



DISTRICT OF
Stewart
BRITISH COLUMBIA



Official Community Plan

District of Stewart

Bylaw No. 882, 2014

District of Stewart
Official Community Plan Bylaw No. 882, 2014

WHEREAS Council wishes to repeal District of Stewart Official Community Plan Bylaw No. 650, 1996, and amendments thereto, and wishes to adopt a new Official Community Plan bylaw, pursuant to Section 876 of the *Local Government Act*;

AND WHEREAS Council has held a Public Hearing pursuant to Section 890 of the *Local Government Act*;

AND WHEREAS pursuant to Section 882 of the *Local Government Act*, the Council for the District of Stewart has examined the plan in conjunction with its Financial Plan and any waste management plan that is applicable in the municipality to ensure consistency between them;

NOW THEREFORE Council of the District of Stewart, in open meeting assembled hereby enacts as follows:

1. District of Stewart Official Community Plan Bylaw No. 650, 1996 and the amendments thereto are hereby repealed.
2. This bylaw shall be cited as the "District of Stewart Official Community Plan Bylaw No. 882, 2014".
3. The following schedules attached hereto are hereby made part of this bylaw and adopted as the Official Community Plan Bylaw for the District of Stewart:
 - .1 Schedule A (Official Community Plan Bylaw text)
 - .2 Schedules B, C, D, E, F, G, H, I, J, and K (Official Community Plan Bylaw maps)

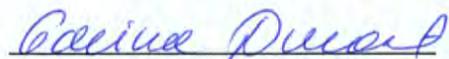
READ A FIRST TIME THIS 30th DAY OF SEPTEMBER, 2014

READ A SECOND TIME THIS 30th DAY OF SEPTEMBER, 2014

PUBLIC HEARING HELD ON 27th DAY OF OCTOBER, 2014

READ A THIRD TIME THIS 27th DAY OF OCTOBER, 2014

ADOPTED THIS 28th DAY OF OCTOBER, 2014



MAYOR



CHIEF ADMINISTRATIVE OFFICER

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SCHEDULE A – OCP TEXT



PART 1: INTRODUCTION AND VISION

1. Introduction

The community of Stewart was established in the early 1900s as a gold rush town and was incorporated as a municipality in 1930. Since its establishment, the economy and population base of Stewart has been very much tied to investment in mining, natural resources, and marine transportation operations in the area. More recently Stewart has been sustained by forestry, tourism, and some mining exploration that continues. Stewart's current population has remained static, at approximately 500 people, for the past 5 years.

Stewart's most recent Official Community Plan (OCP) was adopted in 1996. Since then there has been a dramatic shift in the demographic and economic underpinnings of the community. In 1996, Stewart's population was near 900, and the average age of people in the community was seven years younger than it is now. However, the increased rate of investment in the North has dramatically changed the prospects for the natural resource economy in the region and could have significant impact on Stewart along with the continued evolution of the tourism industry in the community. Looking forward, there are several potential projects that may offer Stewart increased economic diversity including the construction and operation of Stewart World Port, natural resource development within Stewart and throughout the North, and alternative energy development. It is an important time to embark on an OCP process to ensure that the community is strategically benefiting from future prospects and economic development opportunities and that these opportunities align with the community's interests, goals and vision.

1.1. What is an Official Community Plan?

An Official Community Plan (OCP) is a policy document used by municipal and regional governments to guide land use decisions and community planning. It is a general statement of the collective desires of a community, identified through public consultation and expressed through broad objectives and policy statements.

An OCP must be prepared and adopted within the statutory provisions of the *Local Government Act* (the Act). The required content of an OCP is defined in Section 877 of the Act. Required content includes:

- (1) Statements and map designations for the area covered by the plan respecting the following:
 - (a) the approximate location, amount, type and density of residential development required to meet anticipated housing needs over a period of at least 5 years;
 - (b) the approximate location, amount and type of present and proposed commercial, industrial, institutional, agricultural, recreational and public utility land uses;
 - (c) the approximate location and area of sand and gravel deposits that are suitable for future sand and gravel extraction;
 - (d) restrictions on the use of land that is subject to hazardous conditions or that is environmentally sensitive to development;

- (e) the approximate location and phasing of any major road, sewer and water systems;
- (f) the approximate location and type of present and proposed public facilities, including schools, parks and waste treatment and disposal sites;
- (g) other matters that may, in respect of any plan, be required or authorized by the minister.

(2) Housing policies of the local government respecting affordable housing, rental housing and special needs housing.

(3) Targets for the reduction of greenhouse gas emissions in the area covered by the plan, and policies and actions of the local government proposed with respect to achieving those targets.

Optional content provisions are set out in Section 878 of the *Local Government Act* and may include:

- (a) policies of the local government relating to social needs, social well-being and social development;
- (b) policies of the local government respecting the maintenance and enhancement of farming on land in a farming area or in an area designated for agricultural use in the community plan;
- (c) policies of the local government relating to the preservation, protection, restoration and enhancement of the natural environment, its ecosystems and biological diversity.

An OCP is a long-term visionary document that guides decision-making and sets a course for how a community wishes to evolve. An OCP should be re-examined and updated every 5 – 10 years to ensure that it continues to reflect the long-range planning objectives of the community. Occasional updates also ensure that an OCP remains consistent with other procedures, bylaws and government implementation tools. An OCP should inform decision making on a wide range of municipal planning and development functions. The relationship between an OCP and these local government functions is illustrated in **Figure 1.1**.

Figure 1.1: Influences of the OCP

Before it can come into effect, an OCP must be adopted by Council as an official Bylaw. Once adopted, all bylaws enacted or works undertaken by Council must be consistent with the goals, objectives and policies included in the Plan.

An Official Community Plan serves a number of important purposes:

- It provides direction for the growth and development of the community;
- It states in general terms the social, economic, and environmental objectives of a community as they relate to land use planning;
- It provides a tangible policy tool which Council, District staff, and the general public can use to evaluate development proposals;
- It identifies and establishes policy statements (and map designations where appropriate) with respect to the following:
 - Residential development required to meet forecasted housing needs in a community over a period of at least 5 years;
 - Commercial, industrial, institutional, agricultural, recreational and public utility land uses (both present and future);
 - Sand and gravel deposits that are suitable for future extraction;
 - Environmentally sensitive land, or land that is subject to hazardous conditions;
 - Major proposed road, sewer and water systems;

- Existing and proposed public facilities (i.e. schools, parks and waste treatment and disposal sites);
- Targets for the reduction of greenhouse gas emissions in a community, and proposed actions for achieving those targets;
- Strategies for affordable housing, rental housing and special needs housing; and
- Any case-specific matters authorized by the Minister.

What an OCP can and cannot do

An OCP can:

- Provide a degree of certainty to Council, government staff, local businesses, developers, and residents regarding the future form and character of a community;
- Limit decisions and actions by Council when adopting bylaws or undertaking works to those which are consistent with the goals, objectives and policies included in the OCP;
- Provide direction for Council on decision-making and policy development; and
- Be used to support applications to acquire funding from senior levels of government to provide for works and services in a community, as funding is often contingent on a plan being in place for capital-intensive infrastructure investments.

An OCP cannot:

- Obligate Council to undertake any projects suggested in the OCP;
- Commit Council to specific expenditures; or
- Force any action identified in the OCP.

