

NO: R048

COUNCIL DATE: **MARCH 23, 2015**

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **March 23, 2015**

FROM: **General Manager, Planning and Development**

FILE: **6520-20 (East Fraser Heights/Abbey Ridge)**

SUBJECT: **East Fraser Heights/Abbey Ridge Land Use Concept**

RECOMMENDATION

The Planning and Development Department recommends that Council:

1. Receive this report as information; and
2. Authorize staff to initiate a land use planning and community consultation process for the East Fraser Heights/Abbey Ridge area as outlined in Appendix I of this report.

INTENT

The purpose of this report is to seek Council's authorization to develop a coordinated land use concept and servicing strategy for the area generally between Highway 1 to the south, the South Fraser Perimeter Road (Highway 17) to the north, 172 Street to the west and the Port Kells Industrial Area to the east. Such a plan will:

- assist the City in responding to development applications and inquiries in the area;
- provide a level of certainty for residents and land owners regarding the future character of the area; and
- ensure adequate public infrastructure such as schools, parks, roads and utilities to support the land uses anticipated in the plan.

POLICY CONSIDERATIONS

The Official Community Plan ("OCP") designates the majority of the study area shown in Appendix II as Suburban, with several pockets of Urban designation and single sites designated Multiple Residential and Commercial. The development of a Land Use Concept for the area may guide future OCP amendments, or may confirm the existing designations.

The study area has not been the subject of a Secondary Plan such as a Neighbourhood Concept Plan ("NCP"). If a Land Use Concept is approved for the area, the area may be designated as an Infill Area in the Zoning Bylaw, with an attached schedule of Amenity Contributions to support park development, library materials, police and fire service capital needs in exchange for bonus density, consistent with other NCP and Infill Areas.

BACKGROUND

The East Fraser Heights/Abbey Ridge area, as shown in Appendix III, comprises approximately 430 acres (175 hectares) of land north of Highway 1 and between the established Fraser Heights neighbourhood to the west and the Port Kells Industrial Area to the east.

Environmental Characteristics

The area is characterized by land that slopes moderately towards the north, with excellent views over the Fraser River to the North Shore Mountains. A number of Class A and Class B fish habitat watercourses and associated riparian areas bisect the area and flow north towards the Fraser River. A Green Infrastructure Corridor has been identified in the Biodiversity Conservation Strategy for protection, as shown in Appendix III. The study area also lies between two large natural environment parks – Surrey Bend Regional Park to the north, across the South Fraser Perimeter Road and the CN rail corridor, and Tynehead Regional Park to the south, across Highway 1. Opportunities for creating habitat connections between these two large natural areas may be identified in an environmental study.

Land Uses

The great majority of the study area is occupied by residential uses. The residential neighbourhoods within the study area are a mix of large suburban properties, undeveloped properties and pockets of higher-density urban subdivisions and developments that have been approved on a case-by-case basis over the years.

The majority of the area is designated Suburban in the OCP, as shown in Appendix II. The Suburban areas include:

- approximately 140 properties zoned One Acre Single Family Residential (RA) Zone;
- 25 properties zoned Half-Acre Single Family Residential (RH) Zone;
- 54 properties zoned Gross Density Half-Acre Single Family Residential (RH-G) Zone;
- 35 properties zoned Cluster Residential (RC) Zone; and
- one property zoned Assembly Hall 1 (PA-1) Zone, occupied by a church.

Over the years, a number of higher-density developments have been approved that involved an OCP amendment to Urban, Multiple Residential or Commercial designations. The Urban designated areas include a total of 123 properties zoned Single Family Residential (RF) Zone in three locations. In 2011 a development application was approved along Barnston Drive adjacent to the Highway 1/Highway 17 interchange that included an OCP amendment to Multiple Residential and Commercial land uses, and rezoning to a CD (Comprehensive Development) zone. The CD zone was further amended and these amendments were granted final approval in 2013. This development will eventually include approximately 80 townhouse units, 415 apartment units in six buildings and 81,000 square feet of community commercial space.

