

## **8.0 Landscape Design**

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### **8.1 INTRODUCTION**

The functional study for the widening of Gaetz Avenue has provided an opportunity to review the landscape development along the corridor. Gaetz Avenue is a significant part of the road network for the City of Red Deer, serving as a transportation nexus for commerce. It is deserving of a special landscape development plan that recognizes its significance and defines it as a unique feature of Red Deer. A consistent landscape design treatment of this corridor reinforces its importance to the City. All planting schemes consider visibility to business frontages and pylon signs. The landscaping concept is provided in Figures 8.1 through 8.8.

### **8.2 EXISTING TREES**

Of the over 520 trees inventoried for this portion of the study, it is estimated that over half will be required to be removed. Tree removal is necessary for two primary reasons: first, trees currently exist within the area that will be required for widening Gaetz Avenue, and second any trees that exist in the area where new road sideslopes will be constructed may be removed as it is detrimental to the health of the tree. The north portion of Gaetz Avenue will lose about 180 trees. The south portion will lose about 90 trees. A majority of the trees lost are mature poplars and large spruce. Some intermediate aged elm and ash will also be removed.

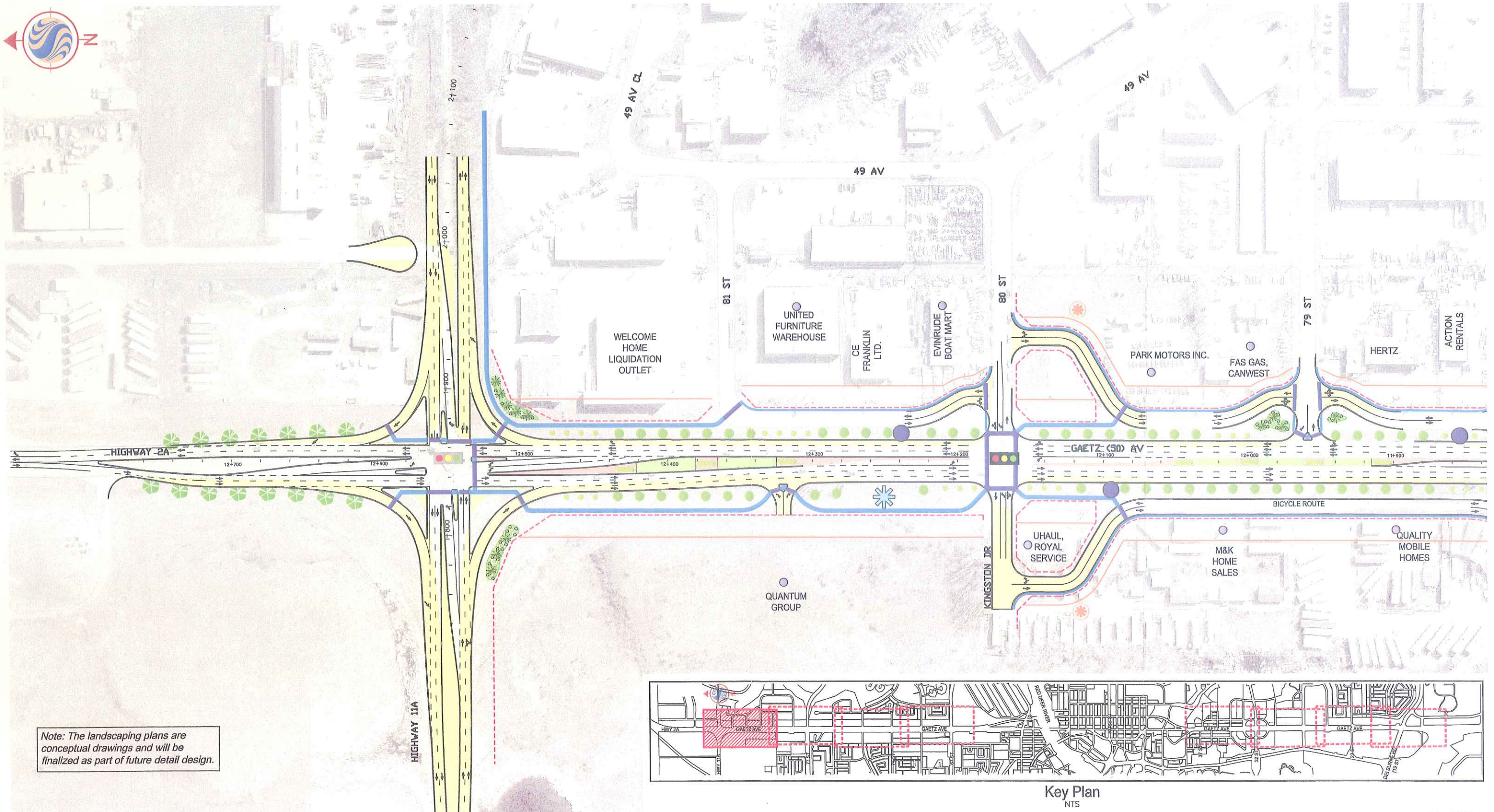
### **8.3 CONCEPTUAL DESIGN**

The conceptual design for Gaetz Avenue is primarily based on the establishment of tree planting patterns that reflect the scale of adjacent development and the roadway. A mixture of tree species is proposed to provide some variety as well as to avoid horticultural problems associated with mono-culture planting. Variation in tree heights and the distance between trees provides adequate sight lines to businesses and clear sight triangles at intersections. The spacing between trees will not be increased above the existing conditions and in many instances the replacement trees will be more appropriated in providing visibility from the roadway to business.

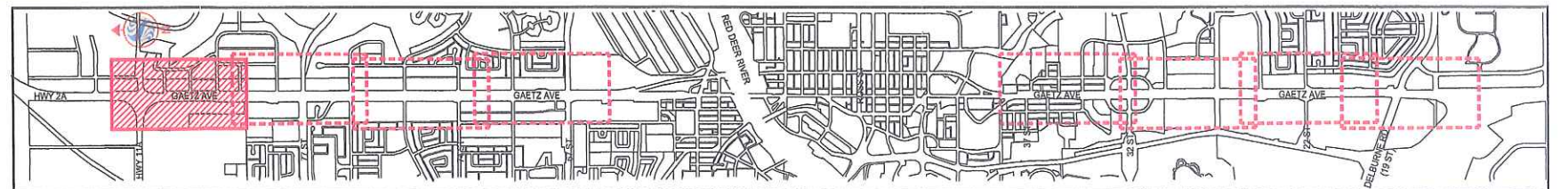
It will take in excess of 20 years before the tree canopies are fully filled out. The landscape plan drawings illustrates what the tree canopy size will be at approximately 10 to 15 years from the time of planting. Coniferous trees are not part of the planting program between blocks as they do obscure visibility to business signage and are also susceptible to poor health from winter road salt.