1.2. Organization of the Plan

This OCP is organized into four main parts with various sub-sections including:

Part 1 – Introduction and Vision – this part of the OCP provides an introduction to the plan process, a summary of the history of Stewart, a review of key community characteristics such as population demographics, and the community vision and guiding principles for the evolution of the community.

Part 2 – Land Use Plan – the land use plan provides objectives and policies for land use planning in the community. This includes development permit area guidelines.

Part 3 – Community Development Plan – this part of the OCP provides a description of how the community intends to evolve in the future. This includes a description of how the community will address key issues such as economic development, housing, social needs, and infrastructure, among others.

Part 4 – Action and Implementation Plan – this part of the OCP outlines an action and implementation plan for moving forward.

1.3. Rationale for Updating Stewart's OCP

An Official Community Plan should be exactly what the name suggests:

- *Official*, meaning it is adopted by the Mayor and Council.
- *Community*, meaning it should reflect the community's desires and vision for the future along with implying that the community has a strong role in ensuring the plan is implemented.
- *Plan*, meaning there is a relevant strategy for achieving future goals and vision.

Given this context, there are a number of reasons why it is important to update the District's OCP. These include:

- *Age of current OCP* – best practices suggest that OCP's should be reviewed and updated every 5 – 10 years. The current OCP was adopted in 1996 and is 18 years old;
- *The community has changed significantly* – Stewart has changed significantly since 1996. Most pronounced of these changes are the loss of population and subsequently the loss of senior government services in the community. The economy of the community has also changed with the emergence of tourism as a major industry that supports employment. The OCP is an important tool in providing direction on how these changes should be addressed and communicating to senior government agencies the key needs for the community.
- *The community expects major development* – major development in and around Stewart is expected. This includes the expansion of the port facilities as well as the potential development of mines in the community. With the expansion of the port facilities, there is also the increased likelihood that Stewart could support the development of natural resource industries throughout northern BC through the import and export of goods. The OCP provides direction for how the community can adapt and maximize the opportunities associated with the growth in development in the community as well as the regional growth and development in Northern BC.
- *OCP's can help support infrastructure funding* – senior governments often provide municipalities with funding through competitive grants to update and/or develop new infrastructure. Having a recently adopted OCP in place that provides guidance and policy on municipal infrastructure is important to supporting these funding grant applications.
- *Support economic development* - a comprehensive and up-to-date community plan can provide certainty for developers that may be interested in undertaking a major project in the area. It will provide guidance to the District, the community, businesses, and senior government agencies on how to balance various economic development sectors to ensure the long-term viability of Stewart.

Combined, these provide the basis for updating the OCP.

1.4. Scope of the Plan and Approach

The approach to this OCP was to include all relevant policies and actions that would support the community in achieving common goals and vision for the future. While it is important for the OCP to be grounded in actions that the municipality has immediate jurisdiction over, it is also important to recognize

that the OCP can also be used to communicate to the community at-large, senior government agencies, and industries the vision, policies and actions that the community supports.

In terms of determining what goals, policies and actions the District should pursue, significant community consultation was undertaken. The District of Stewart wanted a consultation process that engaged as many people as possible to obtain a diversity of opinion on what Stewart's future should entail. The District of Stewart established an OCP Committee which consisted of members of the public, District Council, and staff members to guide the development of the plan. Initial consultation with the public and stakeholder consisted of two main components including:

Pre-consultation period – a number of pre-consultation materials were prepared and distributed to residents of Stewart as well as being made available online via the District's website. These materials included a community survey and a newsletter and were intended to educate residents about the community planning process as well as to allow residents an initial opportunity to provide feedback on what the key issues and priorities for Stewart are moving forward. The central component of the pre-consultation materials was a community survey. The survey asked people to indicate their priorities for a number of important topic areas. There were 67 respondents to the survey, representing well over 10% of the population.

Consultation week – a week-long consultation program was undertaken in October 2013 and consisted of several meetings with the general public and stakeholder groups representing a diverse cross-section of interests in Stewart. Groups that were consulted with include:

- General Public (through a Residents' Workshop on October 1, 2013 and through an Open House on October 3, 2013)
- District's OCP Committee
- Council Advisory Committees (Healthy Communities, Economic Development, Environment and Community Safety)
- Arts, Culture and Heritage groups (Stewart Heritage Society, Stewart Arts Council, Stewart Bear Arts Festival Committee)
- Businesses (8 businesses were consulted were interviewed individually)
- Bear Valley School students and staff
- Youth Coordinator
- Stewart Services Society
- RCMP
- Border Town Recycling
- District of Stewart staff

2. History of Stewart

Stewart has many historical periods including:

- Pre contact (pre-1793)
- Contact and Exploration (1793-1898)
- Establishment of the community (1906 – 1918)
- Post World War I (1919 – 1945)
- Post World War II (1945 – 1984)
- Decline and Stabilization (1984 – present)

These historical eras are described below. In general, since the establishment of the community in the early 1900s, there have been boom periods due to increased natural resource development, often times followed by a sudden decline due to war or mine closures.

Pre Contact

Before Stewart was explored and settled by Europeans, the Nass First Nations used the area for hunting, berry picking and as a retreat from the invading Haida. They called the area “Skam-A-Kounst” which means “safe house.” The area was also called Sgamagunt by the Nisga’a. The Nass relied heavily on seafood, shell fish, and whales for food.

Contact (1793-1898)

The first contact with Europeans occurred in 1793 when George Vancouver entered the Portland Canal. Although he did not stay there, it is thought that he encountered two Nass peoples upon his arrival. Years later in 1898, in hopes of finding gold, a party of prospectors from Seattle came to Stewart. Although 68 prospectors originally landed, only one, D. J. Rainey, stayed. He built the first log house in the area and staked the first mineral claims.

Establishment of the Community (1906-1918)

In 1902 J. Wardlaw and Robert M. Stewart, two brothers, also arrived to establish mineral claims. The US/ Canada border lines were drawn at this time and shortly after, in 1905, Robert Stewart became the town's first postmaster and its official namesake.

Stewart quickly boomed as more prospectors started to arrive in 1906. The official designation as a Canadian city allowed government infrastructure investment, and in 1907 a wharf and a mill were constructed to accommodate the mining industry. The population boomed to 10,000 people, and along with it came banks, a school, hospital, police, churches, waterworks, electricity, the telephone, a luxury hotel and even several local newspapers.

Despite the services and infrastructure available to Stewart's residents, during World War I, Stewart lost all but 17 of its residents. All mines ceased operation as investors withdrew their financial support and the population declined causing a labour shortage.

Post World War I (1919-1951)

After World War I many people did return to Stewart and high-grade ore was once again discovered in 1919. Big Missouri, Riverside and Premier Mines, along with several smaller operations successfully re-entered operation during this period. In 1921, Premier Mine built a 12-mile long air tram from the mine to the docks for easier ore transport, one of the longest air trams of its time. In the same year, a hydro power plant was set up to provide power to the town after it had been discontinued during the war. During this resurgence period the population grew to 3000. This larger population supported many social events, hospital fundraisers, infrastructure improvements, and organized sports.

The depression of the 1930s forced many mines to cease operations, as investors once again pulled out and the economy froze. Big Missouri and Premier Mines suspended operations and then closed in 1948, and 1951, respectively. The population declined to 1500 people during the latter part of this period.

