ALEXANDER STREET (2nd to 4th AVENUE) LOCAL IMPROVEMENT PROJECT

PRE-DESIGN

Welcome!

The City of Whitehorse has initiated a process to reconstruct the portion of Alexander Street located between 2nd and 4th Avenues, along with the portion of 3rd Avenue between Alexander and Black Streets. This process is referred to as the **Alexander Street Local Improvement (LI) Project**.

Prior to hiring a consultant to complete a "Detailed Design" for this area, the City is hosting today's public meeting (August 9th, 2017) to receive feedback from property owners and residents on a "Preliminary Design" (Pre-design).

The displays from this meeting and project information are available online at:

whitehorse.ca/liprojects

LI Project Area

Whitehorse
THE WILDERNESS CITY

ALEXANDER ST LI PROJECT: PRE-DESIGN

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BACKGROUND

Background & Rationale

The underground infrastructure in various Downtown areas is approaching the end of its service life. The City is staging the reconstruction of this infrastructure through Local Improvement (LI) Projects so that it does not require replacing all at once. The City is proceeding with the Alexander St LI Project at this time in order to:

- **Replace aging water and sewer mains:**
  The pipes that run underneath Alexander St date back to the 1950s and are constructed of a material that typically has a functional life of 40 to 65 years. To optimize life cycle costs, it would be best to renew this infrastructure before disruptive and costly repairs are required.

- **Replace bleeding water services:**
  Many buildings periodically "bleed" (release) water during cold months to prevent services from freezing. Bleeding wastes a vast amount of treated potable water and adds it into the sewage system, increasing costs for treatment and pumping. The City is seeking to replace bleeders with recirculating services to eliminate this waste.

- **Improve service capacity:**
  The 150 mm diameter water mains on Alexander St need to be up-sized to ensure that flows to the properties are adequate for current and future demands, and to increase available flow capacity at hydrants.

- **Replace deteriorating road surface:**
  The paved road surface of Alexander St is deteriorating, drainage is poor, and potholes are a common occurrence. The roadway has reached the end of its useful life, meaning that it is no longer economical to perform regular maintenance and repair, and it instead requires a complete rehabilitation.

- **Improve pedestrian infrastructure:**
  Alexander St is a busy area that is considerably lacking in pedestrian infrastructure. The City is striving to create a more accessible Downtown through the development of barrier free sidewalks that provide comfort and safety for pedestrians and people with mobility aid devices.

ALEXANDER ST LI PROJECT: PRE-DESIGN

PROCESS

Summer 2017

Public Consultation

A Pre-design (conceptual) document is being developed by the City's Engineering Services Department. The design is being informed through consultation with property owners that includes an online survey and a public meeting.

Summer

Admin Report & Bylaw to City Council

Engineering Services will present the Pre-design along with a report to City Council that summarizes preliminary input, support, and/or opposition received on the project. City Council will decide whether or not to introduce a Bylaw that will launch a property owner vote.

Fall

Property Owner Vote

If City Council proceeds with the Bylaw, a ballot will be mailed to the owners of affected properties (one per property). Owners will have 30 days (Sundays and holidays excluded) to return the ballot. For the project to be canceled, at least 50% of ballots plus one must be returned stating opposition.

Fall 2017 / Winter 2018

Detailed Design & Construction $$

If the result of the vote is supportive of the project, a consultant will be hired to complete a Detailed Design Report. This report will require further input from property owners. City Council will make a decision on the allocation of funds for construction.

Spring +

Construction

If construction funds are approved by City Council, the earliest potential start date for construction is spring 2018. Construction will likely take one year to complete.