In the boulevard area ornamental trees are spaced at 10 meters apart and are used primarily closer to intersections to reduce conflicts with traffic signals. Between the blocks large canopy trees such as American Elm, Brandon Elm, and Patmore Green Ash are spaced at 15 meters apart. In the entrance areas to the city where there is larger-scale development, very large canopy trees (poplars) are used, at a spacing of 20 meters. Boulevard planting is restricted to





Note: The landscaping plans are conceptual drawings and will be finalized as part of future detail design.



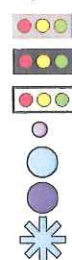
Key Plan  
NTS

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2005-05-06 04:36PM By: eanderson

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1128 70826



Legend:



- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop
- Proposed Entrance Sign

- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line



The Small 24m Bulb Option May Be Utilized. Larger Bulbs Have Been Shown To Allow The Opportunity To Enhance The Development of Land Parcels.

- New Construction
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Coloured Concrete Medians
- Grassed Medians



Proposed Poplar Tree



Proposed Spruce Tree



Proposed Ornamental Tree



Proposed Canopy Tree



Proposed Planting Bed



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GAETZ AVENUE REDEVELOPMENT  
STUDY

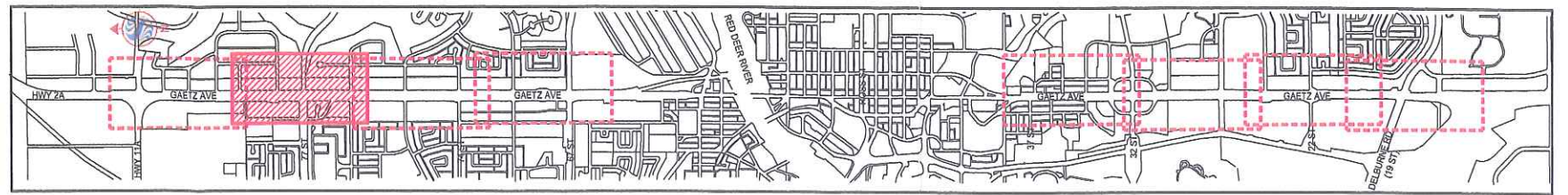
Figure No.

8.1

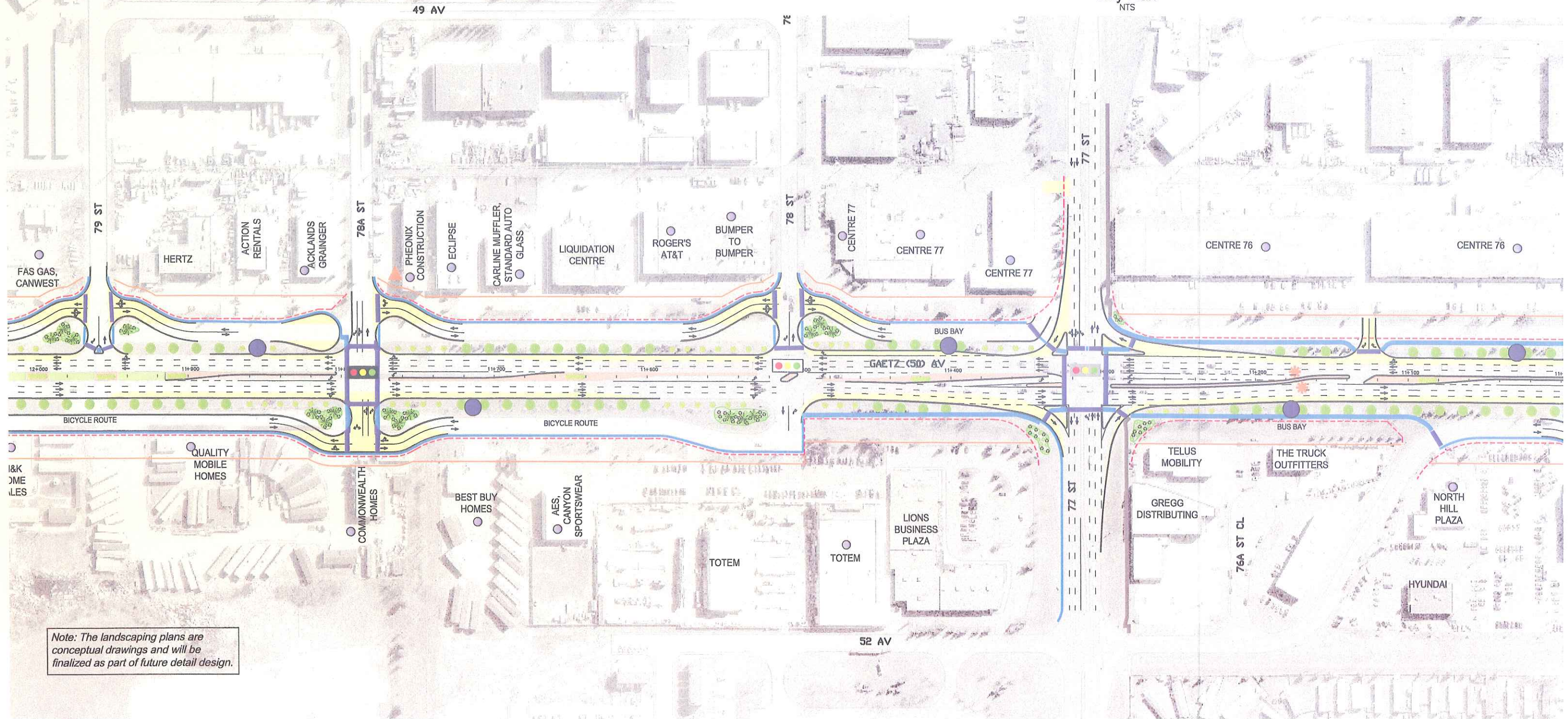
Title

Gaetz Avenue  
Landscape Concept  
79 Street To Highway 11A





Key Plan  
NTS



Note: The landscaping plans are conceptual drawings and will be finalized as part of future detail design.

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Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop

- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line
- Non-Standard Deceleration Taper To Accomodate Slotted Left Turn (Slotted Left Turn May Be Required To Be Removed In The Future)

- New Construction
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Coloured Concrete Medians
- Grassed Medians

- Proposed Poplar Tree
- Proposed Spruce Tree
- Proposed Ornamental Tree
- Proposed Canopy Tree
- Proposed Planting Bed

Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future.



