*“Flood proofing is a combination of structural and non-structural changes made to a building that reduces or prevents structural flood damage”*

Ref: http://kitsaptridenthomes.com/

# More Information

For more information on flood proofing, contact the Planning & Buildings Department.

The content of this brochure are general considerations. For requirements and development standards for building within the floodplain, contact the Planning & Buildings Department.

**Planning & Buildings Department**

A.R. McDiarmid Civic Complex

638 Princess Avenue

Brandon MB R7A 0P3

Planning@brandon.ca

204 729 2110


City of BRANDON

# Building in the Floodplain

## Building Design Considerations

City of BRANDON

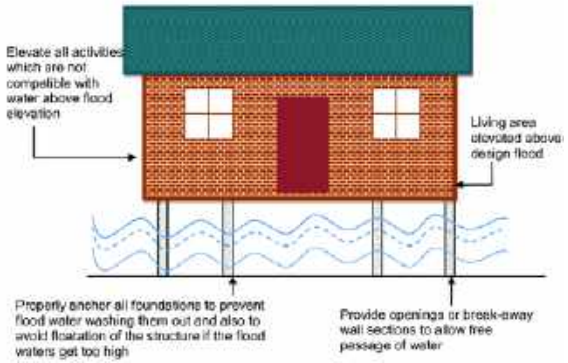
# New Buildings

## Strategies for Flood Proofing Buildings

***Building on fill.*** New subdivisions or single buildings may be built on fill that raises the building above the design flood level.

***Building on piers, piles, columns or bearing walls.*** This strategy involves elevating the building on some kind of support that will allow floodwaters to pass through, although careful considerations must be taken into account for protection of foundation units from floating debris.

***Flood proofing services.*** Electrical, plumbing, and heating should be protected from flood damage. Locating services above the design flood level will help limit flood damage. Installation of a backwater valve on the main building drain will prevent overwhelmed sewers from backing up into the building.




*Ref:* https://kb.ermis-f.eu/kb/d/Measure/1088

## Foundations

When floodwaters reach a building, it produces an increase in lateral and uplift loads on the foundation walls and floor slab. These loads can cause catastrophic failure of the foundation.

***Shallow Foundation*** is a foundation unit that gets its support from soil or rock located close to the lowest part of the building it supports, such as a basement footing, foundation wall, or structural slab construction. *Shallow foundations* are prohibited in the floodplain. Designers shall use *deep foundations.*

***Deep Foundation*** is a foundation unit that provides support for a building by transferring loads either by end-bearing to soil or rock at considerable depth below the building, by adhesion or friction, or both, in the soil or rock in which it is placed. Piles are the most common type of deep foundation.

*Ref:* https://www.familyhomeplans.com/

# Existing Buildings

## Flood Proofing Basements

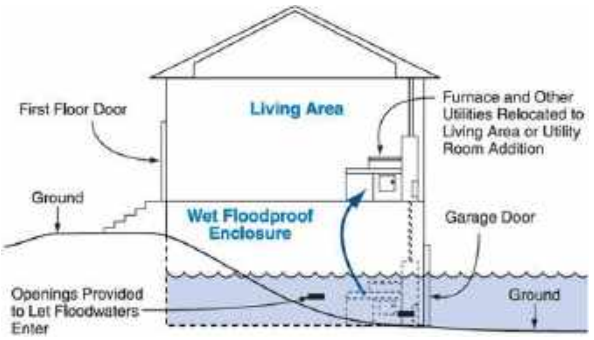
There are two main strategies to flood proofing existing basements.

***Dry flood proofing*** has two main methods.

A *drained* system uses a sump pit and pump to keep uplift and lateral forces in the soil to a minimum.

An *undrained* system uses a watertight foundation that is designed with sufficient strength and mass to withstand uplift and lateral forces caused by the flood waters.

***Wet flood-proofing*** accepts the fact that the lowest level of the building will be flooded. Flood damage is kept to a minimum by using special water-resistant construction materials.




*Ref:* https://www.researchgate.net/

# APPENDIX B: IMPLEMENTATION—ACTIONS

The City of Brandon, in collaboration with private and public sector partners and stakeholders will endeavor to complete the "action items" listed below to implement The Assiniboine Gardens Secondary Plan. These action items are City-led actions. Items that are to be developer-led are not in this list. The City should review and update "action item" priorities annually. Timeframes for "the action items" are

- Ongoing
- Short Term (0-5 years)
- Medium Term (6-10 years)
- Long Term (10+ years)

| Actions | Responsibility | | Timeframe | Notes/Considerations |
|---|---|---|---|---|
| | Lead | Support | | |
| **Transition Area 1—21st Street North stub**<br>• Include as part of Greenspace network<br>• City may consider purchasing and rezoning lands when opportunities arises | Planning | • Parks<br>• Property | Long | Possible purchase and rezoning of lands to greenspace |
| **Transition Area 2—Area bound by 19th and 20th Streets North, and McGregor and Hilton Avenues**<br>• Closure of 20th Street North right-of-way between Hilton and McGregor Avenues<br>• Swapping City-owned lands with private properties within this block<br>• Consolidate existing Parks Complex with closed 20th Street North and City-owned lands east of 20th Street North<br>• Rezone Open Space (OS) Zone properties along 19th Street North to Commercial Arterial (CAR) | Planning | Property | Short | |
| **Transition Area 3—Area northwest of Parker Boulevard and 14th Street North**<br>• Include as part of greenspace network<br>• City may consider purchasing and rezoning lands when future opportunities arise | Planning | • Parks<br>• Property | Long | Possible purchase and rezoning of lands to greenspace |
| **Transition Area 4—320 – 6th Street North**<br>• Include as part of greenspace network | Planning | • Parks<br>• Property | Long | Possible purchase and rezoning of lands to greenspace |
| **Transition Area 5—Area bound by 14th and 16th Streets North, and Maple and Stickney Avenues**<br>*Maple Avenue*<br>• Upgrading of Maple Avenue, and 14th Street North between Maple Avenue and Parker Boulevard to a paved rural section<br>• Extending a sidewalk along the north side of Maple Avenue<br>• Installing infrastructure along the Maple Avenue right-of-way between 14th and 16th Streets North<br>*Rest of Transition Area*<br>• At the request of the developer, facilitating the closure of the north-south lanes between Maple and Stickney Avenues, and 15th Street North between Maple Avenue and the lane north of and parallel to Stickney Avenue<br>• Monitoring of methane gas in the area | Planning | • Planning<br>• Engineering<br>• Building Safety | • Short term along Maple Avenue<br>• Developer-driven for the rest of the area | |

## APPENDIX: IMPLEMENTATION—ACTIONS

| Actions | Responsibility | | Timeframe | Notes/Considerations |
|---|---|---|---|---|
| | Lead | Support | | |
| **Transition Area 6—Area bound by 14th and 16th Streets North, Parker Boulevard, and McGregor Avenue**<br>• Facilitating the closure of 15th Street North and the north-south lanes to establish larger development sites fronting Parker Boulevard and McGregor Avenue<br>• Monitoring of methane gas in the area | Economic Development | Planning | Short to Medium Term | Handout or brochure to communicate with applicants |
| **Transition Area 7—11th and 12th Streets North between Parker Boulevard and Stickney Avenue**<br>*West Side of 12th Street North*<br>• Rezoning of sites with existing residences to the Residential Single Detached (RSD) Zone, and undeveloped sites to the Development Reserve (DR) Zone<br>o Rezoning undeveloped sites to the DR Zone allows the City to obtain contributions from developers to offset costs associated with 12th Street North infrastructure improvements<br>• Upgrading of 12th Street North to a paved rural section, funded through sale of City-owned sites within this area and capital improvements to existing infrastructure<br>• Monitoring of methane gas in the area and reserve for drainage<br>*East Side of 12th Street North*<br>• Rezoning of sites to the DR Zone, allowing for reorganization of titles before sites are developed or redeveloped<br>• Facilitating the closure of 11th Street North, Maple Avenue, and the north-south lanes between 11th and 12th Streets North to establish deeper residential sites fronting 12th Street North<br>• Monitoring of methane gas in the area | • Planning<br>• Engineering | • Property<br>• Building Safety (methane gas) | • Medium term for sites along the west side of 12th Street North<br>• Long term for sites east of 12th Street North | |

## APPENDIX: IMPLEMENTATION—ACTIONS

| Actions | Responsibility | | Timeframe | Notes/Considerations |
|---|---|---|---|---|
| | Lead | Support | | |
| **Transition Area 8 – Area bound by 8th Street North, Parker Boulevard, Stickney Avenue, and the dike section east of 6th Street North**<br>*6th and 8th Street North Sections*<br>• Upgrade 6th Street North to paved rural standard and rezone properties fronting 6th and 8th Streets North to Residential Single Detached (RSD)<br>• Swapping of City-owned lands fronting 8th Street North with properties in the rest of the area not developable due to groundwater concerns<br>• Rezoning of all properties along 8th Street North except 737 Stickney Avenue to the RSD Zone to allow development of detached and, subject to conditional use approval, semi-detached dwellings<br>• Rezone undevelopable lands to Development Reserve (DR) Zone, including properties fronting 7th Street North<br>*Rest of Transition Area*<br>• The City will require a geotechnical report and groundwater testing completed prior to development of this area to confirm the extent of the drainage area<br>• Design of this area will require outreach to site owners to explore solutions regarding 7th Street North and the informal laneways running across private properties | • Planning | • Property<br>• Engineering | • Short term along 6th and 8th Streets North<br>• Medium to long term for the rest of the area | The northeast part of the area will be set aside for drainage purposes, as this part is known to have a high water table resulting in groundwater concerns for construction purposes |
| **Rest of Employment Lands**<br>• Sites within one block of 18th Street North shall remain commercial in nature, while other employment lands further east may also accommodate other uses typically found in the Industrial Restricted (IR) Zone, such as construction contractors' offices and light industrial uses<br>• Where streets or infrastructure require upgrades to enable development, the policies of the adjacent transition areas will apply | Planning | Engineering | Medium term | This area is fully serviced and mostly developed with a variety of commercial uses, including retail, restaurants, personal services, automotive, hotels, and offices |
| **Stickney Avenue Residential Area**<br>• The City should maintain the Residential Low Density (RLD) Zone for the residential sites along Stickney Avenue<br>• The City may, provided there is sufficient servicing capacity, consider Residential Moderate Density (RMD) developments due to the higher elevations of these sites and Stickney Avenue acting as a collector street for The Assiniboine Gardens | Planning | Engineering | Short term | • Most of the sites along the north side of Stickney Avenue are zoned for residential uses, of which most of them are zoned Residential Low Density (RLD)<br>• Stickney Avenue is developed to an urban section and has water and wastewater service |

The capital improvement plan identifies transportation and servicing network improvements to allow for incremental buildout of the Flats Secondary Plan area. Capital improvement timelines and phasing will be driven by Council priorities.

The costs in the tables below include network infrastructure only, and do not include costs to upgrade the water and wastewater treatment facilities.

Further wastewater modeling is required to confirm that there is sufficient capacity within the existing wastewater mains in the Flats Secondary Plan Area. Due to lack of natural grade within the secondary plan area, where ditch construction is required, in Nodes 7, and 8B, conceptual design should be prepared prior to any considerations for developing the node in question.

**Development Node 8A (8th Street North, Stickney Avenue to Parker Boulevard)**

| ***Description of Work*** | ***Lump Sum Cost ($)*** |
|---|---|
| *8th Street North – Stickney Avenue to Parker Boulevard – (150mm Watermain Upgrade including lot servicing)* | $ 309, 000 |
| *8th Street North – New and renewal servicing* | $ 144, 000 |
| **Ditch upgrades – Parker Boulevard, 7th Street N to 11th Street N (Stormwater)* | $ 35, 100 |
| **Zone 8 – 7th Street North - Retention Pond (Stormwater)* | $ 425, 000 |
| ***Total*** | **$ 913, 100** |

*Development node 8B dependent on upgrade

**Development Node 8B (6th Street North, Stickney Avenue to Parker Boulevard)**

| ***Description of Work*** | ***Lump Sum Cost ($)*** |
|---|---|
| ***Ditch upgrades - 7th Street N to 11th Street N (Stormwater)* | Shared with Node 8A |
| *Ditch construction – 6th Street N, Parker Boulevard (Stormwater)* | $ 68, 400 |
| ***Zone 8 – 7th Street North - Retention Pond (Stormwater)* | Shared with Node 8A |
| *6th Street North – Stickney Ave to Parker Boulevard (Local-urban cross section roads, no sidewalk)* | $ 441, 870 |
| ***Total*** | ***$ 510, 270*** |

**Dependent on development node 8A. Anticipated to develop in a longer timeframe

**Development Node 5 (16th to 14th Street North, Stickney Avenue to Maple Avenue)**

| ***Description of Work*** | ***Lump Sum Cost ($)*** |
|---|---|
| *14th Street North – Stickney Avenue to Maple Avenue (150mm Watermain)* | $ 270, 000 |
| *Maple Avenue – 16th Street N to 14th Street N (150mm Watermain)* | $ 285,000 |
| *16th Street North – 60m north of Stickney Ave to Maple Avenue (150mm Watermain)* | $ 165, 000 |
| *McGregor Avenue – 16th Street N to 14th Street N (200mm Domestic Sewermain)* | $ 262, 500 |
| *16th Street North, Maple Avenue, and 14th Street – New and renewal servicing* | $ 120, 000 |
| ***Zone 6 – 14th Street North - Retention Pond (Stormwater)* | $ 444,000 |
| ***Ditch upgrades – 14th Street N, Parker Boulevard to McGregor Avenue; 16th Street N, Stickney Boulevard to Maple Avenue; Maple Avenue, 16th Street N to 14th Street N (Stormwater)* | $ 65, 070 |
| *Maple Avenue – 16th Street N end of ex asphalt to 14th Street N ( Local-urban cross section roads, no sidewalk)* | $ 194, 155 |
| *16th Street North – Stickney Ave to Maple Ave ( Local-urban cross section roads, no sidewalk)* | $ 261, 105 |
| *14th Street North – Stickney Ave through Maple Ave Intersection ( Local-urban cross section roads, no sidewalk)* | $ 241, 020 |
| ***Total*** | ***$ 2, 307, 850*** |

**Development node 6 dependent on upgrade

**Development Node 6 (16th to 14th Street North, Hilton Avenue to McGregor Avenue)**

| ***Description of Work*** | ***Lump Sum Cost ($)*** |
|---|---|
| *McGregor Avenue – 16th Street North to 14th Street North (150mm Watermain)* | $ 270, 000 |
| *Maple Avenue – 14th Street N to 16th Street N (200mm Domestic Sewermain)* | $ 225, 000 |
| *16th Street North, Maple Avenue, and 14th Street – New and renewal servicing* | $ 36, 000 |
| **Zone 6 – 14th Street North - Retention Pond (Stormwater)* | Shared with Node 5 |
| **Ditch upgrades – 14th Street N, Parker Boulevard to McGregor Avenue (Stormwater)* | Shared with Node 5 |
| ***Total*** | ***$ 531, 000*** |

*Dependent on development node 5. Anticipated to develop post node 5 development

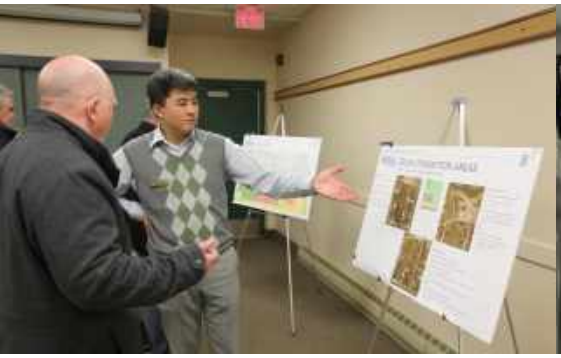
**Development Node 7 (12th Street North, Stickney Avenue to Parker Boulevard)**

| ***Description of Work*** | ***Lump Sum Cost ($)*** |
|---|---|
| *Zone 7 – 11th Street North - Retention Pond (Stormwater)* | $ 284, 000 |
| *Ditch upgrades – Parker Boulevard, 11th Street N to 14th Street N (Stormwater)* | $ 28, 800 |
| *Ditch construction – 12th Street N (Stormwater)* | $ 44, 100 |
| *12th Street North Parker Boulevard to existing asphalt at north end of 1137 Stickney Avenue (Local – urban cross section roads, no sidewalk)* | $ 328, 055 |
| ***Total*** | ***$ 684, 955*** |

+ Potential methane concerns for the entire development node.

# Public Engagement Report

THE ASSINIBOINE GARDENS SECONDARY PLAN



June 2019 – December 2019

Prepared by:

Planning & Buildings Department
Development Services Division
638 Princess Avenue
Brandon, MB R7A 0P3

City of BRANDON

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2.2 Methods of Engagement ..... 2
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3.0 What We Heard ..... 3
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5.0 Contact Information ..... 4
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# 1.0 Summary

With the realities of extreme flooding along Brandon's Assiniboine River Corridor once thought to be unlikely now part of the community's collective wisdom, the city of Brandon looked to the public for feedback in charting a new vision for how development should occur in Brandon's Diked floodplain areas. Engagement with the public was in the form of public presentations, stakeholder meetings, a project webpage and in person meetings are requested.

There has been an overall positive response from the stakeholders and residents with some concerns around timelines, insurability and proposed density.

This report provides the details of the public engagement efforts of the city for this project, and is part of the draft guidelines document that is being presented to council in October 2018.

# 2.0 Project Overview

The City of Brandon's role in the public engagement was mainly to collaborate residents and stakeholders of the proposed changed in development standards, using a number of engagement methods. The project was led by the Planning and Buildings department with representation from Parks and Recreation, Risk Management, Engineering, Property and Economic Development.

## 2.1 Objectives

- Inform the public and affected local stakeholders on the change in development standards and implications of the new standards
- Facilitate feedback from local stakeholders and residents on opportunities and constraints in regard to the proposed changes
- Have targeted stakeholders identify gaps or issues with the standards such as engineering to comment on potential servicing restrictions
- Enable key industry stakeholders to understand the standards
- To create an overall community awareness of the updated development standards
- To facilitate feedback from residents on opportunities and constraints in regards to the ponds and guidelines

## 2.2 Methods of Engagement

The methods were selected each with a different purpose but all with an overall goal to engage a wide variety of people and interested parties. Since our objectives were to collaborate and get feedback, we used the following engagement methods:

### 2.2.1 Stakeholder Meetings

To explore attitudes in depth early in the project, we held target stakeholder meetings for the project in the summer and fall of 2019. These meetings were with other city staff such as Parks and Recreation, Risk Management, Engineering, Property and Economic Development. These meetings consisted of presentations and facilitated discussions regarding strengths, weaknesses, opportunities and threats in the area.

### 2.2.2 Project Webpage

The project webpage was developed to direct interested individuals to a central location where they could find information pertaining to the project. The webpage (http://www.brandon.ca/what-is-happening-in-your-neighbourhood/active-projects/1554-protected-floodplain-development), accessed through the Planning and Buildings department website, provides an overview of the project.

### 2.2.3 Public Event and Social Media

To give residents a chance to get the information and vocalize their opinions, the department held a workshop and an Open House to which the public were invited to participate. The workshop was held in June 2019 and the Open House in December 2019. The purpose of the workshop was to get public input early in the process to then discuss with staff internally and revise the standards. The feedback received at the workshop was then used to develop a vision for the area which was shared in December 2019. We provided notices through the project webpage, Brandon Sun, the Planning and Buildings department subscription service, social media and posters at various city locations. Approximately 20 people attended the workshop and over 50 people attended the Open House. Social media postings reached 16,344 people, had 23 comments and was shared 28 times. A summary of this meeting is under *Section 3.0 What We Heard*, while more detailed information regarding this open house is under Appendix B.

### 2.2.4 Webinar

To provide another opportunity for residents to review and discuss the draft plan policies proposed, we held two webinars in June 2020. These webinars included a presentation of the proposed plan and time for discussion. Approximately 40 people registered for the first webinar and 13 for the second one. Another webinar was presented for council also in June 2020 to provide them an opportunity to give feedback on the proposed plan before moving along with the formal process.

## 3.0 What We Heard

The following are the key findings from our public engagement process for the Naturalized Stormwater Pond Guidelines:

Internal

- Most areas do not have adequate servicing and should not permit more than low density residential
- The area close to the corner of 6th Street N and Parker Boulevard, as with many other areas, is prone to groundwater flooding
- City must maintain the majority of city owned land that is designated Parks and recreation
- Limit number of new residents living in areas with challenging emergency access
- Utilize existing infrastructure
- Respect private property ownership rights

External

- Development standards make it easier to develop both existing and new development
- Deep foundation requirement involves engineered foundation? This could be limitation because of cost
- Is there insurance that will cover development in this area (overland flood insurance )
- Proposal to have coop housing at northwest corner of Stickney and 6th Street N.
- Is it possible to accommodate more density along Stickney Ave where infrastructure is potentially in good condition since it is servicing properties to the south of Stickney
- Lack of connection across the rail has greatly reduced business for commercial establishments in this area
- Potential for business park type of development to attract more to businesses such as the car wash on corner of 16th Street N and Parker Boulevard
- As the area transitions to a park friendly area and have more businesses that attract pedestrian traffic, is there possibility that the city would permit light industrial temporarily in the area, with appropriate frontage and storage in the rear
- Potential for mixed use along 19th Street N?
- Many existing operations would have to extend servicing if they were to expand or redevelop

## 4.0 Next Steps

The insight gained in these meetings was valuable in helping the department understand what the potential issues are in terms of designing and implementing the standards such as the need to look into possible higher density along Stickney and possibly allowing new light industrial in the area. As well, we were able to better have practical conversations regarding what to consider for deep foundations, issues around methane gas and the timeline for getting these changes approved so that development can commence.

The next step in this project is to present the draft development standards, necessary rezoning application, new Assiniboine Gardengs Secondary Plan and accompanying maps and attachments to Council in the fall of 2020. The public can continue to be involved in this process by attending that council meeting as well as staying in contact with the department regarding the project.

## 5.0 Contact Information

Planning Section
Planning & Buildings Department
Development Services Division
638 Princess Avenue
Brandon, MB R7A 0P3

Phone: 204 729 2110
Email: Planning@brandon.ca

# Appendices

The appendices to this report are as follows:

A. Public Engagement Schedule
B. Workshop and Open House Materials
    1. June 6, 2019 Workshop
        i. Invitations
        ii. Handouts and Presentation
        iii. Display Boards
    2. December 12, 2019 Open House
        i. Invitations
        ii. Handouts
        iii. Display Boards
    3. June 2020 Webinar
        i. Invitations
        ii. Presentation
C. Notes and Feedback Forms
    1. June 6, 2019 Workshop
    2. December 12, 2019 Open House

# Appendix A—Public Engagement Schedule

**ENGAGEMENT SCHEDULE**

| Meeting Date | Technique | Stakeholder | Event/Meeting | Intent |
|---|---|---|---|---|
| 7-May-19 | Workshop | City Council (informal session) | Educate Council about risk in study area, and gauge their risk tolerance | • Inform stakeholder<br>• Facilitate input<br>• Inform public |
| 6-Jun-19 | Workshop | Property owners, residents, and business owners in study area | Educate attendees about risk in study area, and gauge their risk tolerance | • Exchange information<br>• Facilitate input |
| 12-Dec-19 | Public Open House | General Public | Inform of draft regulations and land use policies based on feedback obtained during workshops and subsequent staff research | • Inform public<br>• Exchange information<br>• Facilitate input |
| 4-Jun-20 | Webinar | General Public | Inform of draft Secondary Plan, obtain feedback before Council adoption process | • Inform public<br>• Facilitate input |

# Appendix B—Workshop and Open House Materials

# Appendix B-1
# June 6, 2019 Workshop

# Appendix B-1(i)
# June 6, 2019 Workshop Invitations

Planning & Buildings Department
638 Princess Avenue, Brandon, MB R7A 0P3
T: 204.729.2110 F: 204.728.2406
www.brandon.ca

April 29, 2019

Dear: Property Owner

RE: Charting the Course for Future Development in Brandon's Protected Floodplain

With the realities of flooding along Brandon's Assiniboine River Corridor once thought to be unlikely now part of the community's collective wisdom, the City of Brandon is looking to public for feedback as it charts a new vision for how building development occurs in Brandon's protected floodplain areas. The updated regulations informed by community input will attempt to find a balance between development with the need to protect people and property from flooding events.

While recent flood events have forced us to acknowledge the risk that building on a protected floodplain carries, we now need to know what the community's tolerance for such risk is and how that factors into what type of future building development proceeds in the area. As a property owner in the area your feedback is important in helping the City find the right balance between new development or the redevelopment of existing buildings with the need to protect people and property from flooding events.

**You are invited to attend a workshop event on either:**

- Thursday, May 23rd from 5 p.m. to 7 p.m. at the North End Community Centre (1313 Stickney Avenue) or
- Thursday, June 6th from 5 p.m. to 7 p.m. at the Riverbank Discovery Centre (545 Conservation Drive)

The workshops will begin at 5 p.m. with a presentation from City of Brandon administration followed by an interactive engagement event. Advance registration is required by calling 204-729-2214 or by emailing b.patten@brandon.ca.

If you have any questions regarding the initiative, do not hesitate to contact me at 204-729-2124 or r.nickel@brandon.ca.

Sincerely,

Ryan Nickel, RPP
Chief Planner

# DEVELOPMENT AND FLOODING

*Charting the Course for Future Development in Brandon's Floodplain Area*

The City of Brandon is looking for feedback as it charts a new vision for how development occurs in Brandon's protected floodplain areas. The updated regulations informed by community input will attempt to find a balance between development with the need to protect people and property from flooding events.

***You are invited to attend a workshop event on:***

## THURSDAY JUNE 6 5PM–7PM

**Riverbank Discovery Centre (545 Conservation Drive)**

*Advance registration is required by calling 204-729-2214 or by emailing b.patten@brandon.ca*

City of BRANDON

BRANDON Design Studio

***Website Update***

## Charting The Course for Future Development in Brandon's Protected Floodplain

With the realities of extreme flooding along Brandon's Assiniboine River Corridor once thought to be unlikely now part of the community's collective wisdom, the City of Brandon is looking to the public for feedback as it charts a new vision for how building development occurs in Brandon's diked floodplain areas. The updated regulations informed by community input will attempt to find a balance between development with the need to protect people and property from flooding events.

**Event Details**

Residents, and property owners in Brandon's floodplain, along with the wider community, are invited to attend a workshop event on either:

Thursday, May 23rd from 5 p.m. to 7 p.m. at the North End Community Centre (1313 Stickney Avenue); or
Thursday, June 6th from 5 p.m. to 7 p.m. at the Riverbank Discovery Centre (545 Conservation Drive)

Advance registration is required by calling 204-729-2214 or by emailing b.patten@brandon.ca.

