

# 170 Street South of Anthony Henday Drive Concept Plan

## Windermere Area Structure Plan and Neighbourhood Structure Plans

### Recommendation:

That Transportation and Public Works Committee recommend to City Council:

1. That the 170 Street South of Anthony Henday Drive Concept Plan, as outlined in Attachments 1 and 2 of the May 10, 2011, Transportation Department report 2011TD1979rev, be approved.
2. That Administration bring forward amending bylaws for the amendments to the Windermere Area Structure Plan, the adjacent Neighbourhood Structure Plan and the Arterial Roads for Development Bylaw 14380 that are consistent with the 170 Street South of Anthony Henday Drive Concept Plan.

### Report Summary

This report details the proposed concept plan for the arterial road connecting 170 Street from Anthony Henday Drive to the south city limits (41 Avenue Southwest).

### Previous Council/Committee Action

At the April 12, 2011, Transportation and Public Works Committee meeting, the following motion was passed:

1. That Administration bring forward proposed changes to the Windermere Area Structure Plan and

the Ambleside Neighbourhood Structure Plan to Transportation and Public Works Committee to ensure consistency with current roadway designs.

2. That Attachments 1 and 2 of the April 12, 2011, Transportation Department report 2011TD1979 (Executive Summary: 170 Street South of Anthony Henday Drive Concept Planning Study and Recommended Concept Plan for 170 Street South of Anthony Henday Drive), be brought back to Transportation and Public Works Committee at the same time as the Proposed Changes to Windermere Area Structure Plan and Ambleside Area Structure Plan.
3. That Administration provide a report to Transportation and Public Works Committee regarding the legal implications associated with proposed changes to the Windermere Area Structure Plan and the Ambleside Neighbourhood Structure Plan, as well as the 170 Street South of Anthony Henday Drive Recommended Concept Plan.

### Report

Information regarding the motion from the April 12, 2011, Transportation and Public Works Committee meeting is summarized as follows:

1. Consistency with Area Structure Plan and Neighbourhood Structure Plans:
  - Windermere Area Structure Plan was previously amended to include references to 170 Street being a roadway of significance. Comments include that a planning study is underway, that

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- right-of-way is to be protected until the study is complete, and that restrictions may be in place for subdivision applications. Amendments should reflect the final design requirements related to the proposed roadway.
- Windermere NH2 and Keswick Neighbourhood Structure Plans have similar comments as the Area Structure Plan. They also reflect the proposed roadway and minor amendments would be required to ensure they are in line with the most current information.
  - Ambleside Neighbourhood Structure Plan does not match the Area Structure Plan and amendments to both graphics and text are required.
  - Leduc County has been working over the past few years on a long-term highway network and their proposed highway corridor will provide a direct link into the south end of the proposed 170 Street corridor (Attachment 5).
  - Throughout the development of the 170 Street concept plan, area land developers were consulted to ensure their development plans remain in line with the proposed plan. They have been kept well informed as steps were taken to develop this plan and we have carefully integrated the land uses with the proposed transportation plans.
- Excerpts of text and graphics from the existing approved plans are outlined in Attachments 3 and 4.
2. Approval of the Concept Plan for 170 Street South of Anthony Henday Drive:
    - Administration's recommendation is the approval of the proposed concept plan as outlined in Attachments 1 and 2 to ensure right-of-way is protected for the long term and to facilitate continued development in Windermere.
    - Several development applications with direct impacts to approval of the 170 Street plans are currently in circulation. Delay to the approval may delay development plans in Windermere for another year.
    - This concept plan follows similar approval paths as other major conceptual planning studies recently forwarded to Transportation and Public Works Committee include the LRT alignment plans, the 137 Avenue plans in Big Lake and the final location of the Walterdale Bridge.
    - Road concept plans are presented through one process, City Council meetings, and the statutory plan amendments are presented through a separate process, Public Hearings. As both do not occur at the same meeting in the same forum, one must supersede the other. Similar to other plans, Administration is bringing forward this concept plan to provide clarity as to what is expected and to use as a guideline when amendments to the impacted Area and Neighbourhood Structure Plans are pursued.