Client/Project

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STUDY

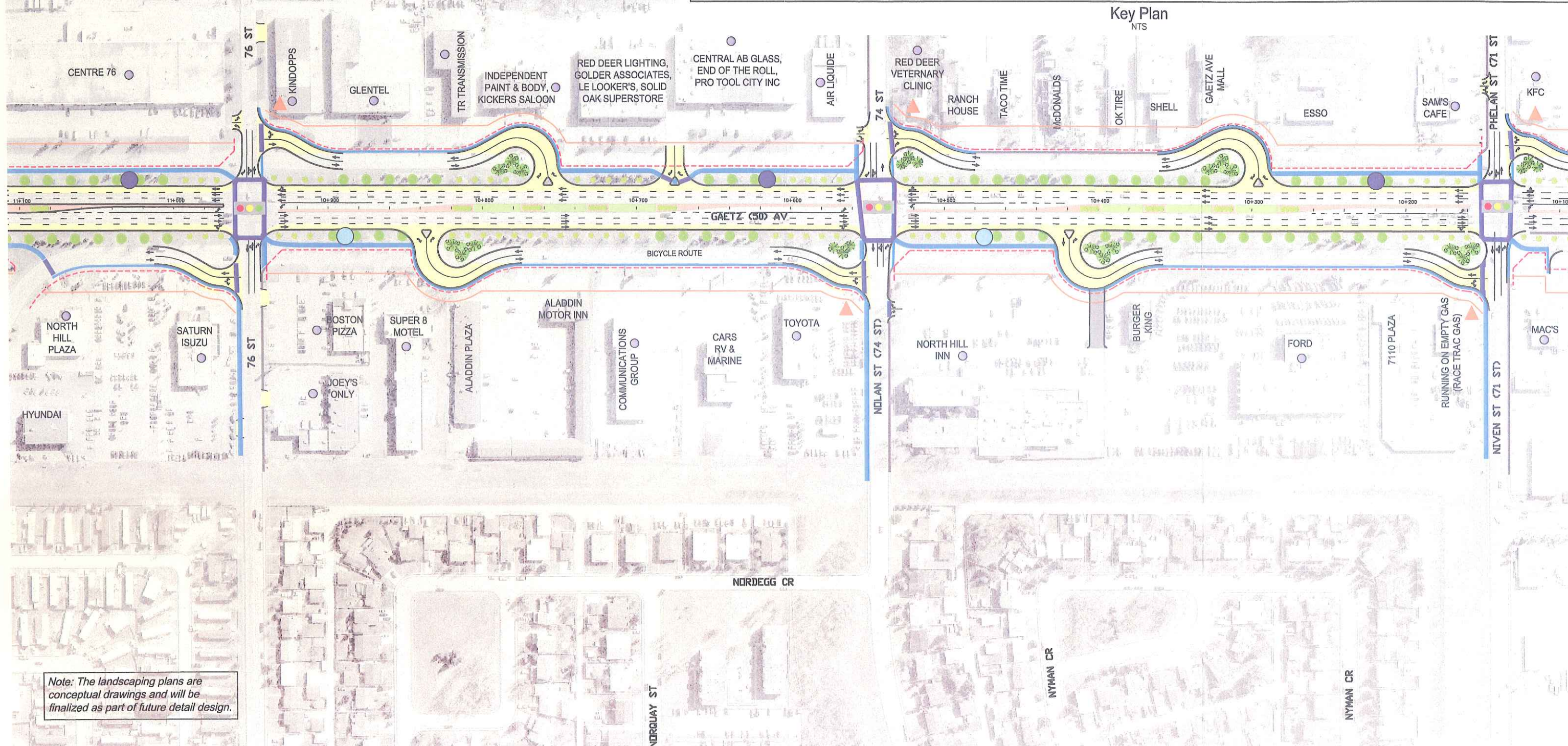
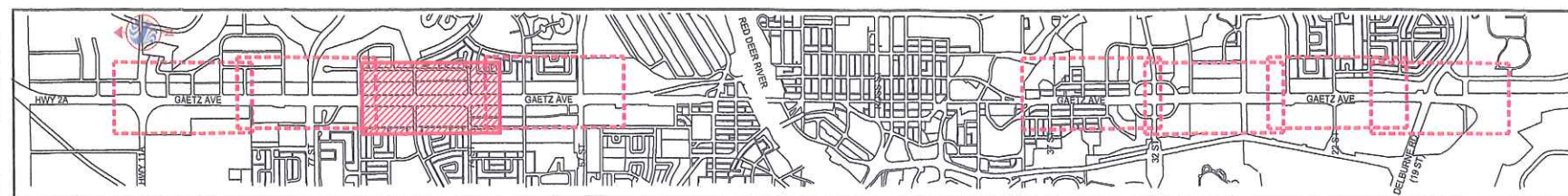
Figure No.

8.2

Title

Gaetz Avenue  
Landscape Concept  
76 Street to 79 Street





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- Legend:**
- Existing Traffic Signals
  - Future Traffic Signals
  - Removal of Traffic Signals
  - Participating Stakeholders
  - Existing Bus Stop
  - Potential New Bus Stop
  - New 3.0m Bike Path / Walkway
  - New 1.5m Walkway
  - Crosswalk
  - Existing 1.5m Walkway
  - Existing 3.0m Bike Path
  - Proposed Property Line / Roadway Required
  - Proposed 15m/6m Setback Line

- New Construction
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Coloured Concrete Medians
- Grassed Medians

- Proposed Poplar Tree
- Proposed Spruce Tree
- Proposed Ornamental Tree
- Proposed Canopy Tree
- Proposed Planting Bed