**Contact**

For more information on this initiative contact:

Ryan Nickel
Chief Planner, City of Brandon
204-729-2124
r.nickel@brandon.ca

***Subscription Service Notification***

## Charting The Course for Future Development in Brandon's Protected Floodplain

With the realities of extreme flooding along Brandon's Assiniboine River Corridor once thought to be unlikely now part of the community's collective wisdom, the City of Brandon is looking to the public for feedback as it charts a new vision for how building development occurs in Brandon's diked floodplain areas. The updated regulations informed by community input will attempt to find a balance between development with the need to protect people and property from flooding events.

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**Contact**

For more information on this initiative contact:

Ryan Nickel
Chief Planner, City of Brandon
204-729-2124
r.nickel@brandon.ca

# CITY OF BRANDON MEDIA RELEASE

May 3rd, 2019 – FOR IMMEDIATE RELEASE

## Charting The Course for Future Development in Brandon's Protected Floodplain

Brandon, MB – With the realities of extreme flooding along Brandon's Assiniboine River Corridor once thought to be unlikely now part of the community's collective wisdom, the City of Brandon is looking to the public for feedback as it charts a new vision for how building development occurs in Brandon's diked floodplain areas.

Following severe river flooding events in 2011 and in 2014, the City of Brandon has worked hard in cooperation with senior levels of government and community stakeholders to mitigate the effects of subsequent flooding through extensive flood protection infrastructure improvements, diligent emergency planning and by restricting the types of development allowed to occur in the protected floodplain area. However, the existing height standards for buildings in the protected floodplain area have been challenging for developers to adhere to and the rules have been regularly deviated from as development has proceeded.

As such, the City of Brandon's Development Services Division is looking to update the regulations and standards for the new development or the redevelopment of existing buildings within the City's protected floodplain that reflect a balance between development with the need to protect people and property from flooding events

"Extreme flooding events such as the ones experienced in Brandon within the past decade have the potential for severe economic, social and environmental impacts and we, as a municipal government, are responsible for managing and reducing such risks for our residents," notes City of Brandon Chief Planner Ryan Nickel. "We are therefore looking to refresh our regulations and standards in a way that strikes a balance between the interests of property owners to develop or redevelop in the diked areas of the floodplain with the need to protect people and property from flooding events."

Residents, and property owners in Brandon's floodplain, along with the wider community, are invited to attend a workshop event on either Thursday, May 23rd from 5 p.m. to 7 p.m. at the North End Community Centre (1313 Stickney Avenue) or Thursday, June 6th from 5 p.m. to 7 p.m. at the Riverbank Discovery Centre (545 Conservation Drive).

The workshops will begin at 5 p.m. with a presentation from City of Brandon administration followed by an interactive engagement event. Advance registration is required by calling 204-729-2214 or by emailing b.patten@brandon.ca.

“We’re very interested in hearing from the residents, property owners and community members that live, work or play within the protected areas of our City’s floodplain,” adds Nickel. “While recent flood events have forced us to acknowledge the risk that building on a floodplain carries, we now need to know what the community’s tolerance for such risk is and how that factors into what type of future building development proceeds in the area.”

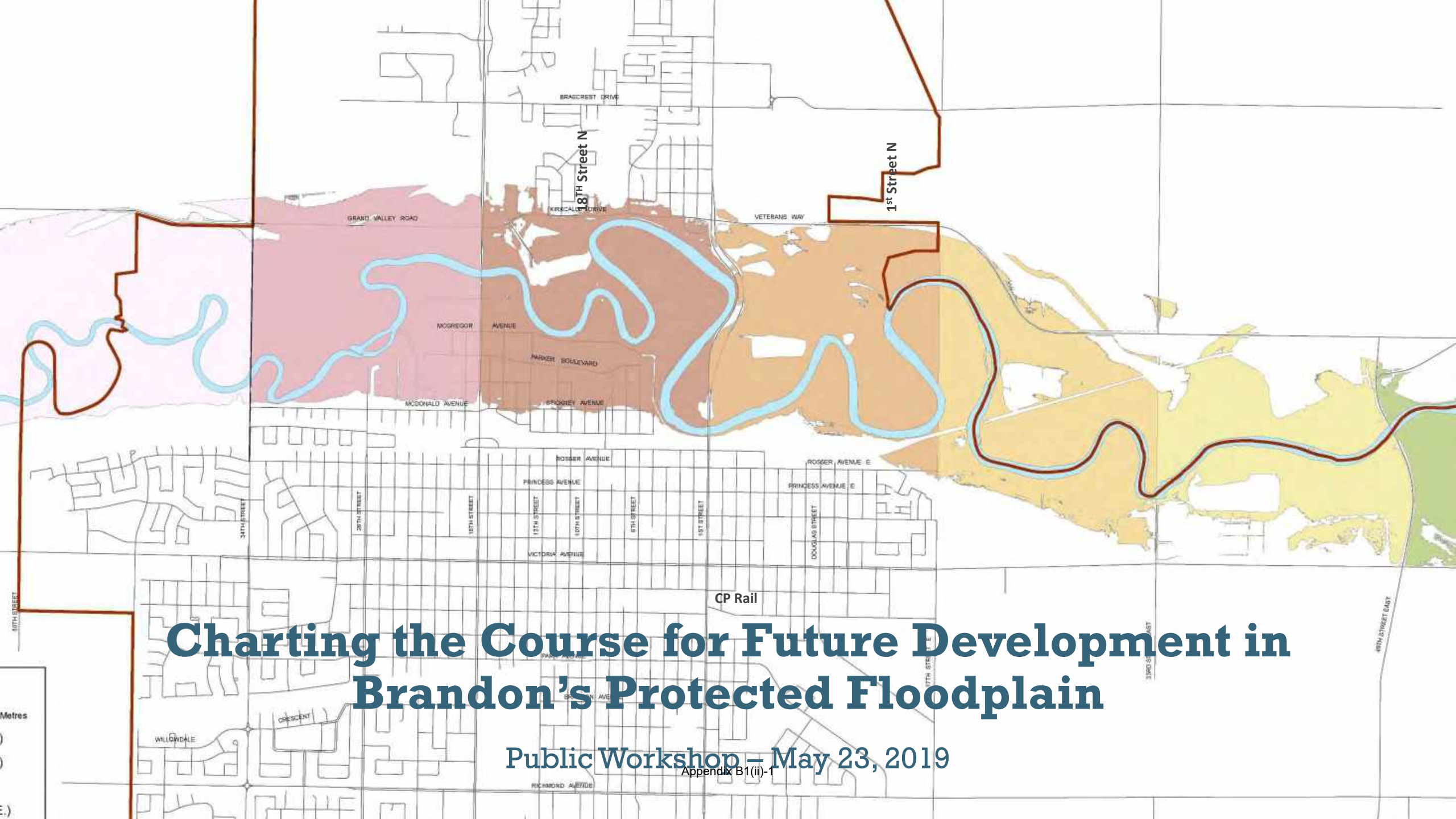
Feedback from the pair of public workshops will be considered by City Administration as its works to develop by-law updates for Brandon City Council consideration later this summer.

-30-

For more information, contact:

Ryan Nickel
Chief Planner, City of Brandon
204-729-2124
r.nickel@brandon.ca

# Appendix B-1(ii)
# June 6, 2019 Workshop Handouts and Presentation




# Charting the Course for Future Development in Brandon's Protected Floodplain

## Public Workshop – May 23, 2019

# Workshop Plan

Background
- History of flooding
- Floodplain & Flood Fringe
- Development in Flood Fringe
- Floodplain Policy

Understanding Risk
- Flooding Scenarios
- Probability and Consequences
- Mitigation

Risk Tolerance
- Residential
- Commercial

Next Steps

Diking

# Flooding

# History of flooding in Brandon

## 1976

*Floodwaters up to Stickney Avenue*

## 1995

*Higher volumes than 1976, but diking improvements mitigate damage*

## 2011

*Flood 3ft higher than 1976*

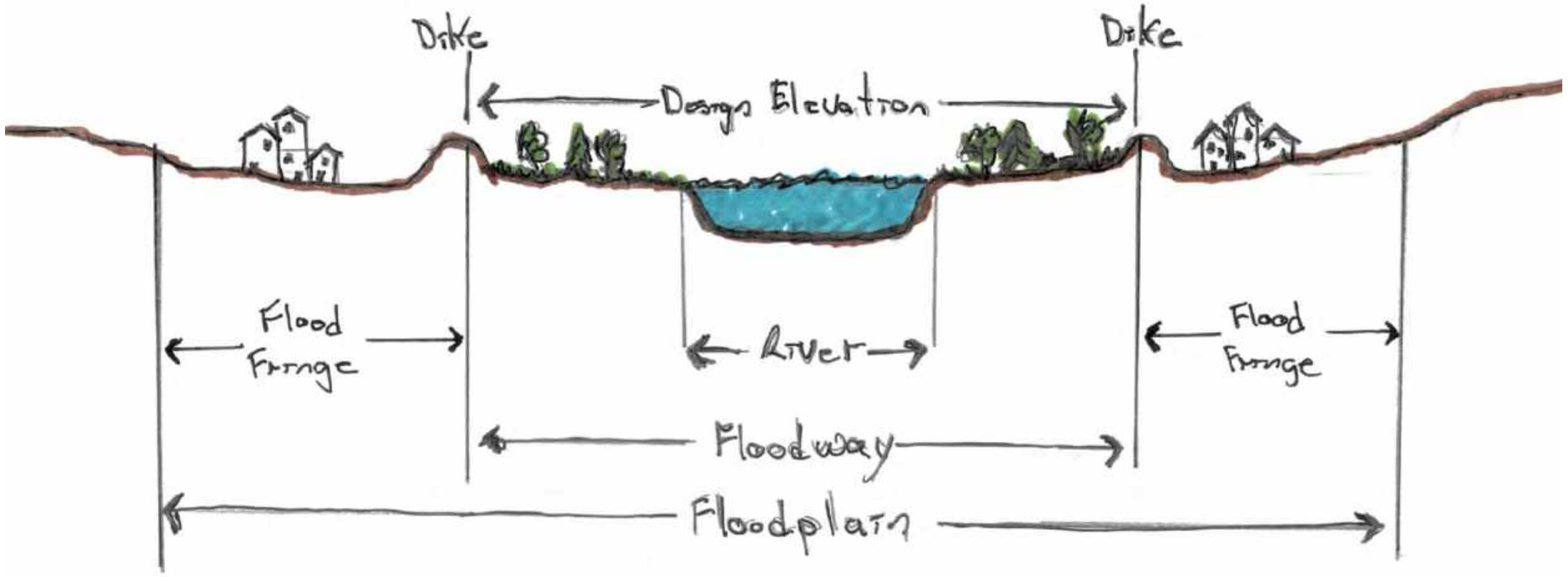
## 2014

*Floods caused by heavy rainfall, similar intensity of 2011*

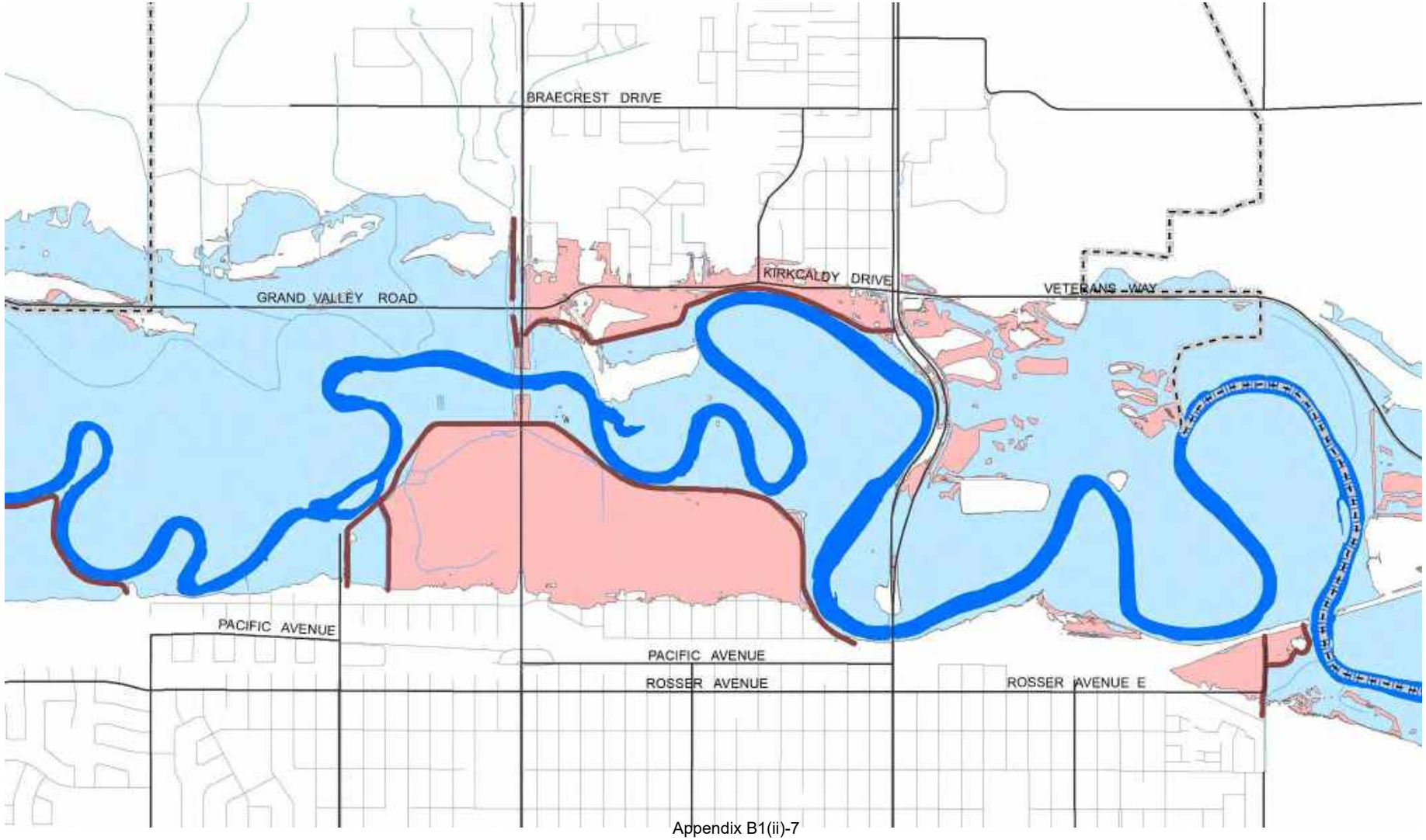
# Flood Mtigation

**North Dike Works – 2013**
**Kirkcaldy Land Drainage Sewer – 2015**
**South Dike Work – 2016/17**
**Kirkcaldy Lift Station 2018/19**
**Kirkcaldy Forcemain 2019**

# What is the floodplain and flood fringe?



# What is the flood plain and flood fringe?



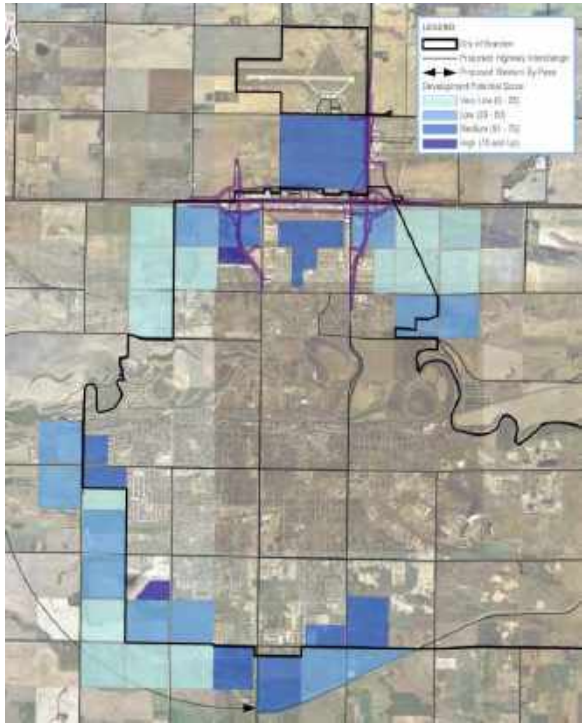
# Development in Flood Fringe

# Floodplain Policy

Province – Recently increased design flood elevation from 1-100 to 1-200 (requires development to be protected 2' above design flood elevation)

Development Plan – To allow for the continuation of existing development in the existing flood protected areas including the up-keep, renewal, renovation and limited expansion of existing developments and to direct intensive development away from diked areas.

Growth Strategy – Diked areas within the flood-fringe may be considered for commercial development when allowed by existing zoning.



# Floodplain Policy

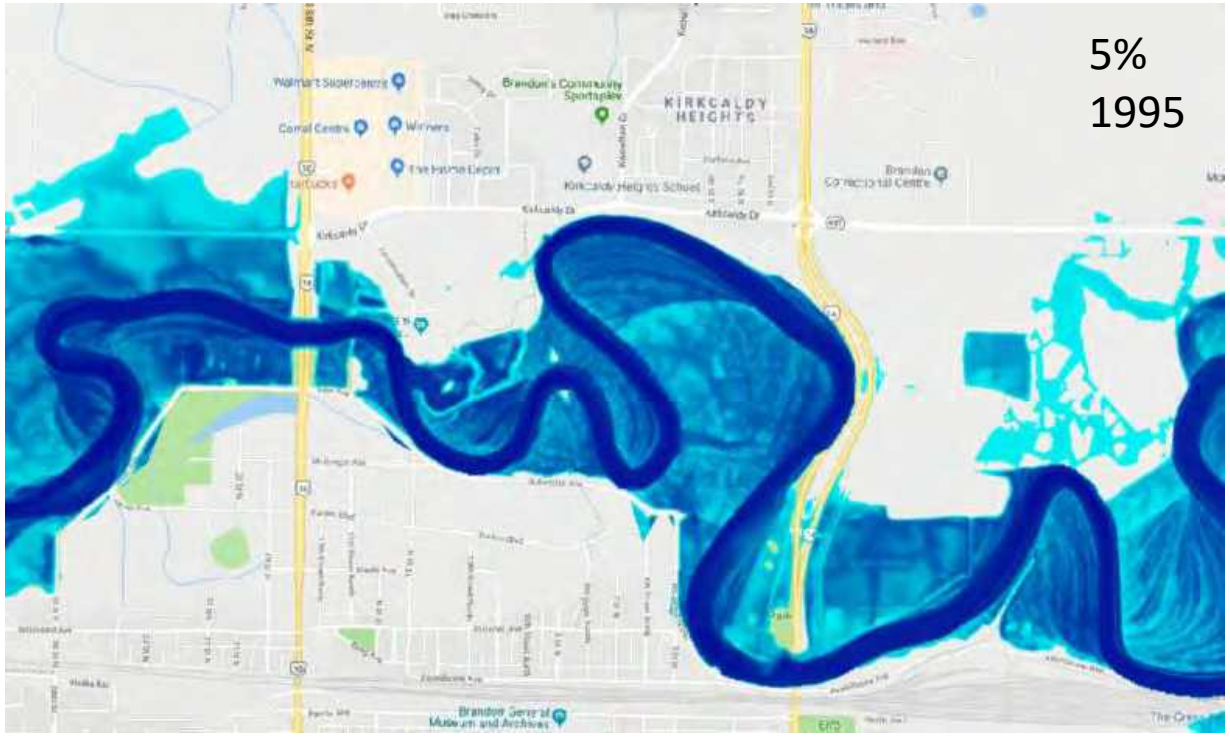
Assiniboine River Corridor Master Plan – Long term strategy of zoning the area to the south of the river for parks and recreation combined with a land acquisition strategy.

Greenspace Master Plan – The area known as "the Flats" on the south bank of the Assiniboine River should be either owned, acquired or controlled by the City of Brandon as greenspace and flood prone lands. New development should be restricted in the area.

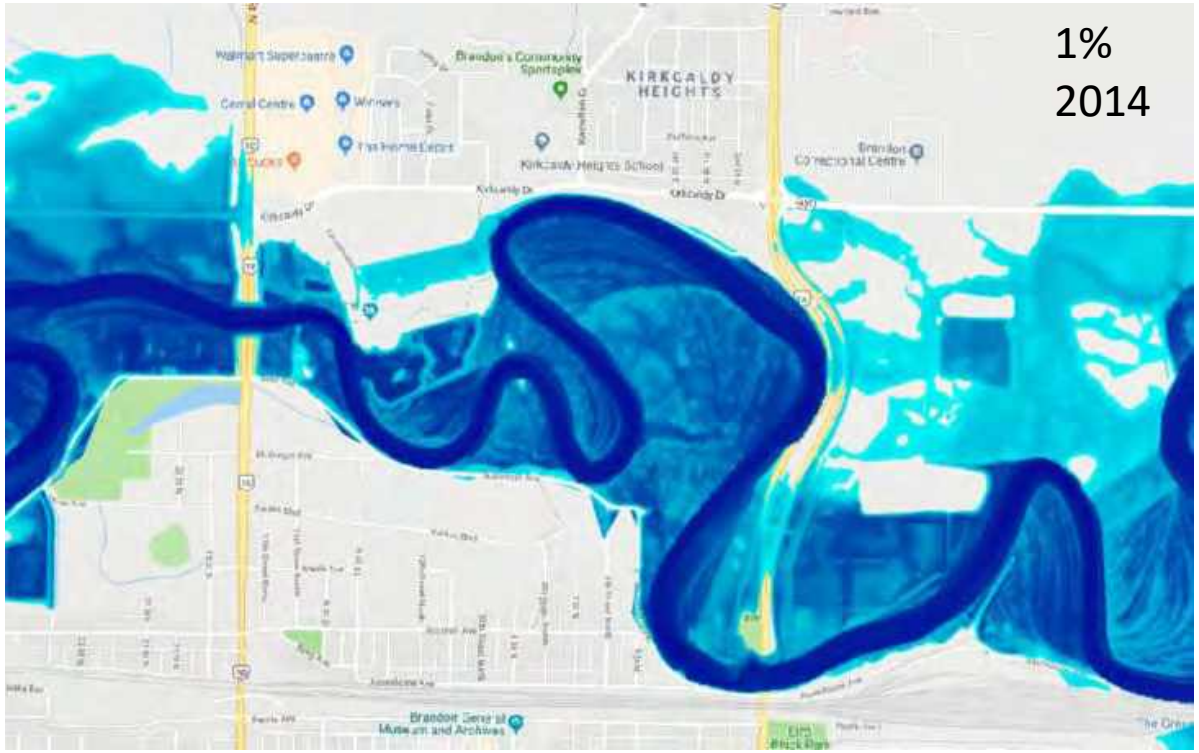
Zoning By-law – Floodplain overlay zone establishes direction for additional mitigation that includes minimum grade 0.3m and 1st floor elevations 0.6m above design flood level.

