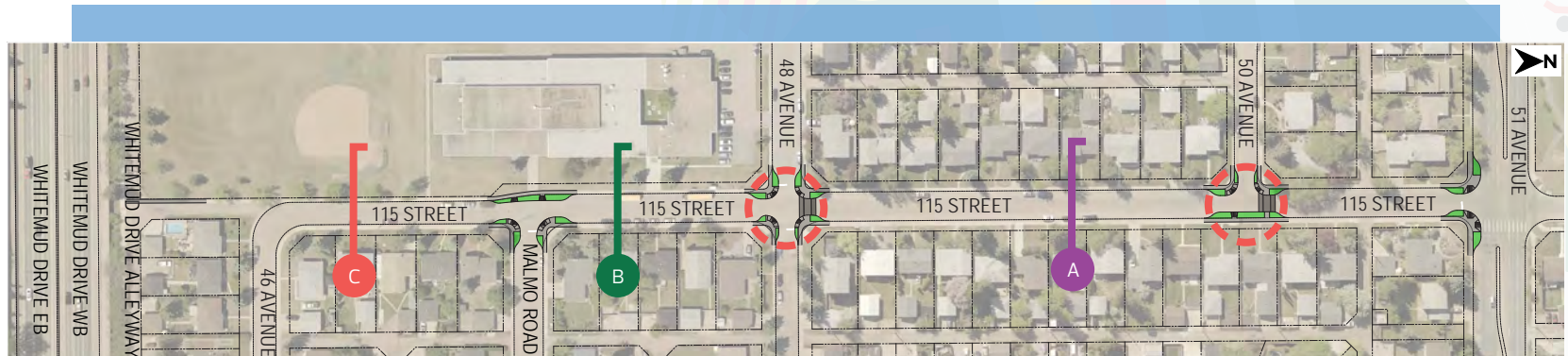
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115 Street

Option 1

Option 1 proposes maintaining the shared roadway for people biking and driving with the addition of curb extensions at intersections to slow traffic. Existing sidewalks on both sides are widened to improve conditions for people walking.



Proposed raised crosswalk either on the North or South side



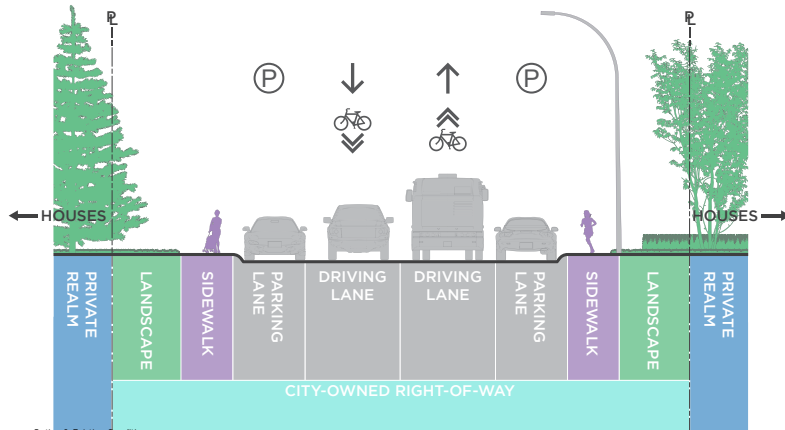
Section views - displayed on following page



