

DISCUSSION

Road Network Changes

The City undertook a lengthy review process to examine various road alignment options for both Croydon Drive and 164 Street that would achieve the City's transportation needs while addressing the potential development of lands adjacent to these roads.

The following describes road alignment changes that have been generally accepted by the land owners / developers in the area and satisfy the transportation needs for continued development of the area. They are illustrated on the map attached as Appendix II.

Croydon Drive - North of 20 Avenue

The need for an intersection of Croydon Drive with 20 Avenue was reviewed and supported by land owners and developers to the north of 20 Avenue. Croydon Drive has been realigned to the east of its original location in the LAP so as to establish a safe location for such its intersection on 20th Avenue in relation to the approach ramps for the future 20 Avenue overpass at Hwy. 99.

Croydon Drive - South of 20 Avenue

The easterly relocation of the Croydon Drive intersection on 20th Avenue results in the need for a change in the alignment of Croydon Avenue south of 20 Avenue. The Croydon Drive intersection on 20 Avenue will be constructed as a roundabout and an access road has been included on the south side of the roundabout to allow development of the adjacent lands. This access road connects through to 164 Street.

164 Street - North of 20 Avenue

The City undertook a detailed review of the use of the existing (unbuilt) 164 Street right-of-way (RoW) between 24 Avenue and 16 Avenue. This existing 164 Street RoW north of 20th Avenue contains significant natural habitat and a Class B creek. Discussions with DFO and detailed construction cost estimates revealed that utilizing this existing RoW for road purposes would cost an additional \$8m (of which approximately \$6m is DFO related compensation) in relation to other alignment options.

It was concluded that a westerly realignment of 164 Street north of 20th Avenue would by-pass the existing significant habitat area, achieve the necessary transportation objectives, had the lowest cost and was acceptable to the affected land owners. This alignment connects to a roundabout at 20 Avenue.

164 Street - 20 Avenue to 18 Avenue

164 Street is proposed to continue south from the planned roundabout at 20 Avenue, then run parallel to the BC Hydro corridor before reconnecting with the existing 164 Street RoW to the south. Land development projects south of 20 Avenue will be expected to establish this new road allowance alignment as part of the land development process.

In addition, because Croydon Drive has essentially been relocated east to the 164 Street alignment in this area, developers of the lands to the west of 164 Street and south of 20th Avenue will be expected to fully dedicate all additional lands necessary to achieve a “4-lane plus left turn lanes” collector road on 164 Street (same standard as Croydon Drive to the north) including a 2.5m SRW for a 4m wide multi-use pathway and construct the full cross-section of 164 Street in this section.

164 Street – 18 Avenue to 16 Avenue

Discussions have taken place with a number of land owners in the area between 16 and 18 Avenues to determine a mutually beneficial alignment and approach for funding this section of 164 Street.

The recommended alignment as illustrated in Appendix II provides reasonable site access opportunities and development potential. Staff carefully reviewed a variety of factors in defining this alignment including:

- 2031 predicted traffic volumes and turning movements at 164 Street;
- Sightlines for both the planned 16 Avenue/Hwy. 99 full movement interchange and the 164 Street/16 Avenue intersection;
- Significant queuing projected along 16 Avenue back to 164 Street; and
- Motorist safety and traffic operations.

Some transportation benefits could be realized with shifting the 164 Street/16 Avenue intersection further east; however, some land use planning benefits are realized by locating it further west. The City and developers agreed that a location approximately 260 m east of the 16 Avenue overpass at Hwy. 99 (in close proximity to the location of this intersection as illustrated in the original LAP) would best meet all of the appropriate objectives.

Although the intersection location at 16 Avenue has been fixed, the process highlighted the need to maintain some flexibility on the alignment to better facilitate development and potential lot consolidation.

A review of funding options for this section determined that no special funding mechanism needed to be established and that the roadway could be achieved through the standard development process. It is expected that any major development in the area would dedicate the lands needed to facilitate completion of this section of road.

20 Avenue – Croydon Drive to 164 Street

Based on the alignment changes to Croydon Drive and 164 Street and the consequential changes to projected traffic flows in the area, staff determined that the arterial classification of 20 Avenue should be extended east from Croydon Drive to 164 Street.

NCP Land Uses

Analysis of the properties impacted by the road re-alignments described in this report demonstrates that their development potential has not been compromised and that no land use designation changes are required in relation to the Land Use Concept in the Hwy. 99 LAP.