# Flooding Scenarios

# Flooding Scenarios



# Flooding Scenarios



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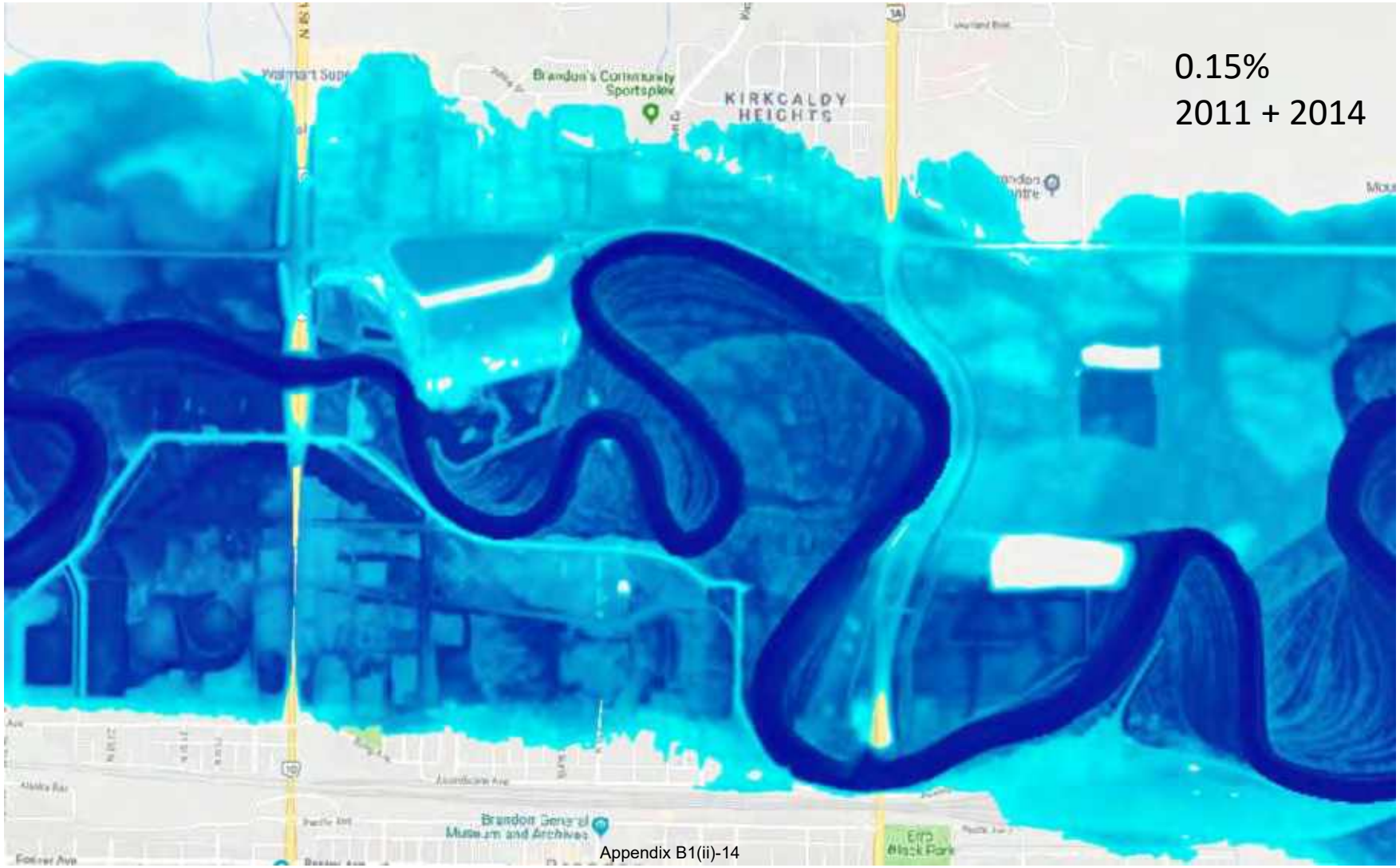
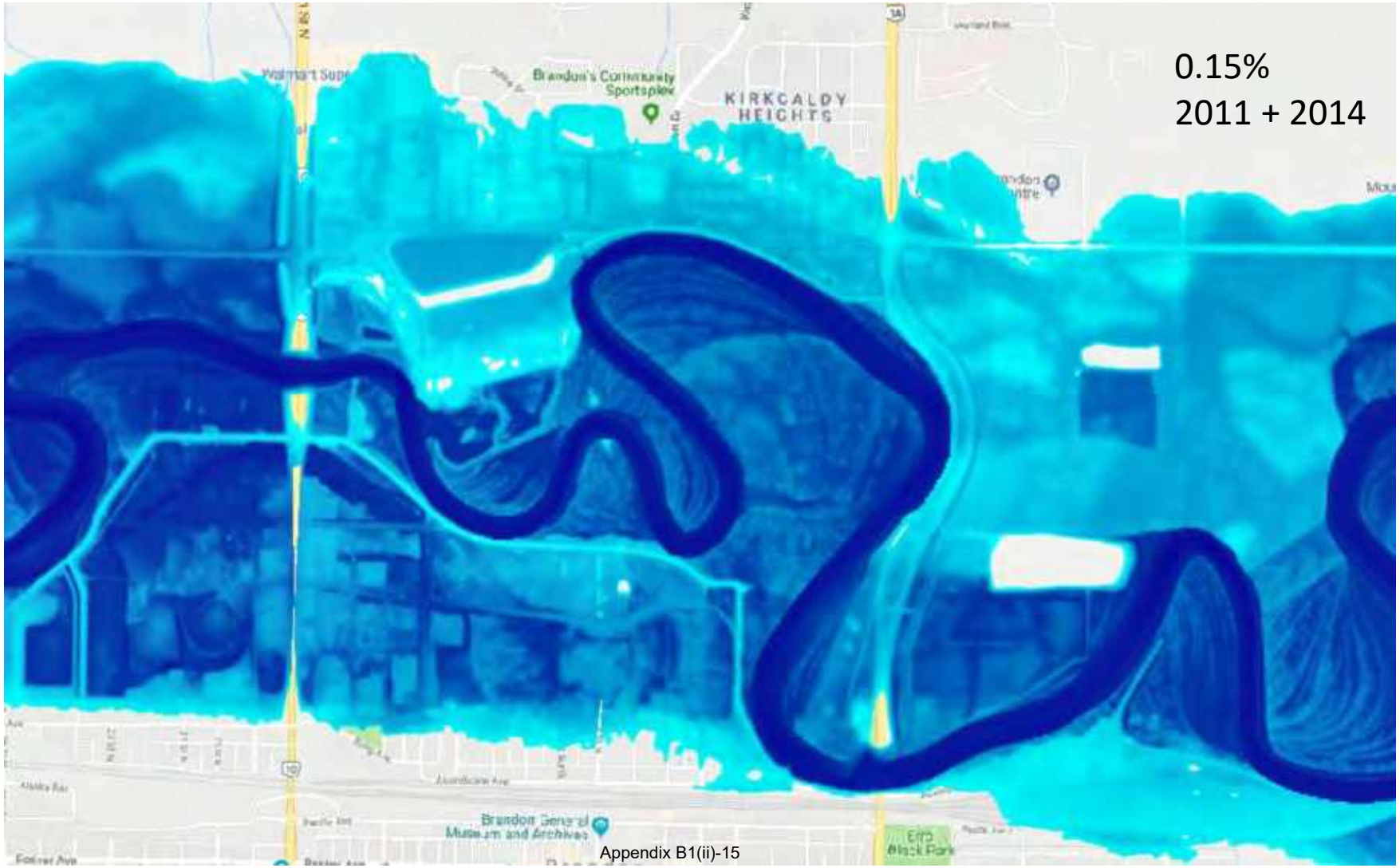
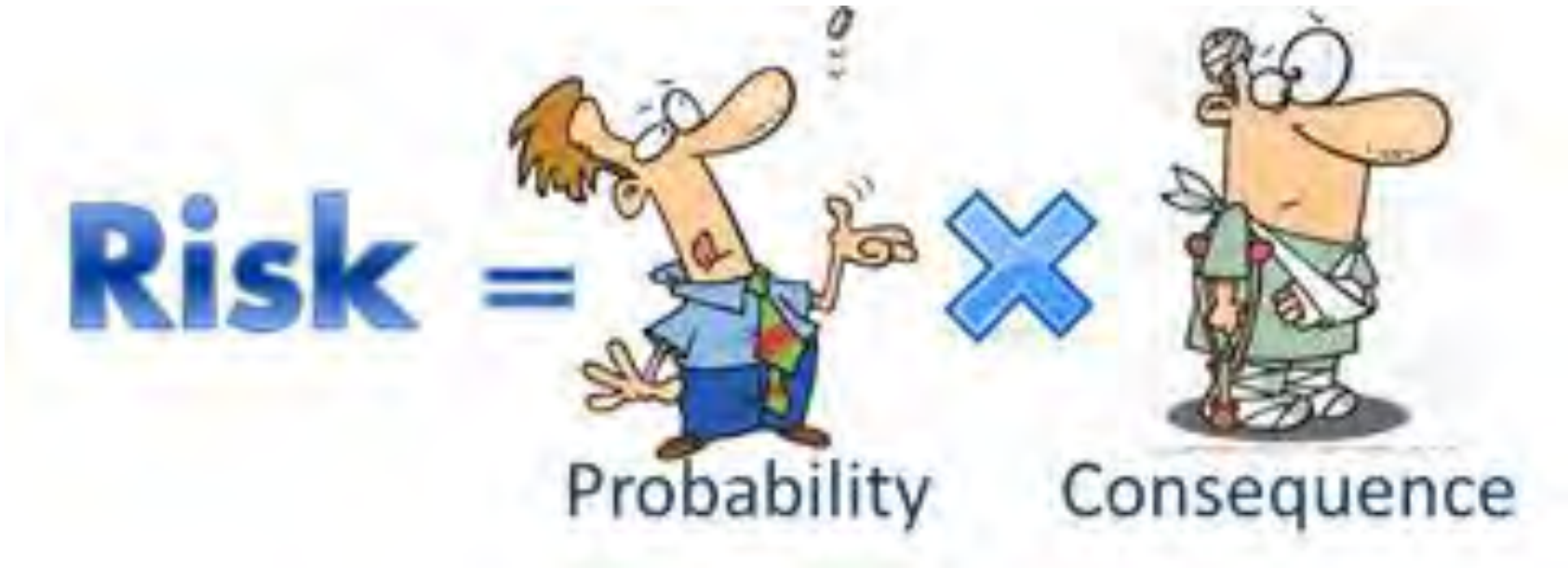


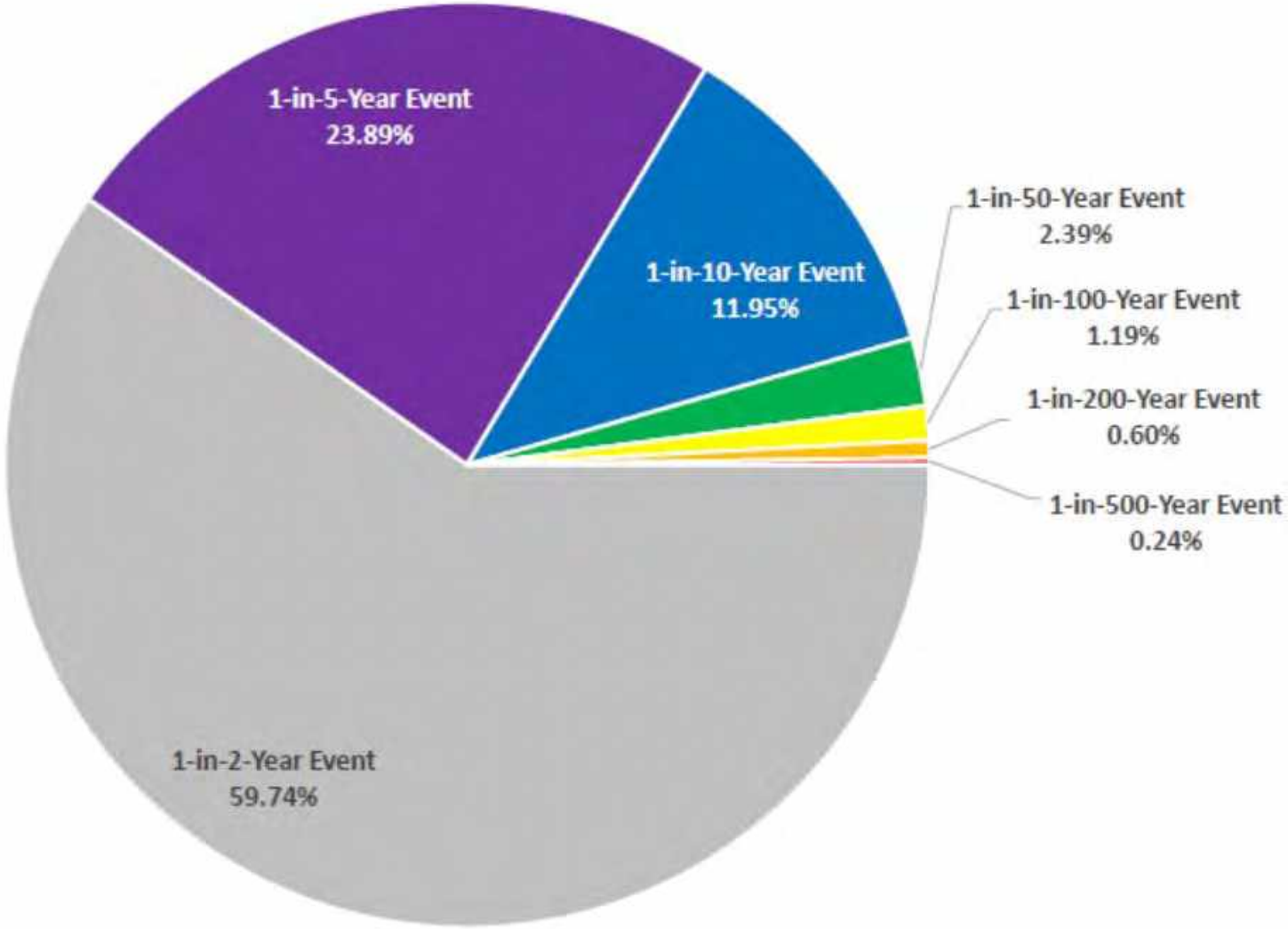
# Groundwater



# Risk



# Probability



# Consequence

## Lowest

*No Development in Flood-Fringe Area. Recreation and parks only*

*Maintain existing uses, no expansion*

## Moderate

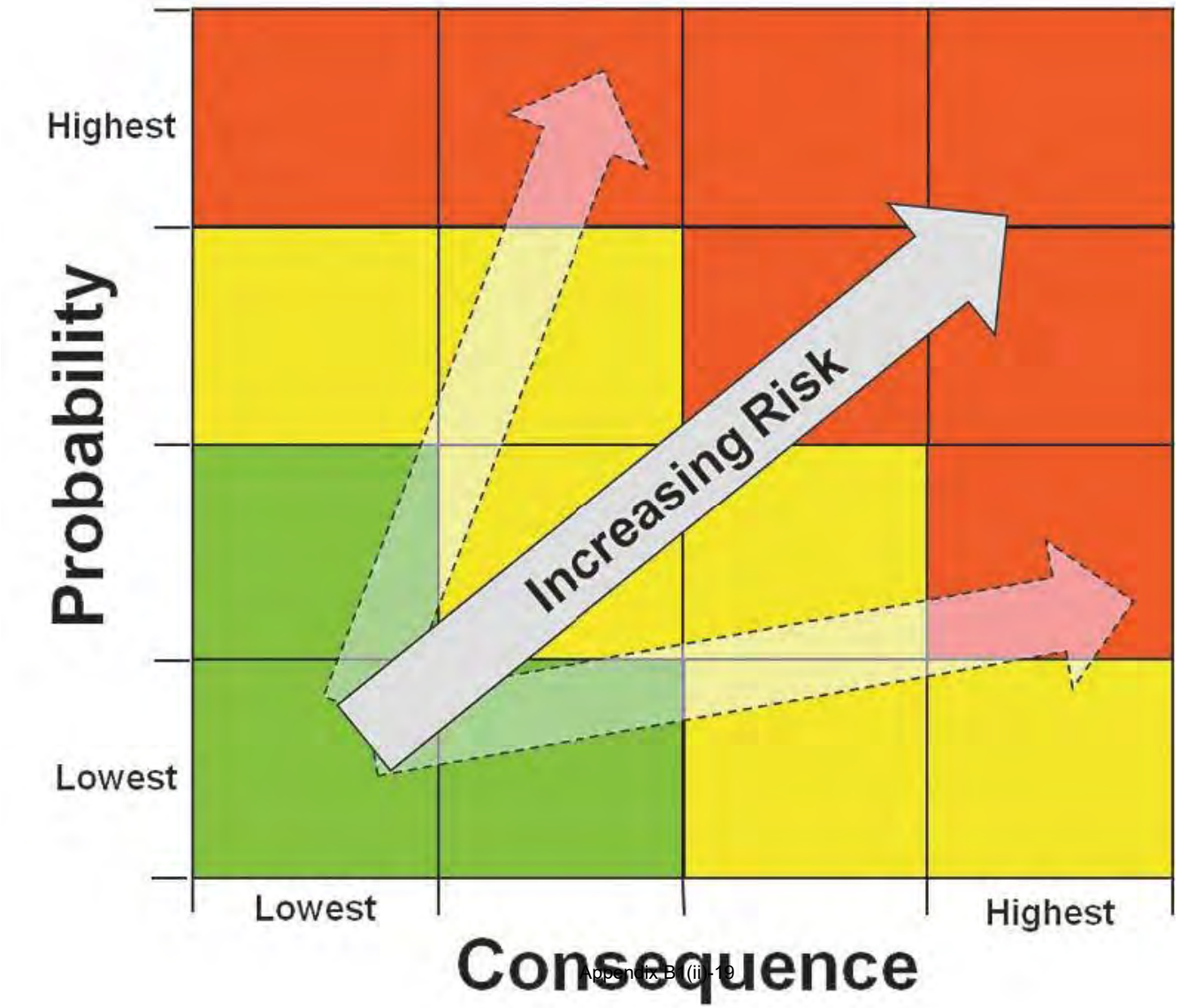
*Allow expansion and redevelopment of existing commercial sites*