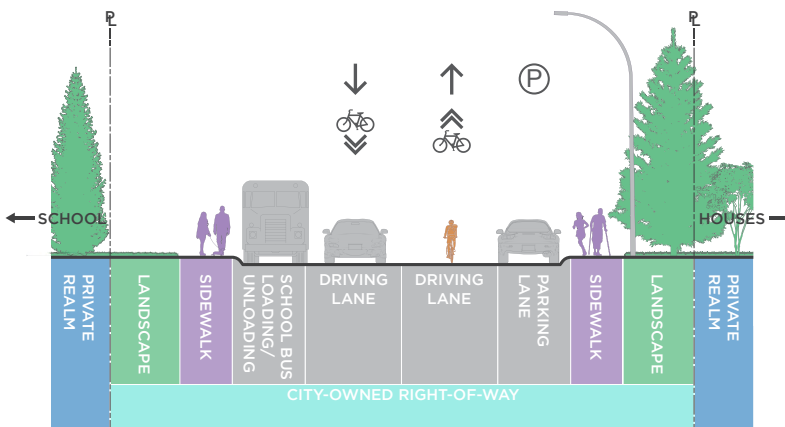
115 Street

Option 1

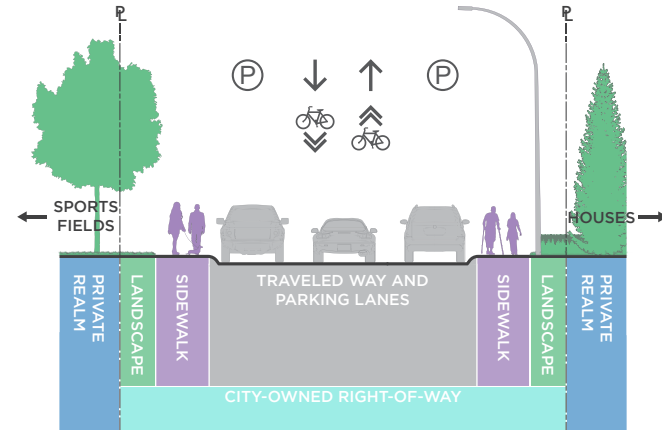
Section A



Section B



Section C





115 Street

Option 1

Benefits

- + Parking is retained on both sides of 115 Street, except at curb extensions
- + Wider sidewalks provide more walking space for people of all abilities and increases the distance from traffic

Trade-offs

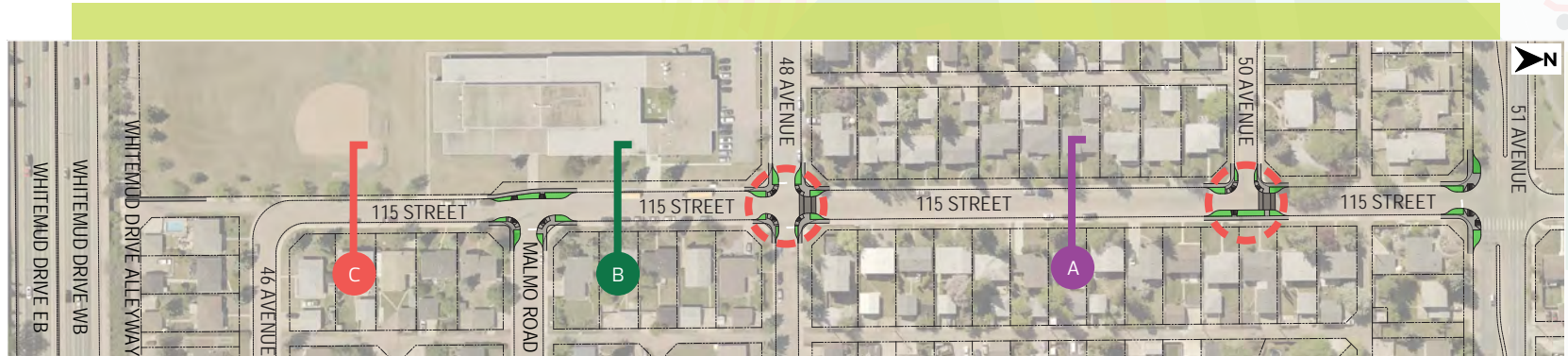
- + People driving and biking continue to share the roadway
- + Roadway is cleared to a level snow pack making biking in winter more challenging
- + Some existing landscape area in City right-of-way is taken up by widened sidewalks
- + Raised crosswalks may be uncomfortable to bike over



115 Street

Option 2

Option 2 proposes raised bike lanes on both sides of 115 Street for people biking. Widened sidewalks are provided to improve conditions for people walking.