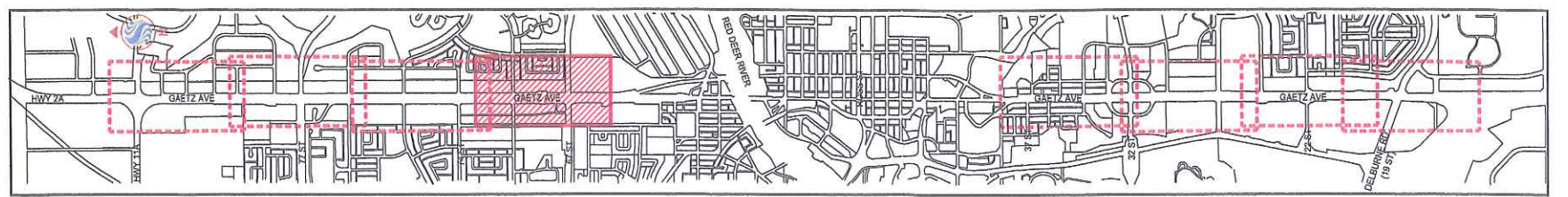
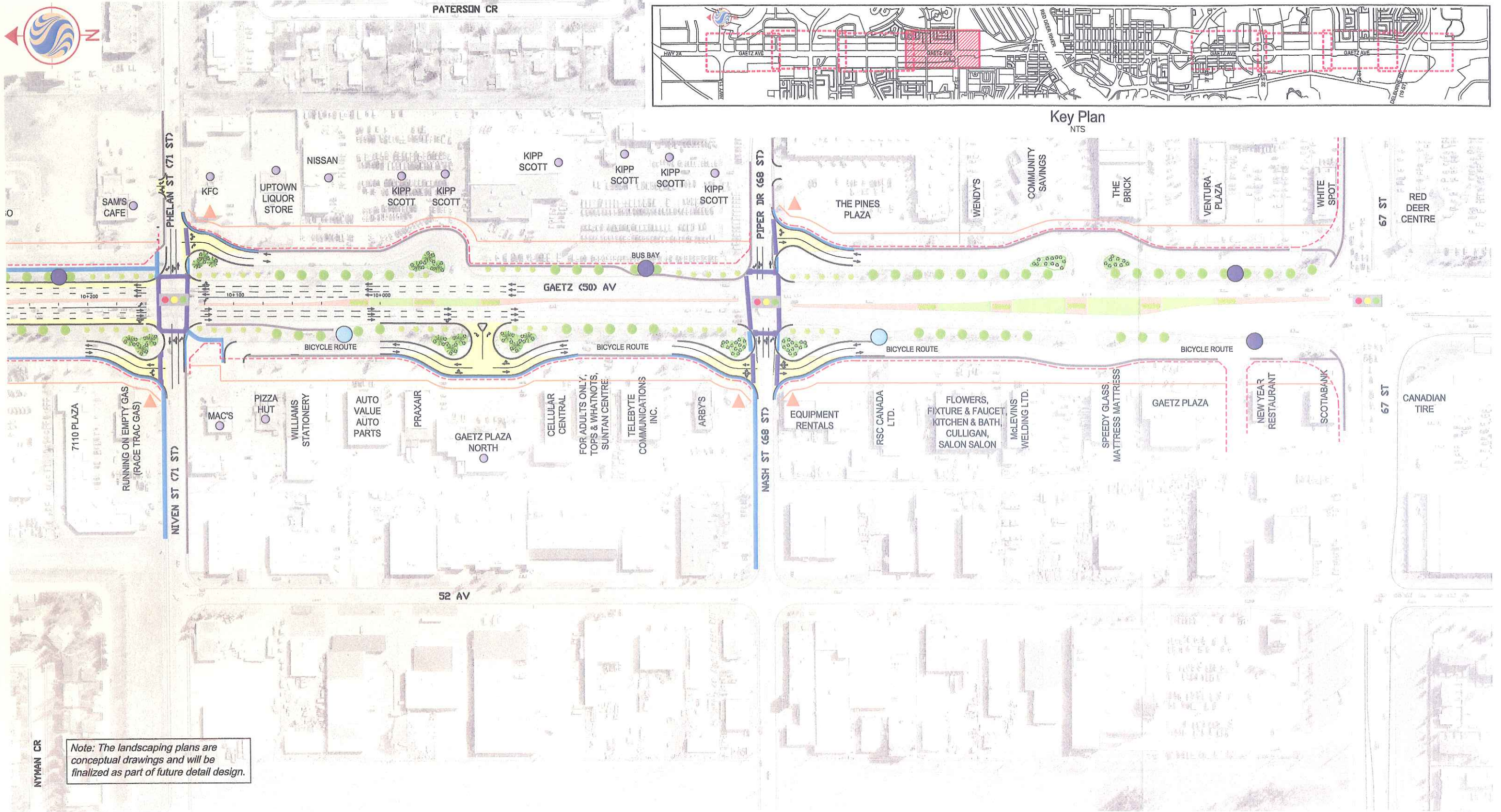
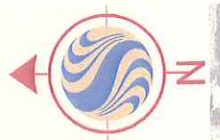
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Figure No.  
8.3  
Title  
Gaetz Avenue Landscape Concept  
71 Street to 76 Street

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Key Plan  
NTS

Note: The landscaping plans are conceptual drawings and will be finalized as part of future detail design.

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Stantec

Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop
- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line

- New Construction
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Coloured Concrete Medians
- Grassed Medians



Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future.

- Proposed Poplar Tree
- Proposed Spruce Tree
- Proposed Ornamental Tree
- Proposed Canopy Tree
- Proposed Planting Bed



Client/Project

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STUDY

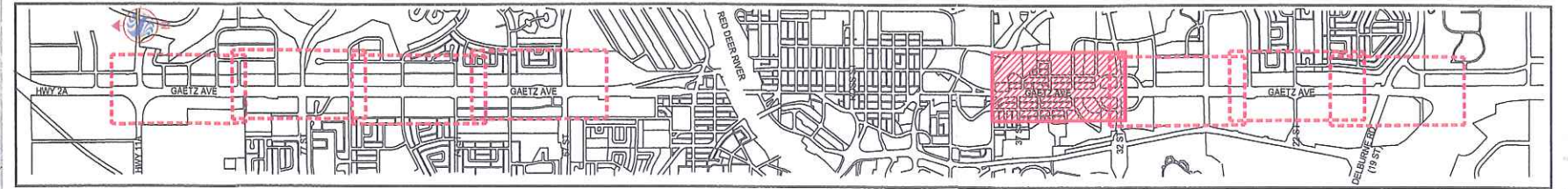
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8.4