*Fully developed for commercial, redevelopment of existing residential sites*

## Hghest

*Fully developed for residential and commercial uses*

# Consequence



# Mtigation (Reduce the Consequence)

- ✓ Emergency Planning
- ✓ Physical Improvements
- ? Land Use

# Finding the balance

**Interests to reduce risk to people and property due to flooding**

***Interests of existing property owners to develop or redevelop in the diked areas of the floodplain***

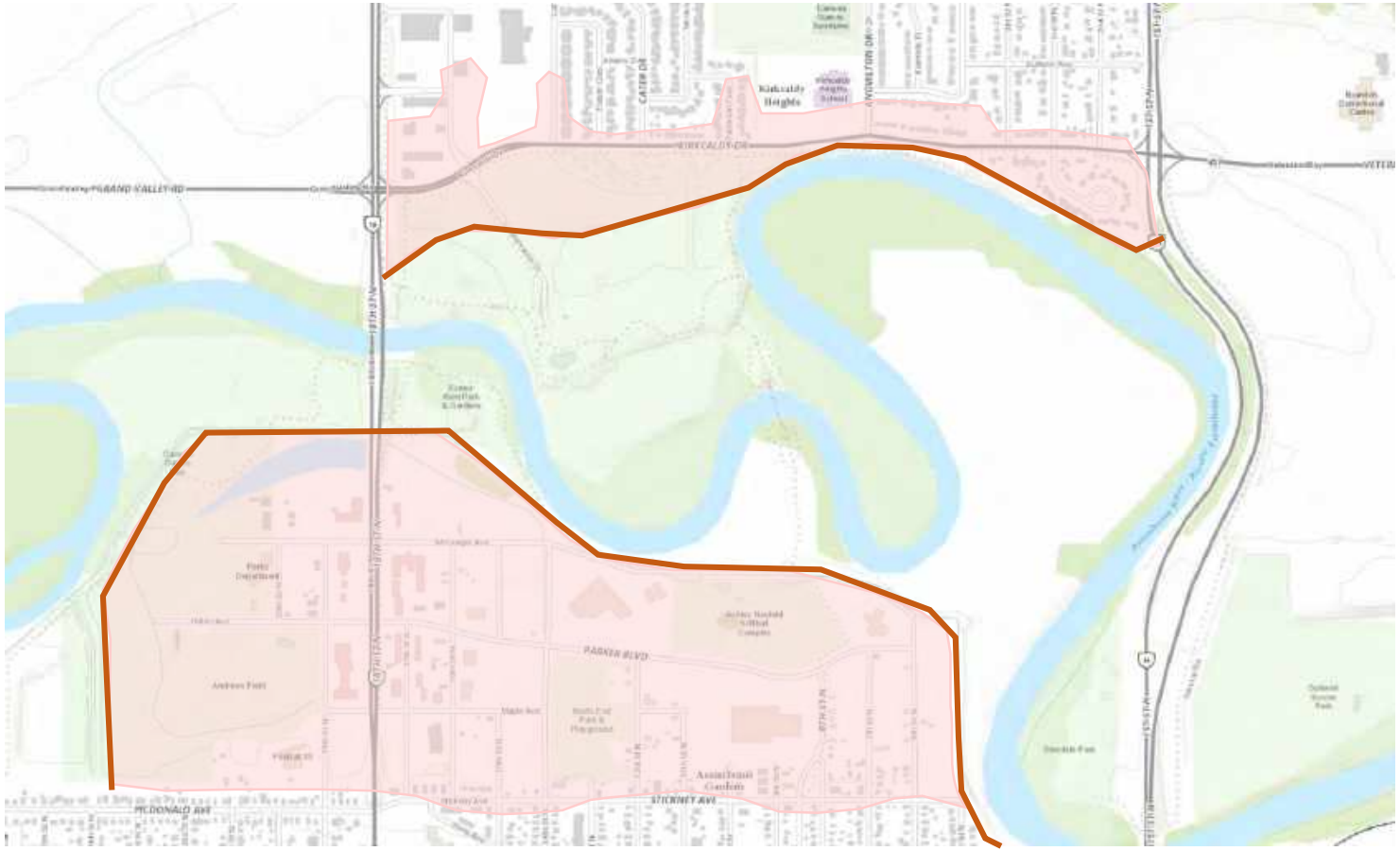
# CONTENTS

*Main categories*

Building Additions

New Construction

# Residential – Additions to Existing Buildings



*Inappropriate development in flood-fringe*

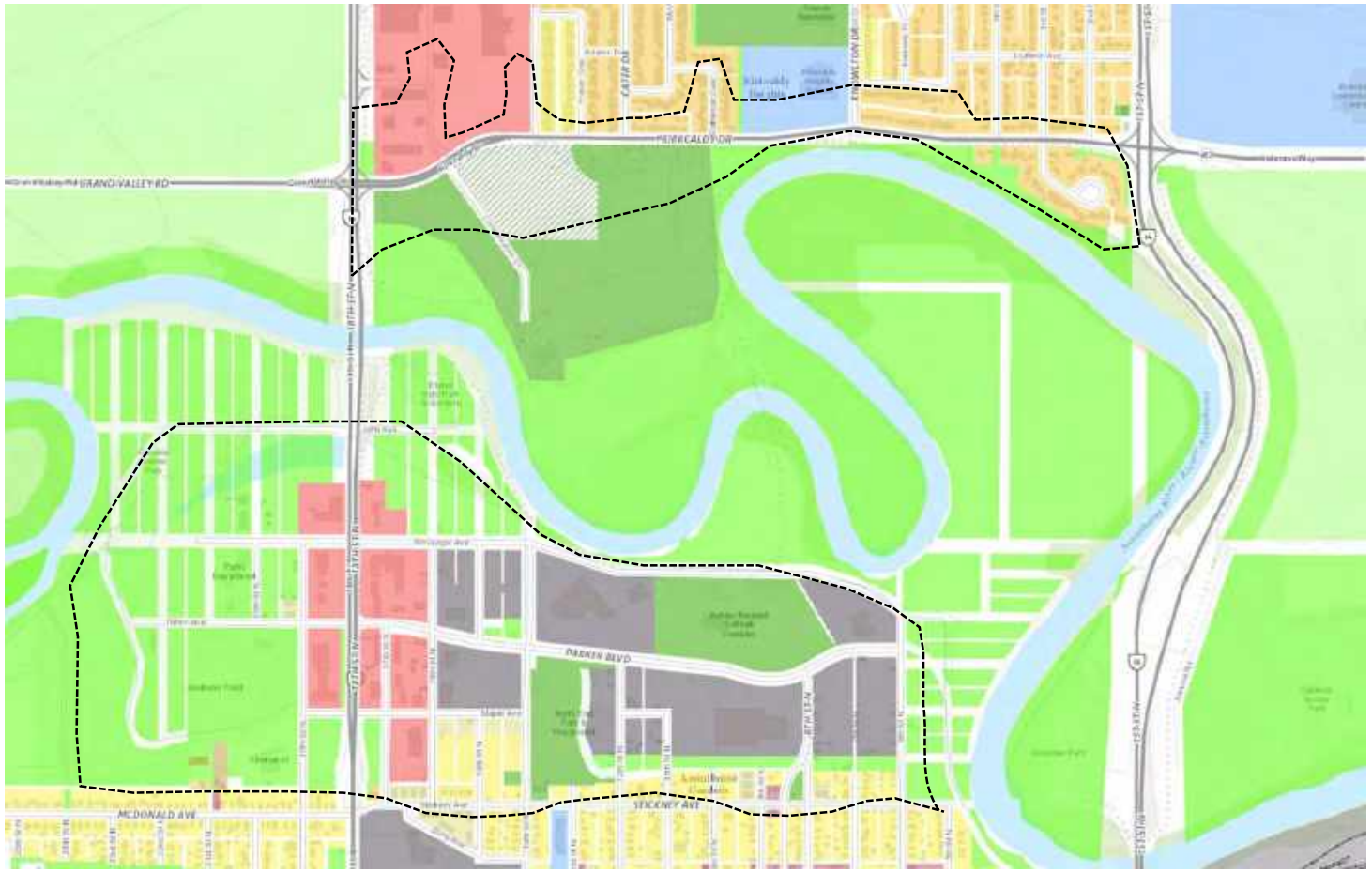
*Low*

*Medium*

*High*

*Appropriate development In flood-fringe*

# Residential – New Buildings on existing properties entitled for development



*Inappropriate development in flood-fringe*

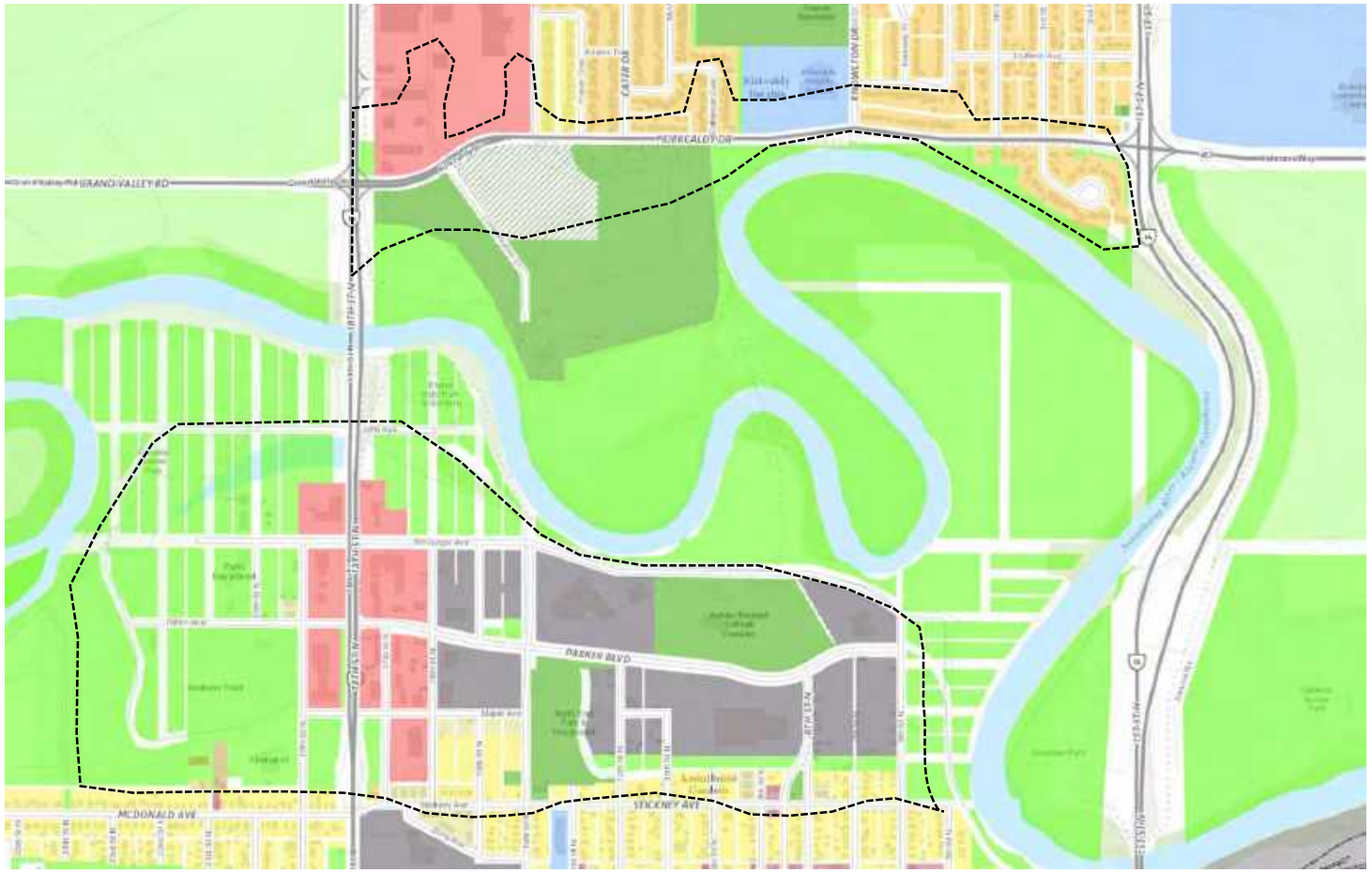
*Low*

*Medium*

*High*

*Appropriate development In flood-fringe*

# Residential – Creating new properties entitled for development



*Inappropriate development in flood-fringe*

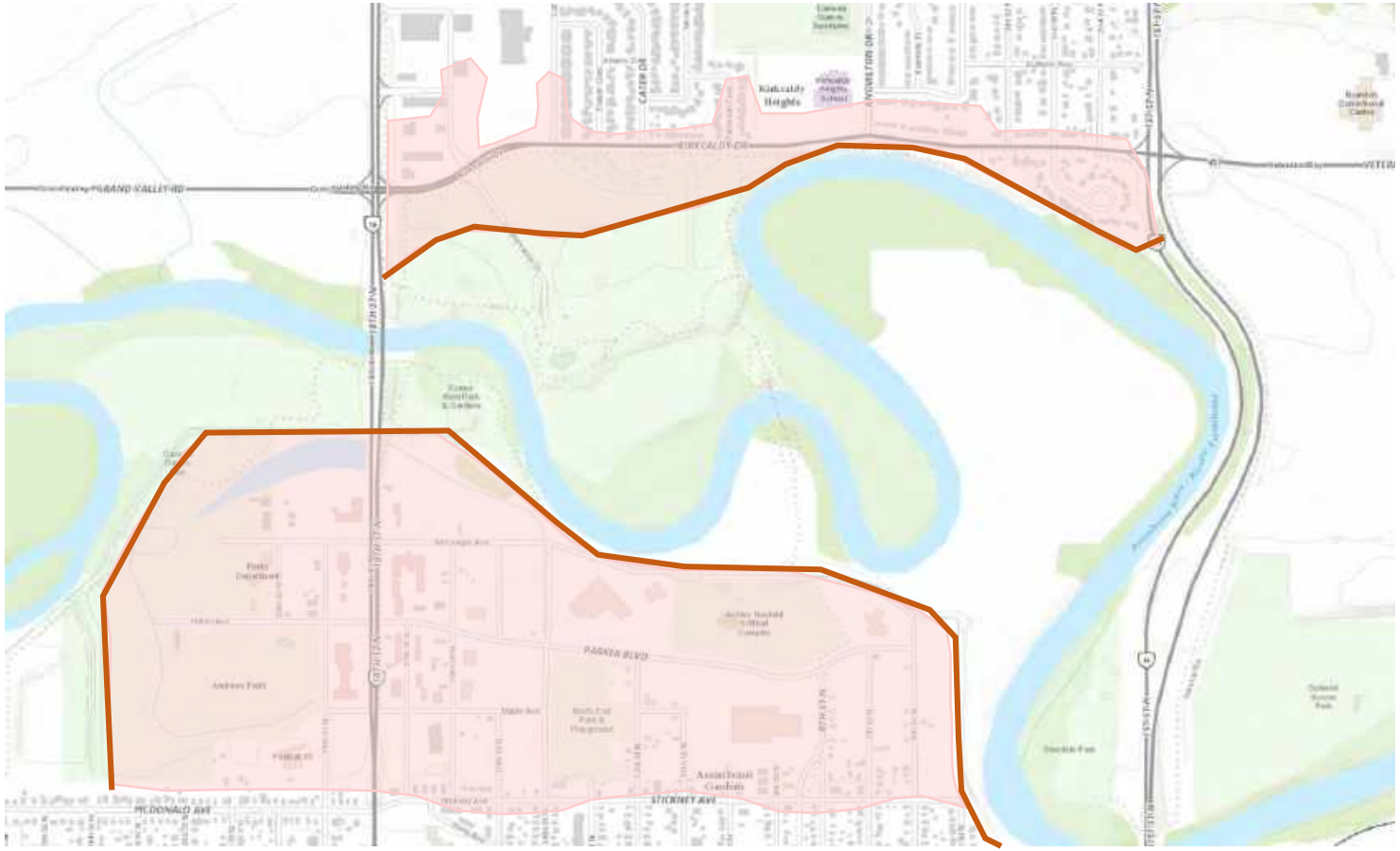
*Low*

*Medium*

*High*

*Appropriate development In flood-fringe*

# Commercial – Additions to Existing Buildings

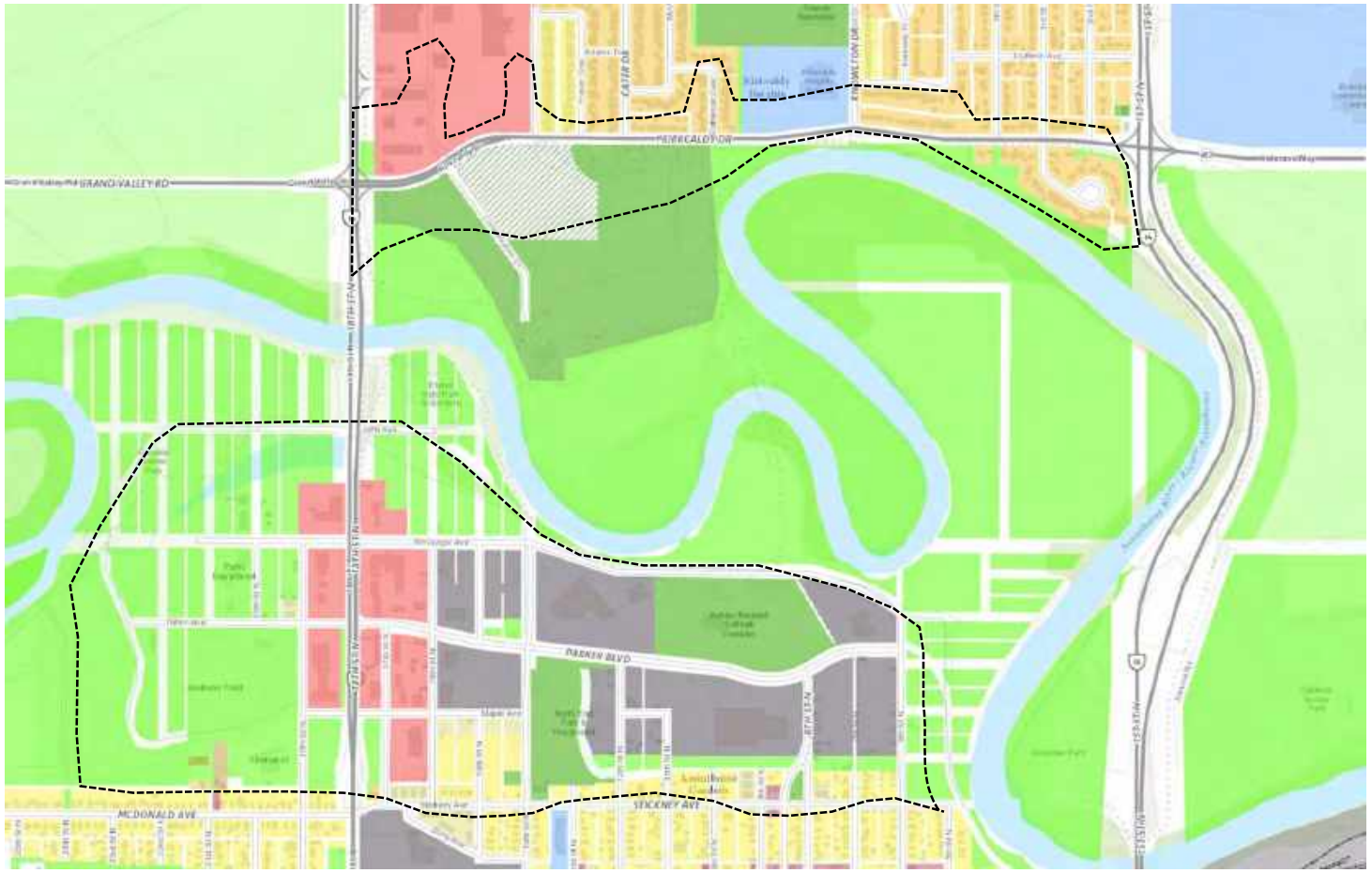


*Inappropriate development in flood-fringe*

Low — Medium — High

*Appropriate development In flood-fringe*

# Commercial – New Buildings on existing properties entitled for development



*Inappropriate development in flood-fringe*

*Low*

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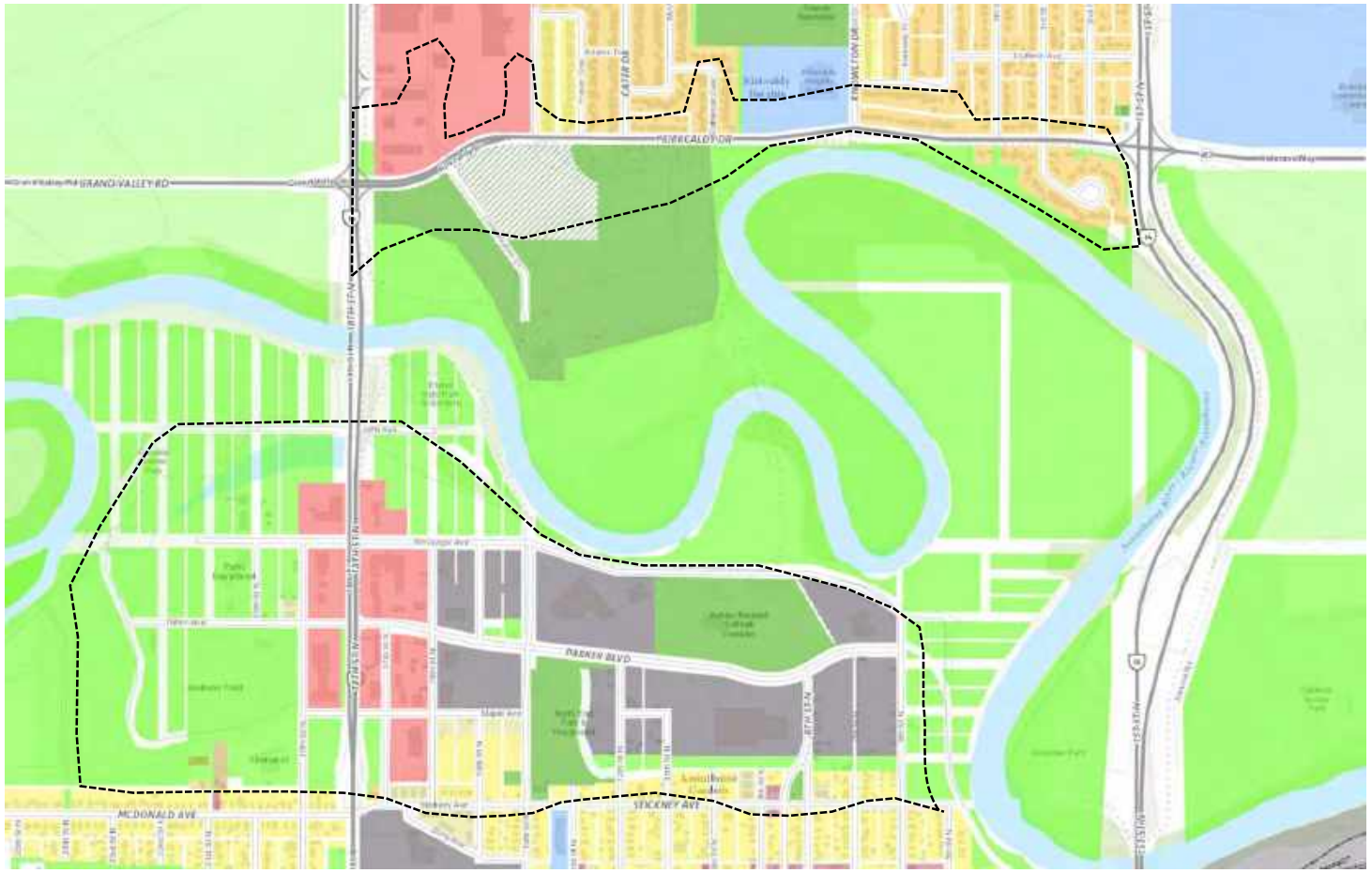
*Appropriate development In flood-fringe*

# Commercial – Creating new properties entitled for development



*Inappropriate development in flood-fringe*

*Appropriate development In flood-fringe*

*Low* *Medium* *High*

# Next Steps

**February- April**
Background Information
Collection & Analysis

**May - June**
Community Engagement #1
Risk Assessment Workshop

**July - August**
Evaluate Development
Scenarios and Draft Standards

**September**
Community Engagement #2
Open House

**October - December**
By-law Approvals

# Appendix B-1(iii)
# June 6, 2019 Workshop Display Boards

# WELCOME

## What is tonight's objective?

With the realities of extreme flooding along Brandon's Assiniboine River Corridor once thought to be unlikely now part of the community's collective wisdom, the City of Brandon is looking to the public for feedback as it charts a new vision for how building development occurs in Brandon's diked floodplain areas. The updated regulations informed by community input will attempt to find a balance between development with the need to protect people and property from flooding events.

This is a public event to discuss possible updated regulations. Feel free to browse the information and ask questions. We have set up sheets for comments you may have.

Your input is valuable to us!

**February - April 2019**
Background Information Collection & Analysis

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Community Engagement #1
Risk Assessment Workshop

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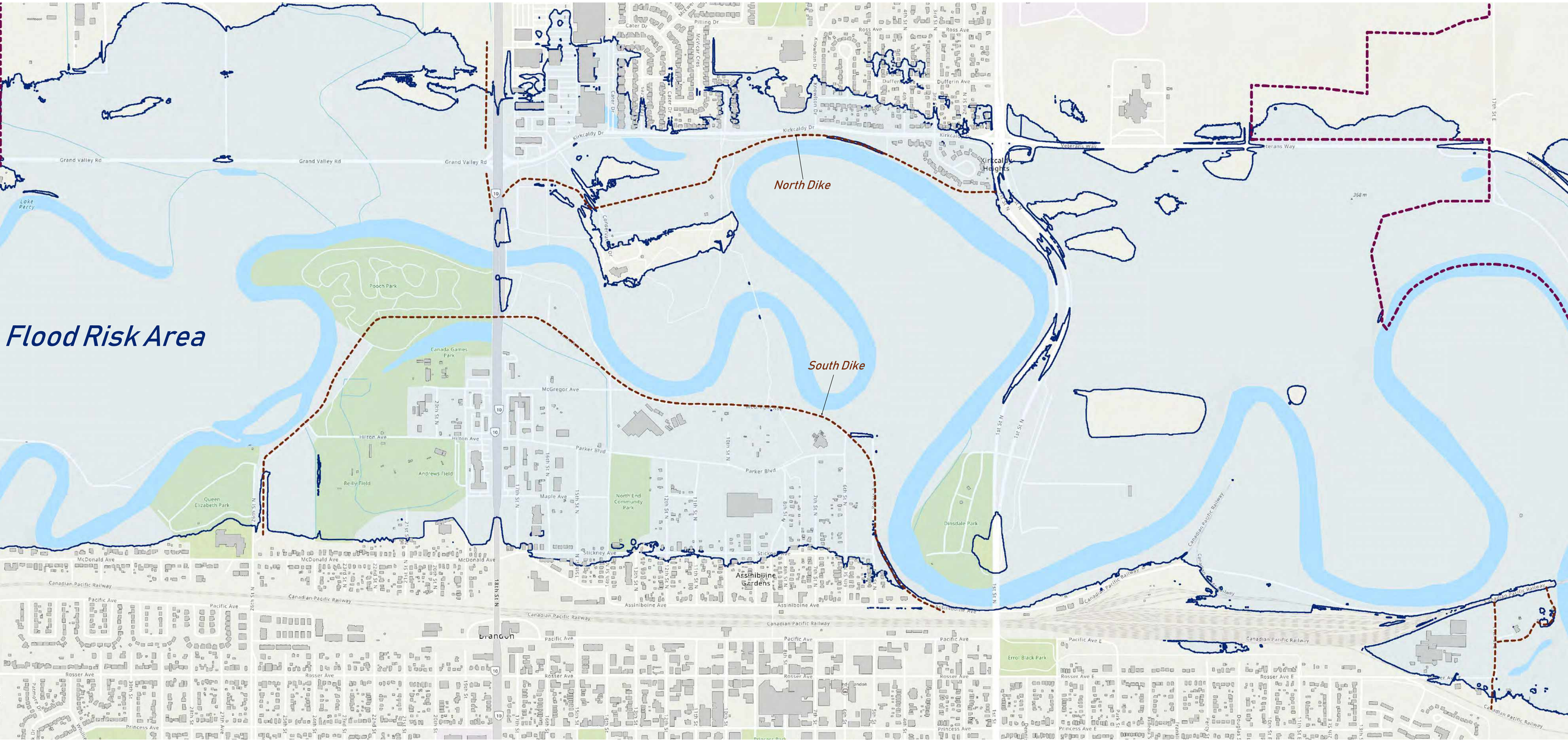
Evaluate Development Scenarios and Draft Standards

**September 2019**
Community Engagement #2
Open House

**October - December 2019**
By-law approvals

# WHERE DO YOU LIVE?

Feel free to place a sticker over the property on which you live. If you live outside the area of this map, place your sticker on the map's edge.

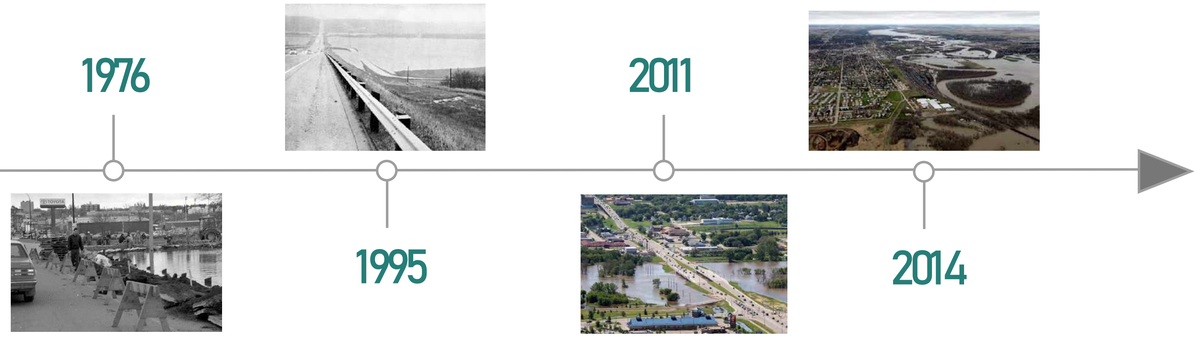


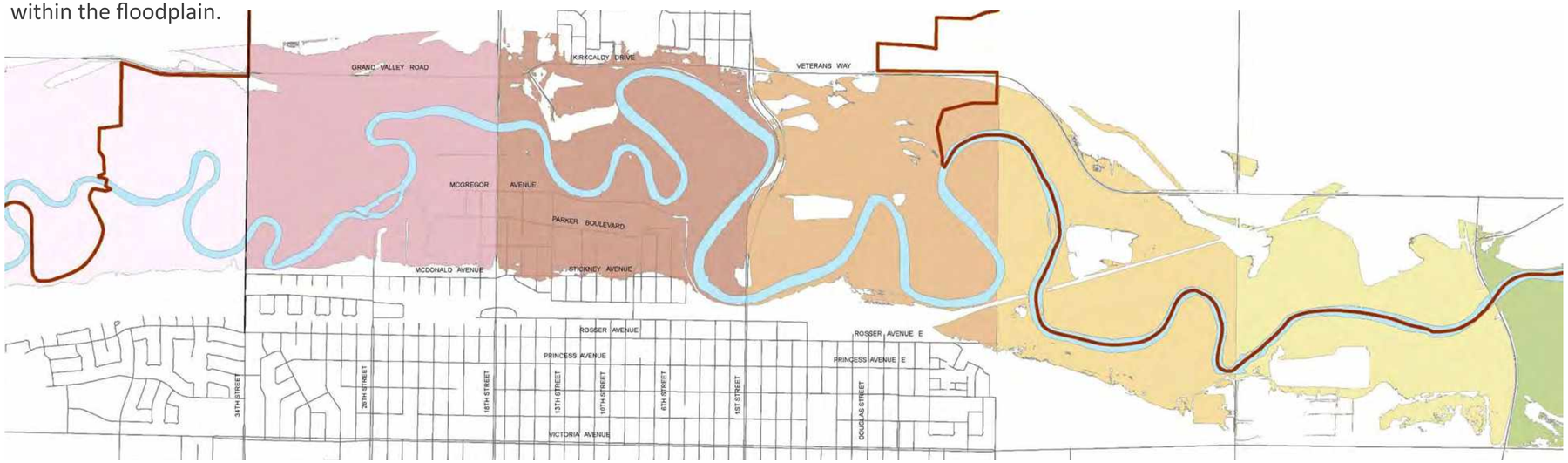
# BACKGROUND

***Flood history, mitigation, development in the floodplain and flood plain policy***

## History of Flooding in Brandon

Brandon has experienced flooding for many years. In 1976, flood waters reached Stickney Avenue, 1995 saw higher volumes but less damage due to mitigation, the 2011 flood was three feet higher than 1976, and 2014 caused millions of dollars' worth of damage. The effects of the floods have changed over time as more investment is made towards mitigation and limiting development within the floodplain.



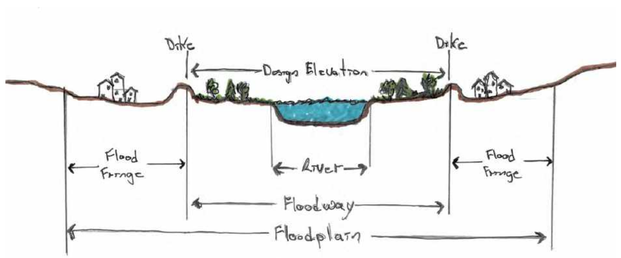




## Development in the Flood Fringe

Over the years, there has been some development within the floodplain, mostly commercial development with scattered residential development. All development in the floodplain must take into account mitigation measures and build above the design flood level to minimize the risk to the development.

## Flood Mitigation

The City has invested in various forms of mitigation to manage and control flood water movement and protect against the effects of flooding. Projects such as the north and south dikes, Kirkcaldy Land Drainage Sewer, Kirkcaldy Sewer Works, Kirkcaldy Lift Station, and Kirkcaldy Forcemain have come up to a total public expenditure of $21,700,000. Investment not considered here is management of people, such as evacuation, which adds to the cost.




## Floodplain Policy

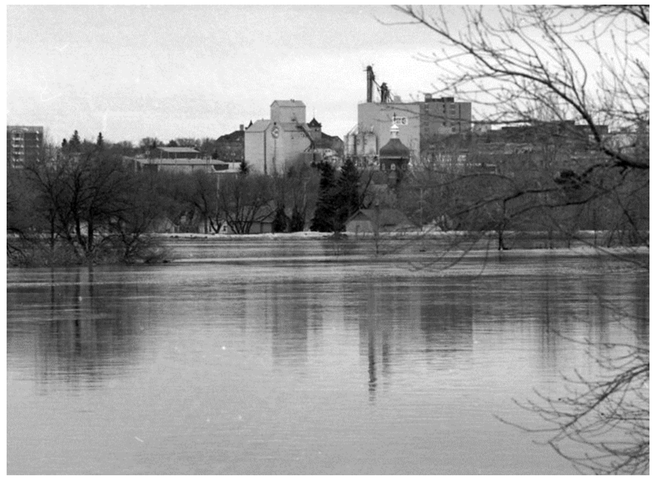
The Province of Manitoba recently increased its design flood level elevation from 1-100-year to 1-200-year. Our Development Plan allows for existing development in the flood-protected areas and directs intensive development away from diked areas. The Floodplain policy is being updated to minimize public expenditures for protection or disaster assistance in areas subject to flooding.

# NEXT STEPS

The next step in the process is to finalize the remaining details of the regulations for Council review and approval.

We will continue to receive comments after this event. If you would like to meet to further discuss these policies one-on-one, see our contact information below. You can also drop off comments or email them.

Thank you for your input.



**For more information please contact**

Ryan Nickel,  Chief Planner

Planning & Buildings Department

638 Princess Avenue

Brandon, MB  R7A 0P3

204-729-2124

r.nickel@brandon.ca

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# Appendix B-2
# December 12, 2019 Open House

# Appendix B-2(i)
# December 12, 2019 Open House Invitations

Planning & Buildings Department
638 Princess Avenue, Brandon, MB R7A 0P3
T: 204.729.2110 F: 204.728.2406
www.brandon.ca

November 20, 2019

Dear Property Owner,

**RE: A Vision for The Flats**

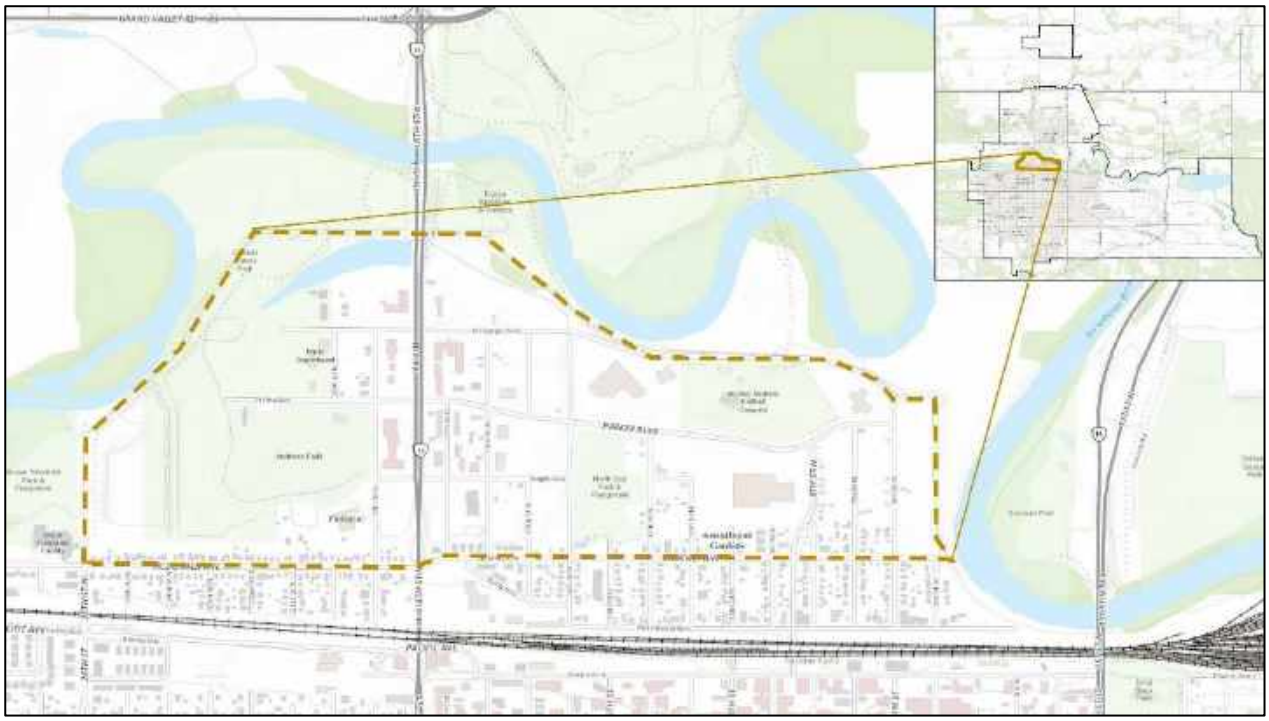
In June 2019, the City met with the community to discuss development options in the floodplain area *(highlighted below),* also known as "The Flats". As a result of that discussion, we are proposing a vision for future development in The Flats, to balance the desire for development with the need to protect people and property from future flooding events. We welcome your attendance as we share this vision.