Proposed raised crosswalk either on the North or South side



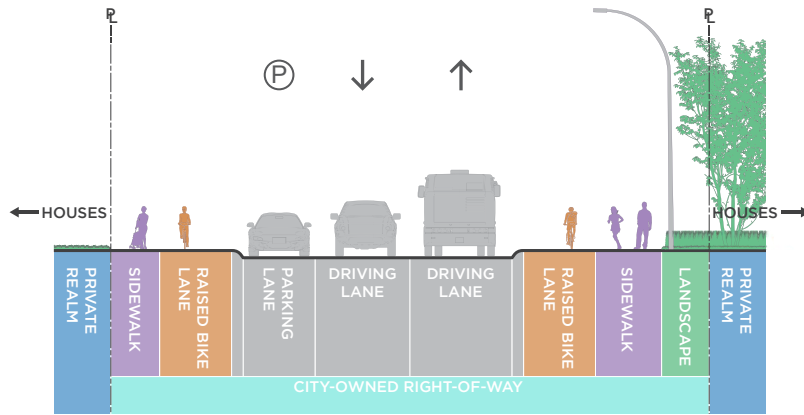
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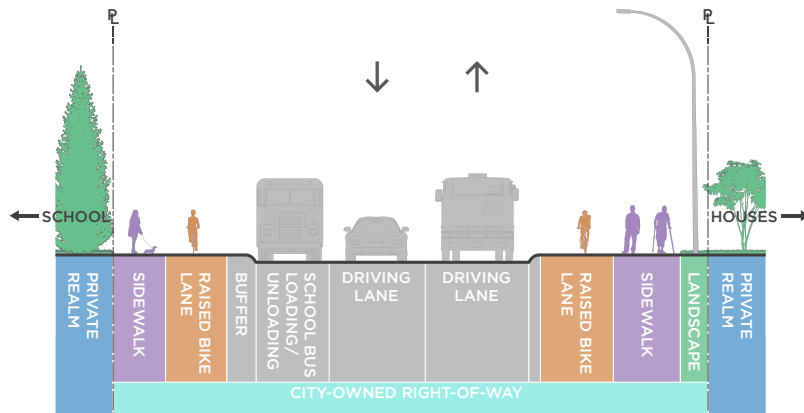
115 Street

Option 2

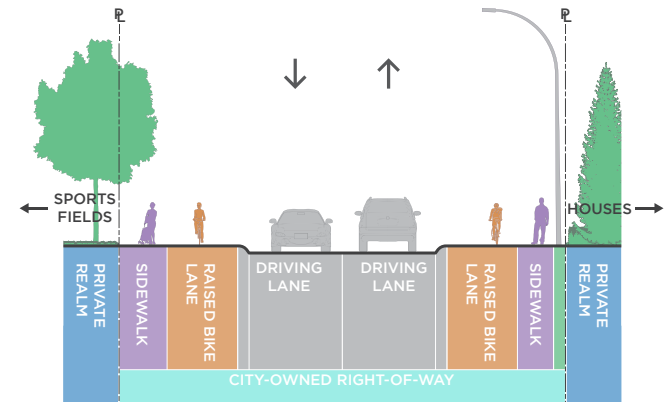
Section A



Section B



Section C



Example (Section C)





115 Street

Option 2

Benefits

- + People walking, biking and driving all have their own space
- + Bike lanes are cleared of snow in the winter by the City, providing an all-season route for people biking
- + Wider sidewalks in some locations provide additional walking space for people of all abilities and increases the distance from vehicle traffic