Post World War II (1951-1984)

After World War II there were once again discoveries of ore and viable mining opportunities. Starting in 1956, exploration and engineering of Granduc Mine began near the Leduc Glacier, opening up new access roads to mines in the area and natural resources. An 11-mile tunnel was required to mine the ore, which took 9 years to complete. In 1965 an avalanche buried an entire camp of men working on the tunnel, killing 26 men. While this tragic event affected the community, the tunnelling continued, and the mine started producing in 1968. Granduc Mine produced 420 million pounds of copper up until the mine closed in 1984, representing an end to active mining in Stewart.

Decline and Stabilization (1984-2013)

Stewart's population has slowly declined since the economic downturn of the 1980's that resulted in the closure of the Granduc Mine. Although there are no mines currently in operation in Stewart, there is still some exploration happening. Forestry also contributes to the local economy by employing residents in logging and in log export. Tourism is also a significant part of Stewart's economy, with over 40,000 visitors a year.

Future (2014 and beyond)

There are several projects currently underway that may enhance and diversify the economy in Stewart in the future. The development and expansion of port facilities in Stewart may bring new economic opportunities related to exporting resources and will offer better access to foreign markets. The Long Lake Hydropower Project was recently completed and provides employment and a source of revenue for the District of Stewart.

Relationship with Hyder, Alaska

The history of Stewart has long been intertwined with that of Hyder, Alaska, which is an unincorporated community located just across the border from Stewart. Parts of Stewart, such as the Salmon Glacier and the Granduc Mine, are accessible only by travelling through Hyder. A number of services for Hyder are provided through Stewart including education, emergency response, and electricity. It is expected that close ties will remain between the two communities.

3. Technical Background

3.1. Demographics

In 2013, the population of Stewart was 494, marking very little change from the population in 2006. Stewart's population has been fairly stable in this time period and has similar characteristics to the change in population in the Regional District as a whole. **Table 3.1** summarizes the populations in Stewart and the Regional District of Kitimat-Stikine (RDKS) and the percent change from the previous year.

Table 3.1: Population Change (2006 – 2013)

	2006	2007	2008	2009	2010	2011	2012	2013	Average
Stewart	496	479	507	487	490	494	501	494	494
% change		-3.4%	5.8%	-3.9%	0.6%	0.8%	1.4%	-1.4%	0.01%
Kitimat-Stikine	38,794	37,925	38,360	38,337	38,130	37,876	37,818	37,745	38,123
% change		-1.2%	2.1%	0.9%	0.4%	0.3%	0.0%	0.0%	0.0%

Source: BC Stats

Although the population has stabilized in recent years, Stewart experienced significant population declines from 1996 to 2006. According to Statistics Canada Census data, there was a total decline of 42% during this ten year period, or nearly 6% per year. Stewart now has only slightly more than half the population it did in 1996. **Table 3.2** shows Stewart's population from 1996 to 2011¹:

Table 3.2: Population Change (1996 – 2011)

	1996	2001	2006	2011
Stewart's population	858	661	496	494
Change from previous census	N/A	-23%	-25%	-0.4 %

Source: Statistics Canada Census

Median age is the age at which half the population is younger and half the population is older. It is a useful statistic to describe the general age of the population, particularly in comparison to other communities. According to Statistics Canada Census data, Stewart's median age in 2001 was 36.2, younger than the median age in BC (38.4), but older than the RDKS's median age, 34.2. Ten years later in 2011, Stewart's median age (43.0) has increased to above the BC median age (41.9) and the Region's median age (40.3). This indicates that the population of Stewart is aging at a more rapid rate than elsewhere.

Between 2001 and 2011, there was a significant increase in the number of people 65 years and older age range, and a significant decrease in the proportion of population in the 25 – 44 year old age range. In fact, the 65 year and older age range was the only age range to experience an increase in population

¹ Statistics Canada. (2002, 2007, 2012). *Stewart, British Columbia Community Profiles*. Accessed August 28, 2013 from: <http://www.statcan.gc.ca/start-debut-eng.html>

between 2001 and 2011, despite a significant decline in the overall population. **Table 3.3** summarizes this analysis.

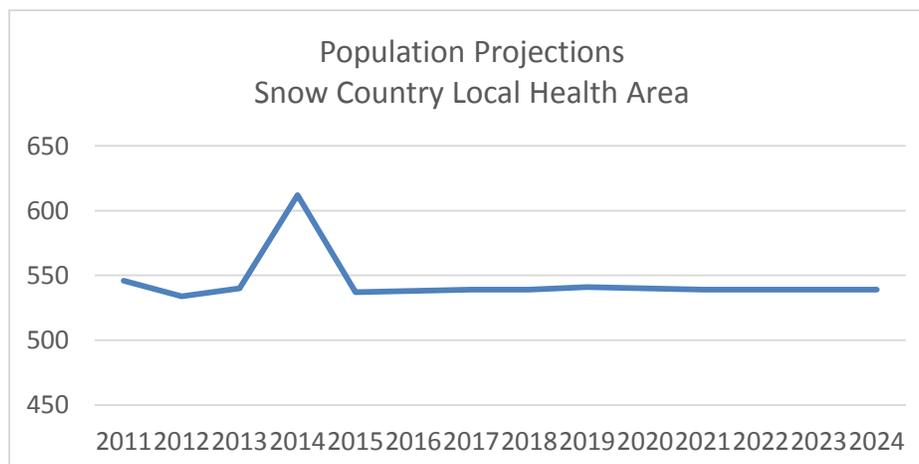
Table 3.3: Summary of Population Change by Age Group

	2001			2006			2011		
	Stewart % of pop.	RDKS % of pop.	BC % of pop.	Stewart % of pop.	RDKS % of pop.	BC % of pop.	Stewart % of pop.	RDKS % of pop.	BC % of pop.
Total pop.	100%	40,876	3,907,740	100%	37,999	4,113,485	100%	37,361	4,400,057
0 – 4	6%	7%	5%	7%	6%	5%	5%	6%	5%
5 - 14	14%	17%	13%	13%	15%	12%	14%	13%	10%
15 - 24	21%	26%	20%	17%	23%	19%	20%	21%	16%
25 - 44	31%	30%	30%	28%	26%	27%	25%	24%	26%
45 - 64	28%	24%	25%	35%	29%	28%	32%	31%	30%
65 +	6%	7%	14%	12%	10%	14%	13%	13%	15%

3.2. Population Projections

Population projections for various jurisdictions in BC have been developed by BC Stats, including Local Health Areas. Stewart is located within the Snow Country Local Health Area and represents approximately 90% of the population of this area. As illustrated in **Figure 3.1**, the population of the Snow Country Local Health Area grew in 2012/2013 (potentially due to the Long Lake Hydro Project) and is projected to drop off again in 2014 and remain relatively stable over the next ten years.

Figure 3.1 Population Projections for Snow Country Local Health Area



Source: BC Statistics

Based on BC Statistics population projections in the Local Health Area, the population in Stewart and area would be approximately 540 in 2024. However, there are several projects underway that could increase the population more significantly than shown in the Local Health Area estimate.

In order to provide an alternative description of potential growth in Stewart over the next 10 years, two growth scenarios were developed based on potential development in the Stewart area. These include:

Low Growth Scenario

The completion of the new Stewart World Port will likely bring increased economic activity to the area. It is conceivable that there will be 30 new jobs in Stewart as a result of the Port operation. Assuming that there is a population multiplier of approximately 2.5 people for each new job, it is possible that the Stewart World Port and its associated businesses will bring 75 new people to the District. In light of the Stewart World Port development, in 2024, Stewart may have a population closer to 570.