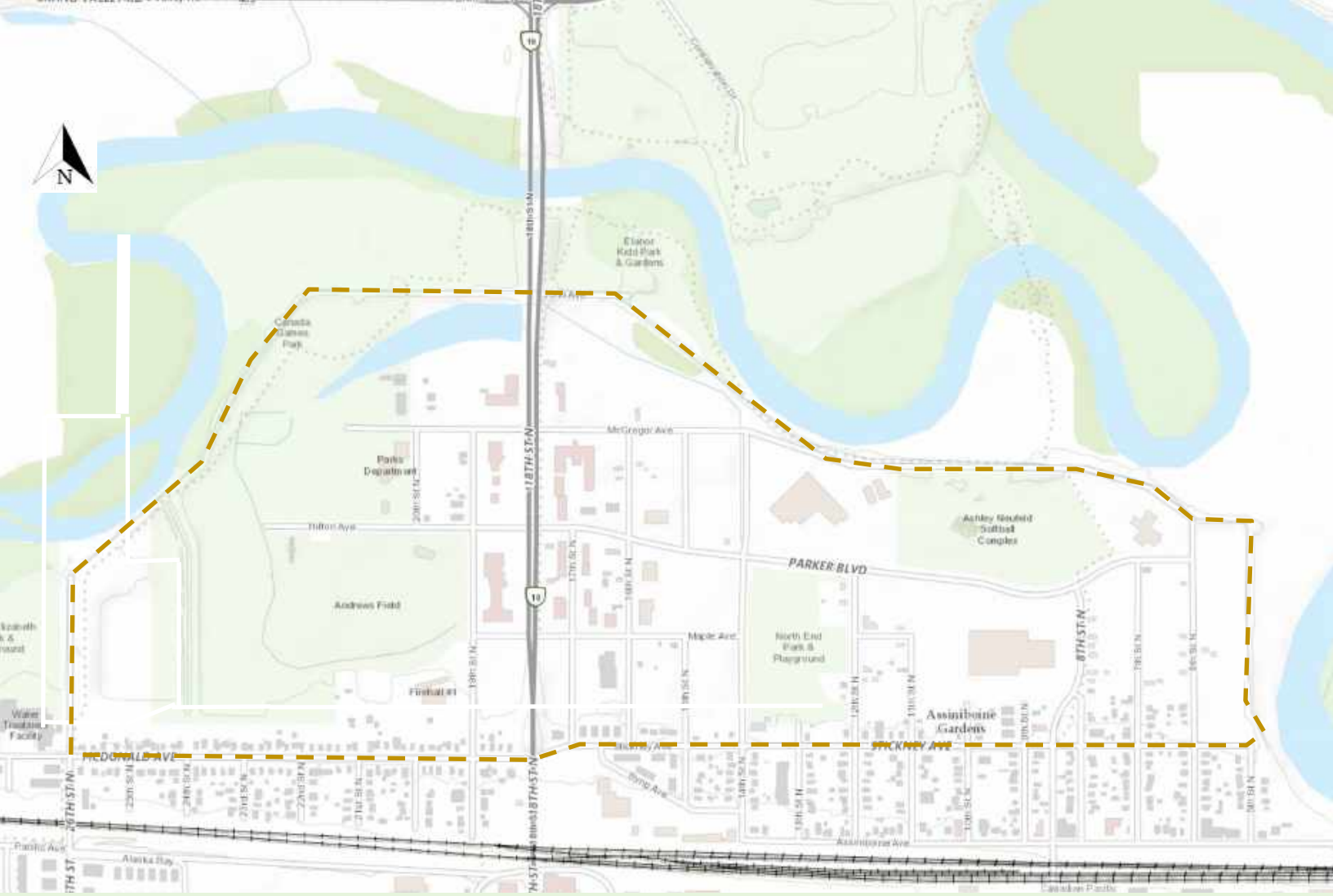
> **You are invited to attend a casual come-and-go Public Open House event on**
> Thursday, December 12, 2019, 4:30 p.m. to 7:30 p.m. at the Riverbank Discovery Centre (545 Conservation Drive)
> All ages are welcome!

If you have any questions about this event, you may contact me at 204-729-2113 or s.tembo@brandon.ca

Sincerely,

Sonikile Tembo
Community Planner






# A VISION FOR THE FLATS

## PUBLIC OPEN HOUSE

### Thursday | December 12 | 4:30pm—7:30pm

***Riverbank Discovery Centre,*** *545 Conservation Drive*

In June 2019, the City met with the community to discuss development options in the floodplain area *(highlighted above),* also known as "The Flats". As a result of that discussion, we are proposing a vision for future development in The Flats, to balance the desire for development with the need to protect people and property from future flooding events. We welcome your attendance as we share this vision.

***All ages are welcome to this public drop-in event!***

City of BRANDON



*For more information contact Sonikile at s.tembo@brandon.ca or 204 729 2113*

BRANDON Design Studio

***Website Update***

## A Vision for The Flats

With the realities of extreme flooding along Brandon's Assiniboine River Corridor, the City of Brandon is looking to share a vision for this area.

In June 2019, the City met with the community to discuss development options in the floodplain area also known as "The Flats". As a result of that discussion, we are proposing a vision for future development in The Flats, to balance the desire for development with the need to protect people and property from future flooding events. We welcome your attendance as we share this vision.

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**Contact**

For more information on this event contact:

Sonikile Tembo
Community Planner
Planning and Buildings
City of Brandon
204-729-2113
s.tembo@brandon.ca

***Subscription Service Notification***

## A Vision for The Flats

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Sonikile Tembo
Community Planner
Planning and Buildings
City of Brandon
204-729-2113
s.tembo@brandon.ca

# Appendix B-2(ii)
# December 12, 2019 Open House Handouts

*“Flood proofing is a combination of structural and non-structural changes made to a building that reduces or prevents structural flood damage”*

Ref: http://kitsaptridenthomes.com/

# More Information

For more information on flood proofing, contact the Planning & Buildings Department.

The content of this brochure are general considerations. For requirements and development standards for building within the floodplain, contact the Planning & Buildings Department.

**Planning & Buildings Department**

A.R. McDiarmid Civic Complex

638 Princess Avenue

Brandon MB R7A 0P3

Planning@brandon.ca

204 729 2110


City of BRANDON

# Building in the Floodplain

## Building Design Considerations

City of BRANDON

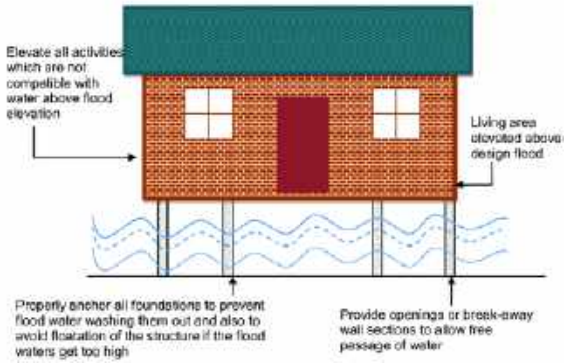
# New Buildings

## Strategies for Flood Proofing Buildings

***Building on fill.*** New subdivisions or single buildings may be built on fill that raises the building above the design flood level.

***Building on piers, piles, columns or bearing walls.*** This strategy involves elevating the building on some kind of support that will allow floodwaters to pass through, although careful considerations must be taken into account for protection of foundation units from floating debris.

***Flood proofing services.*** Electrical, plumbing, and heating should be protected from flood damage. Locating services above the design flood level will help limit flood damage. Installation of a backwater valve on the main building drain will prevent overwhelmed sewers from backing up into the building.




*Ref:* https://kb.ermis-f.eu/kb/d/Measure/1088

## Foundations

When floodwaters reach a building, it produces an increase in lateral and uplift loads on the foundation walls and floor slab. These loads can cause catastrophic failure of the foundation.

***Shallow Foundation*** is a foundation unit that gets its support from soil or rock located close to the lowest part of the building it supports, such as a basement footing, foundation wall, or structural slab construction. *Shallow foundations* are prohibited in the floodplain. Designers shall use *deep foundations.*

***Deep Foundation*** is a foundation unit that provides support for a building by transferring loads either by end-bearing to soil or rock at considerable depth below the building, by adhesion or friction, or both, in the soil or rock in which it is placed. Piles are the most common type of deep foundation.

*Ref:* https://www.familyhomeplans.com/

# Existing Buildings

## Flood Proofing Basements

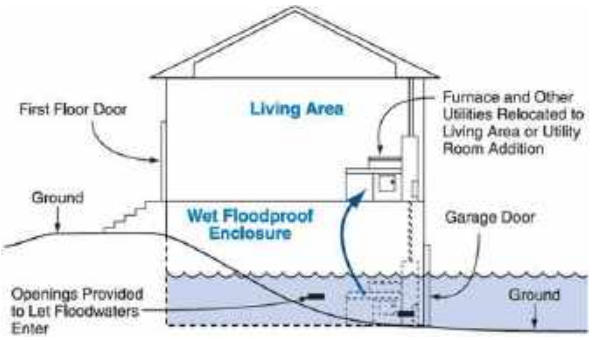
There are two main strategies to flood proofing existing basements.

***Dry flood proofing*** has two main methods.

A *drained* system uses a sump pit and pump to keep uplift and lateral forces in the soil to a minimum.

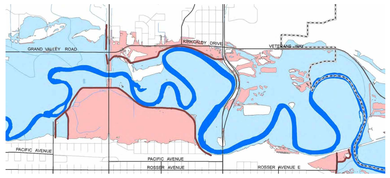
An *undrained* system uses a watertight foundation that is designed with sufficient strength and mass to withstand uplift and lateral forces caused by the flood waters.

***Wet flood-proofing*** accepts the fact that the lowest level of the building will be flooded. Flood damage is kept to a minimum by using special water-resistant construction materials.




*Ref:* https://www.researchgate.net/

# Appendix B-2(iii)
# December 12, 2019 Open House Display Boards



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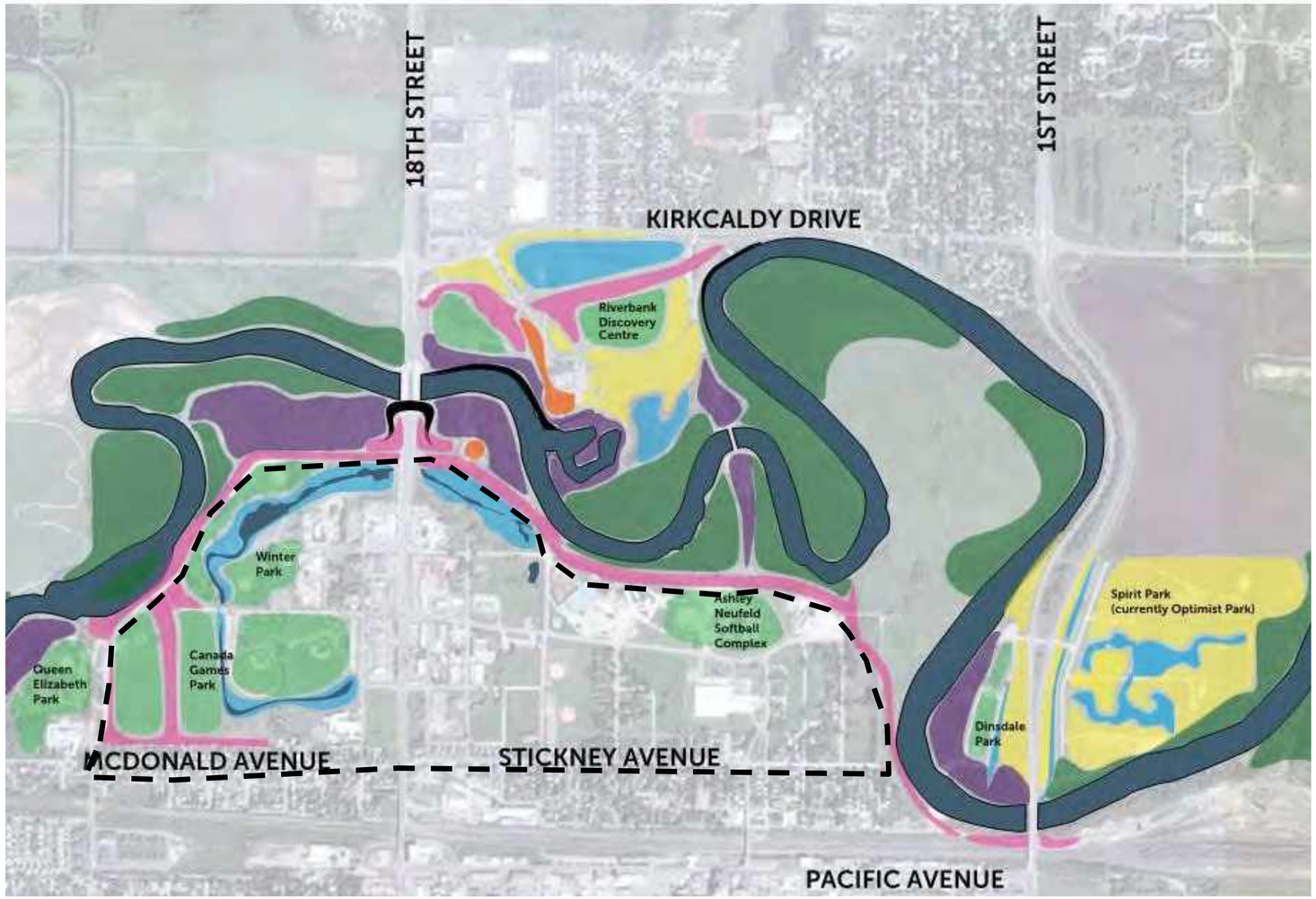
This is a public event to share the vision and gain feedback from the community. Feel free to browse the information, write your comments on the boards and ask questions. We also have comment sheets you may complete.

Your input is valuable to us!




**February - April 2019**
Background Information Collection & Analysis

**May - June 2019**
Community Engagement #1
Risk Assessment Workshop

**July - December 2019**
Evaluate Development Scenarios and Draft Secondary Plan

**December 2019**
Community Engagement #2
Open House

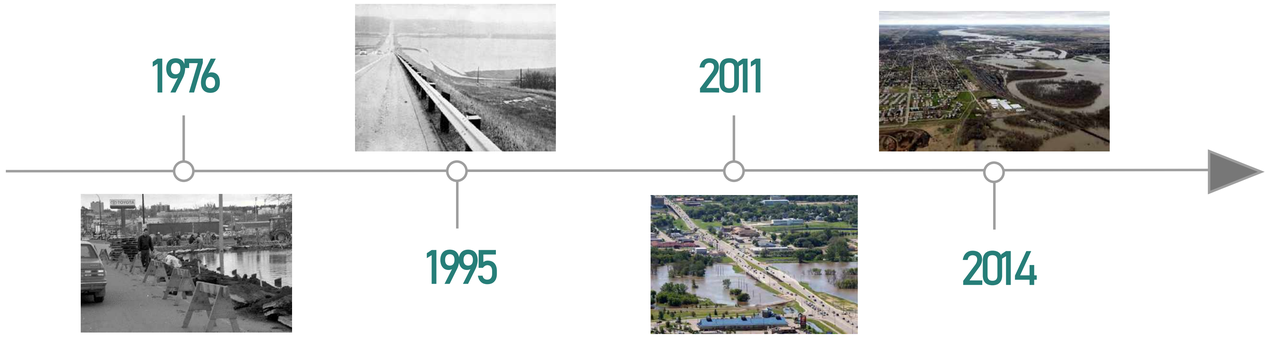
**January - April 2020**
By-law approvals

# BACKGROUND

***Flood history, mitigation, development in the floodplain, and floodplain policy***

## History of Flooding in Brandon

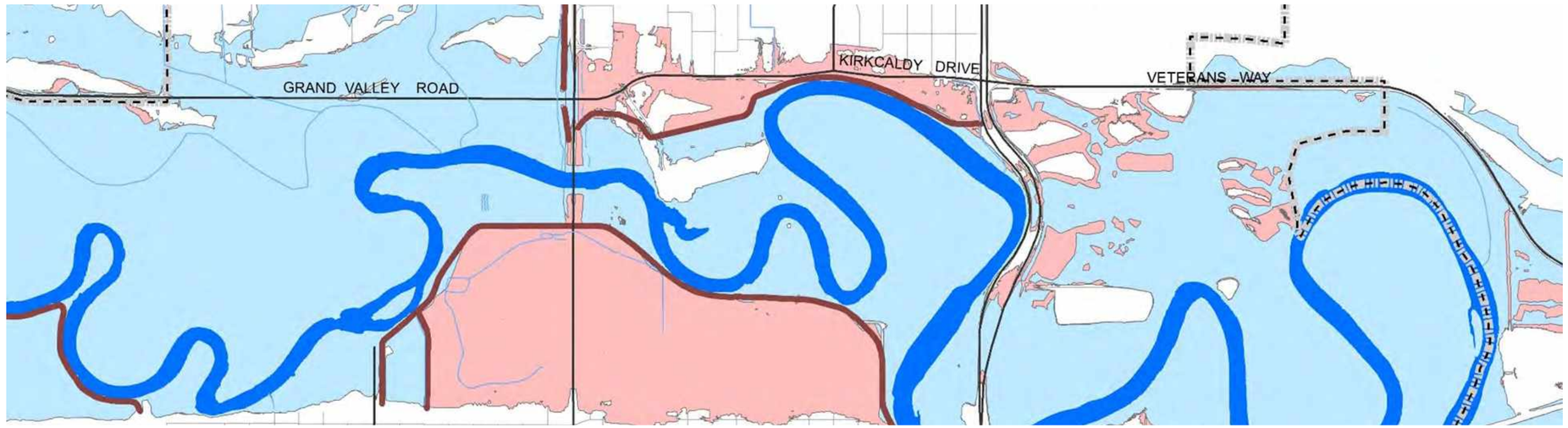
- 1976—flood waters reached Stickney Avenue
- 1995—higher volumes but less damage due to mitigation
- 2011—flood level three feet higher than 1976
- 2014—millions of dollars' worth of damage

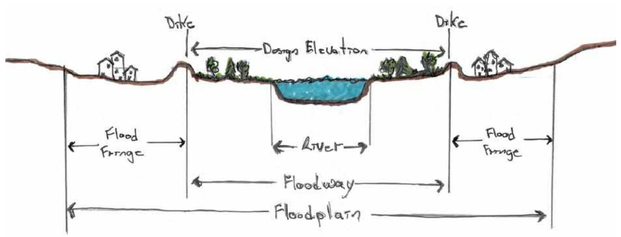


## Flood Mitigation

City has invested $21,700,000 public dollars in

- North and south dikes
- Kirkcaldy land drainage sewer
- Kirkcaldy sewer works
- Kirkcaldy lift station
- Kirkcaldy forcemain



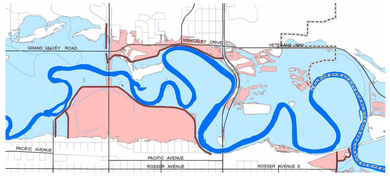




## Development in the South Diked Area

- Mostly commercial development with scattered residential and industrial development
- Must take into account mitigation measures
- Must build above the design flood level to minimize the risk to the development

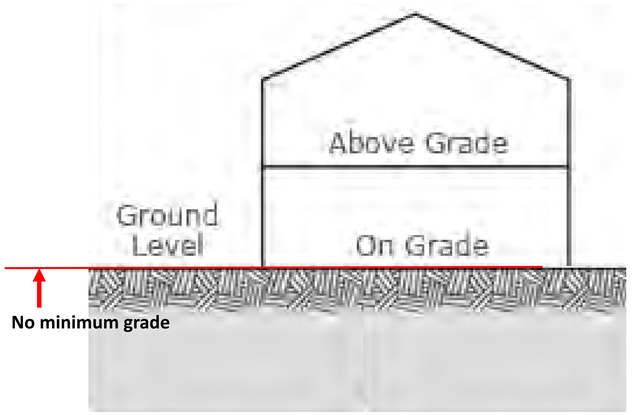
## Current Development Standards

- No basements
- First storey at least 0.6m above design flood level
- Finished grade at least 0.3m above design flood level
- New development can occur with appropriate flood proofing measures



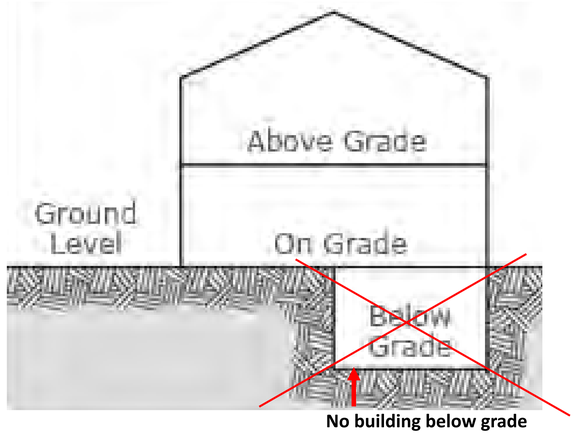
# NEW DEVELOPMENT STANDARDS

***Development standards proposed are less restrictive, but some mitigation is still required***




### Minimum Grade

- Remove minimum grade and building elevation standards for all types of development
- Previous rules required the first floor of buildings to be at least 0.6m above design flood level and the finished grade at least 0.3m above design flood level

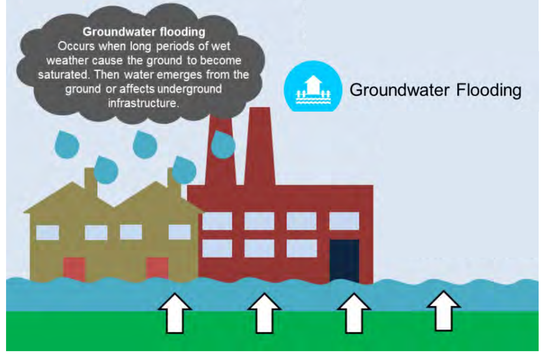



### No Basements

- Maintain requirement prohibiting basements due to high water table in area and groundwater impacts of flooding

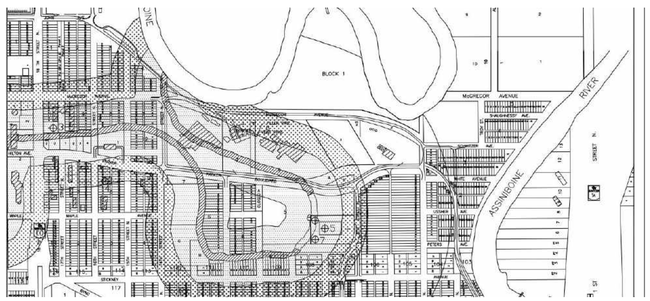
### Save Harmless

- Maintain requirement for a save harmless agreement with the City
- City requires that all developers enter into an agreement protecting the city from lawsuits that may arise as a result of construction in the diked areas



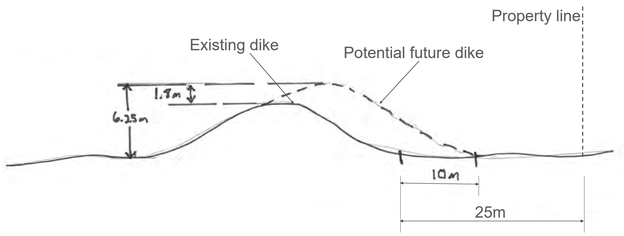

### Groundwater & Soil Testing

- Require groundwater and soil testing prior to any development, as this area is prone to groundwater flooding



### Methane Gas Zone

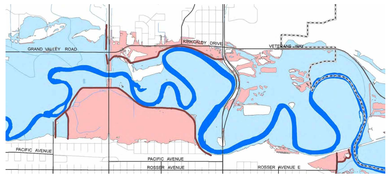
- Maintain requirement for testing within Methane Gas Zone 2 or 3




### Dike Setback

- Require dike setback for new property lines or buildings to allow for future dike expansion and room for continued maintenance

*Brandon Flood events*



# EXISTING CIRCUMSTANCES

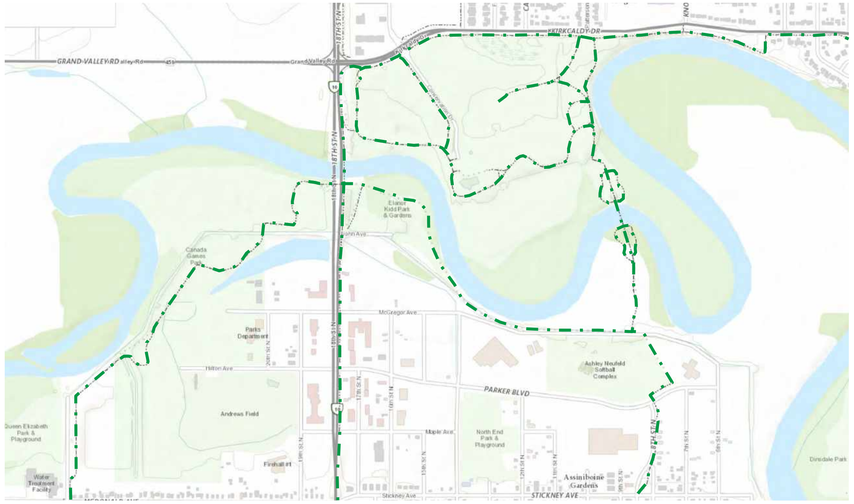
***Current planning documents and infrastructure***

## Land Use

This map shows the various land uses within the flood plain area according to the Zoning By-law.

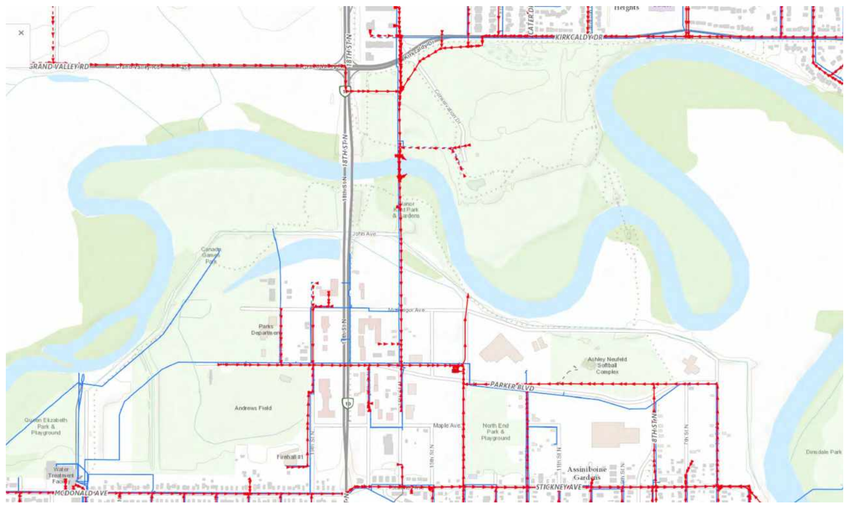
## Trails

The Greenspace Master Plan and the Recreation Master Plan identify trails and green spaces existing in this area that connect south of the railway and north of the river.