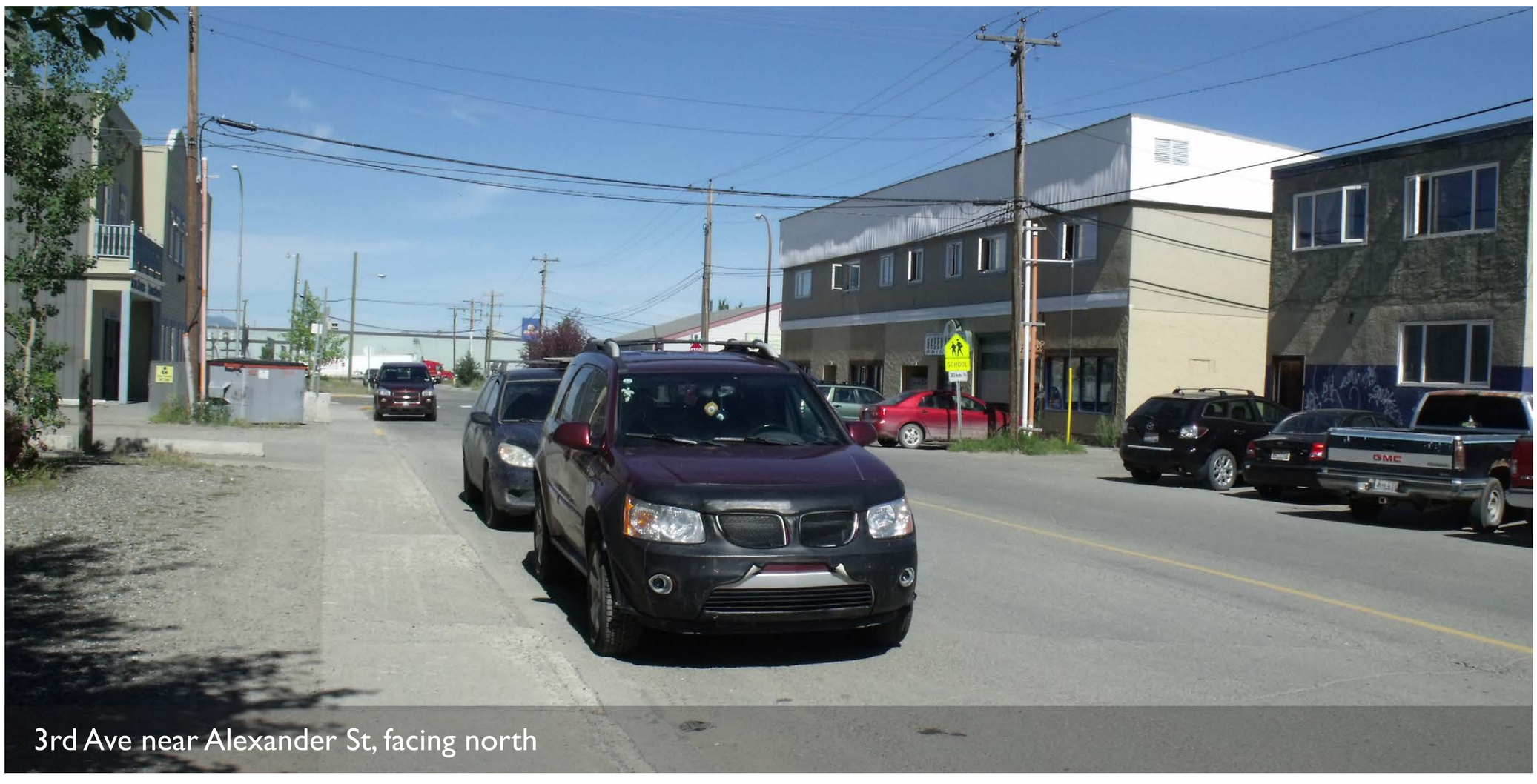
ALEXANDER ST LI PROJECT: PRE-DESIGN

STREET PROFILE

Current Street Profile

Alexander St is a local downtown street that features mixed-use zoning (commercial/residential) between 2nd and 4th Ave. The public road right-of-way in this area is 24.4 m in width. Surface infrastructure includes: a paved asphalt roadway; gravel boulevards; parking on boulevards; and overhead lighting on wooden utility