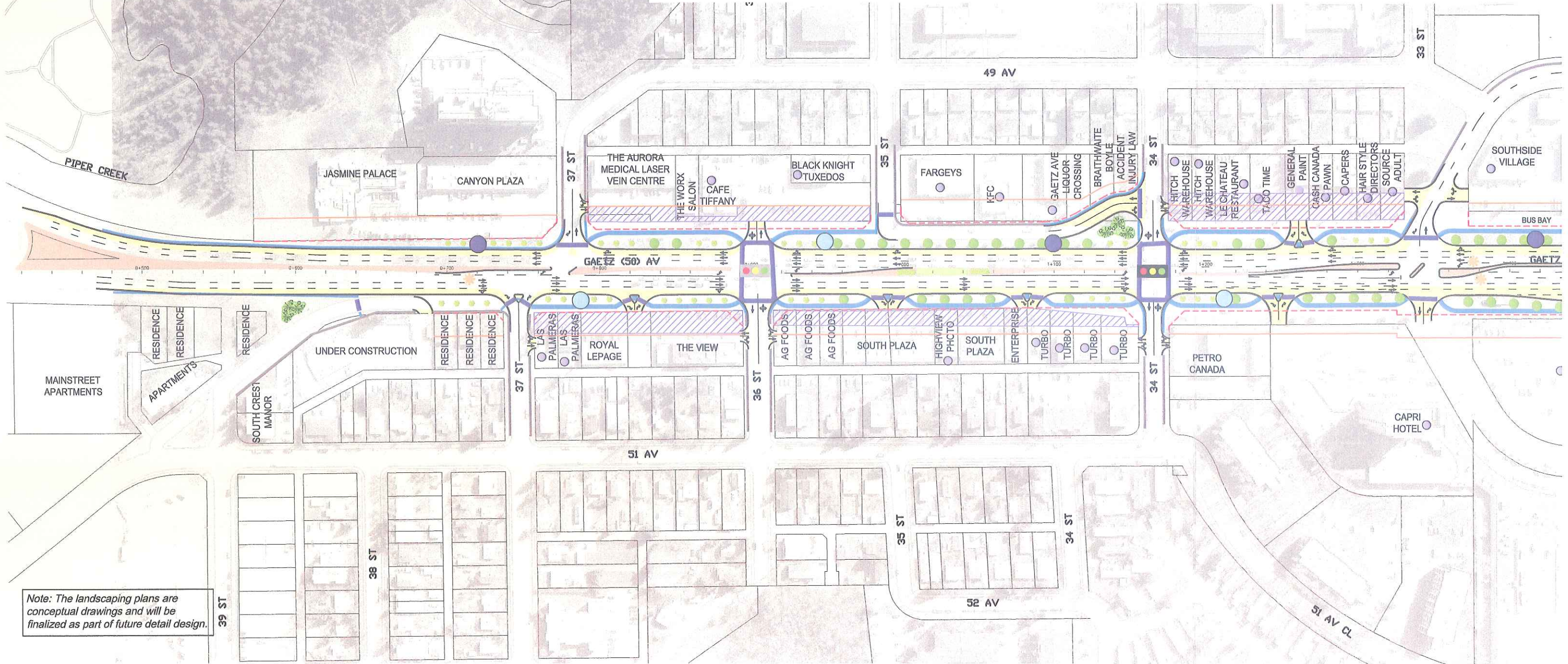
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Gaetz Avenue  
Landscape Concept  
67 Street to 71 Street





Key Plan  
NTS



Note: The landscaping plans are conceptual drawings and will be finalized as part of future detail design.

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Stantec

Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop

- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line
- Non-Standard Deceleration Taper To Accommodate Slotted Left Turn (Slotted Left Turn May Be Required To Be Removed In The Future)

- New Construction
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Coloured Concrete Medians
- Grassed Medians

- Proposed Poplar Tree
- Proposed Spruce Tree
- Proposed Ornamental Tree
- Proposed Canopy Tree
- Proposed Planting Bed



Client/Project

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STUDY

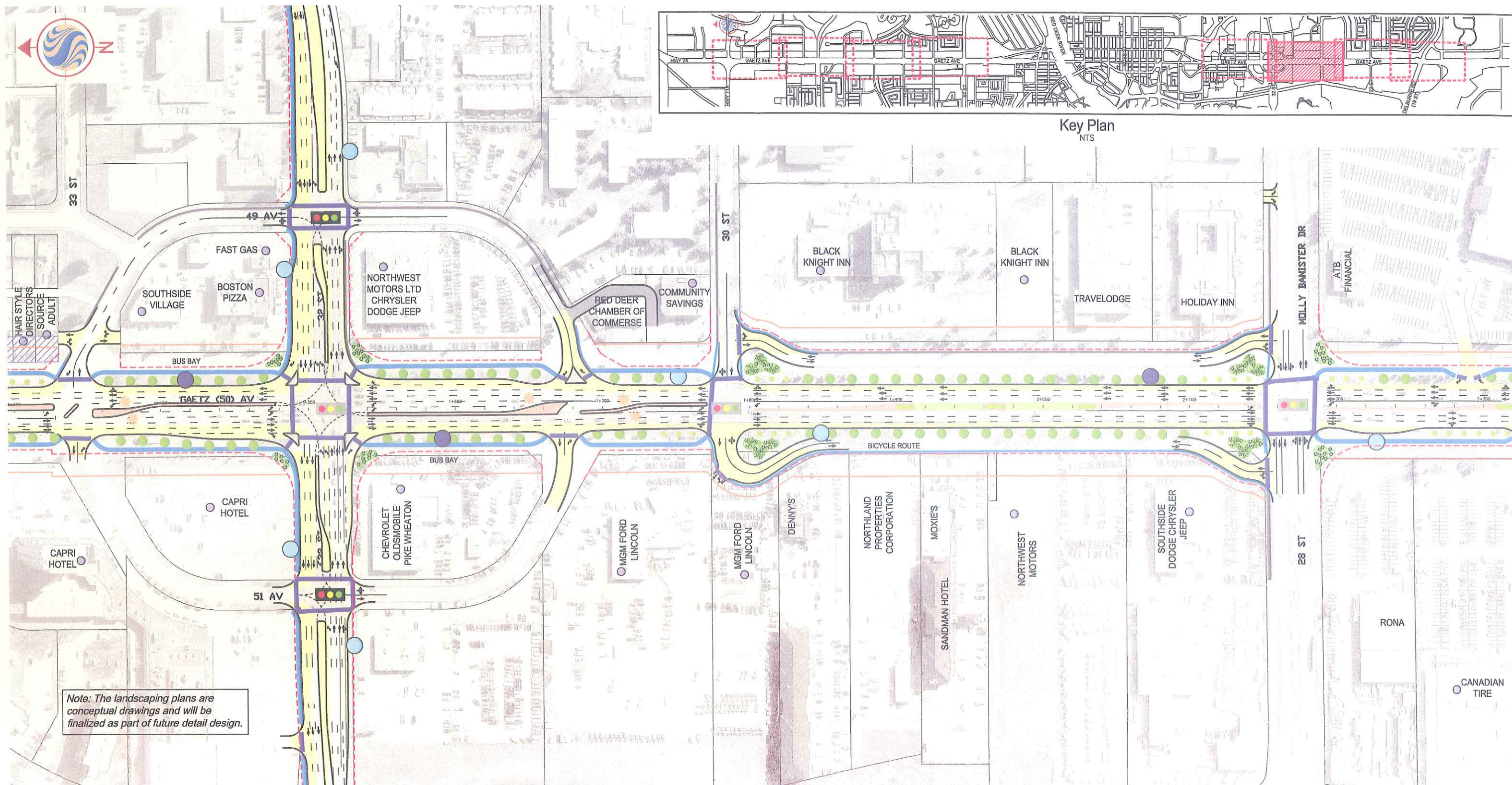
Figure No.