Sustainability Considerations

The recommended road network amendments assist in achieving a variety of the City's sustainability objectives by:

- Avoiding an existing natural creek area along 164 Street RoW between 19 and 22 Avenues;
- Using bio-swales on 164 Street between 22 and 24 Avenues and on 20 Avenue east of 164 Street;
- Improving transit, walking and cycling options and connecting communities with the 20 Avenue overpass of Hwy. 99; and
- Maintaining a natural green buffer zone between the Hwy. 99 corridor LAP and planned residential development in Grandview Heights #2 NCP.

Amendments to R-91 and Road Allowance Map

The Road Classification Map (R-91) and Road Allowance Map in the Subdivision & Development By-law, No. 8830, need to be amended to reflect the road network changes recommended by this report.

CONCLUSION

Based on the above discussion, it is recommended that Council:

- Approve road network changes to the Highway 99 Corridor Local Area Plan as illustrated in Appendix II;
- Approve amendments to the Road Classification Map and Road Allowance Map in the Subdivision & Development By-law, No. 8830, to reflect the changes referenced in recommendation 2; and
- Request that the City Clerk bring forward the necessary amendment By-law for the required readings.

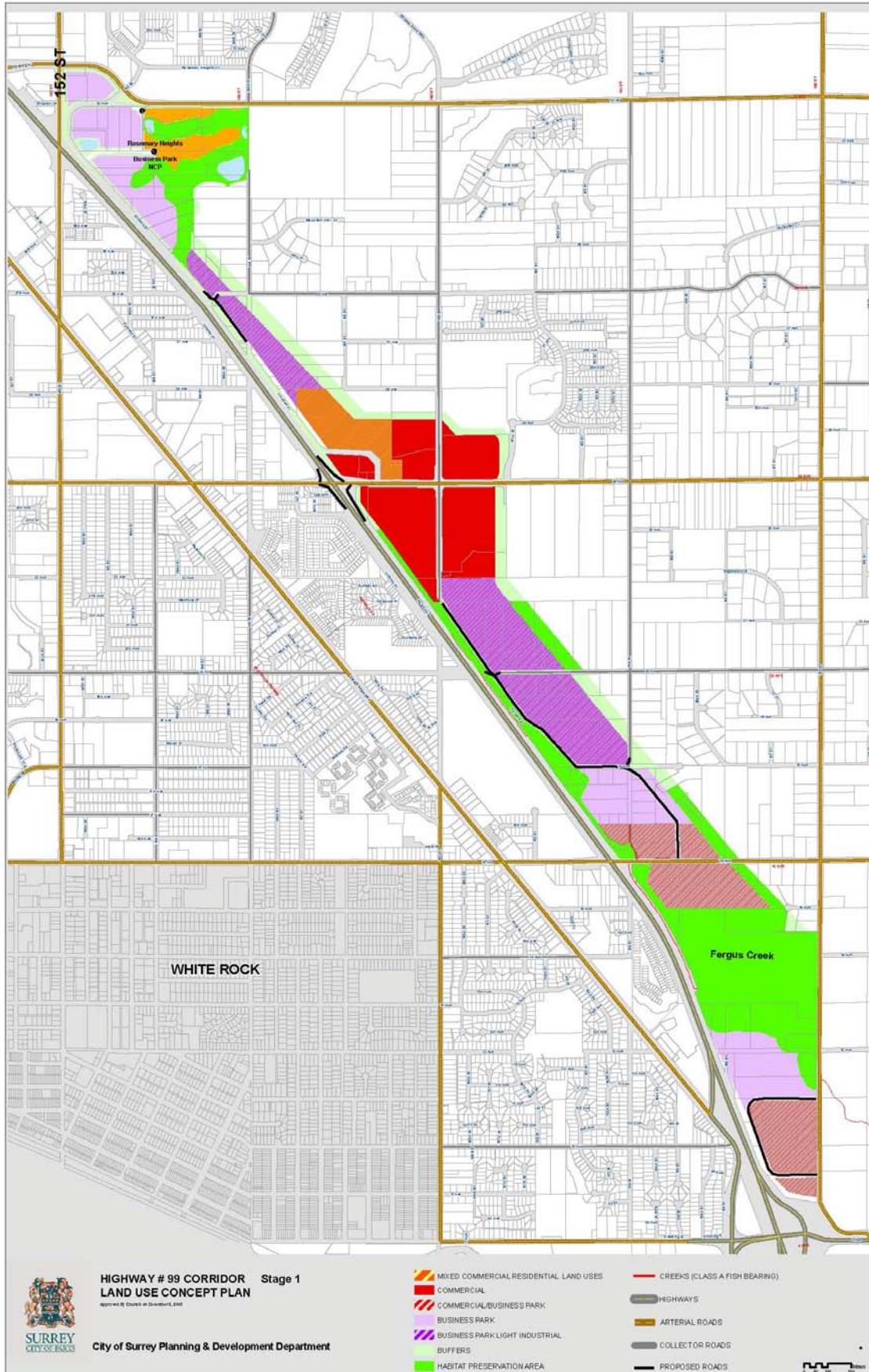
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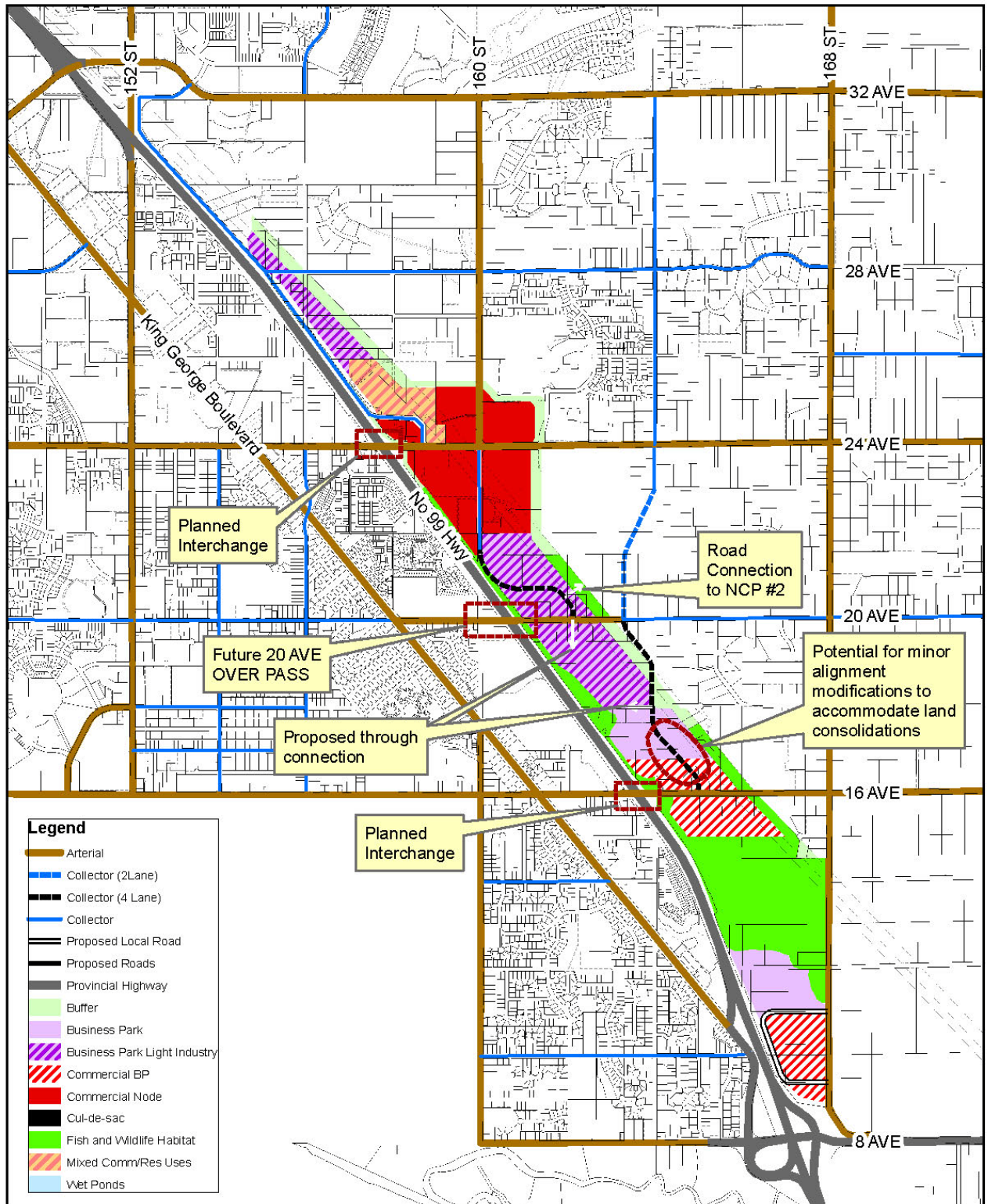
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Appendix I – Highway 99 Corridor LAP (2004)
Appendix II – Highway 99 Corridor LAP Update (2010)

Highway 99 Corridor LAP (2004)



Highway 99 Corridor LAP Update (2010)



**HIGHWAY # 99 CORRIDOR Stage 1
LAND USE CONCEPT PLAN**

City of Surrey Planning & Development Department