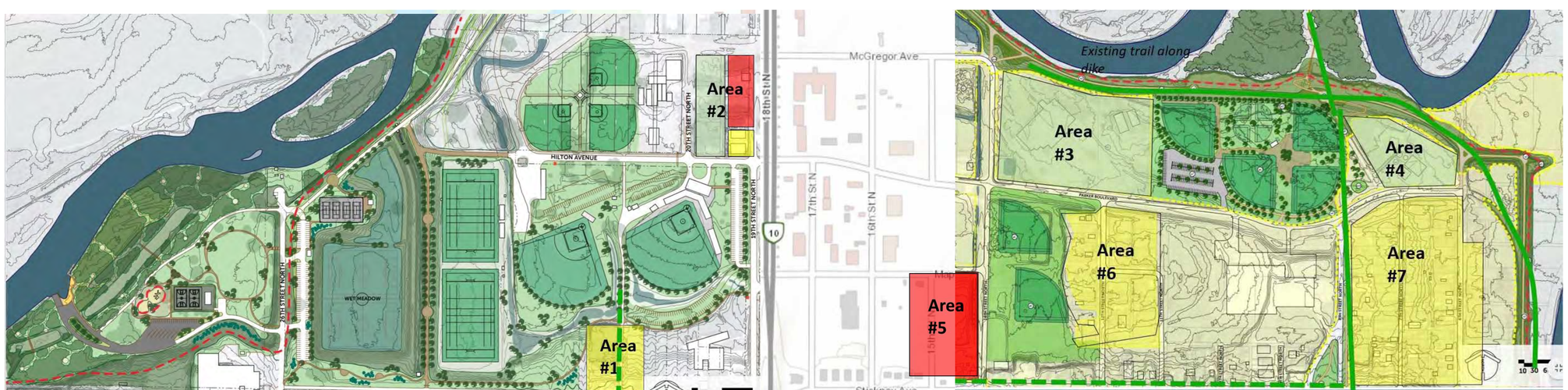

## Servicing

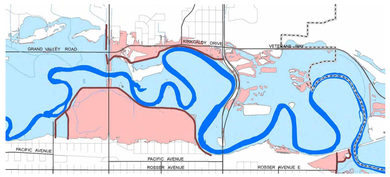
This map shows the existing water and sewer lines (blue and red respectively) in and north of The Flats. The age and functionality of the services varies in the area.




## Parks and Recreation

In 2015 Brandon Riverbank Inc., in partnership with the City, released the "Back to the River" Brandon Assiniboine River Corridor Master Plan 2015-2035. This plan, as well as the Greenspace Master Plan, includes a variety of recreational spaces around the river.



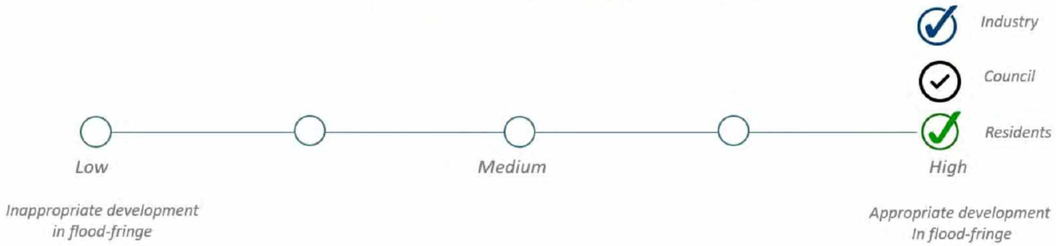



# WHAT WE HEARD

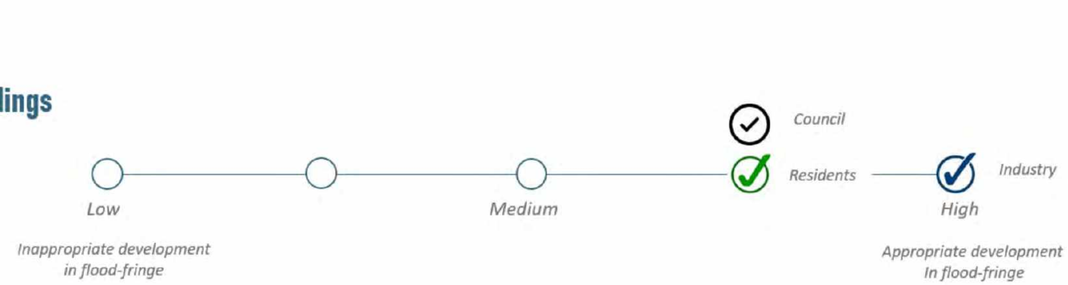
***Feedback received from 2019 Community Engagement***

## Community Engagement – Non-residential

### Additions

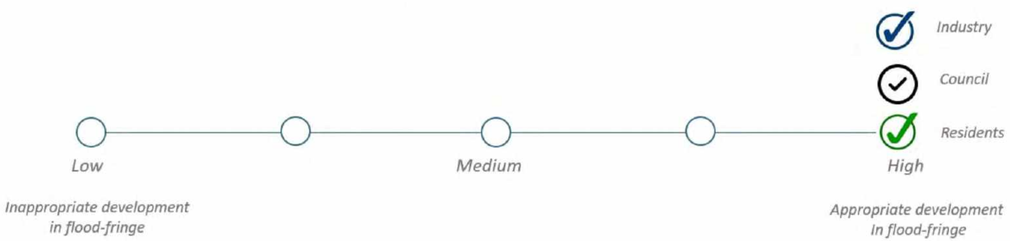



### New Buildings

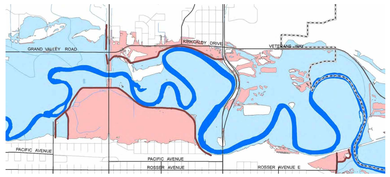



## Community Engagement – Residential

### Additions




### New Buildings



# SEVEN TRANSITION AREAS

***These areas were chosen for potential development change***

## Guiding Considerations

- Maintain City-owned land for greenspace
- Develop existing and new commercial areas
- Street standards
- Respect private property ownership rights
- Groundwater flooding
- Limit new low density residential along streets with existing water and sewer services

**Area affected**

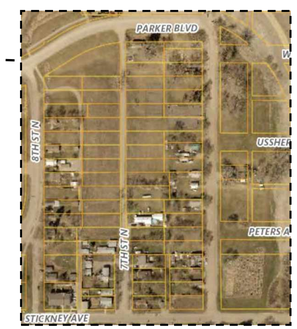
300-block of 19th and 20th Streets North

**Area affected**

320—6th Street North

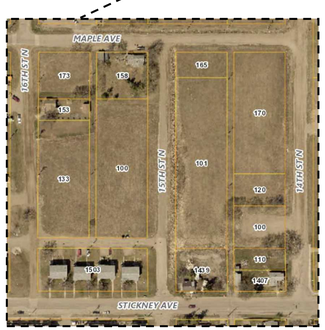
**Area affected**

100-block of 21st Street North




**Area affected**

100-block of 6th and 7th Streets North




**Area affected**

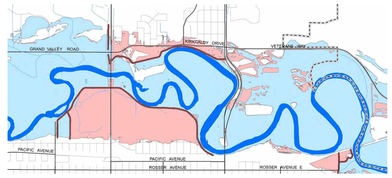
100-blocks of 14th, 15th, and 16th Streets North

**Area affected**

329—12th Street North, 1110 and 1140 McGregor Avenue, and 1201 Parker Boulevard

**Area affected**

100-block of 11th and 12th Streets North



# SEVEN TRANSITION AREAS

***These areas were chosen for potential development change***

## Transition Area 2

- More space for Parks complex
- More commercial on 19th Street North

**Result:**

- Expand Parks complex
- Commercial on 19th Street N

## Transition Area 3

- Zoned Industrial Restricted (IR)
- Existing services on Parker Boulevard
- Within Greenspace Master Plan and Assiniboine River Corridor Master Plan.

**Result:**

- Continue current use until opportunity is made available to transition to designated greenspace use

## Transition Area 1

- Mix of zones (residential and non-residential)
- No servicing
- No access or frontage onto a public street
- Within Greenspace Master Plan and Assiniboine River Corridor Master Plan.

**Result:**

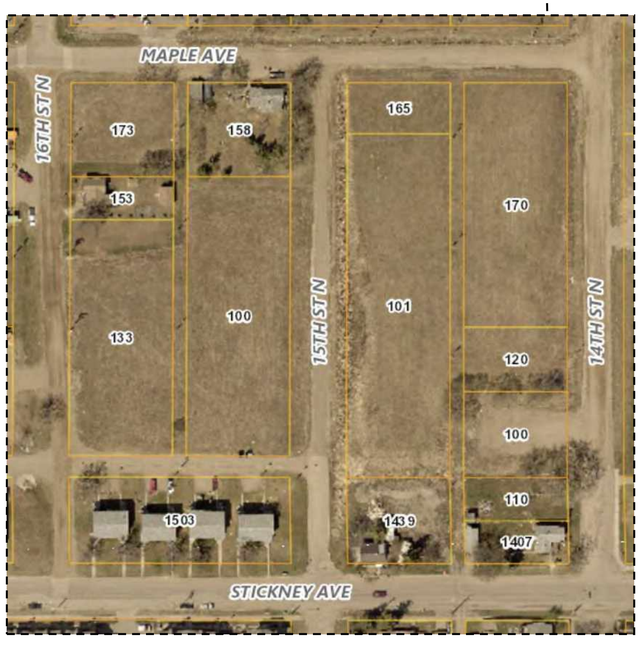
- Continue current use until opportunity is made available to transition to designated greenspace use

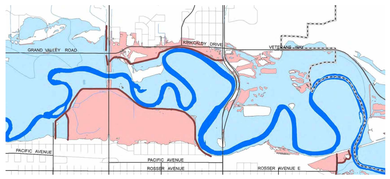
## Transition Area 5

- Sewer service available on 14th Street North only
- All other sites are unserviced
- Streets not up to standard
- Sites are adjacent to both commercial and residential uses.

**Result:**

- Expand commercial use





# SEVEN TRANSITION AREAS

***These areas were chosen for potential development change***

## Transition Area 6

- Zoned mostly Industrial Restricted (IR)
- Existing servicing on 12th Street North only
- Streets are not up to city standard

**Result:**

- Residential use with large lots
- Focus development onto 12th Street N for access to servicing

## Transition Area 4

- Zoned Industrial Restricted (IR)
- Existing services on Parker Boulevard
- Within Greenspace Master Plan and Assiniboine River Corridor Master Plan designated as Open Space

**Result:**

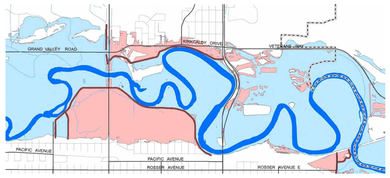
- Continue current use until opportunity is made available to transition to designated greenspace use

## Transition Area 7

- Zoned mostly Industrial Restricted (IR)
- Existing services on 6th and 8th Streets North
- Streets not up to  city standard
- Low area near Parker Boulevard with groundwater flooding concerns
- Maintain dike setback for future expansion and access

**Result:**

- Expand low-density residential use
- Limit development near Parker Boulevard prone to ground water flooding



# THE FLATS

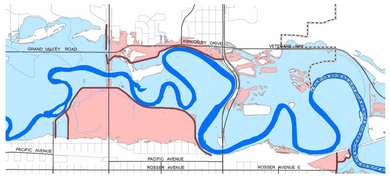
***Long term vision***

Existing Dike

Commercial

Open Space

Residential

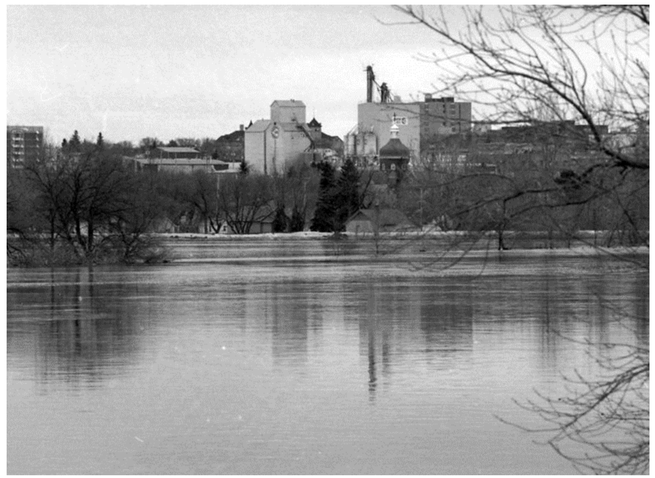


# NEXT STEPS

The next step in the process is to finalize a secondary plan and Zoning By-law amendments for Council to adopt.

We will continue to receive comments after this event. If you would like to meet to further discuss these changes, see our contact information below. You may also drop off comments or email them.

Thank you for your input.



**For more information please contact**

Andrew Mok, Senior Planner

Planning & Buildings Department

638 Princess Avenue

Brandon, MB  R7A 0P3

204-729-2124

a.mok@brandon.ca

**February - April  2019**
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Collection & Analysis

**May - June 2019**
Community Engagement #1
Risk Assessment Workshop

**July - December 2019**
Evaluate Development
Scenarios and Draft Standards

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# Appendix B-3
# June 4, 2020 Webinar

# Appendix B-3(i)
# June 4, 2020 Webinar Invitations

# A VISION FOR THE FLATS:
# Proposed plan to develop the area
# WEBINAR

Thursday, June 4, 2020
Noon – 1pm & 5pm – 6pm

The City of Brandon drafted a secondary plan to facilitate development in this area. It is important before we present the plan to City Council that we update the community with what the plan proposes for the area. We will host a webinar to provide an update on the project and address any questions you may have about the proposed changes.

Questions we will answer during the webinar include but are not limited to:

- What are the proposed changes?
- What do the changes mean for immediate neighbours?
- What is the timeline for these changes?

If you are unable to attend but would like to provide feedback, or if you have questions, please contact Community Planner, Sonikile at s.tembo@brandon.ca or 204 729 2113.

Planning and Buildings Department

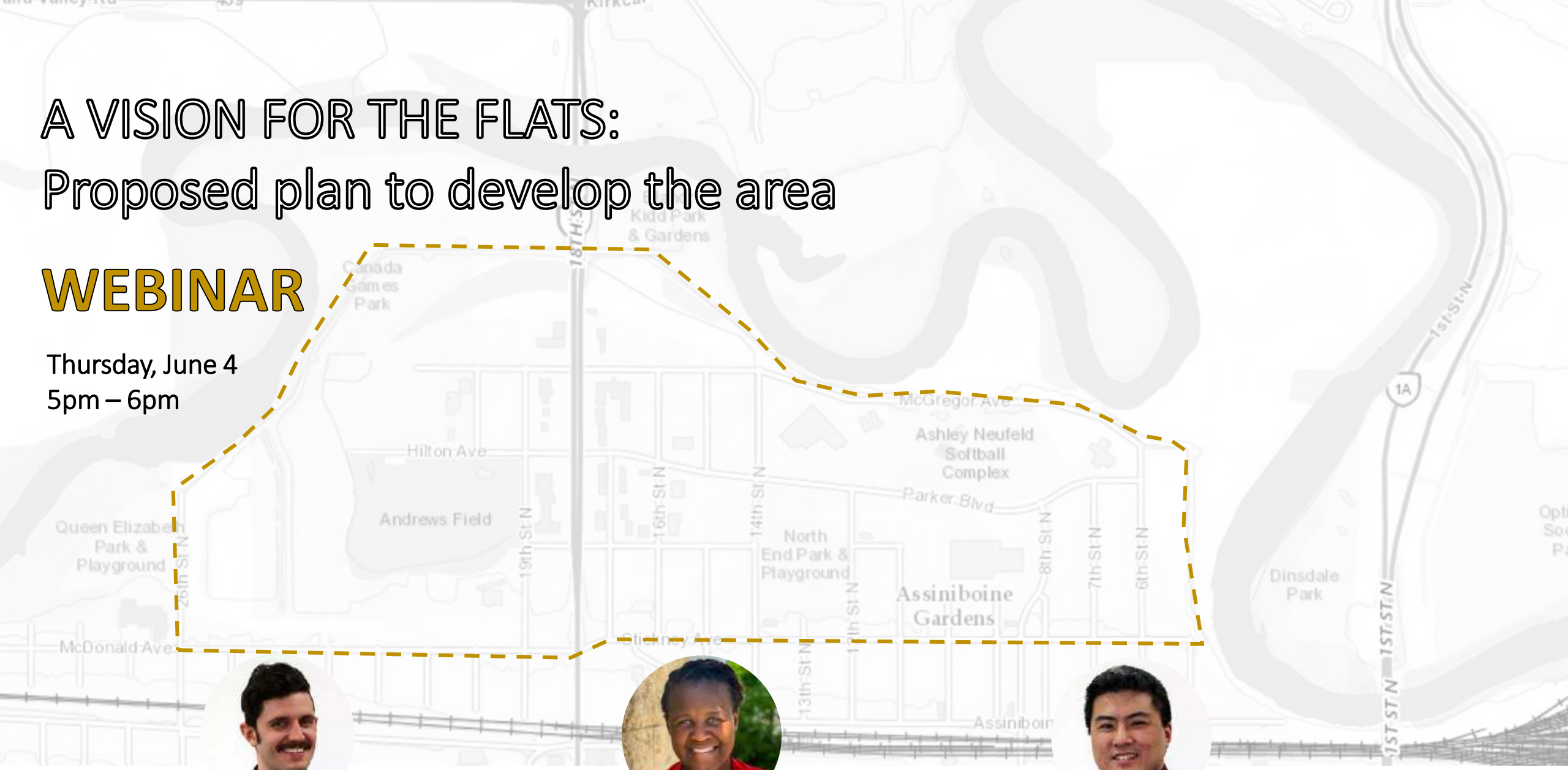
City of BRANDON

# Appendix B-3(ii)
# June 4, 2020 Webinar Presentation

# A VISION FOR THE FLATS:
## Proposed plan to develop the area

## WEBINAR

Thursday, June 4
5pm – 6pm

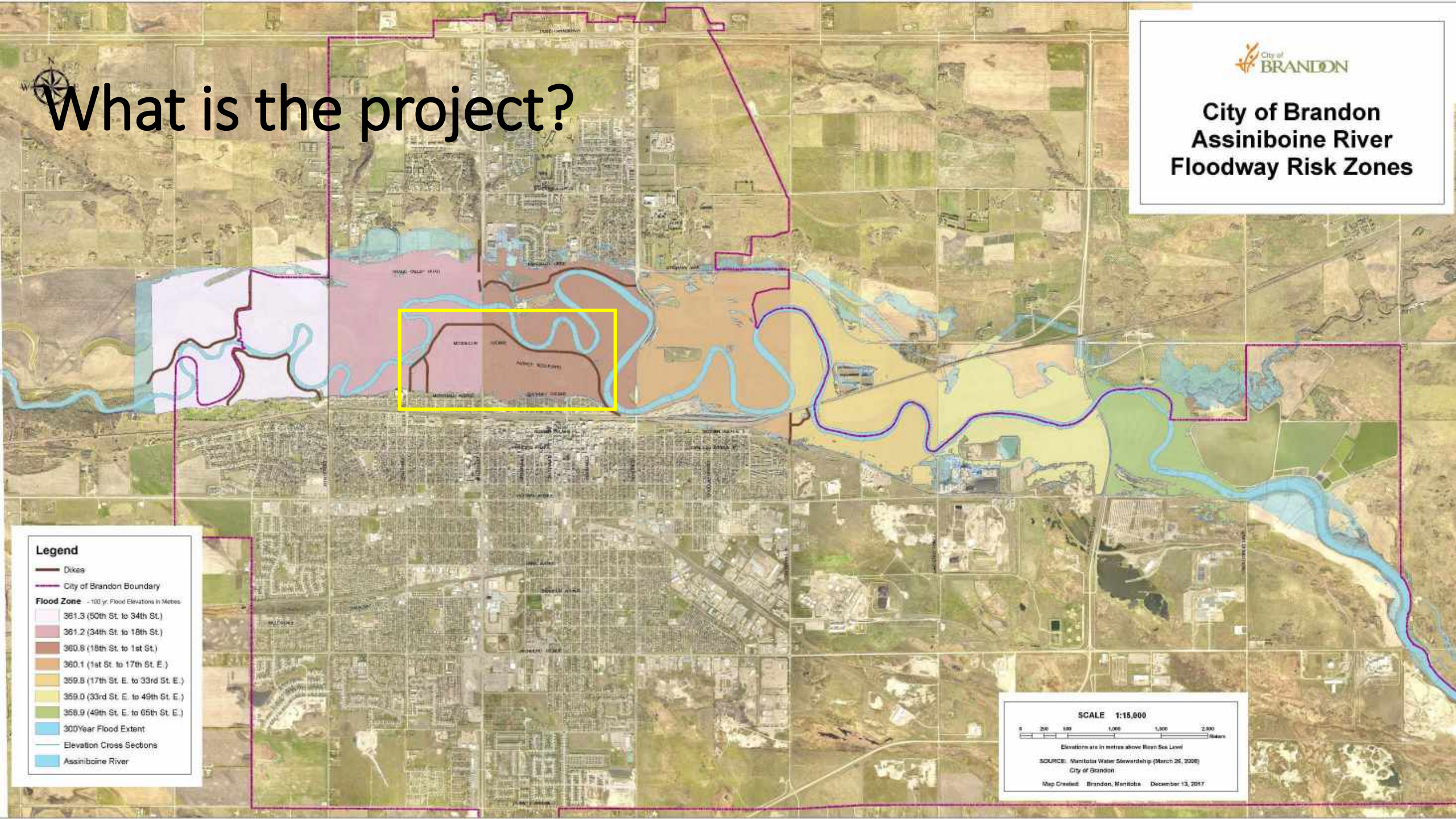


*Marc Chapin*
*Engineering*

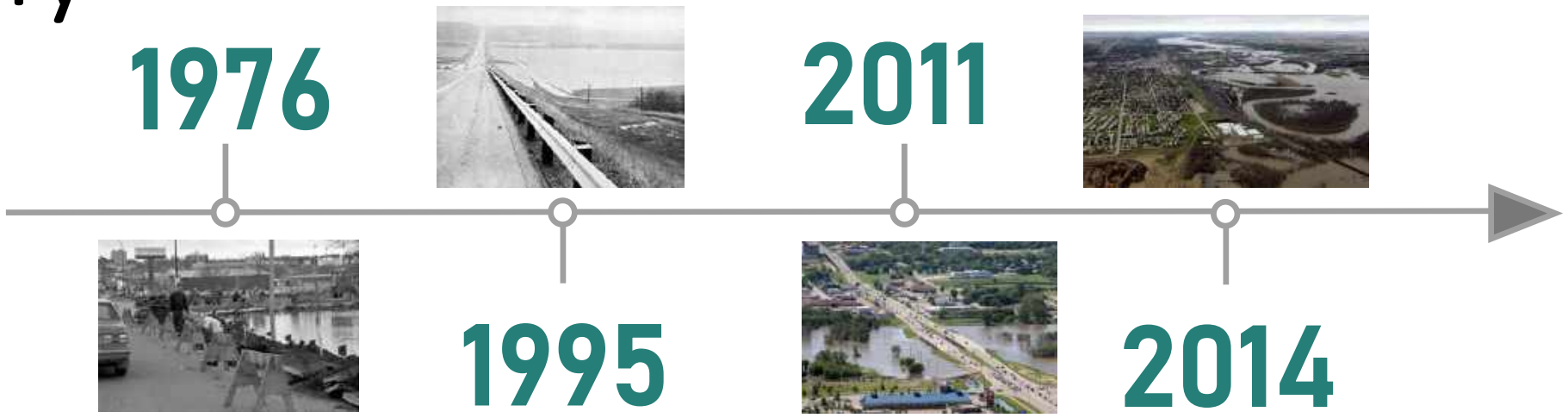
*Sonikile Tembo*
*Planning*

*Andrew Mok*
*Planning*

# What is the project?



# History




**Flood Mitigation**

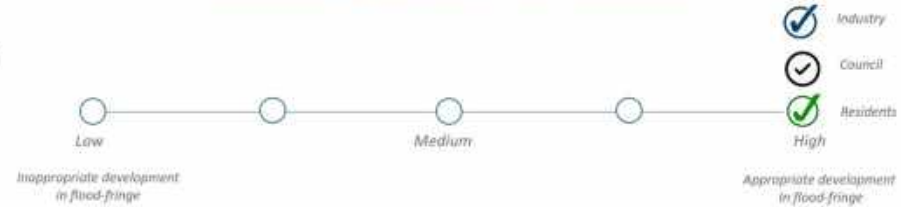
City has invested $21,700,000 public dollars in
- North and south dikes
- Kirkcaldy land drainage sewer
- Kirkcaldy sewer works
- Kirkcaldy lift station
- Kirkcaldy forcemain

# WHAT WE HEARD

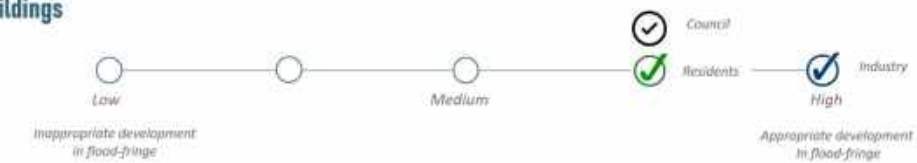
***Feedback received from 2019 Community Engagement***