Trade-offs

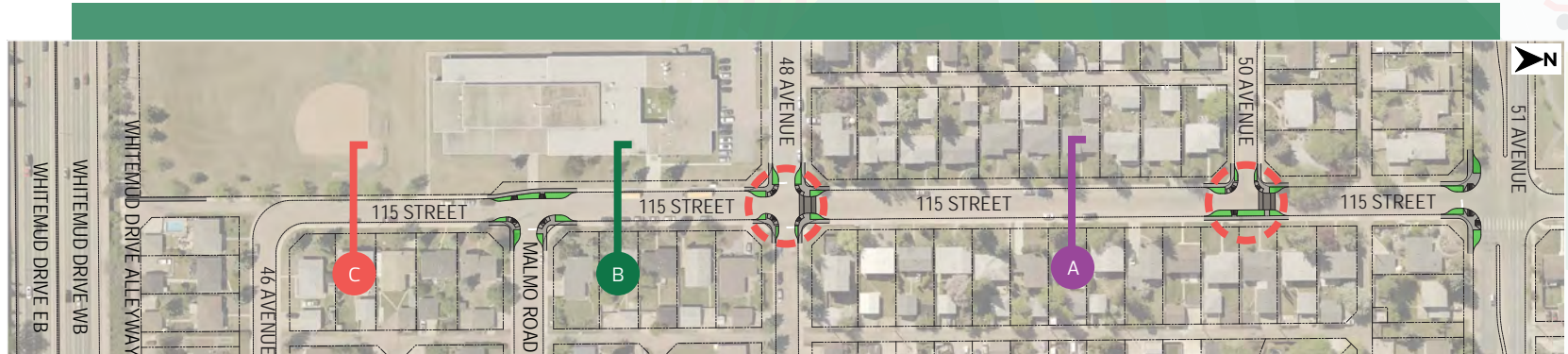
- + Bike lanes and sidewalks take up some of the existing landscape area on City right-of-way in front of residences and the school
- + Potential for conflict between people biking and school bus loading and unloading in front of the school during peak times
- + Existing parking is removed on the east side of 115 Street between 51 Avenue and Malmo Road
- + May require some tree removals in front of the school and along the sports fields
- + Existing parking is removed on both sides of 115 Street between Malmo Road and 46 Avenue



115 Street

Option 3

Option 3 proposes a shared-use path on the west side of 115 Street for people walking and biking. Curb extensions are provided at intersections. The sidewalk on the east side is widened to improve conditions for people walking.



Proposed raised crosswalk either on the North or South side



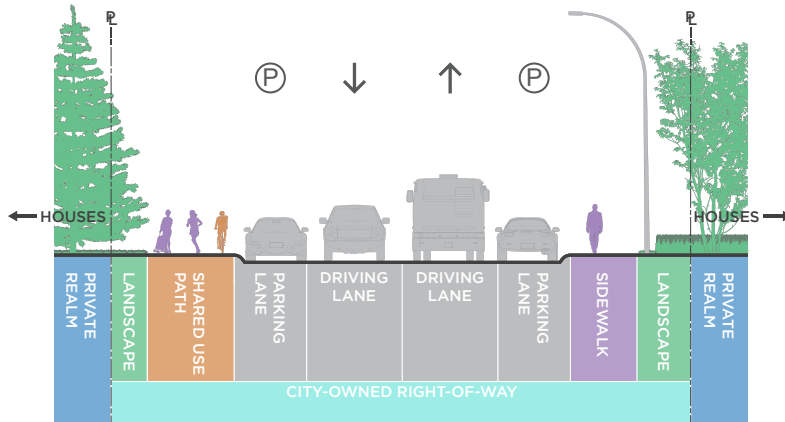
Section views – displayed on following page