8.5

Title

Gaetz Avenue  
Landscape Concept  
49 Avenue to 37 Street





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**Legend:**

- |  |                            |  |  |  |  |  |                          |
|--|----------------------------|--|--|--|--|--|--------------------------|
|  | Existing Traffic Signals   |  | New 3.0m Bike Path / Walkway   |  | New Construction                         |  | Proposed Poplar Tree     |
|  | Future Traffic Signals     |  | New 1.5m Walkway   |  | Joint Access Roadway on Private Property |  | Proposed Spruce Tree     |
|  | Removal of Traffic Signals |  | Crosswalk  |  | Joint Access Agreement                   |  | Proposed Ornamental Tree |
|  | Participating Stakeholders |  | Existing 1.5m Walkway  |  | Coloured Concrete Medians                |  | Proposed Canopy Tree     |
|  | Existing Bus Stop          |  | Existing 3.0m Bike Path  |  | Grassed Medians                          |  | Proposed Planting Bed    |
|  | Potential New Bus Stop     |  | Proposed Property Line / Roadway Required  |  |  |  |                          |
|  |                            |  | Proposed 15m/6m Setback Line   |  |  |  |                          |
|  |                            |  | Non-Standard Deceleration Taper To Accomodate Slotted Left Turn<br>(Slotted Left Turn May Be Required To Be Removed In The Future) |  |  |  |                          |



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STUDY

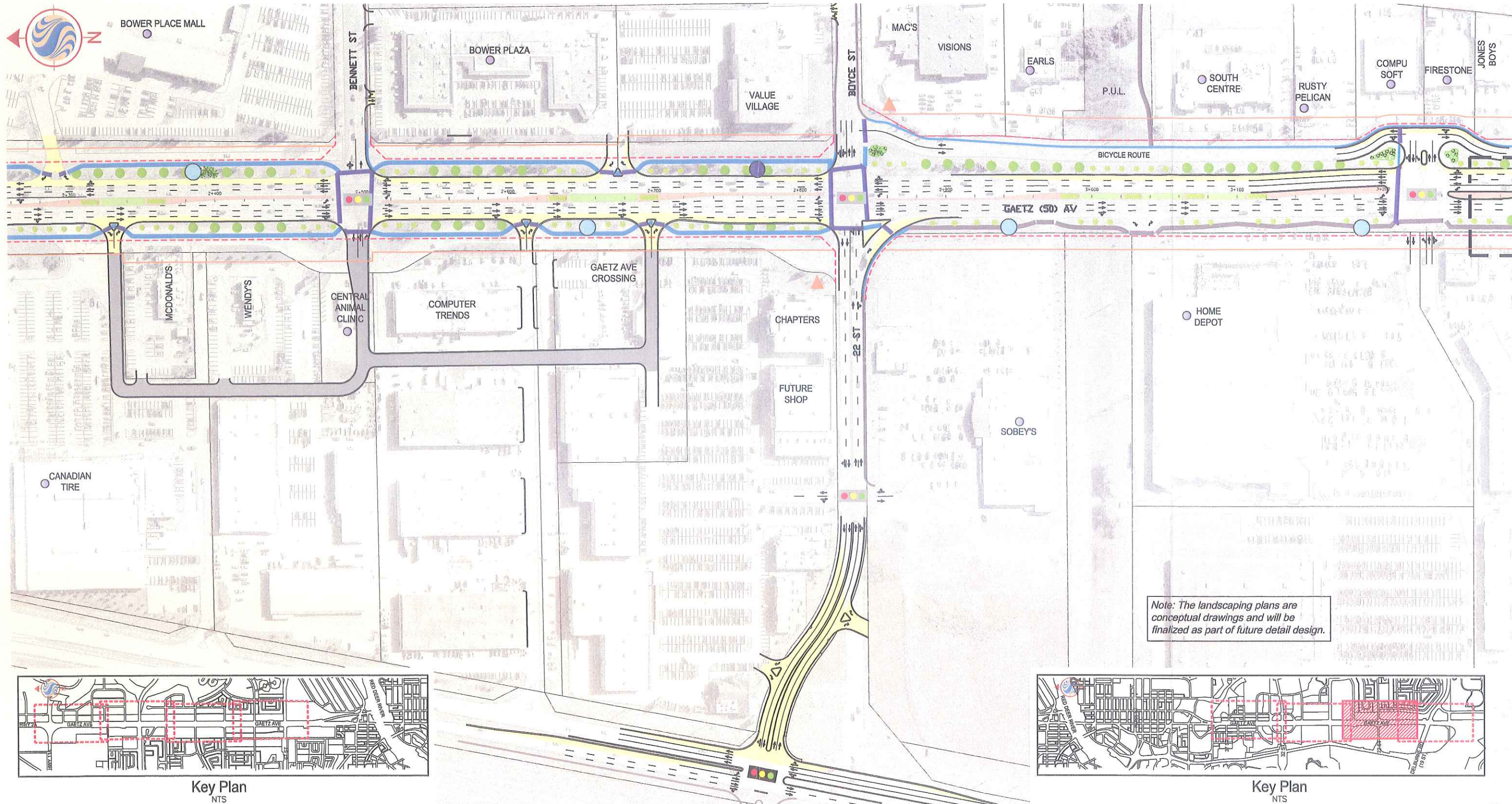
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8.6

Title

Gaetz Avenue  
Landscape Concept  
28 Street to 49 Avenue





Note: The landscaping plans are conceptual drawings and will be finalized as part of future detail design.

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#### Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop

- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line

- New Construction
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Coloured Concrete Medians
- Grassed Medians

- Proposed Poplar Tree
- Proposed Spruce Tree
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- Proposed Canopy Tree
- Proposed Planting Bed

Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future.