High Growth Scenario

Mining exploration continues in Stewart and the surrounding area. Several new projects such as the Long Lake Hydro Project and the Stewart World Port will likely increase the viability of one or more potential mines being explored. If a mine were to come into operation in Stewart, it is likely that another 250 people could be employed in the District. Again, assuming a population multiplier of 2.5, a mine could attract 625 new residents. Considering the impact of the Stewart World Port development along with the impact of a new mine, a high growth scenario for Stewart might result in a population of approximately 1195 in 2024.

Summary

Table 3.4 summarizes these growth projections.

Table 3.4: Population Projection Summary

Growth Projection	Variables	2024 Population	# of Residential Units Required ²
BC Stats		500	0
Low Growth Scenario	<ul style="list-style-type: none"> Completion and operation of Stewart World Port Limited development 	570	34
High Growth Scenario	<ul style="list-style-type: none"> Completion and operation of Stewart World Port Operation of one mine using Stewart as a base 	1195	315

² Based on current average occupancy of 2.2 people per dwelling unit in Stewart

3.3. Economy

Stewart has worked diligently to diversify its economy. The local economy in Stewart is based primarily on tourism, logging, transportation, and mining with various other industries supporting these.

Tourism

Stewart's tourism is a significant economic generator for the community. Its tourism infrastructure includes a number of hotels and campgrounds, which operate in the area in the summertime, as well as tour operators. Stewart currently attracts 40,000 tourists a year³. Most are attracted to the area for the natural beauty, access to Alaska, and access to the Salmon Glacier, which is the fourth largest glacier in North America.

Transportation

Stewart is home to one existing port facility with another one in development. Currently, a wide range of goods are shipped into and out of Stewart's port facilities including raw logs, mechanical equipment for mines and hydro projects, and ore from mines. There is potential for the port facilities to be a port of entry for products being used in the construction of pipelines and Liquefied Natural Gas (LNG) facilities.

Mining

While Stewart's founding was based in mining, there are currently no large scale mines in operation in the Stewart area. There is significant exploration underway in the Stewart area with the Granduc Mine demonstrating some potential to be operational again in the near future depending on economic conditions.

Hydro Power

The hydro project with the greatest relevance to Stewart is the Long Lake Hydro Project (Regional Power Inc.). This project includes a 31 MW hydroelectric project located on Cascade Creek near Stewart, BC and consists of a dam located at the head of Long Lake which supplies a year-round flow of water down a 7.25 km penstock, generating 137 GWh of power annually. The power flows through a new 10km 138kV transmission line which connects to the BC Hydro grid, with an option to interconnect with other projects in the region. The District of Stewart will receive \$400,000 in tax revenue per year for this project. The project employs 3 – 5 operators who live in Stewart year-round. Currently, the townsite is not connected to this project and cannot rely on power from Long Lake when the main grid is down.

In addition to the Long Lake Hydro Project, there are several water license applications in the Stewart area that are held by alternative energy companies. It is unknown if and when these projects might be developed but they represent opportunities for further revenue for the District and employment in the community.

³ The International Resource Journal. (2013). *District of Stewart: Small town, big dreams*. Accessed August 28, 2013 from: http://www.internationalresourcejournal.com/resource_in_action/march_13/district_of_stewart.html

3.4. Development Background

Housing and Residential Development

Stewart's housing stock is comprised primarily of single detached houses or single family dwellings (SFDs). There are 195 SFDs and only 10 apartment or duplex dwellings. The housing market is 80% owner occupied dwellings, compared to the BC average of 60.7%. Rental housing comprises only 5% of dwellings⁴.

Stewart's housing stock is also significantly older than the rest of BC, with 89% of housing built before 1986 and only 7.5% built between 1986 and 2006. **Table 3.5** summarizes key housing characteristics in Stewart.

Table 3.5: Housing Characteristics (2006)⁵

Dwelling Type	Number of Dwellings	% of total dwellings
Single Detached houses	195	86.7%
Semi-detached houses	0	0%
Apartments, duplex	10	4.4%
Other dwellings	15	6.7%
Number of owned dwellings	180	80%
Number of rented dwellings	45	5%
Dwellings constructed before 1986	200	89%
Number of dwellings constructed between 1986 and 2006	30	7.5%
Total number of private dwellings	225	

The cost of housing in Stewart is very low. In fact Stewart has one of the lowest average assessed values for housing in the province. However, it is notable that the value of houses, although low, has more than doubled since 2005. **Table 3.6** shows the representative housing values for a single family dwelling in Stewart from 2005 to 2013 according to data collected by the BC Assessment Authority.⁶

⁴ Statistics Canada. (2007) *Stewart, British Columbia 2006 Community Profiles*. Accessed August 28, 2013 from: <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>

⁵ Note: data sets with numbers under 15 are suppressed for confidentiality, Statistics Canada rounds up or down by 5 randomly to preserve anonymity. This can cause discrepancies in totaled amounts.

⁶ Ministry of Community, Sport, and Cultural Development. (2005-2013). Local Government Tax Rates and Assessments. Accessed August 28, 2013 from: http://www.cscd.gov.bc.ca/lgd/infra/tax_rates/tax_rates2012.htm

Table 3.6: House Values

	Representative House Value
2005	\$28,258
2006	\$31,872
2007	\$31,987
2008	\$50,850
2009	\$51,444
2010	\$63,781
2011	\$59,568
2012	\$65,355
2013	\$69,975

Infrastructure Development

The District of Stewart owns and operates water, sewer, drainage, and road infrastructure. In general, the existing municipal infrastructure is in significant need of upgrades to maintain levels of service.

Water

Water in the District townsite is sourced from three groundwater wells located at the north end of the townsite. While the water quality is excellent, and the District does not currently need to treat water, there are issues with the water system, particularly with regards to fire protection, replacement of pipes, likely leaks in the system, and high demand for water due to the need to keep taps running in the winter.

Wastewater

The District's wastewater system received major upgrades, including a new lagoon system, in 1996. Three pump stations, along with force mains are used for moving sewage through the system. All properties in the town, south of the Highway 37A bridge, are serviced with sewer. The District has a 3 lagoon system that results in infiltration into the ground. There are a number of issues with the wastewater system in Stewart including high amounts of inflow and infiltration and pump failures at lift stations.

Roads

Roads within the District of Stewart are the responsibility of the District with the exception of Highway 37A, which is the responsibility of the Ministry of Transportation and Infrastructure (MoTI). The MoTI owns and operates Highway 37A which provides access from Meziadin Junction to the Alaska Border. Highway 37A serves as the truck route to Stewart Bulk Terminals as well as providing access to the District's downtown.

The road system in the District consists of both paved and gravel roads. In addition, there are sidewalks along Highway 37A in the downtown and along some other roads, though the coverage is more sporadic outside of the downtown.

Drainage

The District has very limited drainage infrastructure despite the fact that the community experiences significant amounts of precipitation, has a very high water table, and experiences high tides from time to time. The District is undertaking some work to build ditches in order to rectify this.