Parks, Schools, Public Facilities

There are currently no developed parks within the study area. However, a number of the cluster-zoned single-family neighbourhoods (RC or RH-G zones) include greenspace areas that were conveyed to the City upon rezoning. These lands typically include riparian areas or other undevelopable lands, and total approximately 18.7 acres (7.7 hectares). Two large Regional Parks

are located adjacent to the study area. Surrey Bend Regional Park is primarily a natural area, with limited trail development along the Fraser River shoreline. Tynehead Regional Park is a large and diverse park with a mix of forests and fields, a fish hatchery, parking areas and a paved perimeter trail. The study area connects with Tynehead Regional Park via a pedestrian overpass across Highway 1 at 168 Street.

There are no schools located within the study area. Children living in the area are within the Bothwell Elementary School catchment. This school is located along 102 Avenue, just to the west of the study area and, according to School District No. 36 staff, has current capacity for an additional 150 students. The local public Secondary School is Fraser Heights Secondary, which is currently at capacity and includes portable classrooms. There is also a large independent school, Pacific Academy, located west of the study area at the corner of Barnston Drive and 168 Street. Fire Hall #5 is located on Barnston Drive, immediately east of Highway 17/176 Street.

Transportation

The street network in the study area is relatively disconnected due to the limited-access Provincial highways that surround and bisect the study area and ravines that limit the connectivity of local street networks. There is limited and disconnected pedestrian and cycling infrastructure in the area and there is no transit service available at this time.

The construction of the South Fraser Perimeter Road (Highway 17) and improvements to the Highway 1/Highway 17 interchange over the past few years have changed the character of the area and affected vehicular access into the existing neighbourhoods and between the western and eastern parts of the study area. While the major Provincial highways have made this area more readily accessible to and from other parts of the region, these highways also limit access points into parts of the neighbourhood. Future connections to the Golden Ears Way Connector will address this issue to a degree, but connectivity across the area will remain a challenge.

Utilities and Servicing Infrastructure

Sanitary Sewer

The study area is currently serviced by a 600 mm to 750 mm diameter sanitary trunk sewer (known as the Big Bend Trunk) that traverses the hillside from east to west through the study area. The Big Bend Trunk captures sanitary flows from the southern portions of the study area, as well as pumped flows from the Port Kells Sanitary Pump Station (located at 98 Avenue and 190 Street) which services the Port Kells industrial area to the east. The trunk sewer discharges to the Big Bend Sanitary Pump Station at 176 Street and 104 Avenue. This pump station pumps sanitary flows via forcemain to Metro Vancouver's North Surrey Interceptor at 173 Street and 104 Avenue. Most of the properties north of the Big Bend Trunk are not serviced by the City's sanitary sewer system due to topographical constraints; instead, existing buildings in this area rely on private, on-lot septic field systems.

Several sections of the Big Bend Trunk have been identified as having capacity constraints under current flow conditions, including several sections east of 179 Street. Further, two sections of the trunk sewer west of 179 Street will experience capacity constraints in the near future. Limited upgrade works have been completed to date to address the capacity constraint issues. Some of the constrained trunk sewer sections traverse existing subdivisions, which may pose a challenge when implementing future upgrades.

The Big Bend Sanitary Pump Station does not have sufficient capacity to accommodate the projected increase in flows under future development conditions. Station upgrades will be required to accommodate future development and/or infill densification in the catchment area. However, undertaking station upgrades may be challenging due to the station's elevation (approximately 3 metres geodetic) and proximity to the Fraser River floodplain. Currently, the station has the potential to flood during freshet conditions (roughly corresponding to a 10 year return period). The City's long term strategy is to relocate the Big Bend Sanitary Pump Station to a higher elevation.

Water

Under current conditions, some parts of the study area are serviced by the municipal water system, with the remaining areas serviced by private groundwater wells. In order to accommodate the proposed development in the study area, the municipal water system would need to be expanded and enhanced. Water supply to the area is currently provided by a 525 mm diameter feeder main on 96 Avenue, which is supplied by a direct connection to Metro Vancouver's transmission main. This feeder main does not have the capacity to support future development conditions in the study area; however, a secondary water source could be provided via the Whalley Reservoir at 14619 - 104A Avenue and its associated feeder main network.

Topographical conditions will require that two separate pressure zones be established for the study area. The majority of the study area is located within the lower pressure zone (90m). A 400mm feeder main, which has already been partially constructed and connected to the existing pressure reducing station at Cherryhill Court, would need to be extended to supply the 90m zone. A network of distribution mains would also be required from this feeder main to service the study area and improve network connectivity.