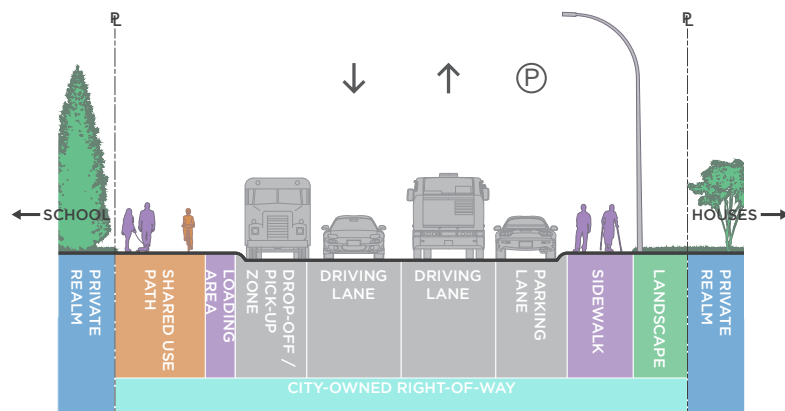
115 Street

Option 3

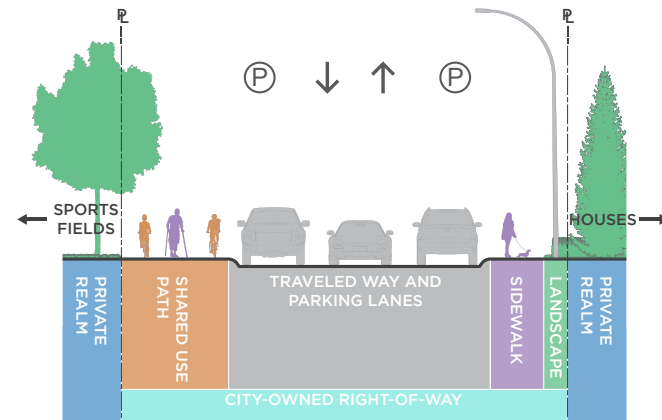
Section A



Section B



Section C



Example (Section B)



115 Street

Option 3

Benefits

- + Separated space from vehicle traffic is provided for people biking
- + Shared-use path is cleared of snow in the winter by the City, providing an all-season route for people biking
- + Existing parking is maintained, except at curb extensions
- + Wider sidewalk on the east side provides additional walking space for people of all abilities and increases the distance from vehicle traffic

Trade-offs

- + Shared-use path and wider sidewalks takes up some of the existing landscape area on City right-of-way in front of school and residences on both sides of the street
- + Potential for conflict between people biking and school bus loading and unloading in front of the school
- + May require some tree removals in front of the school and along the sports fields
- + People walking and biking would share a space on the west side of 115 Street



115 Street

Additional options considered

- + A shared-use path on the east side of 115 Street was considered. However, due to the number of driveways, conflicts with landscaping and conflicts with electrical cabinets, it was decided to locate the path on the west side of 115 Street
- + Protected bike lanes (on the roadway surface with barrier curbs between the bike lane and the vehicle lane) were considered. However, due to the amount of space that was required to implement them and the impacts to on-street parking and sidewalk widths, it was decided to proceed with the option for raised bike lanes instead

Considerations to refine the design options

- + Confirm impacts to existing landscaping and/or on-street parking, depending on which option is pursued
- + An upgrade of the existing pedestrian flasher at 51 Avenue would be required to create a safe and accessible crossing for people biking, either with an upgraded signal, signage and/or pavement markings. The addition of new traffic signals, or the modification of existing signals, is subject to assessment by the City
- + Confirm how the bike facility will be identified in the alley south of 46 Avenue and how it will connect to the existing shared-use path running east/west in the alley along Whitemud Drive



Alleys near LRT

What we heard in September 2019

- + Improve accessibility for people walking in the alleys that lead to the LRT station pedway
- + Opportunity to expand connections and shared-use paths through the alley network

Constraints




- + The alleys are used by people driving to access private garages and people may have to change the way they drive to them
- + Unless they are designated as Shared Roadways, the alleys are not cleared of snow during the winter based on the City's current Snow and Ice Policy, making it hard for people walking and biking to get to the LRT station pedway
- + There is limited space in the right-of-way to add a separate sidewalk for people walking