Dyke

The town is protected by a dyke that provides protection from flooding from the Bear River as the river bed is actually higher than the developed area of the town. The Bear River is experiencing aggradation of 4 cm per year. As of 2011, the freeboard of the dyke was less than 17 cm at high water meaning the dyke is close to being breached. In order to address this issue, the District must promote significant gravel extraction in the Bear River. The last significant investment into the dyke was in 2011 when the District received emergency funds of \$450,000 to undertake maintenance and repair. Maintaining the integrity of the dyke and potentially raising it to provide better flood protection for the town is a key priority.

3.5. Environmental Considerations

Stewart is shaped by its climate and its natural environment. Stewart's climate is heavily influenced by the Pacific Ocean and its mountainous surroundings. The town receives approximately 1300 mm of rain and over 570 cm of snow per year. July is the warmest month with an average temperature of 15.1 degrees Celsius while January is the coldest month with an average temperature of -3.7 degrees Celsius.

Some of the key natural environment considerations include:

- *The Bear River Estuary* – there is highly productive habitat for fish spawning at various locations in the estuary and throughout Stewart. Protecting the harbour and the estuary, while also enhancing access into the area is a key concern of the community.
- *Avalanches* – due to the steep slopes, there are often avalanches in the area around Stewart including along Highway 37A which can lead to the community losing transportation access for extended periods of time.
- *Wildlife* – the District has a wide range of wildlife. Particularly relevant for Stewart is the presence of bears, which are reliant on access to salmon and other foods found in the area.
- *Forests* – the District is surrounded by mountainous forests. These provide habitat for a variety of species.

4. Vision and Guiding Principles

4.1. Vision

A vision statement articulates how a community sees itself in the future. The vision for Stewart is:

In 20 years, Stewart is a healthy, sustainable, and vibrant small community that supports a permanent population base of 1000 to 2000 people. Stewart has a diversified and stable economy where industry and tourism are both thriving and growing simultaneously while also respecting and protecting the environment. Stewart is known internationally for its natural scenery, and continues to attract many visitors year-round. The bustling port facilities serve the north and supports the economy of BC and Canada.

Stewart is fully functional with the services expected of a small, remote community. People of all ages can thrive. Citizens are active and proud of Stewart and passionate in their commitment to maintaining and enhancing their great community.

4.2. Guiding Principles

Guiding principles help establish a framework for decision-making and implementation of the OCP. Guiding principles for Stewart in the development and implementation of this OCP include:

Partnerships

The District will encourage partnerships between different levels of government, crown corporations, local industry, small business and community groups to develop workable solutions to current and future issues that face the community.

Community Engagement

The District will foster an environment where a diverse cross-section of residents is actively engaged in matters pertaining to the community.

Role of Local Government

There will be recognition that in the implementation of the OCP, the District will play a number of different roles as the community moves forward. On some initiatives the District will lead while in others it will facilitate, support and/or encourage the actions of others.

Proactive Decision Making

The District will ensure that decisions are made proactively with a long-term focus. This will include ensuring, where possible, that potential issues are identified and addressed proactively and that the decisions made consider the long-term ramifications.

Work within Our Capacity

The District will work within its capacity as a municipal government to implement initiatives that are simple, meaningful, and cost effective. Efforts will be made to expand the community capacity in terms of finances, expertise, and knowledge.

Shared Ownership

While the OCP is adopted by District Council, it is important to understand that the community, as-a-whole, owns this plan and is responsible for its development and implementation. The District and the citizens of Stewart will work together to implement the plan.

Transparency, Clarity, and Fairness

The District will work to ensure that community plan decisions are transparent and clear to the citizens and businesses of Stewart.

Balanced Decision Making

While decision-making processes will seek to promote greater unity in the community, it is understood that there will not always be complete agreement on the direction taken. Regardless, all viewpoints must be respected and people must be provided the opportunity to be heard in order to provide a balanced decision making process.

PART 2: LAND USE PLAN

Part 2 of the Official Community Plan is focused on the development of objectives and policies relating to land use in specific areas of the community.

5. General Policies

General land use policies apply to the use of land regardless of its land use designation. Council policies include:

- .1 Encouraging the consolidation of existing developed lots, where a single house or development utilizes several lots, and requiring the consolidation of lots in the future for new development in order to simplify land titles in the community.
- .2 Requiring that all development respects the natural environment through compliance with relevant environmental standards and regulations.
- .3 Requiring that potential developers in Stewart ensure that their development is safe from natural hazards such as flooding and avalanches.
- .4 Restricting development on slopes greater than 25% and lands adjacent to these slopes, unless an engineering study, performed by a professional geoscientist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) shows the proposed development to be both safe and feasible.
- .5 Requiring that all development activity includes measures for the protection of the District's aquifer.
- .6 Requiring that the habitable portions of buildings be located above the 20 year floodplain.
- .7 Requiring that principal buildings constructed in the Avalanche Hazard Forecast Area (refer to Schedule I) be constructed to withstand significant damage in the event of an avalanche.
- .8 Developing an update to the Subdivision Bylaw including procedures and specifications for development servicing.

6. Residential

6.1. Background

There are currently 225 dwelling units in Stewart, with a population of nearly 500. The majority (195) of these dwellings are single family dwelling units, while 30 dwelling units are apartments or other types of housing. In terms of dwelling unit age, 89% of dwellings were built before 1986, with many houses having some heritage value. Stewart is a compact community and all houses are within a 5 minute drive from downtown core.

Section 3.2 outlines future population scenarios for Stewart. Under the low growth scenario there will be a need for an additional 34 dwelling units by 2024. In a high growth scenario, there could be a need for an additional 315 units. Assuming an average density of 10 units per hectare, the District could need 3 – 31 hectares (ha) of land for residential purposes. Regardless of the growth scenario, Stewart has ample room to accommodate new residential units through infill development and greenfield development with approximately 40 ha of vacant land currently designated for residential development.

6.2. Objectives

It is the objective of Council to:

- .1 Encourage the development of a variety of housing types.
- .2 Encourage the development of affordable housing in the community.
- .3 Encourage the development of housing for seniors in Stewart.

Policies

6.3. General Residential

It is the policy of Council to:

- .1 Direct general residential uses to those areas designated General Residential on Schedule C.
- .2 Allow the development of single-family, duplexes, townhouses and multi-family residential dwellings in the General Residential areas.
- .3 Permit modular homes in those areas designated as General Residential which meet Canadian Standard Association A-277 standards.
- .4 Permit mobile homes provided that they meet Canadian Standards Association C-Z240 and have been manufactured within the past 10 years.
- .5 Encourage the construction of higher density housing, including multi-family units in and around the downtown area.
- .6 Enable the construction of secondary suites, including garden suites and suites above garages in General Residential areas.
- .7 Require that new homes be constructed to be free from groundwater intrusion.

- .8 Allow appropriate types of home occupations in single family dwellings in General Residential areas, while actively encouraging all businesses to locate in commercial areas, where appropriate.
- .9 Require that home-based occupations are clearly incidental to the primary residential use of the property.
- .10 Discourage home-based occupations that will have a detrimental effect on surrounding properties in terms of unsightliness, noise, parking congestion, and traffic.
- .11 Prohibit home industries such as welding and mechanic shops.
- .12 Update and enforce the District's unsightly premises bylaw.