Due to its higher elevation, the southwestern portion of the study area is located within the high pressure zone (135m). Currently, there is no municipal water system in this area. The proposed feeder main identified in the Anniedale-Tynehead NCP could be used to provide water supply to this portion of the study area. A network of distribution mains would also be required.

Drainage

Based on topography and the existing drainage network, the study area is divided into two major catchments at 176 Street. Areas west of 176 Street drain to watercourses within Surrey Bend Regional Park (Metro Vancouver), while areas east of 176 Street drain to an industrial area on the shoreline of the Fraser River. Both of these catchments pass under the CN Railway via culvert crossings, which may be undersized for future development conditions.

Existing drainage infrastructure consists of a combination of roadside ditches and storm sewers, which outfall to several Class A and B watercourses. The watercourses have well-defined channels and generally drain northeast towards the Fraser River. Most of these watercourses have previously identified erosion concerns.

The northern portion of the study area is within the Fraser River floodplain and is not protected by a dyke. Improvements may be required in this area to support future development.

Surrey's Biodiversity Conservation Strategy identifies a green infrastructure corridor through the study area along Leoran Brook down to the Fraser River. This corridor will need to be included in the land use plan and secured through the development process.

Stormwater management, drainage infrastructure improvements and on-lot source controls will be required to support future development, mitigate upland creek erosion and flooding issues in the lowland portions of the study area, and ensure existing habitat values and baseflows in the watercourses are not compromised.

Kinder Morgan Trans-Mountain Pipeline

The existing Kinder Morgan Trans-Mountain pipeline transverses the study area. The Pipeline corridor consists of an 18.6 metre right-of-way. In the late 1990s, the Utilities Commission placed a 30 metre approval zone on either side of the pipeline right-of-way, with all land owners requiring permissions to do construction works on their properties in the approval zone. The approval zone was established in an effort to ensure the pipeline was not affected by adjacent works. The pipeline corridor and approval zone will need to be considered when making land use and servicing decisions for the area.

Kinder Morgan Trans-Mountain Pipeline is also planning to twin their infrastructure in this area. Due to the development that has already occurred adjacent to the existing alignment, the company is currently proposing to install the new pipeline near the base of the escarpment adjacent to Daly Road. The alignment of the new pipeline will also impact development in the study area. At this time, the corridor under investigation by Kinder Morgan and presented to the Utilities Commission should be considered in the land use planning for the study area.

Development Applications and Inquiries

A number of development applications and inquiries have recently been received by the City, seeking to develop residential areas at urban densities. The build-out of the adjacent Fraser Heights neighbourhood, the improvement of access to the area brought by the South Fraser Perimeter Road, the excellent views available and the general shortage of serviceable lands for new single-family development in the Metro Vancouver region are cited as reasons for this development interest.

DISCUSSION

Given the increased development interest and the significant transportation-related changes occurring in the area, staff is of the opinion that a Land Use Concept planning process is desirable to ensure a coordinated plan to guide future development, and to ensure appropriate neighbourhood consultation on the future of the area. A Land Use Concept planning process will establish an overall vision and direction for the area in a proactive manner, rather than through incremental and piecemeal responses to individual development applications.

A Land Use Concept planning process will address issues, including:

- Appropriate land uses and densities to create an attractive and sustainable community, including particular consideration of transitions and the interface between existing neighbourhoods and new development;

- Environmental conservation and biodiversity through identifying key natural assets and developing a plan for conservation;
- School capacities related to future growth;
- Parks, recreation and open space needs related to current and future residential growth;
- A coordinated street network that ensures pedestrian, cycling, transit and vehicular connectivity and access into and through the study area, and that also addresses issues related to traffic safety and which minimizes traffic impacts on existing neighbourhoods;
- A coordinated servicing strategy (sanitary, water, drainage and other utilities) to ensure efficient and equitable of delivery of infrastructure;
- A mechanism for providing community amenities and benefits related to public needs imposed by development; and
- Consultation with the community in a comprehensive manner, rather than solely on individual development applications.

Staff is of the opinion that due to the relatively small area of the East Fraser Heights/Abbey Ridge that is potentially available for redevelopment, the likelihood that planned densities in the area will be comparable to existing development and the relative simplicity of servicing the area, a full NCP process is not required. Rather, staff proposes that a Land Use Concept process, similar to those that have been recently completed for the Fleetwood Enclave Infill Area, the Aloha Estates Infill Area and the East Clayton Transit-Oriented Area is appropriate. Such a process includes consideration of a full range of planning issues, involves the neighbourhood and stakeholders in a consultation process and can be completed in an efficient time frame.