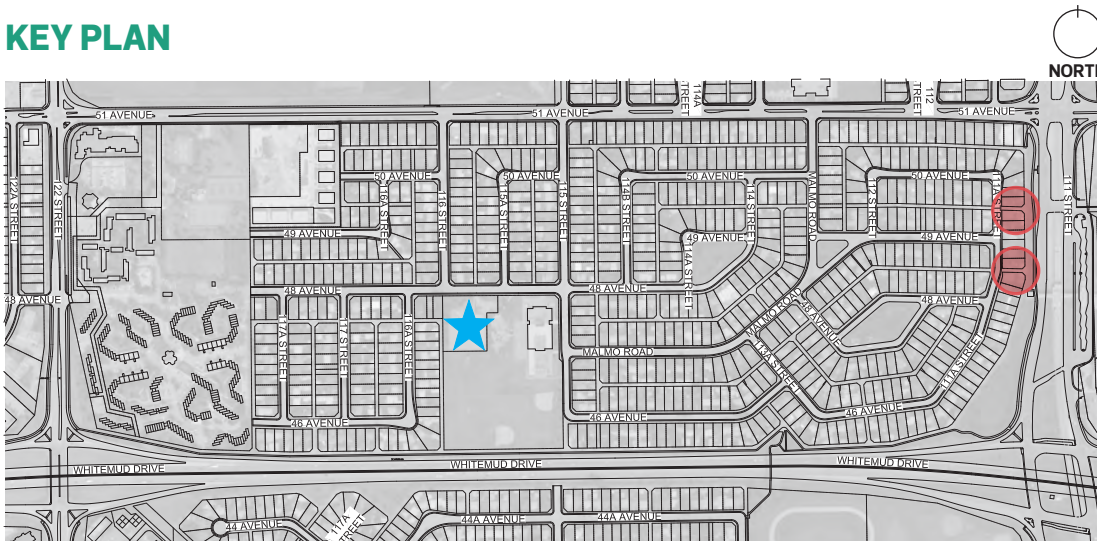



Alleys near LRT

Guiding principles for options presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities
-  Creating safe and well-lit spaces within the community

KEY PLAN



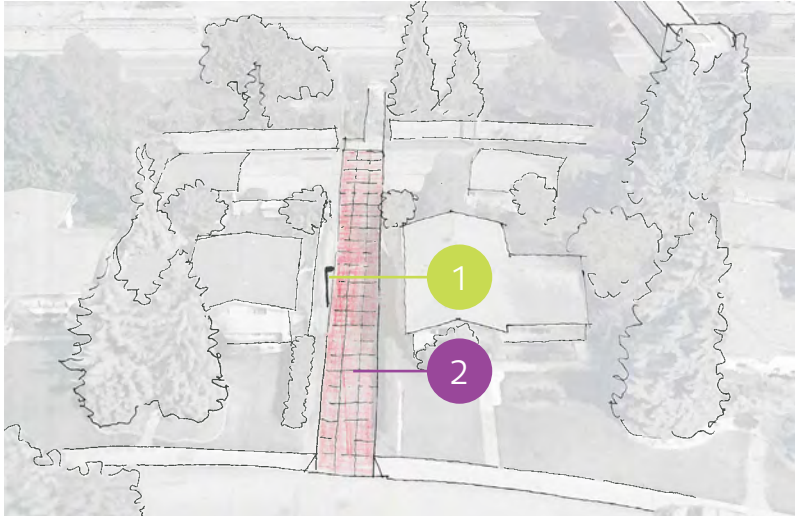
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Alleys near LRT

Option 1: enhanced paving and lighting

Applies to both north and south alley



1 Upgrade existing lighting to LED lighting

2 Proposed decorative concrete paving from 111A Street to the sidewalks leading to the LRT station

Benefits

- + Decorative concrete paving through alley makes it feel more like a space for people walking or biking
- + Upgraded lighting enhances safety for people walking or biking in the alley
- + Access to both alleys is retained for people driving