6.4. Rural Residential

It is the policy of Council to:

- .1 Require that any rural residential land be located within 500 m of Highway 37A in order to enable more efficient emergency vehicle access and limit the development of new, remote roads to service this development.
- .2 Require that rural residential developments provide individual on-site septic systems and on-site water service.
- .3 Require proof of potable water on Rural Residential properties.
- .4 Require that treatment and disposal of sanitary sewer systems meets requirements of agencies responsible for such issues.
- .5 Require that all future residential development outside of the Townsite, as defined on Schedule B, and E be designated Rural Residential development.
- .6 Prohibit modular housing in those areas designated as Rural Residential which do not meet Canadian Standard Association A-277 standards.
- .7 Permit mobile homes provided that they meet Canadian Standards Association C-Z240 and have been manufactured within the past 10 years.
- .8 Enable the construction of secondary suites and garden suites.
- .9 Support agricultural uses in Rural Residential areas as a means of increasing the community's access to local food and diversifying the economy.
- .10 Require that Rural Residential uses be developed in a manner to minimize potential negative impacts to the natural environment, including the District's aquifer.
- .11 Require proof that any new residential development is safe from avalanches, flooding, and landslides.

7. Commercial and Industrial

7.1. Background

Commercial and industrial development in Stewart has occurred primarily in and around the main downtown core area on 5th Avenue, and east of Railway Street, in the industrial area. The downtown core along 5th Avenue consists of businesses offering commercial goods and services including hotels, restaurants, gift stores and grocery and general retail stores. The area retains a number of Stewart's historical buildings.

Stewart's industrial land use is based on servicing the regional mining and forestry industries, as well as Stewart's emerging role as an industrial port. The industrial area contains equipment operators that support mining exploration, forestry and other heavy industry. The District's Public Works yard is also located in this industrial area east of Railway Street. There is also some industrial development at the north end of the town on Conway Street.

Stewart has two sea ports, Stewart Bulk Terminals and Stewart World Port (currently under construction) as well as a log storage and shipping facility. The access to sea transportation could be a key driver of Stewart's economy moving forward offering a transportation route for raw logs and other natural resources from the area. If mining, LNG, or other natural resource sectors expand, the port will become an even more vital connection point between Northern BC and Asian markets.

Stewart also has a small airport. For many years it has been used as a base for charters. The airport has been underutilized and as growth and development expands in the Stewart area, there may be increased demand for use of the airport as well as for the land that surrounds the airport.

The District needs to ensure that there is land available for a variety of commercial and industrial uses in order to maximize the opportunities associated with growth in the tourism, natural resources, and transportation sectors of the economy.

7.2. Objectives

It is the objective of Council to:

- .1 Require that development in the downtown is consistent with heritage themes.
- .2 Require that commercial and industrial uses are developed in a manner that does not adversely impact the natural environment.
- .3 Ensure that sufficient land is available to support economic development.

Policies

7.3. Downtown Commercial

It is the policy of Council to:

- .1 Direct downtown commercial uses into the areas identified Downtown Commercial on Schedule C.

- .2 Encourage higher density residential development in and adjacent to the Downtown Commercial area.
- .3 Encourage the development of mixed use buildings with commercial use on the ground floor and residential above the commercial use, in the Downtown Commercial area.
- .4 Develop a Downtown Revitalization Plan that provides clear direction for the physical and economic development of the Downtown Commercial area and which also provide guidance for the future amendment of the Downtown Commercial Development Permit Area Guidelines.
- .5 Encourage pedestrian-oriented development and maintain the walkability and accessibility of the Downtown Commercial area.
- .6 Continue to direct commercial lodging, restaurants and similar uses to the downtown area.
- .7 Encourage property owners to integrate key heritage themes into existing and future development of facades.
- .8 Require that traffic management issues be considered and addressed appropriately.
- .9 Encourage the demolition of buildings that are structurally unsound and cannot be restored.

7.4. General Commercial

It is the policy of Council to:

- .1 Direct general commercial uses into the areas identified as General Commercial on Schedule C.
- .2 Direct light industrial and service commercial uses to the General Commercial areas.
- .3 Require that general commercial uses are adequately screened from residential areas and the downtown in order to promote the improved aesthetics of the community.
- .4 Require that general commercial uses do not negatively impact the natural environment, including the District's aquifer.

7.5. Heavy Industrial

It is the policy of Council to:

- .1 Direct heavy industrial uses into the areas identified as Heavy Industrial on Schedule C.
- .2 Review options for working with the province to identify and utilize crown land to create and market a heavy industrial park north of the town area along Highway 37A.
- .3 Require that heavy industrial uses follow relevant environmental regulations and are developed in a manner that does not negatively impact the natural environment, including the District's aquifer.

7.6. Airport Commercial

It is the policy of Council to:

- .1 Direct airport commercial uses into the areas identified as Airport Commercial on Schedule D.

- .2 Require that businesses located on Airport Commercial lands are users or beneficiaries of the airport facilities in order to promote the vitalization and use of the airport.
- .3 Undertake an Airport Lands Master Plan to identify upgrades to the airport as well as identifying developable land and marketing strategies for the land.

7.7. Port Industrial

It is the policy of Council to:

- .1 Direct port industrial uses into the areas identified as Port Industrial on Schedule C and D.
- .2 Require that uses of the port industrial lands are consistent with the development and use of the shipping port facilities.
- .3 Require that developers refer to and comply with the Port of Stewart Environmental Management Plan.
- .4 Require that port industrial facilities follow environmental regulations and protect the natural habitat of the marine area.
- .5 Undertake a Port Industrial Master Plan reviewing lands that could take advantage of the shipping ports.
- .6 Require that facilities are designed to take into account the potential impacts of a tsunami.

7.8. Commercial Recreation

It is the policy of Council to:

- .1 Direct commercial recreation uses into the areas identified as Commercial Recreation on Schedule D.
- .2 Allow uses such as RV parks, commercial campgrounds and golf courses and supportive facilities to locate in areas designated for Commercial Recreation.
- .3 Require that commercial recreation uses work to protect key natural features such as trees, water bodies and such.

7.9. Home-Based Occupations

It is the policy of Council to:

- .1 Direct home-based occupations into the areas identified as General Residential, or Rural Residential, on Schedule B, C and D and regulate this use through the Zoning Bylaw.
- .2 Recognize the value of home-based occupations as a means of promoting entrepreneurship in Stewart and as an affordable entry point into starting new businesses.
- .3 Require that home-based occupations be clearly incidental to the primary residential use of the property.

- .4 Prohibit home-based industries that are incompatible with surrounding residential uses, such as welding and mechanics shops.
- .5 Prohibit any home-based occupation that will have a detrimental effect on surrounding properties in terms of unsightliness, noise, traffic, or parking congestion.
- .6 Encourage home-based occupations to relocate to commercial facilities in order to support the development of commercial areas.
- .7 Enable the development of mobile home-based businesses such as a mobile welding truck.

8. Civic

8.1. Background

Municipal and provincial investment in infrastructure and services provide the backbone of the community and ensure that services can be offered which support the quality of life in Stewart. These include parks and recreation facilities; social services such as health, education, and policing; and community services such as the museum. Maintaining and enhancing these services is critical to the long-term survival of Stewart.

8.2. Objectives

It is the objective of Council to:

- .1 Have civic facilities that meet the needs of the community to provide a high quality of life.
- .2 Identify land for future civic uses such as a new municipal hall.
- .3 Encourage the development and operation of institutional facilities to service the needs of residents of Stewart.