Appendix I sets out a proposed planning and consultation process, including neighbourhood open houses, further consultation with a range of stakeholders including (but not limited to) the Fraser Heights Community Association, the Abbey Ridge Neighbourhood Association, Surrey Environmental Partners, School District No. 36, landowners in the area, the Katzie First Nation, the Ministry of Transportation and Infrastructure and utilities, including Kinder Morgan.

The proposed planning process begins with an environmental study conducted by qualified consultants and internal staff reviews of heritage assets, visual resources, and existing transportation and utility infrastructure. Following an initial neighbourhood meeting where the results of these initial studies are shared, a land use and transportation concept will be developed in consultation with internal and external stakeholders, including those listed above. Depending upon the results of this work, a traffic consultant may be engaged to provide a traffic analysis of the draft land use concept before it is presented for comment and input at a second neighbourhood meeting. Following this meeting, adjustments may be made to the Land Use Concept before it is brought to Council for approval in principle. Further work on a servicing strategy to support the Land Use Concept and a financial strategy to guide implementation (Servicing & Implementation Strategy) will follow, and will be brought to Council along with the Land Use Concept for final approval.

Once Council has approved the Land Use Concept in principle, development applications that conform to the Concept may be advanced to Council for consideration. However, final approval of development applications (OCP amendments and Rezoning) is recommended to be withheld, until Council grants final approval to the Land Use Concept and the Servicing & Implementation Strategy.

The expected timeframe for completion of the Land Use Concept is six months, with Council consideration of approval in principle in September 2015. The Servicing & Implementation Strategy is expected to be completed within an additional three months, with final approval consideration in December, 2015. This timing is consistent with staff's experience in the Fleetwood Enclave and Aloha Estates processes.

SUSTAINABILITY CONSIDERATIONS

The recommendations in this report address a number of the objectives and actions in the Sustainability Charter, including:

- SC9 – ensuring that adequate, appropriate and affordable housing is available in areas well served by transit;
- SC12 – planning for demographic change;
- EC2 – promoting local economic vitality and job creation;
- EC7 – encouraging sustainable building and development practices;
- EC9 – encouraging high quality urban design and development;
- EN9 – supporting sustainable land use planning practices;
- EN12: - enhancing the protection of natural areas, fish and wildlife habitat;
- EN13 – enhancing the public realm; and
- EN15 – increasing sustainable transportation options.

CONCLUSION

In response to increased development interest in the East Fraser Heights/Abbey Ridge area, and given the absence of a coordinated land use plan to guide the future development of the area, it is recommended that Council authorize staff to initiate a land use planning and community consultation process for the East Fraser Heights/Abbey Ridge area as outlined in Appendix I of this report.