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GAETZ AVENUE REDEVELOPMENT  
STUDY

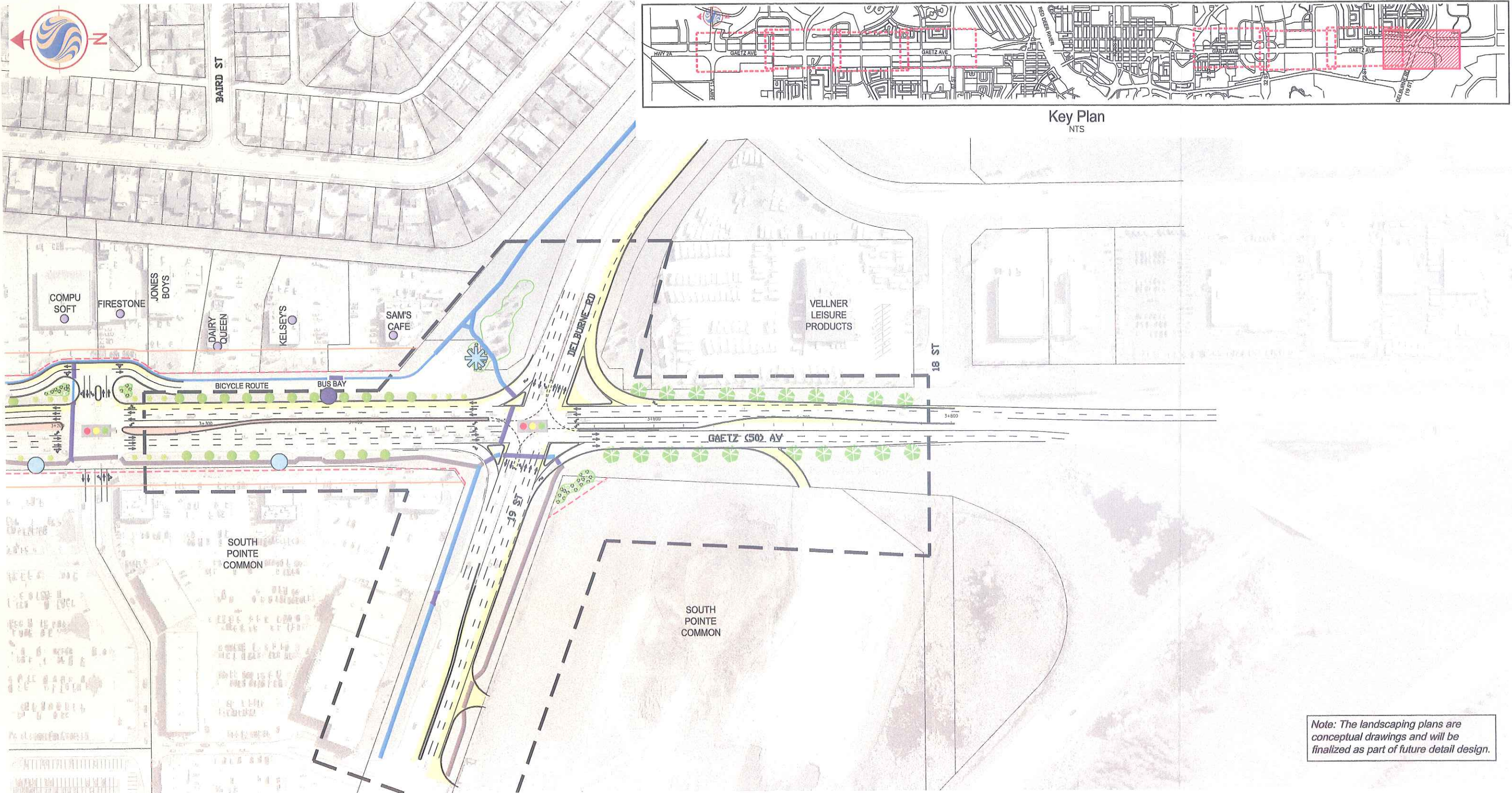
Figure No.

8.7

Title

Gaetz Avenue  
Landscape Concept  
20 Street to 28 Street





*Note: The landscaping plans are conceptual drawings and will be finalized as part of future detail design.*

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**Legend:**

- |  |                            |  |   |
|--|----------------------------|--|---|
|  | Existing Traffic Signals   |  | New 3.0m Bike Path / Walkway              |
|  | Future Traffic Signals     |  | New 1.5m Walkway                          |
|  | Removal of Traffic Signals |  | Crosswalk                                 |
|  | Participating Stakeholders |  | Existing 1.5m Walkway                     |
|  | Existing Bus Stop          |  | Existing 3.0m Bike Path                   |
|  | Potential New Bus Stop     |  | Proposed Property Line / Roadway Required |
|  | Proposed Entrance Sign     |  | Proposed 15m/6m Setback Line              |

- |  |  |
|--|--|
|  | New Construction                         |
|  | Joint Access Roadway on Private Property |
|  | Joint Access Agreement                   |
|  | Coloured Concrete Medians                |
|  | Grassed Medians                          |

- |  |                          |
|--|--------------------------|
|  | Proposed Poplar Tree     |
|  | Proposed Spruce Tree     |
|  | Proposed Ornamental Tree |
|  | Proposed Canopy Tree     |
|  | Proposed Planting Bed    |



Client/Project

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GAETZ AVENUE REDEVELOPMENT  
STUDY

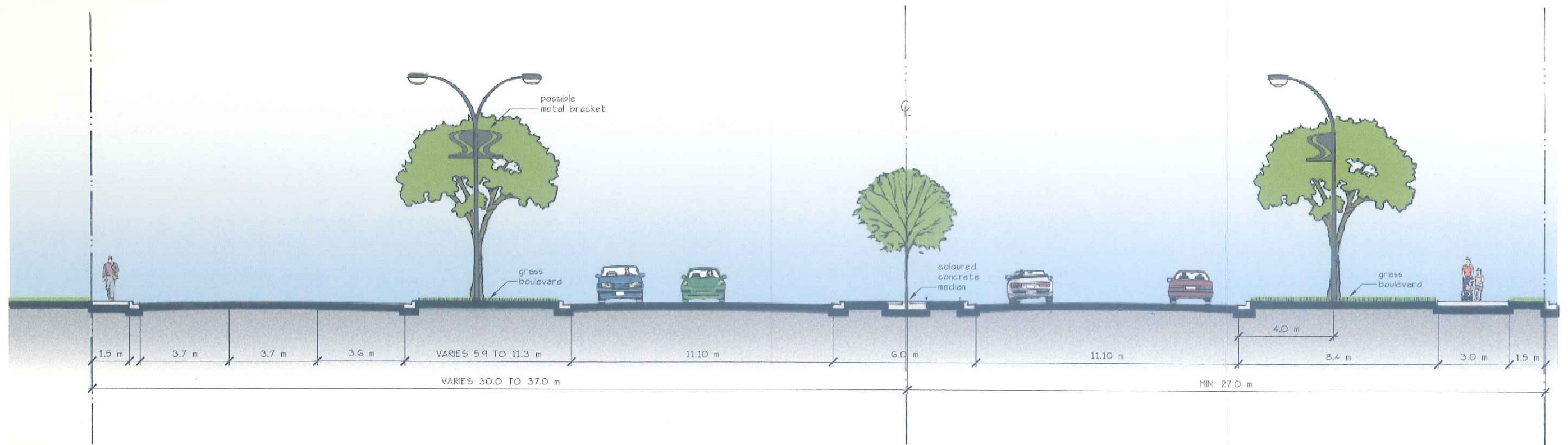
Figure No.