Trade-offs

- + Potential conflicts between people walking or biking and people driving



Alleys near LRT

Option 2: close south alley to vehicles

Applies to south alley only



1 Close alley to people driving with bollards west of driveways

2 Remove road and replace with sidewalk

3 Upgrade existing lighting to LED lighting

4 Enhanced planting

Benefits

- + Potential conflicts between people walking or biking and people driving are eliminated
- + Access to garages is maintained from the alley along 111 Street
- + Upgraded lighting enhances safety for people walking or biking in the alley
- + If the sidewalk is designated as a shared-use path, it would be cleared of snow in the winter by the City

Trade-offs

- + People who currently drive through the alley will need to use different routes



Alleys near LRT

Additional options considered

A narrow sidewalk along one side of the alley was considered. However, due to the limited width available in the alley for people driving, it was determined that the addition of a sidewalk was not feasible.

Considerations to refine the design options

- + A road closure bylaw will be required to close the one existing alley to vehicle traffic. Timelines for acquiring the Bylaw should be factored into project timelines
- + Confirm whether the connection in the south alley can be closed to vehicle traffic and classified as a shared-use path and what considerations are required by the City to maintain landscaping and clear snow to ensure use in all seasons
- + Confirm snow clearing practices based on the current Snow and Ice Policy allowing the alley to the north to be maintained in all seasons to ensure it functions for different user groups; otherwise, review design alternatives for drainage
- + Some type of barrier, such as bollards, will be required to prohibit vehicles from driving in the south alley if it is closed



Whitemud Drive Bridge Connection



What we heard in September 2019

- + Improve conditions for people walking and biking to/from the bridge over Whitemud Drive
- + The ramp and connection from the Whitemud Drive pedestrian bridge to the shared-use path in the alley could be improved for accessibility because it is steep and the fence is difficult to move around
- + Improve the connection to the Whitemud Drive pedestrian bridge
- + The stairs to the Whitemud Drive pedestrian bridge are in poor condition
- + Create a formal bike path off of the Whitemud Drive pedestrian bridge

Constraints

- + The bridge access is on a steep slope, which may result in high travel speeds by people biking. Some intervention is required to reduce travel speeds to increase safety for all users. Re-grading of the slope will likely have an impact on some of the existing mature trees in the area
- + There are tight turns for people biking at the bottom of the slope to travel either east or west along the existing shared-use path
- + The space between the bridge structure and the noise wall is narrow and steep

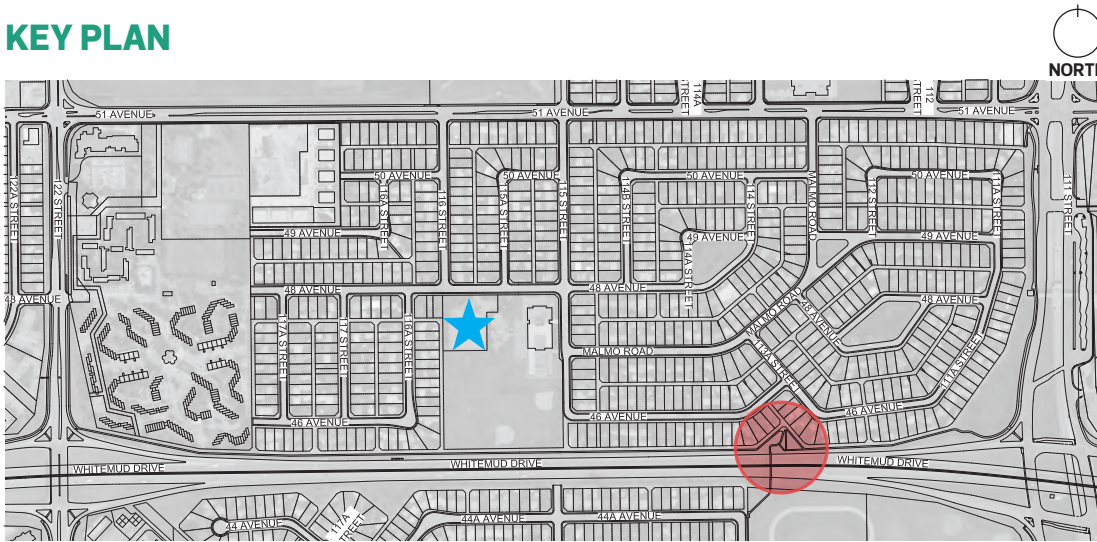
Guiding principles for option presented

-  Improving accessibility for people within the community and surrounding destinations
-  Making the places where people travel safer for all users, ages and abilities