Original signed by
Jean Lamontagne
General Manager,
Planning and Development

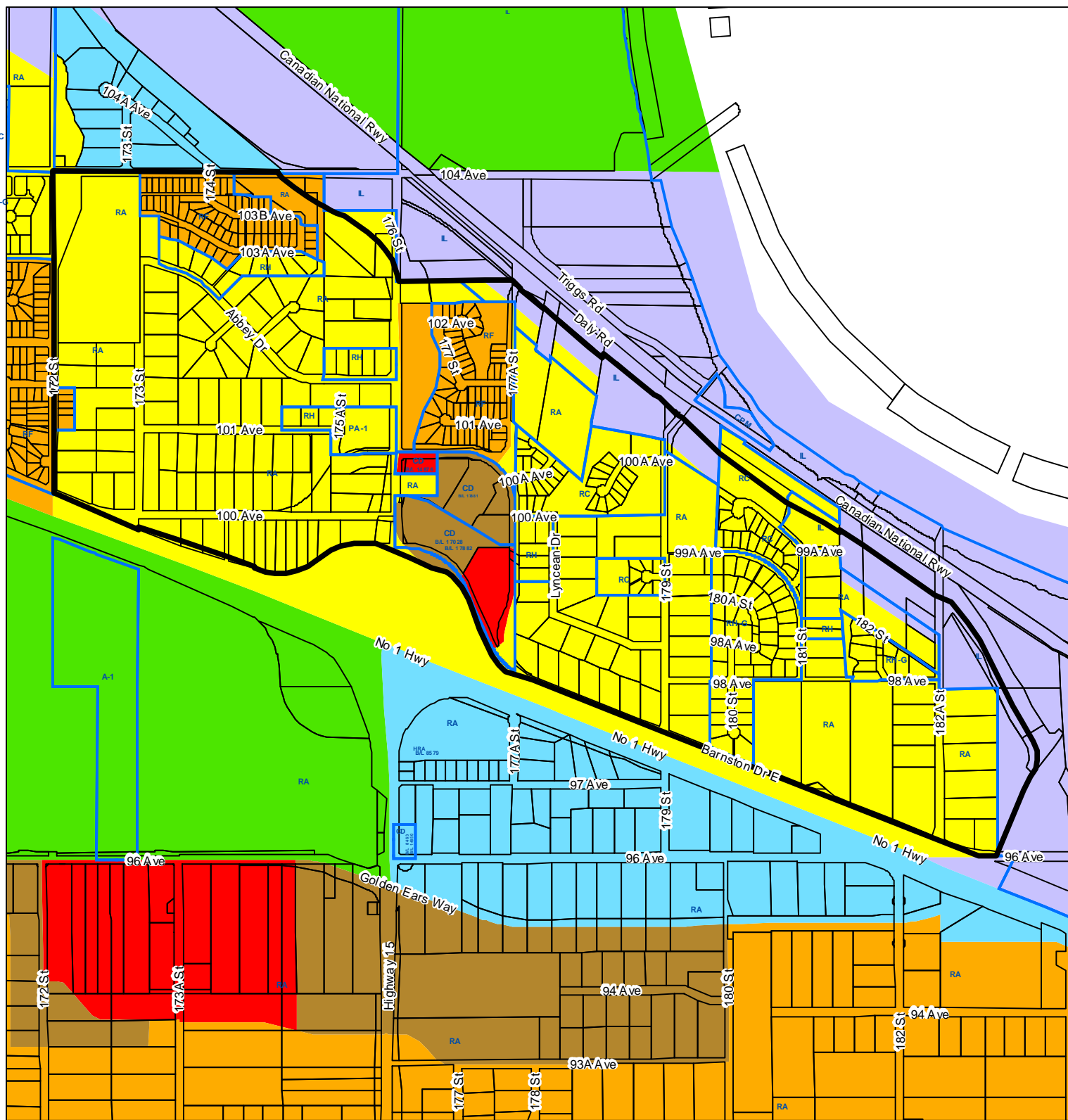
DL:saw

Attachments:

- Appendix I Proposed Planning Process and Timelines
- Appendix II East Fraser Heights/Abbey Ridge Study Area Study Area – current land use
- Appendix III East Fraser Heights/Abbey Ridge Study Area - air photo

**Proposed Planning Process for
East Fraser Heights/Abbey Ridge Study Area**

- Background Studies
 - Environmental and Tree Study (April – May 2015)
 - Visual assessment and Heritage assessment (internal) (April—May 2015)
 - * (Development Applications may be received)
- Initial Neighbourhood Open House (May 2015)
- Land Use Concept(s) development (April—June 2015)
 - Stakeholder Consultation, including City departments, land owners, School District No. 36, Ministry of Transportation and Infrastructure, Katzie First Nation, Fraser Heights Neighbourhood Association, Abbey Ridge Neighbourhood Association, Surrey Environmental Partners, Kinder Morgan
- Traffic Analysis (internal or external) (June—July 2015)
- Draft Land Use and Transportation Concept
 - Neighbourhood Open House #2 (Sept. 2015)
- Council consideration of approval in principle of Land Use Concept (Sept. 2015)
 - * Development Applications may be processed and advanced to Council
- Servicing Strategy and Financing Strategy (Sept.—Dec. 2015)
- Council consideration of approval for final Land Use Concept and Financial Strategy (Dec. 2015)
 - * Development Applications may be finalized