Policies

8.3. Parks and Recreation

It is the policy of Council to:

- .1 Direct parks and recreation uses into the areas identified as Parks and Recreation on Schedule B, C and D.
- .2 Maintain and improve District-managed parks.
- .3 Maintain and improve the existing trail system to promote recreation and good community connectivity.
- .4 Consider the development of a Parks Master Plan which will outline where future parks should be located and identify the feasibility of developing new facilities such as a golf course, BMX/skateboard park, mountain bike trails, and disc golf, while also considering the feasibility of re-opening the pool.
- .5 Commit to the maintenance and enhancement of the cemetery.

8.4. Institutional

It is the policy of Council to:

- .1 Direct institutional uses to those areas designated Institutional on Schedule C.
- .2 Direct new institutional developments toward the vicinity of the downtown, where appropriate.
- .3 Review options for the relocation and expansion of the museum.

- .4 Review options for the relocation or rehabilitation of the municipal hall and the fire hall.

8.5. Public Works and Infrastructure

It is the policy of Council to:

- .1 Locate infrastructure such as the transfer station, marshalling yard, lift and pump stations, and sewage lagoons, in those areas designated Infrastructure on Schedules C and D and as illustrated in Schedule J (map of infrastructure and major road network).

9. Environmentally Sensitive Areas and Hazardous Areas

9.1. Background

Stewart is located in a remote area with a wild and rugged terrain that supports a diversity of flora and fauna. Just south of Stewart is the Bear River Estuary, where streams and run-off meet the ocean. Estuaries are particularly important ecosystems due to their role as habitat for a diversity of birds, fish, amphibians, insects and shellfish. Estuaries have very unique ecosystems that thrive on the transition area between fresh and salt water. They are important not only for those species that live, nest and inhabit the estuary, but also for herbivores or predators who depend on the abundance of life in the estuary for food. It is therefore, important to protect the estuary from pollution, from encroachment of development and other contaminants that may affect the ecosystems from upstream sources or from the Portland Canal.

The Bear River which runs adjacent to Stewart to the east is a shallow river that experiences significant accumulations of gravel deposits. The District of Stewart lies within the Bear River flood plain, slightly below the water level of the Bear River. There is a dyke that offers protection against flooding, however, the river requires dredging for increased flood protection. This dredging has not been occurring as frequently as has been recommended thus resulting in gravel accumulating in the river bed.

Due to the steep mountains and rugged terrain, Stewart is often prone to avalanches in the winter. Avalanches often block Highway 37A as well, blocking access to Terrace and other outside communities.

Given the large land base of Stewart, a complete inventory of hazardous lands and environmentally sensitive areas has not been undertaken. Rather, this OCP identifies potentially hazardous and environmentally sensitive areas that may be affected by urban encroachment, including avalanche areas. Future developers are cautioned to conduct their own assessment of potential hazards as this OCP contains only a cursory overview.

9.2. Objectives

It is the objective of Council to:

- .1 Work with key partners to protect environmentally sensitive areas.
- .2 Support the protection of habitats for key aquatic and terrestrial wildlife.
- .3 Exercise caution when new development is considered in potentially hazardous areas.

Policies

9.3. Environmentally Sensitive and Hazardous Areas

It is the policy of Council to:

- .1 Designate environmentally sensitive and hazardous areas as identified on Schedules F, G and I.
- .2 Require that wildlife habitat is protected in Environmentally Sensitive Areas.
- .3 Work with the provincial and federal governments to provide adequate protection of the Bear River Estuary.

- .4 Continue to provide access to the Bear River Estuary through the estuary boardwalk to provide an opportunity for residents and tourists to better understand the significance of the area.
- .5 Work with the provincial government to ensure that there is ongoing avalanche mitigation.
- .6 Require that the riparian area of Rainey Creek is protected from the impacts of development in order to protect valuable fish habitat.
- .7 Prohibit development on slopes greater than 25% and lands adjacent to these slopes, unless an engineering study performed by a professional geoscientist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) shows the proposed development to be both safe and feasible.
- .8 Encourage principal buildings to be protected from groundwater intrusion and be constructed above the one in 20 year flood elevation.

10. Open Space and Rural Resource

10.1. Background

Due to its large geographic size, and small area of development, largely limited to the townsite, Stewart has a significant land base that is undeveloped. These open space and rural resource areas have the potential for mining, logging, and energy development while also providing the basis for a thriving tourism industry. These attractions include the salmon run and bear viewing, the Salmon and Bear Glaciers and the abundant wilderness for hiking, and sightseeing. Striking a balance between protection of the environment of the open space and rural resource areas while also promoting a level of development of these areas to support the Stewart economy is a key consideration.

10.2. Objectives

It is the objective of Council to:

- .1 Support mining, logging and other economic development activities in rural areas.
- .2 Preserve and enhance key natural assets for tourism and the enjoyment of residents of Stewart.
- .3 Balance the preservation of the natural environment with new development.

Policies

10.3. Open Space and Rural Resource

It is the policy of Council to:

- .1 Direct open space and rural resource uses into the areas identified as Rural Resource on Schedules B, C, D and E.
- .2 Support the re-designation of rural resource land for rural residential purposes provided that the land in question is located within 500 m of Highway 37A.
- .3 Work with the province to protect valuable tourism assets such as access to the Salmon River Glacier.
- .4 Support winter and summer recreational activities throughout Stewart.
- .5 Work with senior government to require that resource-based industries exercise good environmental stewardship as part of their resource management practices.
- .6 Work with senior government to encourage the protection of key salmon habitats from development impacts.
- .7 Encourage the provincial ministry responsible for forests, to maintain the natural forest cover on mountain faces in order to minimize avalanche hazards.
- .8 Require developers to exercise good management practices and incorporate key community, environmental, and social values when developing in natural areas.

- .9 Require that any development in this area include an assessment of risks from natural hazards including avalanches, steep slopes, and flooding, and implement measures to mitigate any identified risks.

11. Sand and Gravel

11.1. Background

The District has access to a number of gravel resources that are being actively mined. The Bear River is a potential source of gravel that could also be used. Mining the gravel could serve the dual purpose of promoting local economic development and reducing the potential for flooding of the river into the townsite.

11.2. Objectives

It is the objective of Council to:

- .1 Promote the development of sand and gravel resources in Stewart, where appropriate.
- .2 Promote the dredging of the Bear River for gravel resources in order to reduce the risk of flooding and to provide a valuable resource.

Policies

11.3. Sand and Gravel

It is the policy of Council to:

- .1 Designate lands for sand and gravel resource extraction as Sand and Gravel on Schedules C and D.
- .2 Encourage the development of sand and gravel resources.
- .3 Work with stakeholders, such as the ministry responsible for transportation and private developers to ensure that sand and gravel needs are met over the long-term.
- .4 Seek companies to invest into the dredging of the Bear River and identify opportunities to market gravel from this resource while also addressing the critical issue of the need to dredge the Bear River.
- .5 Work with the Province of BC to determine the feasibility of removing royalties from the extraction of gravel from the Bear River in order to make it more economically feasible to extract gravel and reduce the risk of flooding.