poles. Some residents access parking at the rear of properties using laneways that run parallel to Alexander St on both sides. Electrical utilities are located in these laneways.

Alexander St at 4th Ave, facing east



3rd Ave near Alexander St, facing north

STREET PROFILE

Current Surface Conditions

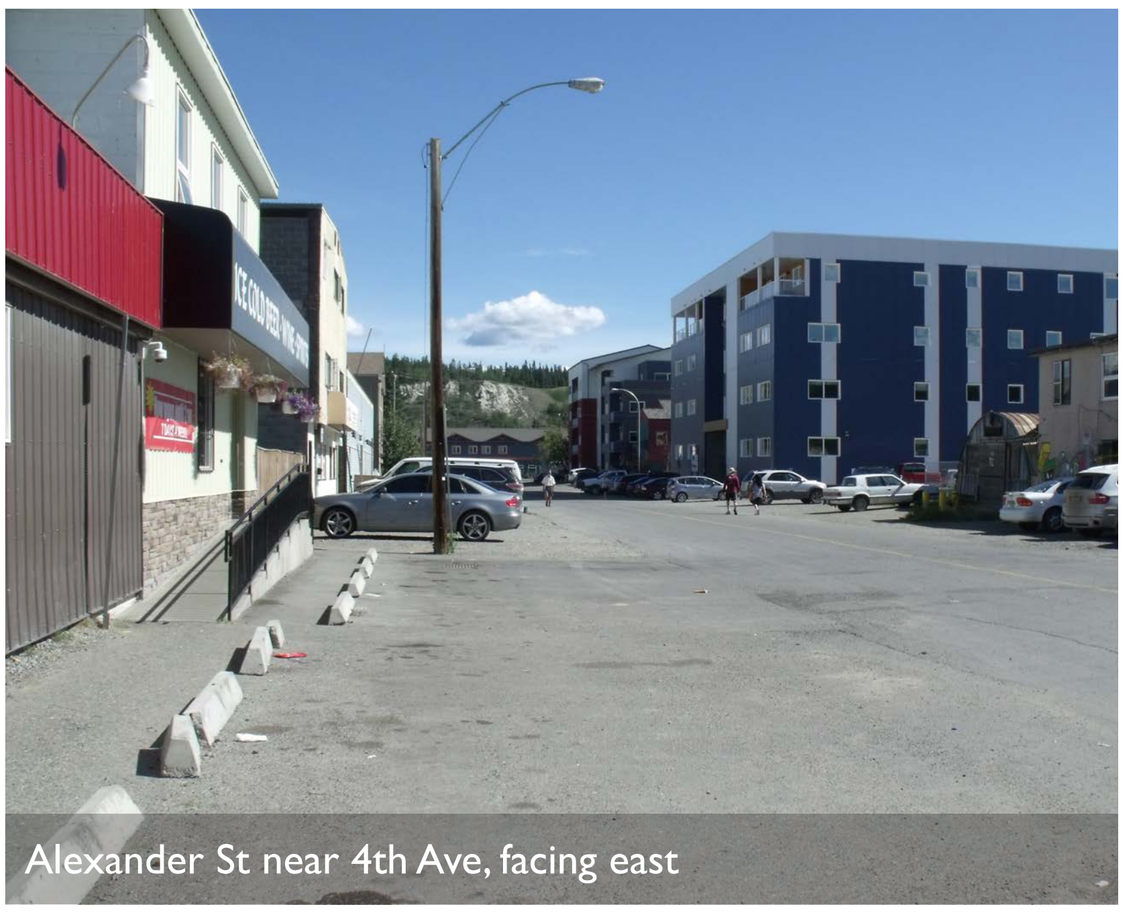
The current surface conditions of Alexander St are considered to be very poor. Issues include:

- **Failing asphalt:**
  The road surface is crumbling in several sections and ponding due to drainage problems contributes to potholes that require annual maintenance. Some potholes measure 4" deep, creating a hazard for all circulation modes. Breaks in the asphalt allow water to seep into base layers, which degrades their performance.
- **Lack of public pedestrian infrastructure:**
  The existing boardwalks have been developed by private owners as a practical and well-used interim solution until the City can proceed with road reconstruction. The goal is to upgrade these to sidewalks that meet municipal infrastructure standards.
- **Discontinuous pedestrian infrastructure:**
  The public sidewalk that curves from 3rd Ave onto Alexander St ends abruptly, and pedestrians then travel into the roadway. The City's preferred service level in commercial areas is sidewalks on both sides of the street.
- **Lack of accessible design features:**
  The grade changes and loose gravel on the road surface can be difficult to manage by people who use mobility aid devices such as walkers, wheelchairs, motorized chairs, and strollers.

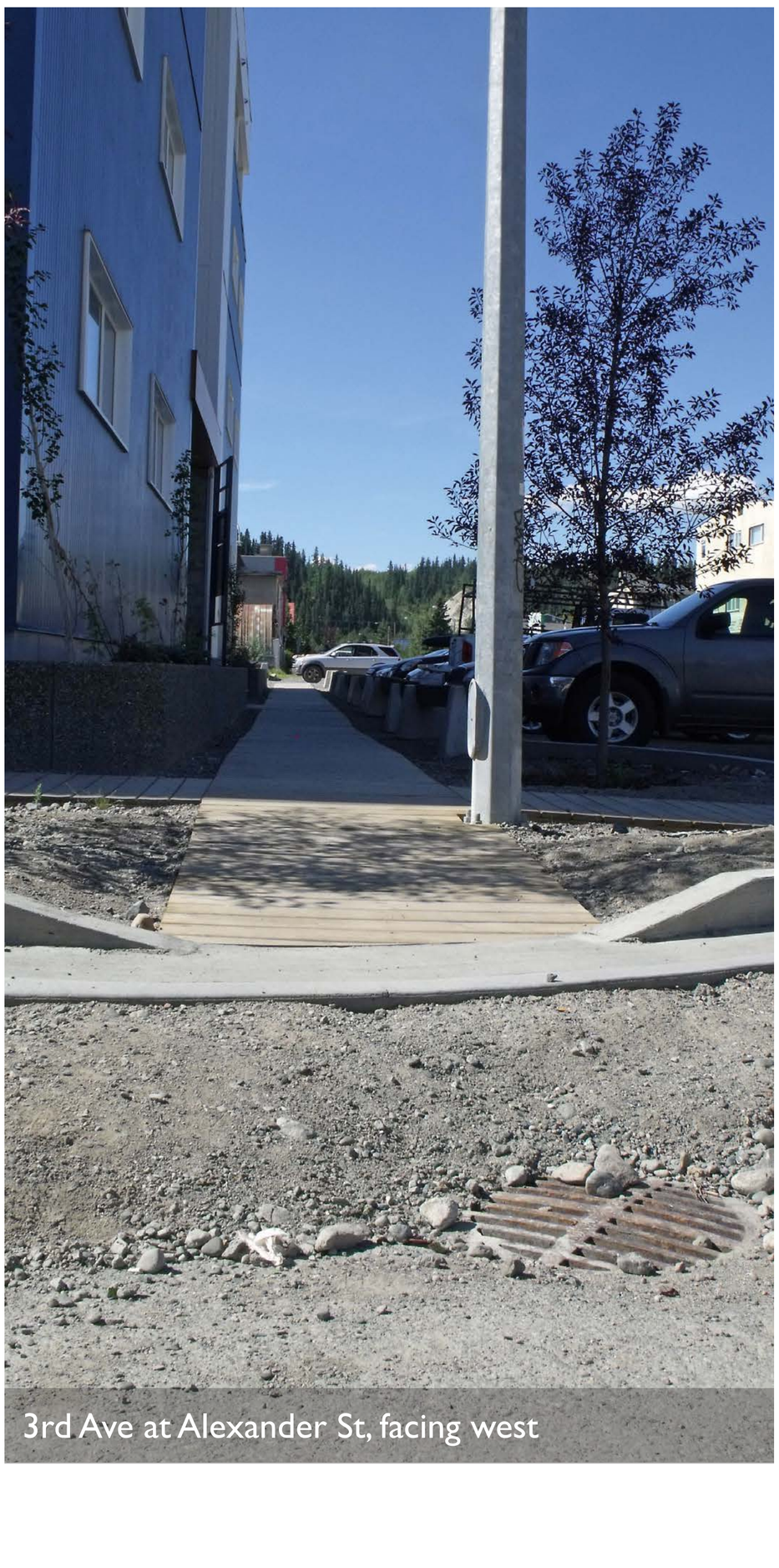
Alexander St near 3rd Ave, facing east

STREET PROFILE

Current Surface Conditions Continued...



Alexander St near 4th Ave, facing east



3rd Ave at Alexander St, facing west

Intersection of 3rd Ave and Alexander St

STREET PROFILE

Current Surface Conditions Continued...