## Community Engagement – Non-residential

### Additions



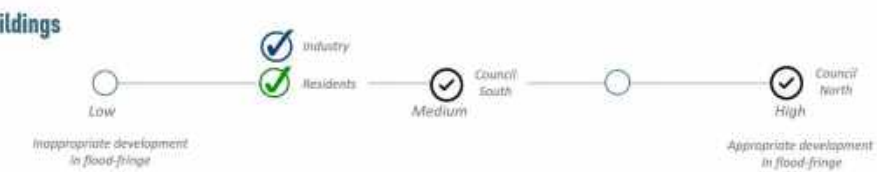

### New Buildings



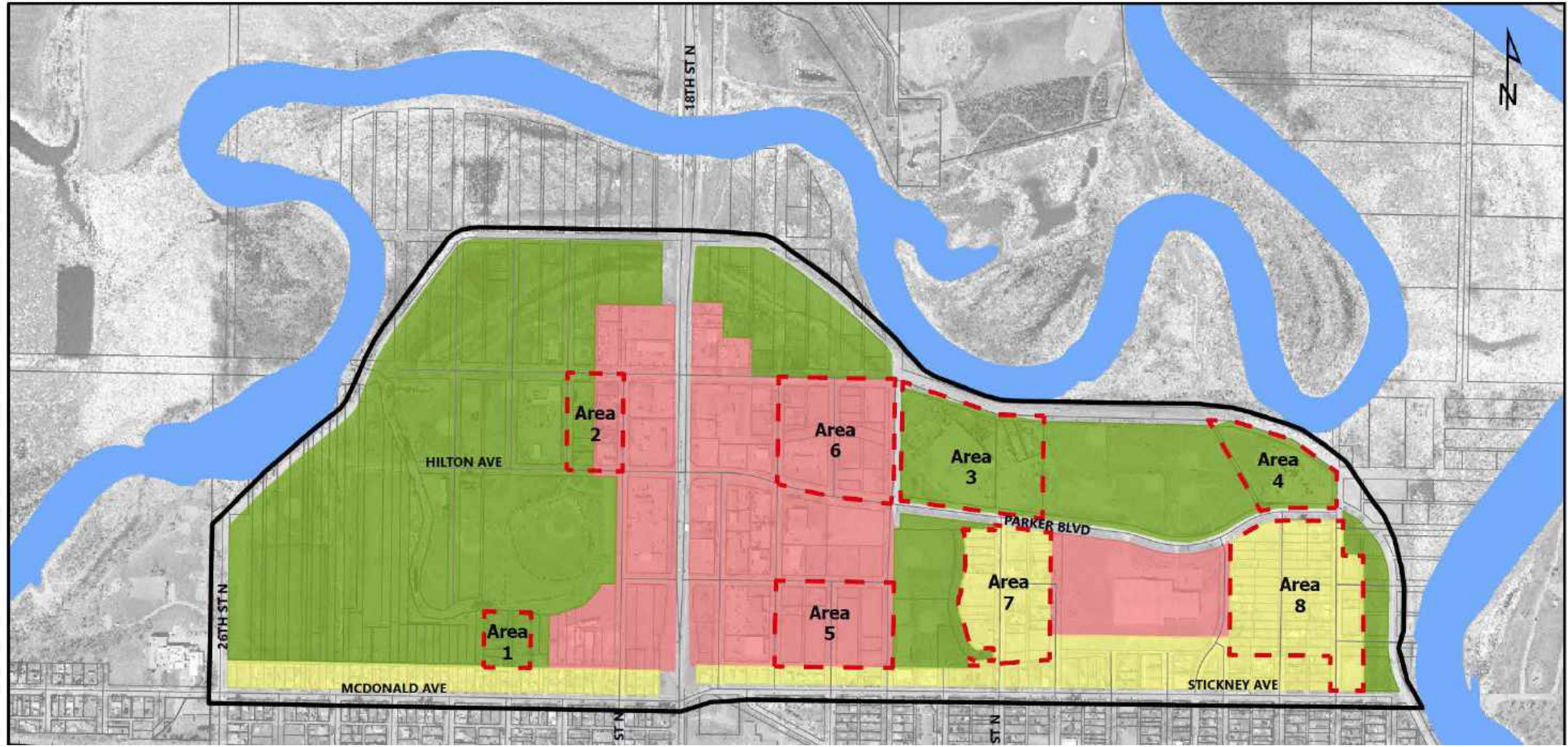

## Community Engagement – Residential

### Additions

### New Buildings



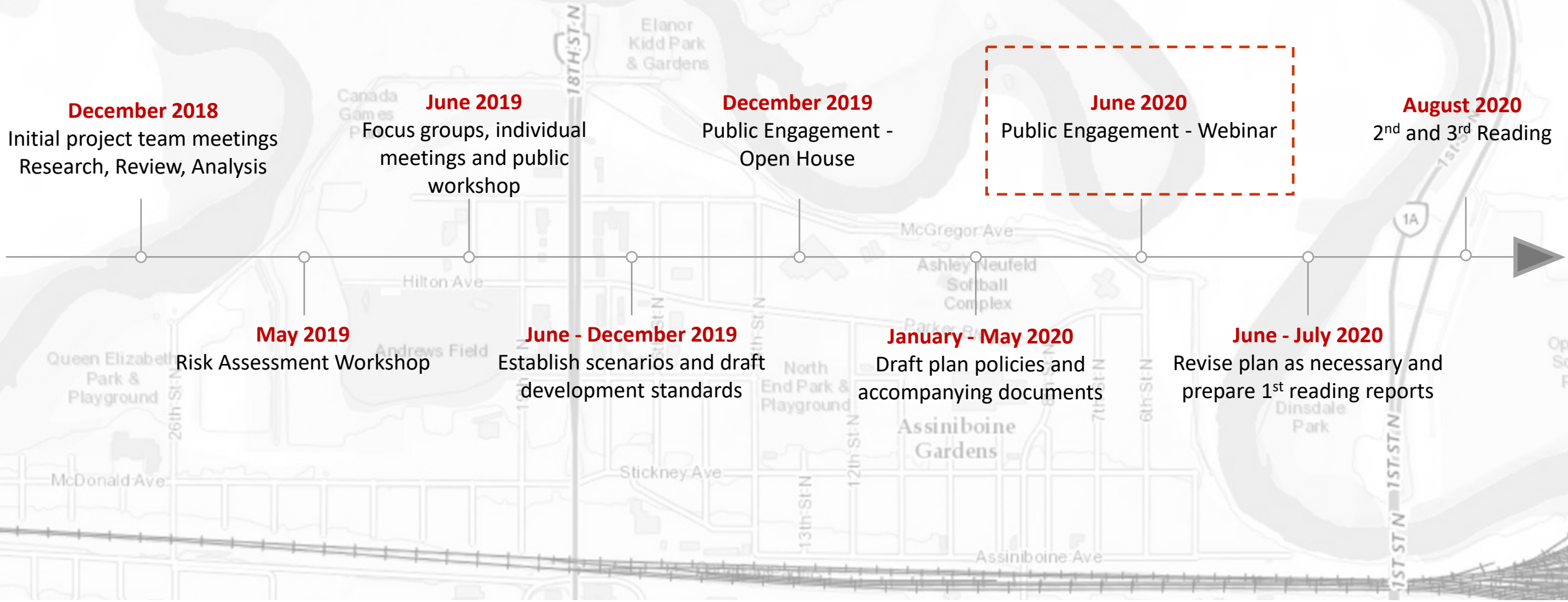
# Existing circumstances


18TH ST N
N
HILTON AVE
Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 8
PARKER BLVD
26TH ST N
MCDONALD AVE
STICKNEY AVE
ST N
ST N
Residential
Employment
Secondary Plan Area
Assiniboine River
Greenspace
Transition Area
Railways
0
150
300
450
Meters

# Questions?

18TH ST N
Elanor Kidd Park & Gardens
Canada Games Park
McGregor Ave
Ashley Neufeld Softball Complex
Hilton Ave
Parker Blvd
Andrews Field
Queen Elizabeth Park & Playground
North End Park & Playground
Assiniboine Gardens
Dinsdale Park
1st St N
1A
26th St N
19th St N
16th St N
14th St N
13th St N
12th St N
8th St N
7th St N
6th St N
McDonald Ave
Stickney Ave
Assiniboine Ave

# Where are we now?

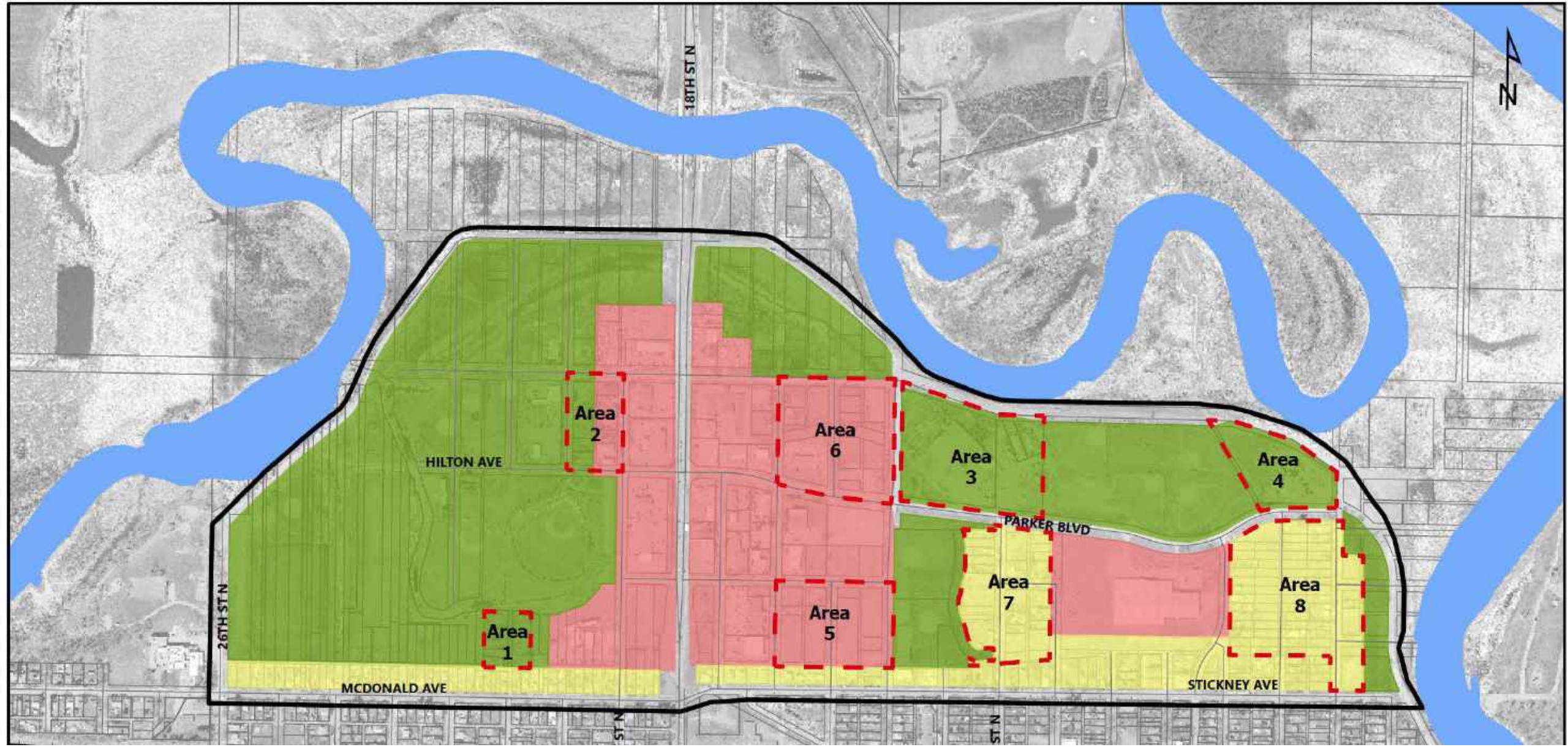


# Purpose of this webinar?

- Share a summary of the policies
- Explain reasoning behind key policies
- Have a discussion of what works and what doesn't
- Get clarity on whether this is how community wants to move forward

# Plan policies

- General policies
  - Connectivity
  - Environment
- Transitional area policies
  - Areas 1 - 8


18TH ST N
N
HILTON AVE
Area 1
Area 2
Area 3
Area 4
Area 5
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Area 7
Area 8
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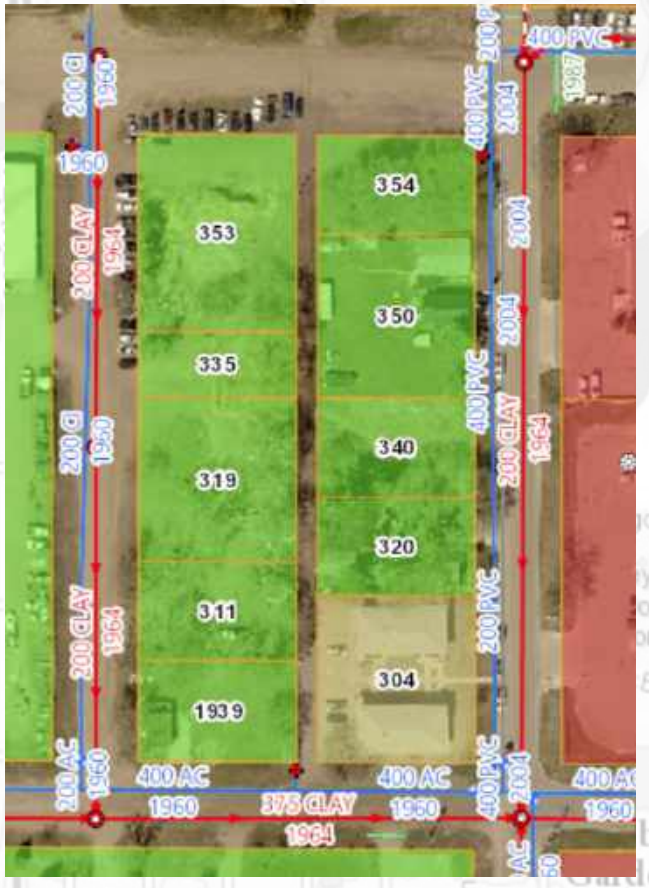
26TH ST N
MCDONALD AVE
STICKNEY AVE
ST N
ST N
Residential
Employment
Secondary Plan Area
Assiniboine River
Greenspace
Transition Area
Railways
0
150
300
450
Meters