8.8

Title

Gaetz Avenue  
Landscape Concept  
19 Street to 20 Street





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Legend

Notes

Scale: NTS

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STUDY

Figure No.

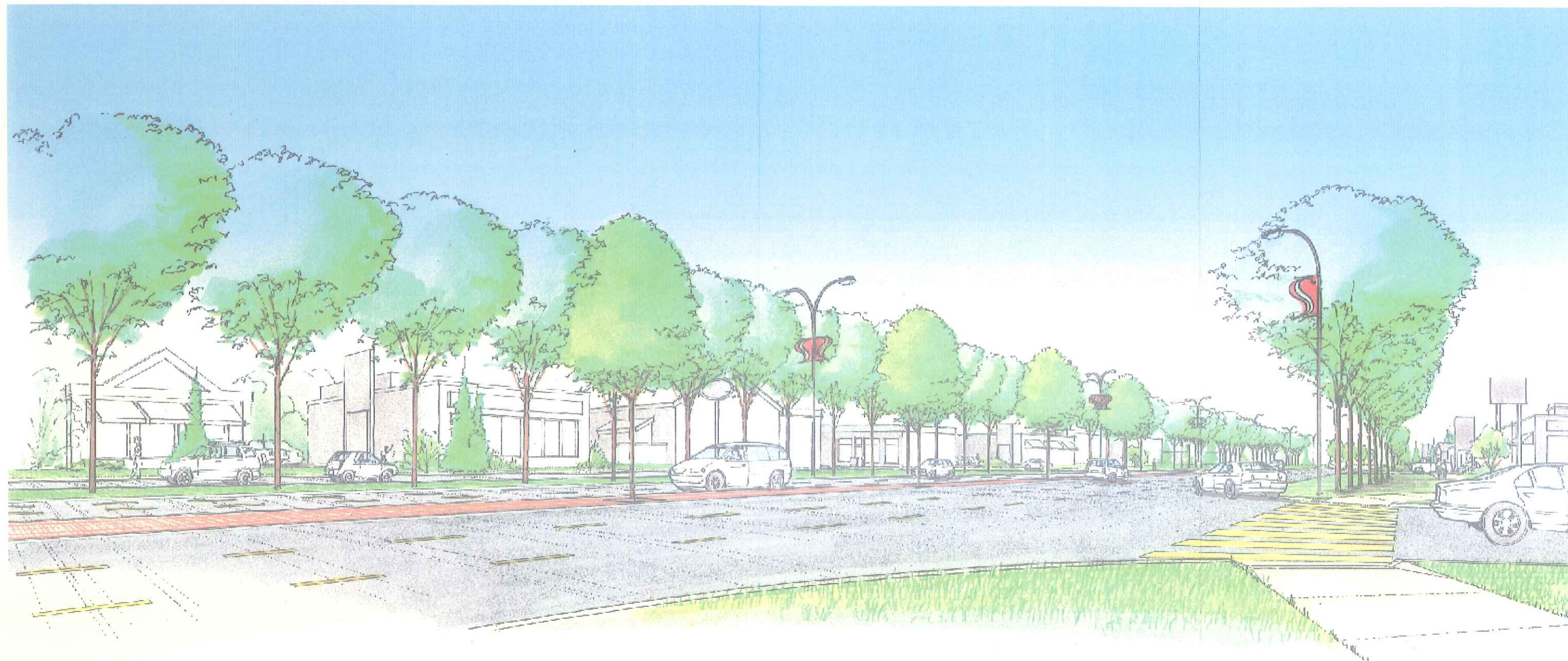
8.9

Title

Gaetz Avenue  
Landscaping  
Cross Section







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2005-05-03 09:42AM By: tntm

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Legend

Notes

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GAETZ AVENUE REDEVELOPMENT  
STUDY

Figure No.

8.10

Title

Typical Landscape View  
of Gaetz Avenue





an average setback of 4.0 meters from the lip of gutter. The location of existing or future utilities may also restrict tree planting. Median planting will consist of ornamental trees planted in groupings wherever the median is 6.0 meters wide. The groupings will be separated by approximately 30 to 40 meters of grassed area. Trees should be maintained below a 150 mm caliper to mitigate safety issues relative to the clear zone area.

The use of stamped or colored concrete is a recommended treatment of the median surface as maintaining the median becomes more difficult in narrower sections near the intersections and around the perimeter of the planting beds that contain groups of trees. Service road bulbs shown in the plan introduce the potential for planting islands to be located in a way that site lines are still obtainable for the traffic intersection. These planting islands will have the spatial requirements around them that City Staff can safely maintain them. The potential exists for the introduction of coniferous trees in these islands providing some appearance of "green" throughout all seasons.

The following listing of tree species should be utilized in the implemented in the plan during detail design process.

Canopy Trees	Median Trees	Ornamental Trees
American Elm	Ivory Silk Tree Lilac	Schubert Chokecherry
Brandon Elm	Sutherland Caragana	Tower Poplar poplars
Patmore Green Ash		Amur Cherry
		Mountain Ash
		Black Ash
		Hawthorn
		Ornamental Flowering Crabapple

Due to maintenance and safety concerns, shrub planting is not recommended immediately next to the roadway. Figure 8.9 illustrates a typical landscaping cross section for the corridor.

Street furnishings along the corridor should be consistent and may include benches, trash receptacles, bus shelters, bollards, signage, and signal lights to complement the lights standards. Light standards would consist of 45' standard poles painted black with a flat glass fixture to minimize light pollution and will be located on both sides of the roadway. This will also allow business signage to be more visible. The spacing of flat glass lights is reduced to provide proper illumination of the roadway. Where service roads are retained the dual-headed fixture light standard will be used. Architectural metal banner plates would also be incorporated to



identify Gaetz Avenue as a unique corridor. The logos illustrated on the cross section are examples only and can be revised as desired by the City. Logos are to be steel plate welded to light standard complete with banner hangers on the bottom. City will coordinate implementation directly with EL&P. The plan indicates potential locations for new City entry signs. Planting in and around these areas are more detailed and include flowering shrubs and low evergreens. The detailed design of these elements is currently being done under the direction of the City of Red Deer. Figure 8.10 provides a typical view of the Gaetz Avenue.

#### **8.4 IMPLEMENTATION**

The concept shown is intended to provide a vision to guide future development. If, during roadway development, existing trees can be safely and feasibly saved, they will only be replaced by the indicated species and groupings when the existing trees have run through their life cycle. Safety considerations prohibit the long-term retention of spruce trees along this busy corridor. Tree evaluations that assess the feasibility of retaining a tree during and after construction can only be done at the detailed design stage.