Alexander St near 4th Ave, facing east

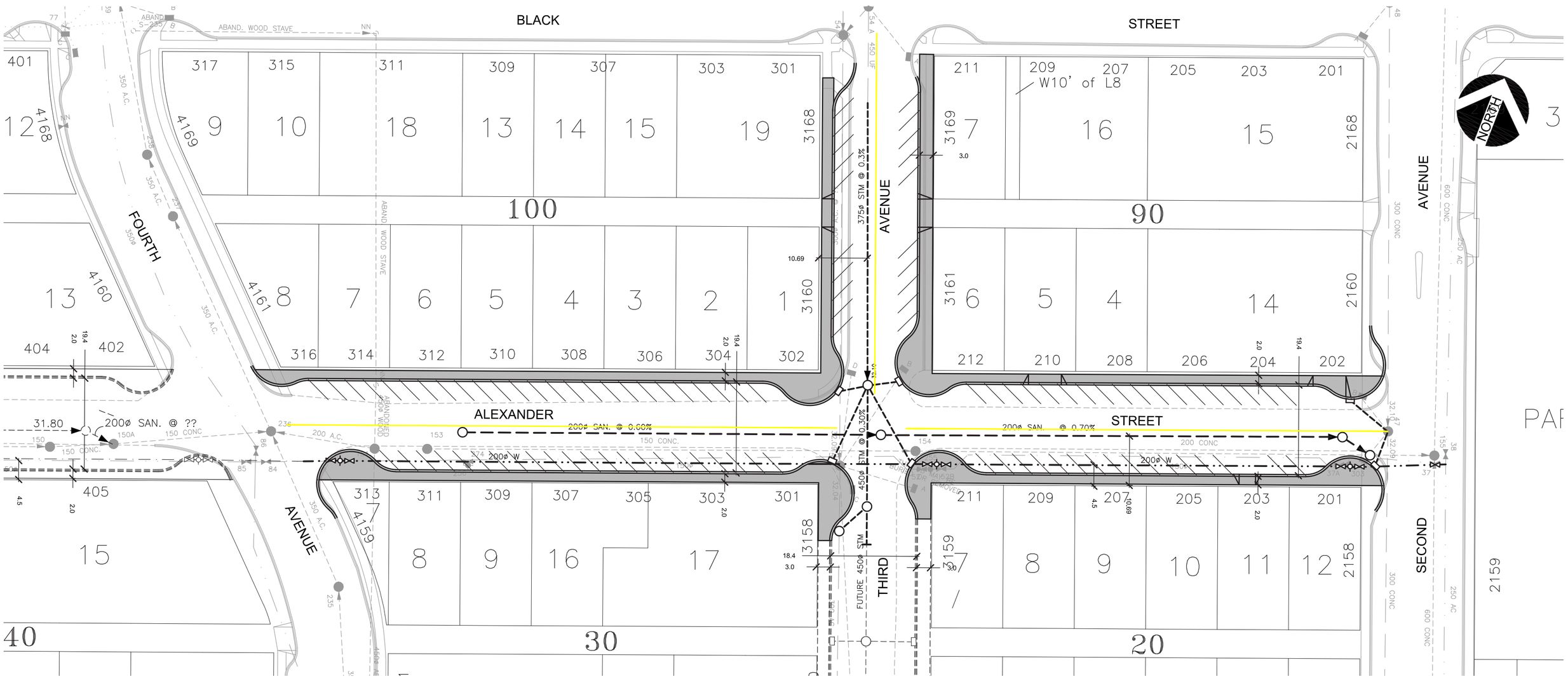
Alexander St near 3rd Ave, facing west

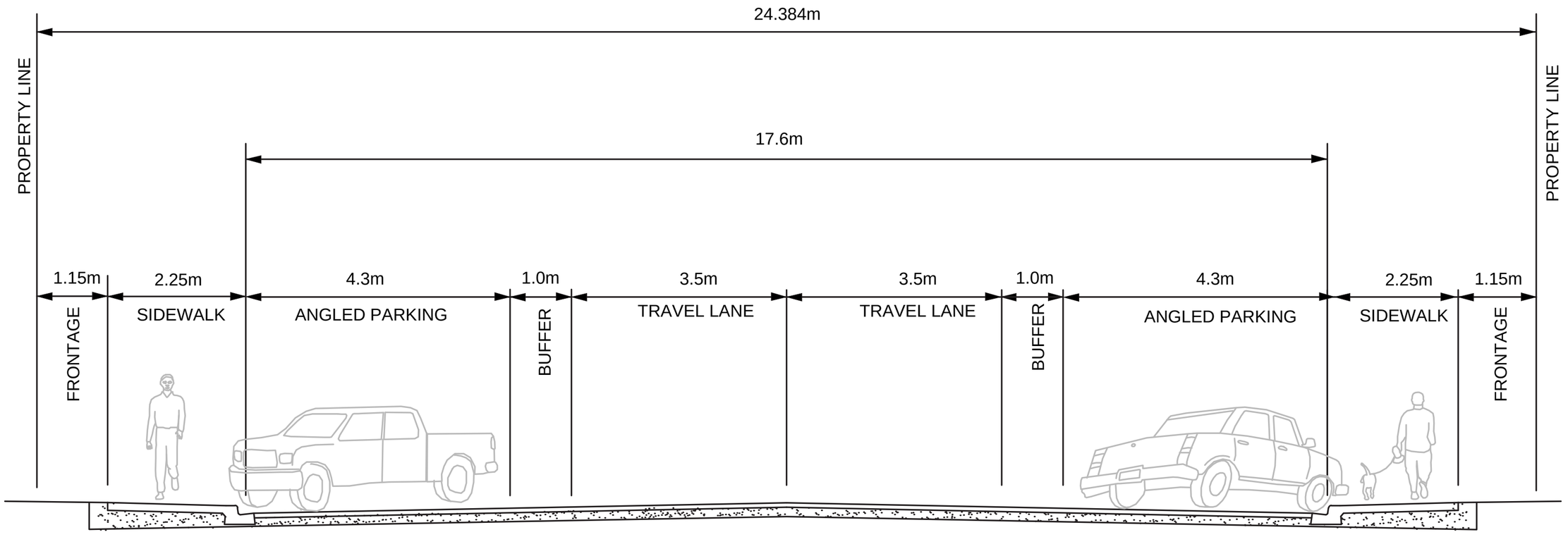
ALEXANDER ST LI PROJECT: PRE-DESIGN

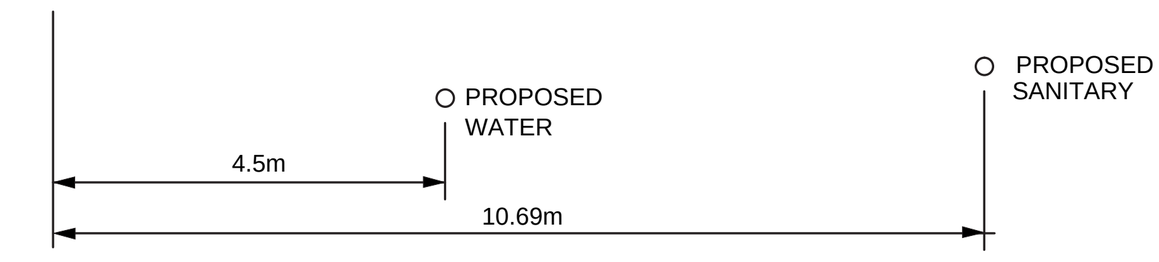
STREET PROFILE

Proposed Design

The City is proposing to reconstruct the LI Project sections of Alexander St and 3rd Ave to a profile that includes sidewalks on both sides, barrier curbs (with cuts at vehicle entries and intersections), gutters, angled parking, and intersection bulb-outs with landscaping.