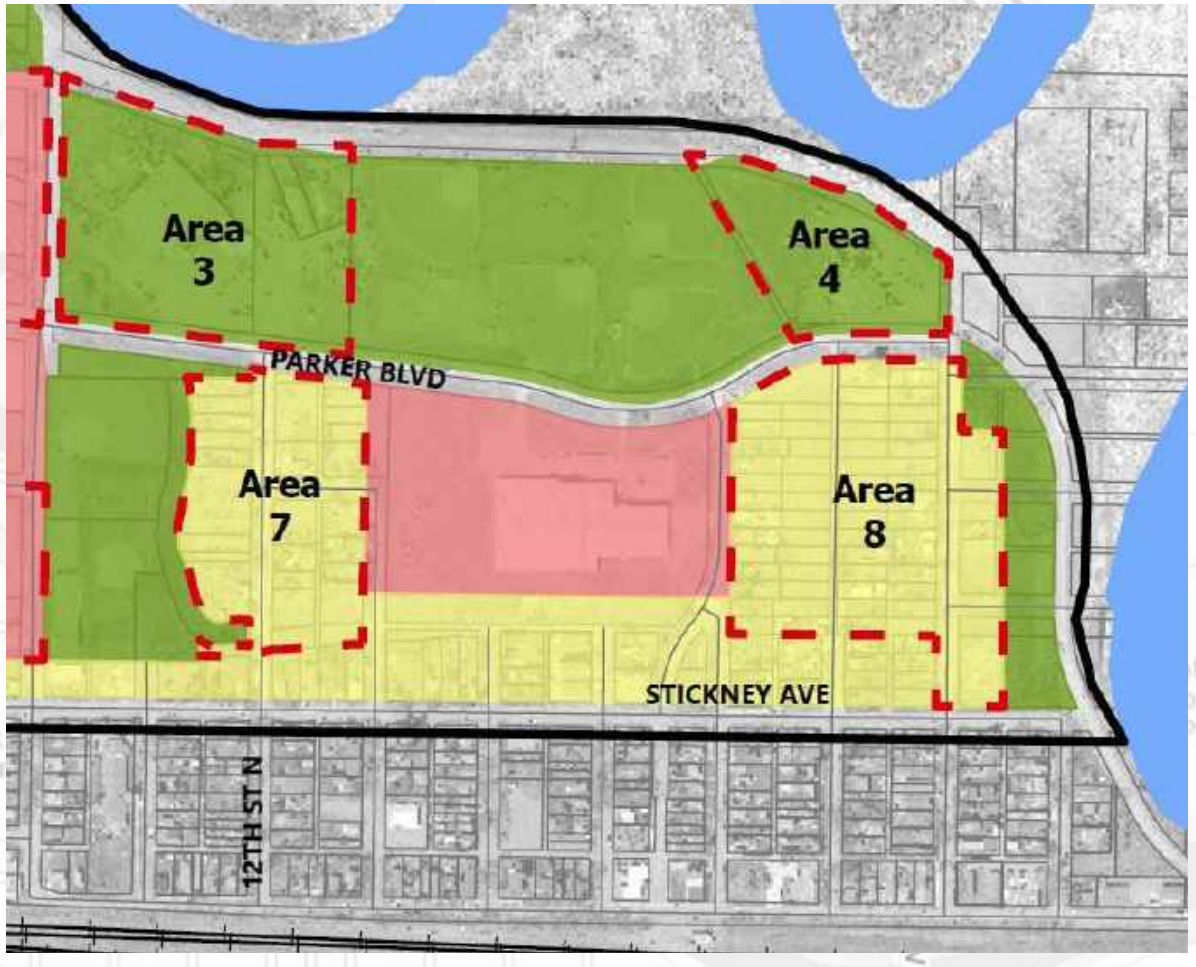
# Transition area 1

# Transition area 2

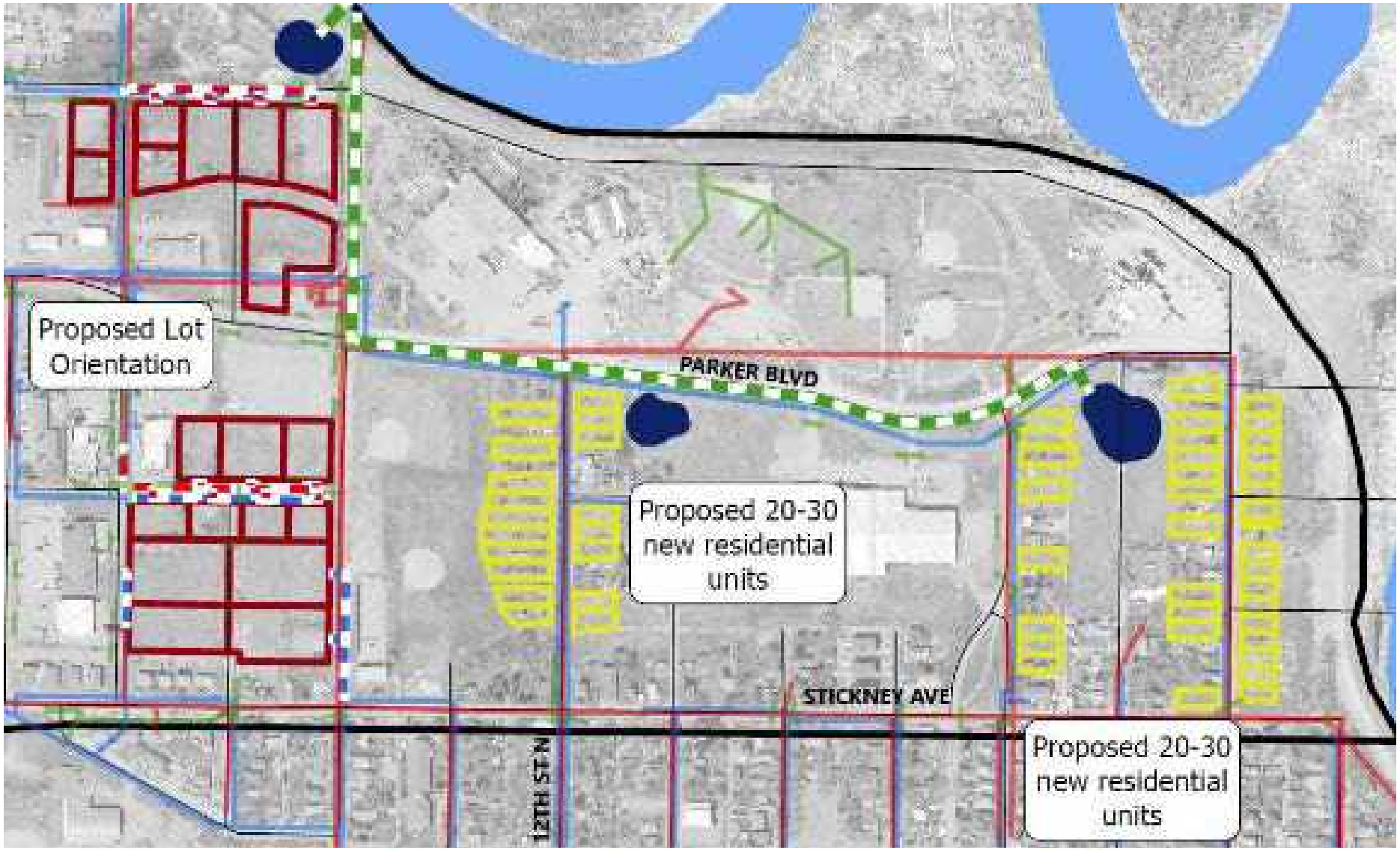


# Transition area 3

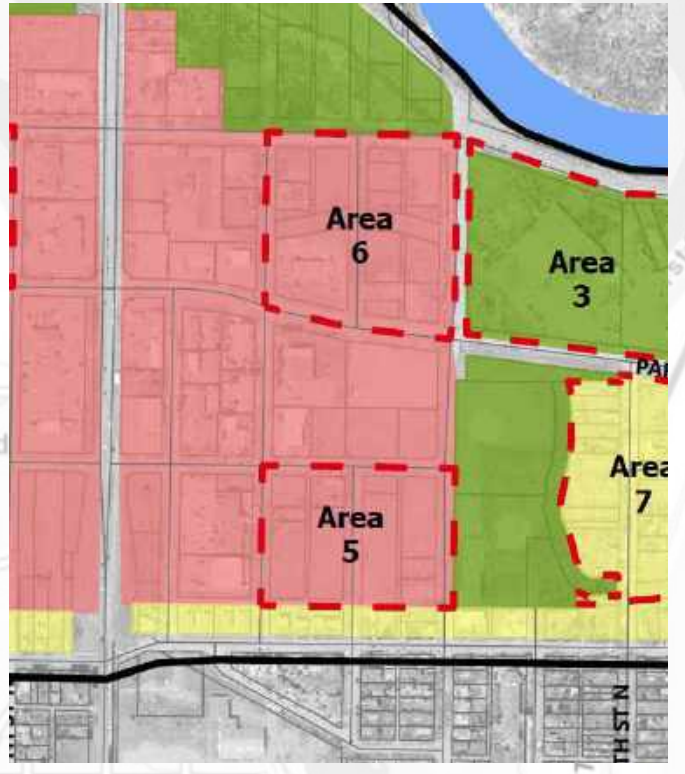
# Transition area 4



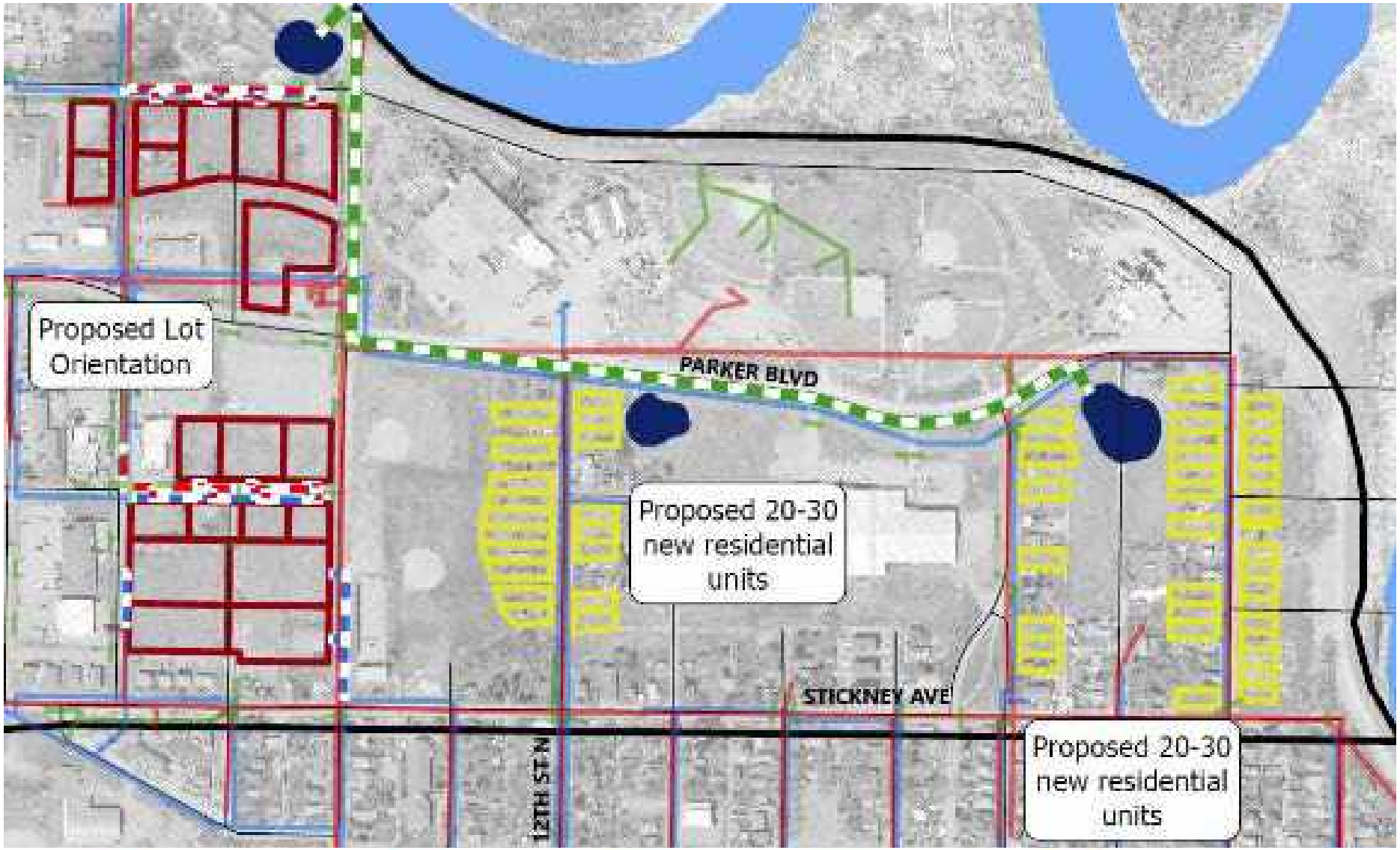
# Transition area 5, 6, 7 and 8



# Transition area 5

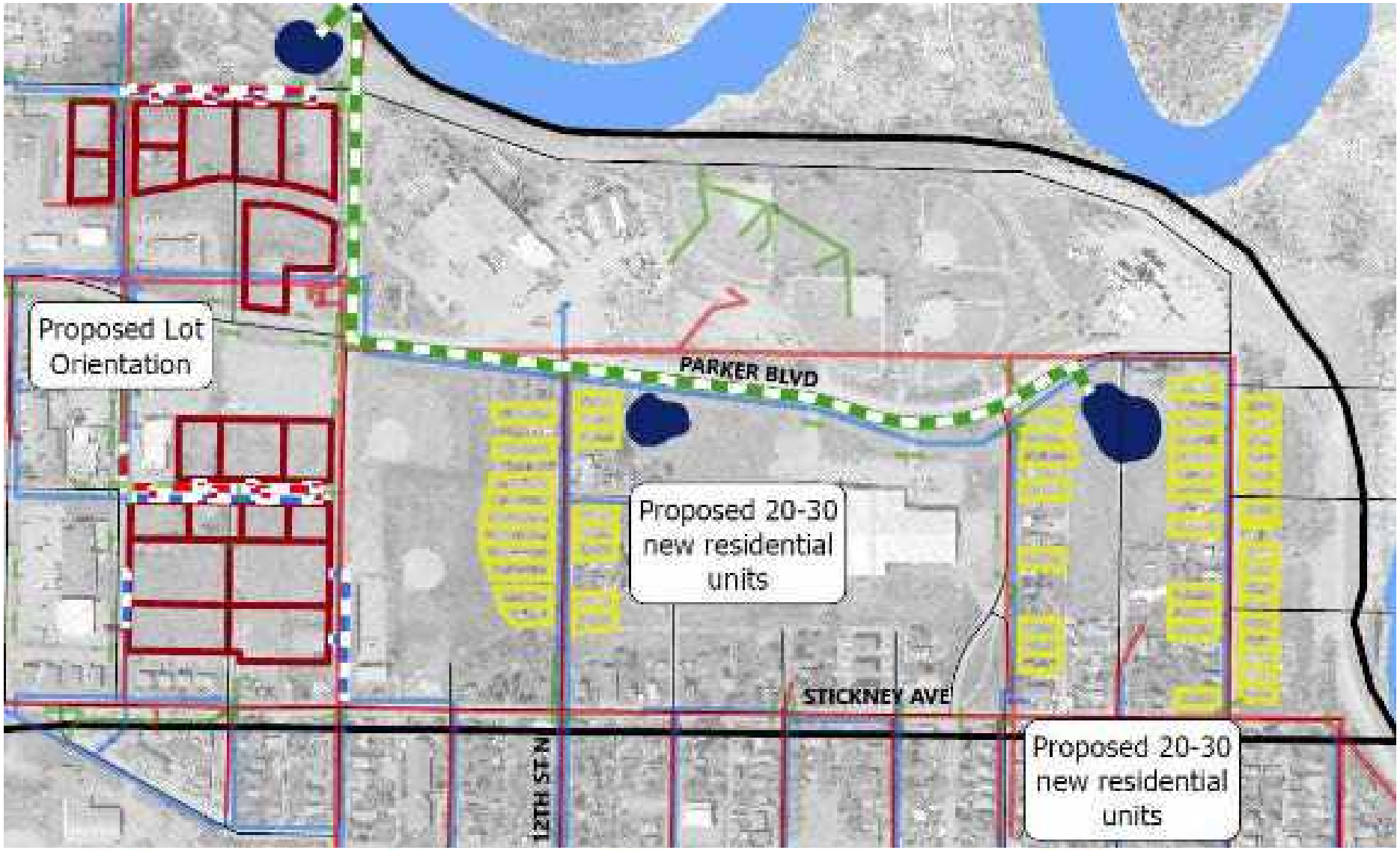


# Transition area 5, 6, 7 and 8

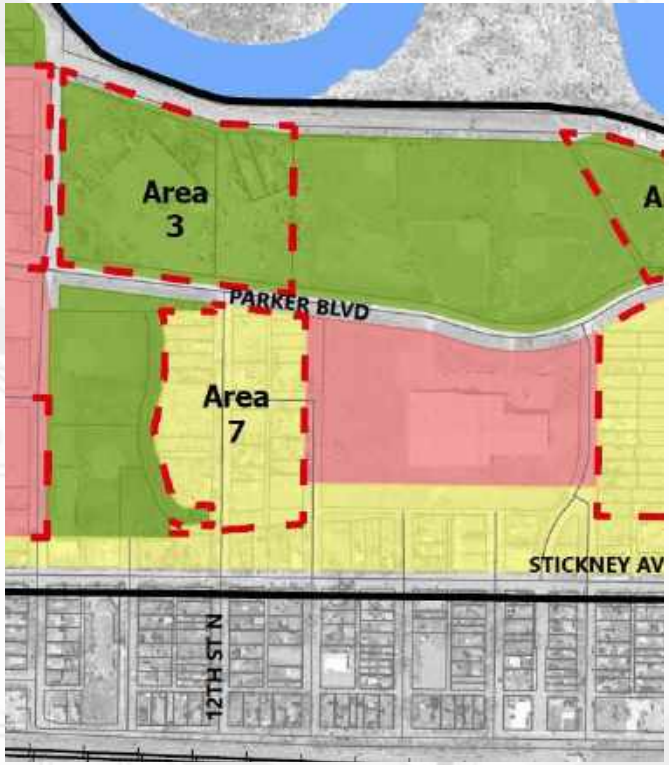


# Transition area 6

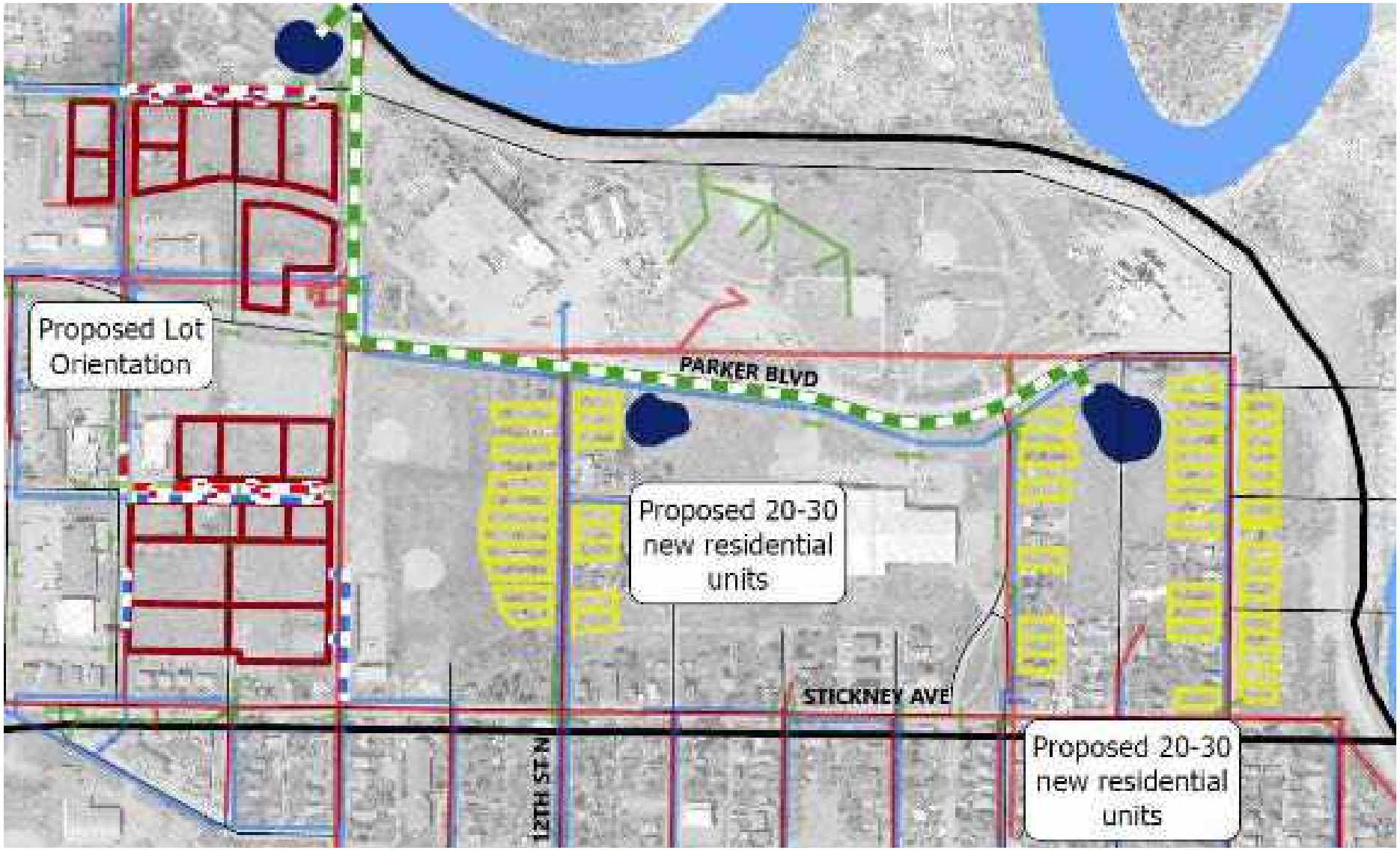
# Transition area 5, 6, 7 and 8



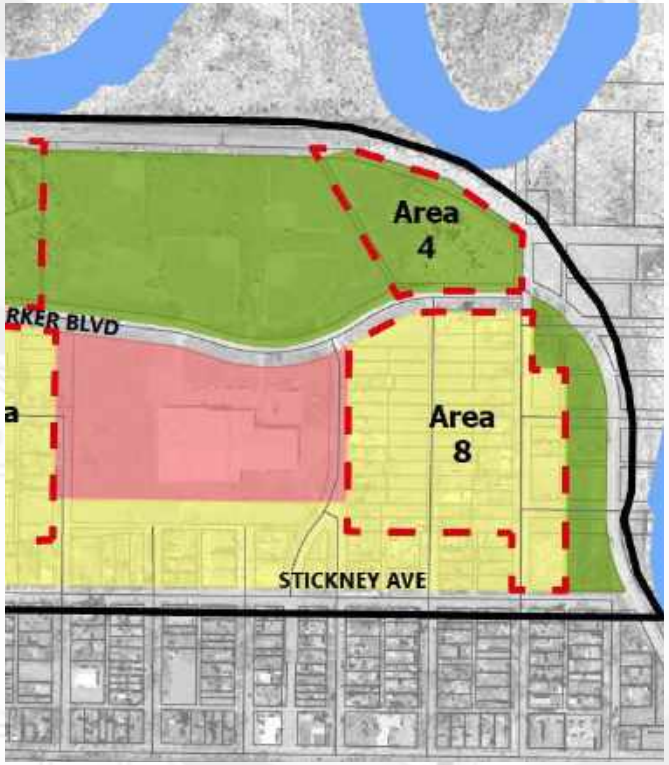
# Transition area 7



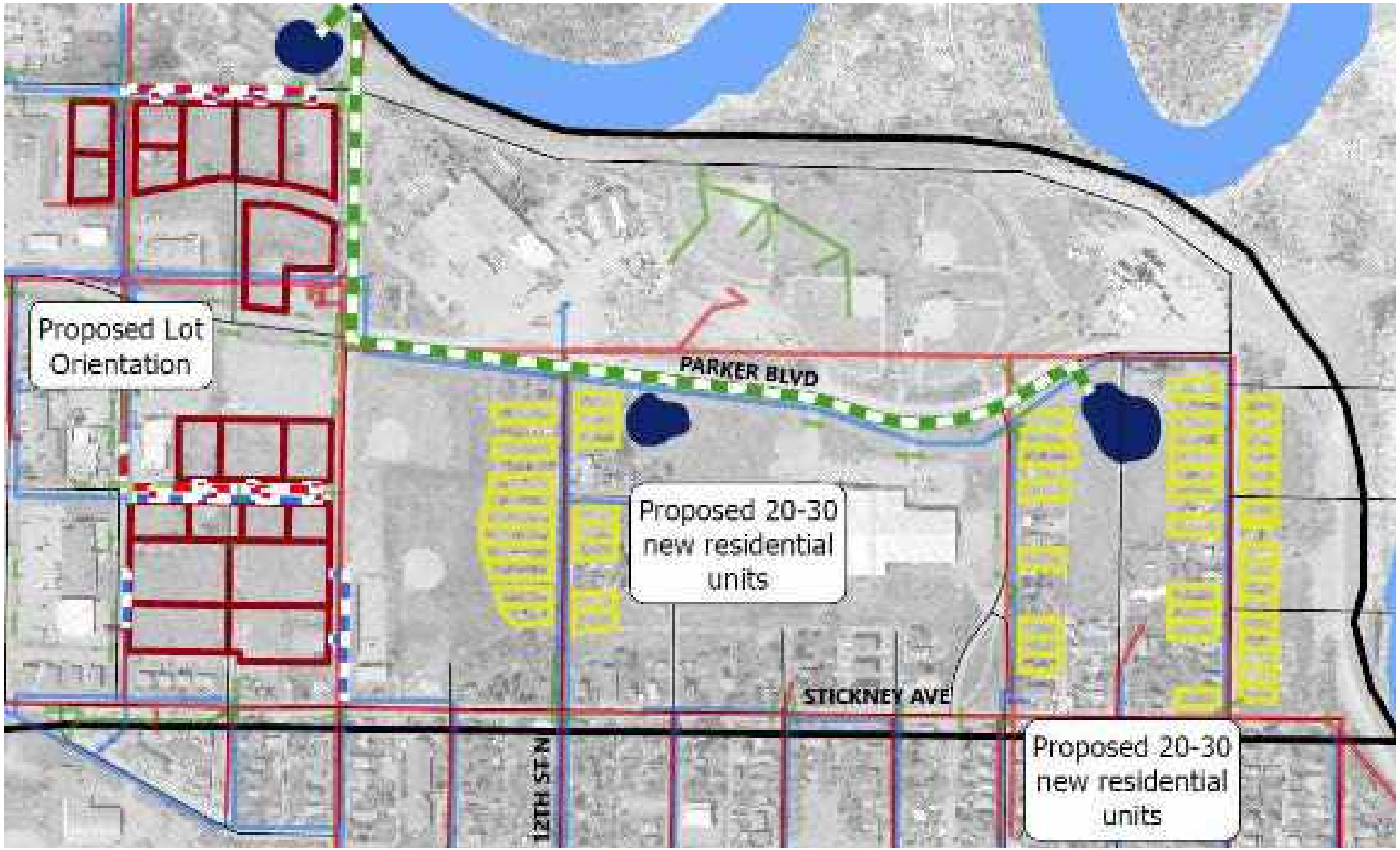
# Transition area 5, 6, 7 and 8



# Transition area 8



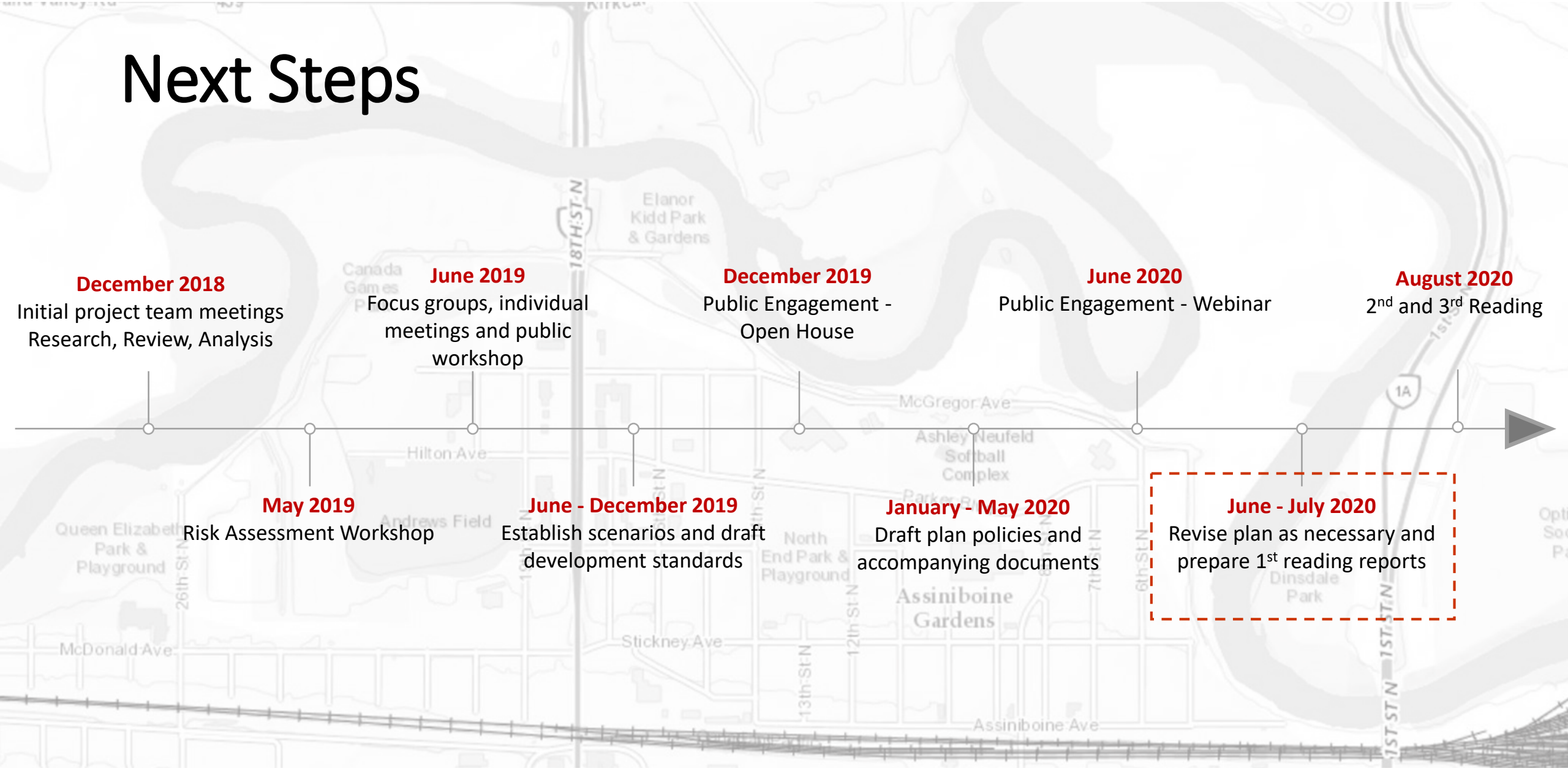
# Transition area 5, 6, 7 and 8



# Questions?

18TH ST N
Elanor Kidd Park & Gardens
Canada Games Park
McGregor Ave
Ashley Neufeld Softball Complex
Hilton Ave
Parker Blvd
Andrews Field
Queen Elizabeth Park & Playground
North End Park & Playground
Assiniboine Gardens
Dinsdale Park
1st St N
1A
26th St N
19th St N
16th St N
14th St N
13th St N
12th St N
8th St N
7th St N
6th St N
McDonald Ave
Stickney Ave
Assiniboine Ave

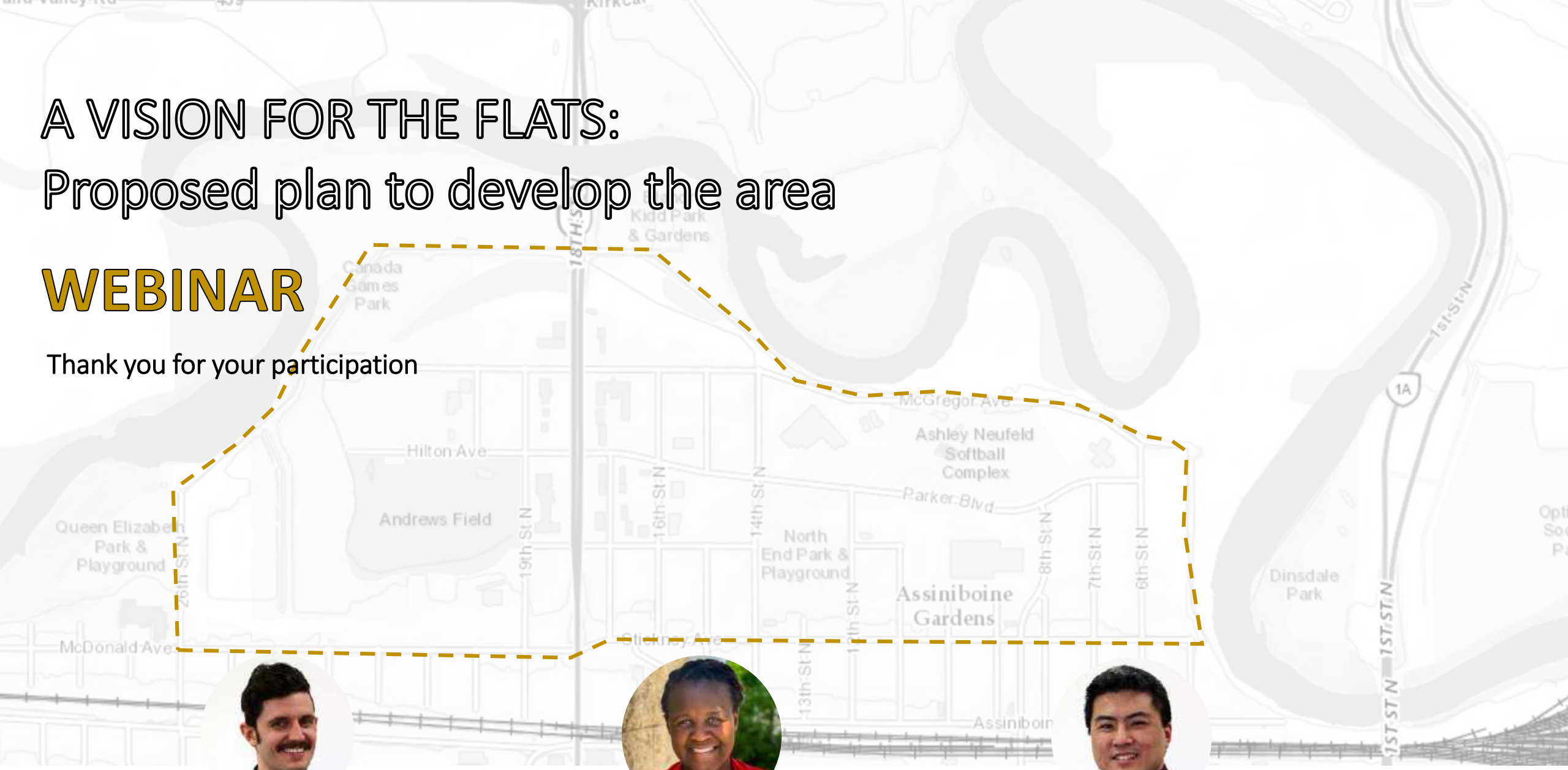
# Next Steps


December 2018
Initial project team meetings
Research, Review, Analysis
May 2019
Risk Assessment Workshop
June 2019
Focus groups, individual meetings and public workshop
June - December 2019
Establish scenarios and draft development standards
December 2019
Public Engagement - Open House
January - May 2020
Draft plan policies and accompanying documents
June 2020
Public Engagement - Webinar
June - July 2020
Revise plan as necessary and prepare 1st reading reports
August 2020
2nd and 3rd Reading

# A VISION FOR THE FLATS:
# Proposed plan to develop the area

## WEBINAR

Thank you for your participation



*Marc Chapin*
*Engineering*

*Sonikile Tembo*
*Planning*

*Andrew Mok*
*Planning*

# Appendix C—Notes and Feedback Forms

# Appendix C-1
# June 6, 2019 Workshop

**DATE:** June 6, 2019

**PERSON/ORGANIZATION:** Workshop

**ATTENDEES:**

| **City Administration** | **Individuals/Members** |
|---|---|
| Andrew Mok | 13 people |
| Ryan Nickel | |
| Marc Chapin | |
| Patrick Pulak | |
| Brian Kayes | |
| Lindsay Hargreaves | |

**QUESTIONS:**

$21 million spent on protective measures, do we need to spend more in the future?
How high do additions have to be built?
Is a house with flood mitigation valued more than than a house without flood mitigation?
Would the City allow for new subdivisions?
Is it less costly to buy out property owners vs. allowing more development?

**COMMENTS:**

**Generally medium-high to high tolerance for additions to existing commercial uses**
Grandfather clause of rexisting businesses
Increased development = increased property tax revenue
More assets = increased loss of business revenue if businesses damaged or destroyed
Insurance companies will try to recover costs from any and all possible sources, including the City
Floodproofing buildings will decrease insurance risk
**Generally medium-high to high tolerance for new buildings on existing commercial sites**
Can ask that a new building be floodproofed
Raising buildings under exisitng rules (10-15') is a challenge
Raise critical building components (e.g. electrical panel) to keep them dry - more flood-resilient
**Generally medium tolerance for new lands for commercial uses**
Strict restrictions re: City investments (e.g. use existing infrastructure, or build new infrastructure only for additional reasons)
Limited commercial lands available in the city, especially for larger sites (e.g. south annexed area)
Raising dikes higher = decreased risk
**Generally high tolerance for additions to existing (low density) residential uses)**
Additions typically don't increase number of residents
Residents living there have already significantly invested in their properties/homes
**Generally medium tolerance for new buildings on existing residential sites**
North diked area already built out
More residents = increased risk
Insurance industry updating data, trend shows that increasing risk tends to increase premiums
Low-density developments less risky than high-density developments
**Generally medium-low tolerance for new lands for residential purposes**
Some streets are already serviced
Some emergencies require short-notice evacuation, poor access alternatives for the south diked area
Low demand to buy existing homes in south dikes area
Mixed-use buildings to mitigate risk (residential upstairs only)

Current people may accept risk, but what about future generations?
Existing regulations may prevent development

# Appendix C-2
# December 12, 2019 Open House

**DATE:** December 12, 2019

**PERSON/ORGANIZATION:** Open House

**ATTENDEES:**

| **City Administration** | **Individuals/Members** |
|---|---|
| Andrew Mok | 50+ people |
| Ryan Nickel | |
| Sonikile Tembo | |

**QUESTIONS:**

Insurability of Transition Area 1 properties?

**COMMENTS:**

100-block of 6th and 7th Streets North also includes the 200-series
Address railway setback for Assiniboine Avenue sites
Consider allowing increased density along Stickney Avenue
Commercial sites east of 17th Street North need more adjacent development to bring back visibility of existing businesses lost after closure of 8th Street Bridge
Consider allowing mixed use along the west side of 19th Street North, not just only commercial
Existing access challenges to cross Parker Boulevard at 8th Street North (between two trail segments)
Clarify what is the flood design elevation

City of BRANDON

BRANDON Design Studio

How did you hear about this program?

- ☐ Newspaper
- ☐ Radio
- ☐ Facebook
- ☐ Twitter
- ☐ City of Brandon website
- ☐ Public Notice
- ☐ Other: TALK @ RYAN
- ☐ Invite was mailed to me

What did you like about this event?

THE Display boards -

What suggestions do you have to improve upon this event?

$ FAVOURABLE

General comments about this event:

GOOD COMMUNICATION & INFO.

Do you have any suggestions or topics of interest for future events?

YES. WILL SEND IT TO YOU VIA email ONCE I STUDY THE EXISTING INFO & PLANS.

City of BRANDON

BRANDON Design Studio

How did you hear about this program?

- ☐ Newspaper
- ☐ Radio
- ☐ Facebook
- ☐ Twitter
- ☐ City of Brandon website
- ☐ Public Notice
- ☐ Other: _____
- ☑ Invite was mailed to me

What did you like about this event?

Clearly charted.

What suggestions do you have regarding the information shared?

General comments:

Still need access to replace 8th St. bridge. Discriminates against & ltd limits access to residents between 18th St N and 5th St N.

Do you have any suggestions or topics of interest for future public events?