Legend

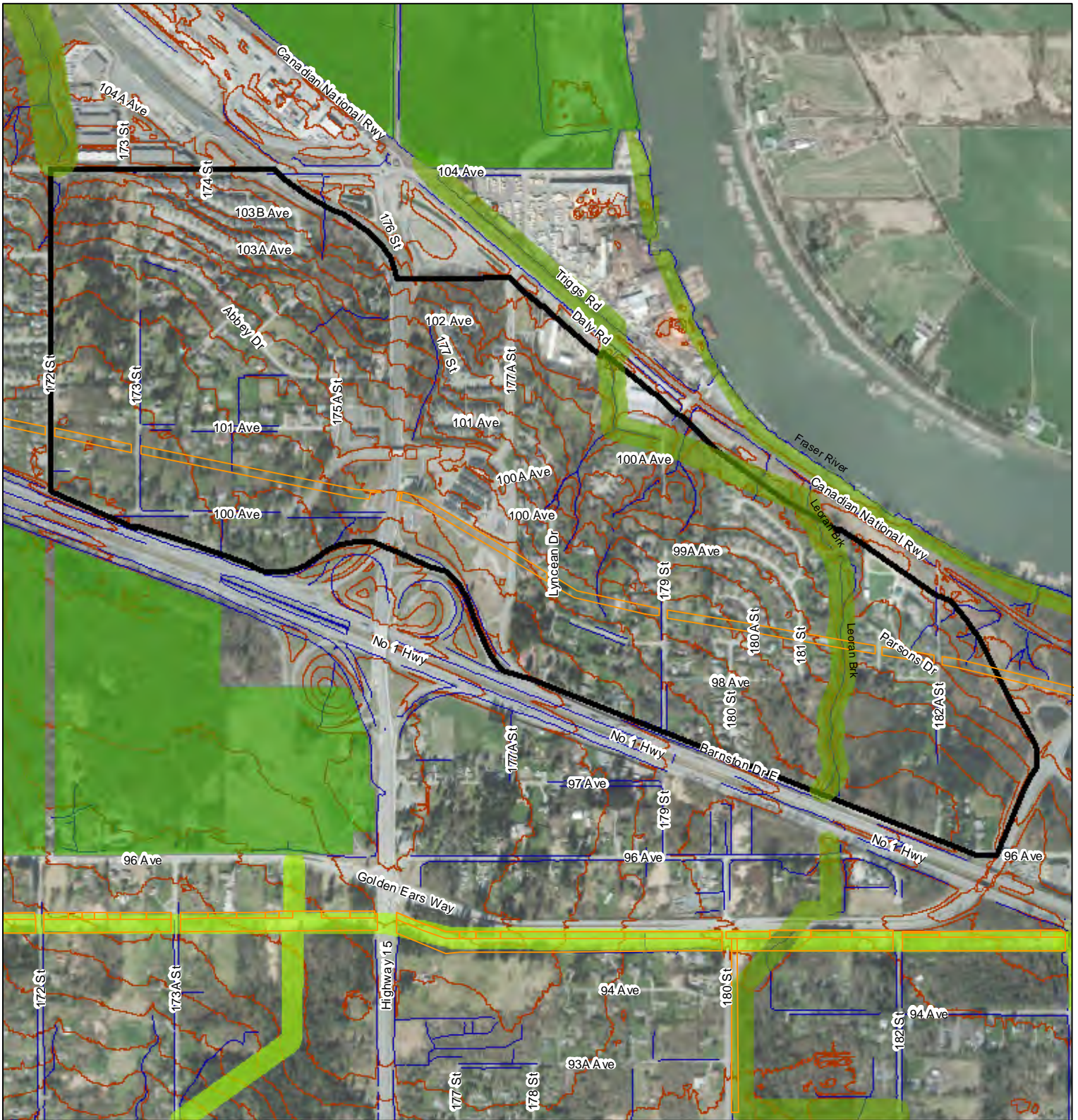
- East Fraser Heights / Abbey Ridge
- Zoning Boundaries

OCP Designation

- | | |
|-----------------------------|---------------------------|
| Conservation and Recreation | Commercial |
| Agricultural | Industrial |
| Rural | Mixed Employment |
| Suburban | Town Centre |
| Suburban - Urban Reserve | Central Business District |
| Urban | First Nations Reserve |
| Multiple Residential | |



East Fraser Heights / Abbey Ridge








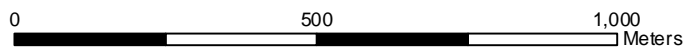
East Fraser Heights / Abbey Ridge

Legend

-  East Fraser Heights / Abbey Ridge
-  Streams
-  Contour 5m
-  Utility ROW

BCS

-  Existing BCS Hub
-  Local BCS Corridor
-  Regional BCS Corridor



1:12,500