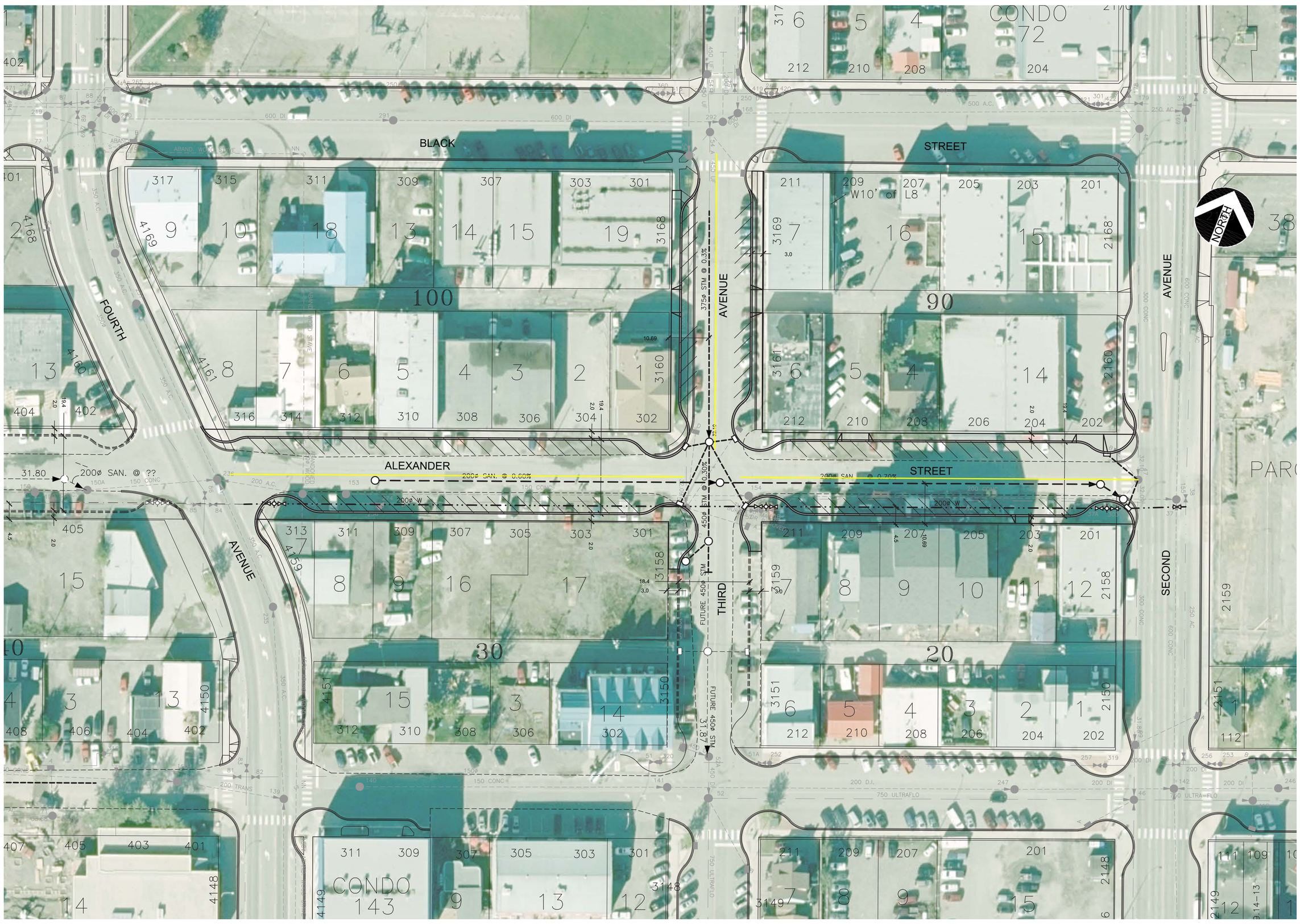




ALEXANDER ST LI PROJECT: PRE-DESIGN

STREET PROFILE

Proposed Design Continued...