3. Legal Implications:

- Legal Implications are provided under “Legal Implications”.

The 170 Street South of Anthony Henday Drive Concept Planning Study was undertaken to address changes in the transportation network and traffic demand projections in the southwest area of the city that differ from those anticipated when the Windermere Area Structure Plan was approved in 2005.

As a result of work completed in 2009 by the Province on the Queen Elizabeth II Provincial Highway, the Port Alberta initiatives at the International Airport were updated and ongoing development patterns in south Edmonton efforts were required to review and update the plans for 170 Street south of Anthony Henday Drive. This includes protecting right-of-way to accommodate an ultimate freeway facility.

Alignment:

Several factors were considered when selecting the design parameters for the corridor. Key considerations included:

- Balance the road right-of-way requirements with the status of this roadway as a key regional facility.
- Minimize the impacts to recently approved and subdivided properties.
- Maintain existing east/west connectivity between neighbourhoods.
- Develop as a free-flow high capacity facility with an urban context.

- Ensure transit bus routing was not impacted and all areas within Windermere could continue to be appropriately serviced.
- Consistency with the planned function of Terwillegar Drive from Whitemud Drive to Anthony Henday Drive.
- Accommodate opportunities to extend south of the city as a highway right-of-way through Leduc County. This route will help relieve future traffic demand on the Queen Elizabeth II Provincial Highway.

Traffic Forecasts and Roadway Features:

Long-term traffic projections were used to identify ultimate lane requirements, interchange locations, fly-over requirements and intersection configurations. The analysis indicated a need for a six-lane main line facility with an additional two-lane frontage road system. The main line will carry regional traffic volumes through the area while the frontage road system will serve as a distribution network from the freeway into or out of the neighbourhoods. Interchanges will be located at Windermere Drive, Ellerslie Road, 25 Avenue southwest and 41 Avenue southwest. Fly-over locations are planned between all the interchanges at the approximate mid-points.

Along the corridor, in the long-term (3.2 million regional population) the estimated traffic volumes along the freeway portion will be approximately 114,000 vehicles per day, which is similar to what Whitemud Drive between

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119 Street and 53 Avenue carries today. The volume along the frontage road network will range from 6,000 to 23,000 vehicles per day.

### Environmental Considerations:

Environmental issues are minimal along this corridor. The interchange at 41 Avenue southwest and 170 Street may pose some challenges with the Whitemud Creek ravine; however, this level of detail does not indicate that impacts are any greater than the previously planned roadways. A crossing at 41 Avenue southwest exists today and this will be widened to accommodate the roadways as development requires. The interchange has been located west of the ravine which should be sufficient to avoid greater impacts.

### Pedestrian Circulation and Shared Use Path Connectivity:

Active modes will not be accommodated along the freeway component as this is a high-speed free-flow facility that will predominantly serve regional traffic and goods movement. Alternate options are available on parallel routes and all crossing routes at interchanges and fly-overs will include appropriate accommodations for all modes.

### Planning Level Cost Estimate:

The concept level estimate for the construction of this corridor is \$415 million in 2011 dollars. This estimate includes the cost of:

- road construction and paving

- concrete work (i.e. curb and gutter, sidewalk, islands, etc.)
- structures
- landscaping
- drainage (urban, rural and storm water management facilities)
- signage and pavement markings
- land value
- engineering and contingencies

The cost estimate includes road work required for the construction of the 170 Street alignment, as well as improvements/upgrades to the crossing streets. The land will be obtained by the City through the subdivision process.

The roadway is included in the Arterial Roadways for Development Bylaw 14380; however, only two of the lanes are cost recoverable for construction costs, and six of the lanes are recoverable for land dedication costs. Due to the regional nature of this facility, it would be appropriate to approach the Province for potential dedicated funding towards its ultimate construction, including initial land purchasing.