Whitemud Drive Bridge Connection

KEY PLAN



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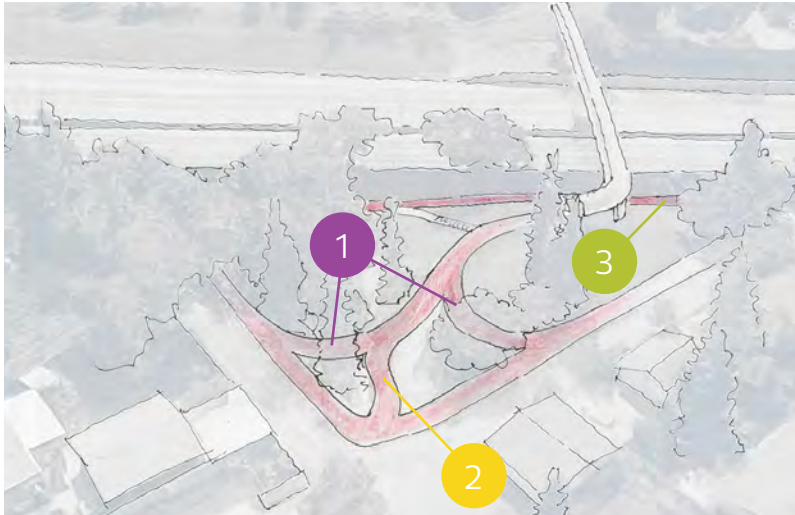
Existing conditions





Whitemud Drive Bridge Connection

Potential improvements



1 New shared-use path connections from the bridge to the existing paths

2 Improved connection that removes the existing fence but still promotes slower travel speeds by people biking

3 New walkway connection behind bridge structure

Benefits

- + Improved connections to the existing shared-use paths to the east and west
- + Improved connection to the alley intersection by removing the existing fencing
- + Improved connection for people travelling east or west by adding a walkway between the bridge structure and the noise wall
- + Improved separation for people driving and people walking and biking
- + Regrading required reduces the berm height and increases sight lines

Trade-offs

- + May require removal of some existing trees



Whitemud Drive Bridge Connection

Additional options considered

No additional options were considered for this area.

Considerations to refine the design option

- + The grading of the area will need to be closely reviewed to determine whether the area can be re-graded without impacting the existing mature trees. If not, a detailed assessment of the existing trees and planting will need to be completed with the City of Edmonton Urban Forester to determine what would need to be removed in order to improve the access. Any trees to be removed will be evaluated by the Urban Forester for monetary value as per the City's Corporate Tree Management Policy.
- + The mechanism for ensuring safe travel speeds of people biking will need to be determined. A fence of some type may still be required if geometric changes to the path are not sufficient
- + Ensure that the design accommodates non-standard bikes (recumbent bikes, tandems, trailers, etc.) and motorized wheelchairs/scooters
- + Ensure that sight lines are maintained for people biking and walking
- + Confirm whether a retaining wall is required to accommodate the sidewalk between the bridge structure and the noise wall

Next Steps

The Malmo Plains Neighbourhood Renewal project team will take the input received on the design options and will incorporate direction from policy and technical studies in order to prepare the draft neighbourhood design. The draft design will be shared with the community in the spring of 2020. Following these steps, it will be determined which elements of the draft design will be implemented with the Neighbourhood Renewal in 2021 and 2022.