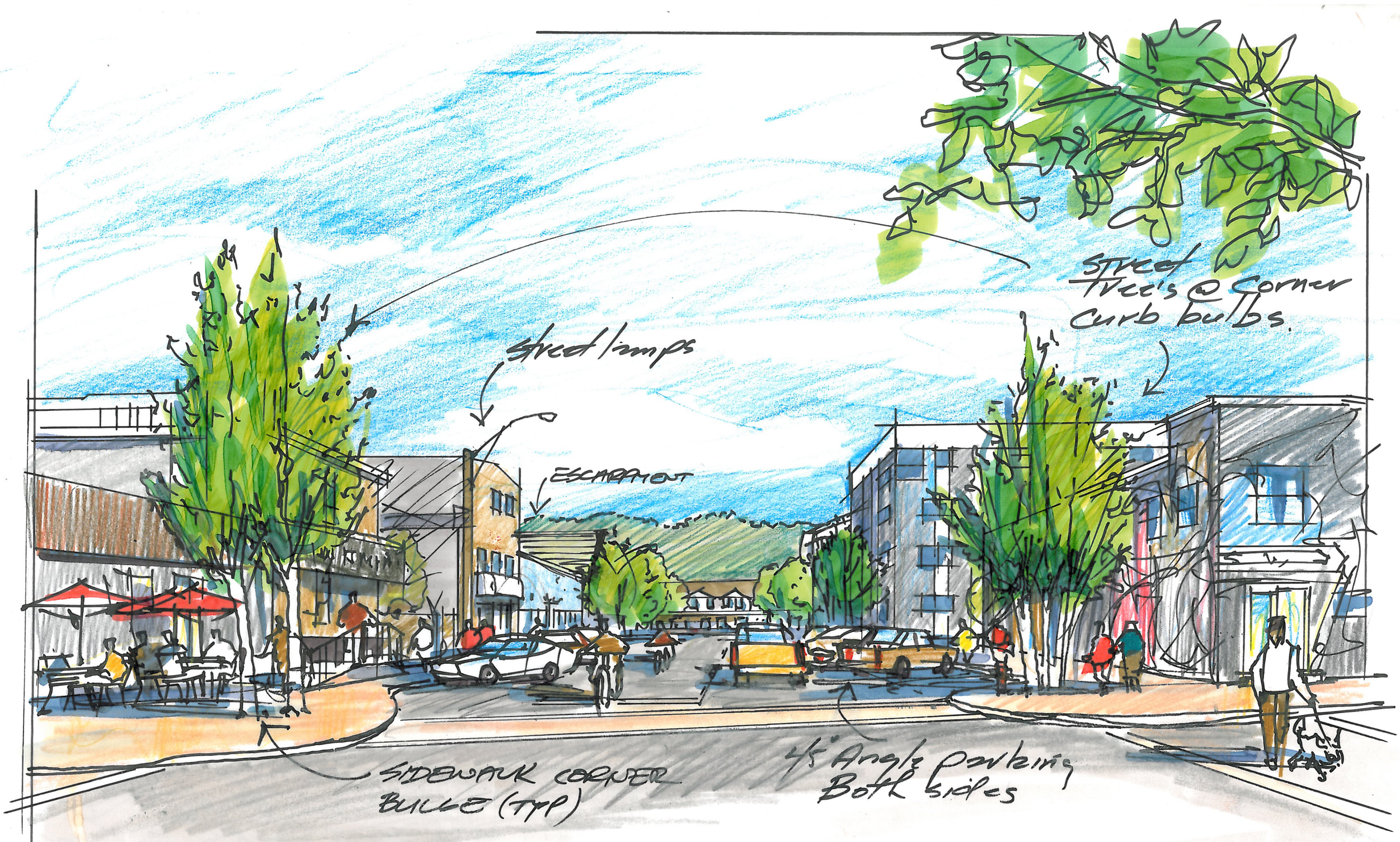
Strickland St at 3rd Ave, facing east

The finished work will look similar to Strickland St between 2nd and 3rd Ave, but with a slightly narrower roadway and wider boulevards.

ALEXANDER ST LI PROJECT: PRE-DESIGN

STREET PROFILE

Artist's Rendering of Improvements



Alexander St at 4th Ave, facing east

ALEXANDER ST LI PROJECT: PRE-DESIGN

LANDSCAPING

Improving the Streetscape

The City would like to improve the streetscape of the project area by adding landscaping at the bulb-outs of intersections. The goal is to introduce robust plantings that will be attractive and low maintenance. Maintaining sightlines through vegetation will be important to ensure pedestrian, cyclist, and motorist safety.