### Timing:

The need for construction of this facility is dependent on the rate of land development in southwest Edmonton and in the Region. The first phase, which includes upgrading to a four-lane roadway south of Ellerslie Road and a second bridge structure crossing Anthony Henday Drive, may be required within ten years. The ultimate facility including all interchanges is not

anticipated to be needed within the next 30 years.

### Public Consultation

Public consultation for this study included both individual meetings and two public open houses. Individual meetings were held with land developers with substantial land holdings adjacent to 170 Street, south of Ellerslie Road.

Public open houses were held on June 22 and November 30, 2010, to provide information to area land owners or their representatives, as well as the general public. The primary goal of the open house was to provide a general overview of the plan and to discuss the difference between the proposed plan and the roadway classification shown in the Area Structure Plan and Neighbourhood Structure Plan, as well as to allow attendees to provide comments and suggestions.

### Legal Implications

The Windermere Area Structure Plan and the adjacent Neighbourhood Structure Plans should be amended to acknowledge 170 Street as a freeway facility. In addition, an amendment to the Arterial Roads for Development Bylaw 14380 is recommended to ensure part or all of the right-of-way for 170 Street to be assessable, as well as to ensure that the proposed roadway alignment for Ellerslie Road matches the current road plan.

- Development is expected to follow standard development procedures. Zoning and Subdivision applications will be responded to and managed

through the same process as any application.

- Administration will ensure that land and right-of-way is developed in accordance with the provisions within *Municipal Government Act* and any approved Statutory Plans or Bylaws.
- Under section 662 of the *Municipal Government Act*, the City is permitted to take up to 30% of a subdivided parcel of land for the purposes of road and public utility or both.
- Under section 648 of the *Municipal Government Act*, the City is permitted to pass a Bylaw that permits an off-site levy to be created and to be charged to a subdivided parcel of land for the purposes of road construction and land dedication as a result of road construction.
- Under section 655 of the *Municipal Government Act*, the City is permitted to require a development or subdivision to pay for an off-site levy as prescribed by an approved Bylaw.
- The three areas of the *Municipal Government Act* listed above permit the City to require dedication of road right-of-way through the subdivision process and to develop the Arterial Roads for Assessment Bylaw 14380. This is a means to share the burden of the costs for land dedication. Under this Bylaw, land can be cost shared throughout an area such as the Windermere Area Structure Plan

so that developers are treated equally.

**Justification of Recommendation**

1. The 170 Street South of Anthony Henday Drive Concept Planning Study represents a design of an urban freeway that will continue to provide access to adjacent neighbourhoods while providing a significant level of service for regional trips in southwest Edmonton.
2. City Council will need to consider an amendment to the Windermere Area Structure Plan, the adjacent Neighbourhood Structure Plans and the Arterial Roads for Development Bylaw 14380 to ensure the current statutory plans and Bylaws are consistent with the 170 Street South of Anthony Henday Concept Plan, assuming recommendation 1 is approved. The alignment changes to Ellerslie Road will result in required amendments to the plan areas as well as the Arterial Roads for Development Bylaw 14380. Any amendments proposed will include a review of current practices for road right-of-way dedication along 170 Street. Administration intends to engage in discussions with area land owners as part of developing any recommended changes prior to advancing for approval by City Council.

3. Text excerpts from Currently the Approved Area Structure Plan and Neighbourhood Structure Plans
4. Graphic excerpts from the Currently Approved Area Structure Plan and Neighbourhood Structure Plans
5. Leduc County’s North Central Roadway Network

**Others Reviewing this Report**

- R. G. Klassen, General Manager, Planning and Development Department
- M. Koziol, General Manager, Capital Construction Department
- D. H. Edey, General Manager, Corporate Services Department

**Attachments**

1. Executive Summary: 170 Street Planning Study Report #3
2. Recommended Concept Plan for 170 Street South of Anthony Henday Drive