Potential Tree (and tree-like) Plantings

Madame Lemoine Lilac

Princess Kay Plum Tree

Northwest Poplar Tree

LANDSCAPING

Potential Shrub Plantings

Snow Pavement Rose

Amber Jubilee Ninebark

Ash Leaf False Spirea

Little Lamb Hydrangea

Abbotswood Potentilla

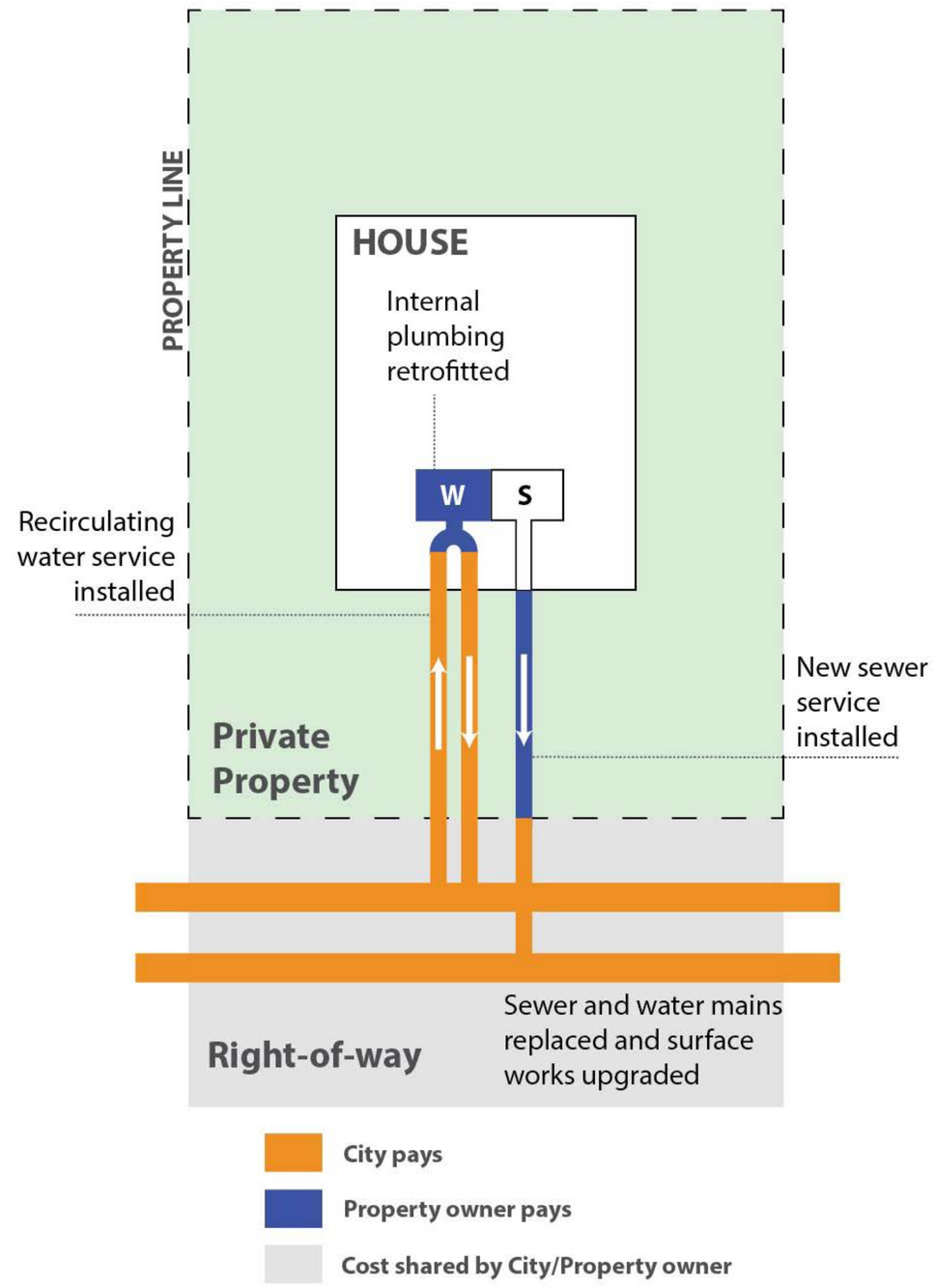
LI CHARGE

Cost Sharing (City & Property Owners)

LI Projects are cost shared between the City and property owners, with the City covering the majority of project expenses, typically with financial assistance from external funding sources.

Underground Works

The City will pay for all underground works in the right-of-way and for a new recirculating water service on each property all the way to the front of the building/residence. The property owner will be responsible for purchasing a recirculating pump and for any related indoor plumbing work (estimated at $2,000 or more, depending on building size and design). Property owners will have the option to replace their sewer service while the reconstruction project is underway (estimated at $100/metre). For reference, the cost to install a new commercial water service independent of the LI Project is estimated at $20,000 to $40,000.



Surface Works

The cost of surface works (e.g. roadway, curbs, sidewalks, and landscaping) will be shared between the City and property owners, as described in the City's LI Policy.

The LI Charge is applied to the length of each property's frontage on a per metre basis. The rate is set annually and is standardized (i.e. will not change as a result of the design options selected for the Pre-design).

Government owners pay the full frontage rate, commercial property owners pay 2/3 of the rate, and residential and non-profit property owners pay 1/3 of the rate. For properties with mixed use zoning (commercial/residential), the commercial rate will only apply if a commercial use is currently in operation.

The 2017 LI Charge rates are as follows:

Government: $1,900/m
Commercial: $1,266/m
Residential and non-profit: $633/m

LI CHARGE

Property Owner Charges

The City has calculated the LI Charge that would apply to each affected property if the Alexander St LI Project proceeds to construction. A sum of approximately $475,500 will be collected from property owners, which is roughly 19% of the total project cost (approximately $2.5 million):

Civic Address	Assessed Use	Frontage (m)	Charge ($)
2158 2ND AVENUE	CMS	15.24	19,304.00
2160 2ND AVENUE	CMS	45.72	57,912.00
203 ALEXANDER STREET	CMS	15.24	19,304.00
207 ALEXANDER STREET	RSM	45.72	86,868.00
208 ALEXANDER STREET	CMS	15.24	19,304.00
210 ALEXANDER STREET	CMS	15.24	19,304.00
3159 3RD AVENUE	CMS	15.24	9,652.00
3160 3RD AVENUE	CMS	15.24	19,304.00
3161 3RD AVENUE	CMS	15.24	19,304.00
303 ALEXANDER STREET	RS1	3.41	2,159.67
#402 303 ALEXANDER STREET	RS1	3.41	2,159.67
#403 303 ALEXANDER STREET	RS1	3.41	2,159.67
#404 303 ALEXANDER STREET	RS1	3.41	2,159.67
#405 303 ALEXANDER STREET	RS1	3.41	2,159.67
#406 303 ALEXANDER STREET	RS1	3.41	2,159.67
#100 303 ALEXANDER STREET	CMS	20.46	25,916.00
306 ALEXANDER STREET	CMS	45.72	28,956.00
307 ALEXANDER STREET	CMS	20.00	25,333.33
310 ALEXANDER STREET	CMS	15.24	19,304.00
312 ALEXANDER STREET	RSM	15.24	9,652.00
4159 4TH AVENUE	CMS	35.49	44,954.00
4161 4TH AVENUE	CMS	30.18	38,228.00

CONSTRUCTION

What to Expect

The project's construction phase is anticipated to take one year to complete. Disruptions will be similar to those that occurred during the reconstruction of Black St, Hanson St, and Wheeler St. Occupants will access properties via the rear laneways during construction. Arrangements will be coordinated with owners for access to buildings without rear entries.

Black St reconstruction

Wheeler St reconstruction

Hanson St installation of recirculating water service and new sewer line