12. Development Permit Area Guidelines

Pursuant to the *Local Government Act (919.1)*, Council may designate Development Permit Areas. These may be established under the following conditions:

- .1 Protection of the natural environment, its ecosystems and biological diversity;
- .2 Protection of development from hazardous conditions;
- .3 Protection of farming;
- .4 Revitalization of an area in which a commercial use is permitted;
- .5 Establishment of objectives for the form and character of intensive residential development;
- .6 Establishment of objectives for the form and character of commercial, industrial or multi-family residential development;
- .7 In relation to an area in a resort region, establishment of objectives for the form and character of development in the resort region;
- .8 Establishment of objectives to promote energy conservation;
- .9 Establishment of objectives to promote water conservation; and
- .10 Establishment of objectives to promote the reduction of greenhouse gas emissions.

This Plan contains four separate Development Permit Areas:

DPA # 1 – Hazardous Lands	Areas considered hazardous because of steeply sloping terrain, as well as the presence of unstable soils.
DPA # 2 – Bear River Estuary	Areas of development in the Bear River Estuary.
DPA # 3 – Town Centre	Areas subject to guidelines for the form and character of development in the District's Town Centre area, including façade treatments.
DPA # 4 – Avalanche Hazard Area	Areas located within the Avalanche Hazard Forecast Area.

12.1. Development Permit Area # 1 – Hazardous Lands

12.1.1. Authorization

Development Permit Area No. 1 is designated pursuant to *Local Government Act* section 919.1(1)(b) protection of development from hazardous conditions.

12.1.2. Designated Area

Development Permit Area No. 1 is the area shown as Hazardous Lands Development Permit Area on Schedule F.

12.1.3. Justification

The land within Development Permit Area No. 1 is considered by Council to be hazardous because of steeply sloping terrain, and the presence of unstable soils. The objective of the Development Permit Area is to protect future development from hazardous conditions associated with those conditions.

12.1.4. Development Permit Triggers

The *Local Government Act* imposes development permit requirements in development permit areas. Unless exempted by 12.1.6, a development permit must be obtained when any of the following types of development activity occur in Development Permit Area No. 1, in accordance with Section 920 of the *Local Government Act*:

- .1 Subdivision of land;
- .2 Construction, addition or alteration of a building or other structure; or
- .3 Alteration of land.

12.1.5. Exemptions

In Development Permit Area No. 1, a development permit is not required for the following:

- .1 The alteration of a building that is limited to the addition, replacement or alteration of doors, windows, building trim, awnings, or roofs;
- .2 Interior alterations to buildings;
- .3 The construction of new buildings or structures less than 10 square metres in area;
- .4 The erection of a sign or fence;
- .5 The placement of temporary construction site offices, structures used for short-term special events and emergency facilities; or
- .6 The consolidation of a lot or road widening.

12.1.6. Hazardous Lands Development Permit Guidelines

The following Development Permit Guidelines apply in Development Permit Area No. 1:

- .1 Any future development, including but not limited to the altering of land and soil, the erection and placement of buildings, and the installation of in-ground sanitary or storm sewer systems, shall ensure that erosion mitigation and slope stabilization measures are implemented; and
- .2 Lands within Development Permit Area No. 1 should generally remain free from development and should not be altered unless it can be demonstrated that the land may be used safely for the intended use, with appropriate protection from the risk of rock fall, landslip, and similar hazards where soil instability is a concern. The use of lands that are adjacent to hazard areas and that could be adversely affected by, or could increase, inherent hazards should be similarly limited and subject to professional assessment.
- .3 All persons wishing to undertake an activity within the designated area for which a development permit is required will be required to submit to the District a report certified by a professional geoscientist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) to assist the District in determining what conditions or requirements it will impose in the permit.

12.2. Development Permit Area # 2 – Bear River Estuary

12.2.1. Authorization

Development Permit Area No. 2 is designated pursuant to *Local Government Act* section 919.1(1)(a) Protection of the natural environment, its ecosystems and biological diversity.

12.2.2. Designated Area

Development Permit Area No. 2 is the area shown as Bear River Estuary Development Permit Area on Schedule G.

12.2.3. Justification

Development Permit Area No. 2 seeks to protect the Bear River Estuary from development that may impact habitat quality. The Port of Stewart Environmental Management Plan was prepared in 1995. This Plan identifies areas of key environmental sensitivity and sets out a process to ensure that any new development in the estuary is sensitive to key habitat values. This Development Permit Area provides further guidance on how development shall be undertaken.

12.2.4. Development Permit Triggers

The *Local Government Act* imposes development permit requirements in development permit areas. Unless exempted by 12.2.6, a development permit must be obtained when any of the following types of development activity occur in Development Permit Area No. 2, in accordance with Section 920 of the *Local Government Act*:

- .1 Subdivision of land;
- .2 Construction, addition or alteration of a building or other structure; or
- .3 Alteration of land.

12.2.5. Exemptions

In Development Permit Area No. 2, a development permit is not required for the following:

- .1 The alteration of a building that is limited to the addition, replacement or alteration of doors, windows, building trim, awnings, or roofs;
- .2 Interior alterations to buildings;
- .3 The construction of new buildings or structures less than 10 square metres in area;
- .4 The erection of a sign or fence;
- .5 The placement of temporary construction site offices, structures used for short-term special events and emergency facilities; or
- .6 The consolidation of a lot or road widening.

12.2.6. Bear River Estuary Development Permit Guidelines

The following Development Permit Guidelines apply in Development Permit Area No. 2:

- .1 The completion of an environmental assessment report by the developer identifying any impact to critical habitat of development and mitigative measures that will be implemented to ensure that habitat is retained and enhanced.
- .2 Demonstration of compliance with the Port of Stewart Environmental Management Plan.

12.3. Development Permit Area # 3 – Downtown Commercial

12.3.1. Authorization

Development Permit Area No. 3 is designated pursuant to *Local Government Act* section 919.1(1)(f) establishment of objectives for the form and character of commercial, industrial, or multi-family residential development.

12.3.2. Designated Area

Development Permit Area No. 3 is the area shown as Downtown Commercial Development Permit Area on Schedule H.

12.3.3. Justification

Development Permit Area No. 3 seeks to ensure that the Downtown Commercial area continues to have a unique form and character and to ensure that development in the Downtown Commercial area respects Stewart's heritage and presents an interesting focal point for the community.

12.3.4. Development Permit Triggers

The *Local Government Act* imposes development permit requirements in development permit areas. Unless exempted by 12.3.6, a development permit must be obtained when any of the following types of development activity occur in Development Permit Area No. 3, in accordance with Section 920 of the *Local Government Act*:

- .1 Subdivision of land; or
- .2 Construction, addition or alteration of a building or other structure.

12.3.5. Exemptions

In Development Permit Area No. 3, a development permit is not required for the following:

- .1 The alteration of a building that is limited to the addition, replacement or alteration of doors, windows, building trim, awnings, or roofs;
- .2 Interior alterations to buildings;
- .3 The construction of new buildings or structures less than 10 square metres in area;
- .4 The erection of a sign or fence;
- .5 The placement of temporary construction site offices, structures used for short-term special events and emergency facilities; or
- .6 The consolidation of a lot or road widening.

12.3.6. Downtown Commercial Development Permit Guidelines

The following Development Permit Guidelines apply in Development Permit Area No. 3:

- .1 Bright colours for facades are encouraged;
- .2 The use of wood and other natural materials are encouraged on the exterior of buildings;
- .3 Building design should incorporate Stewart's rich history;
- .4 Large buildings should be designed in a way to minimize domination of the streetscape and should be articulated by offsetting and planting to give the appearance of smaller blocks;
- .5 Buildings should have a significant proportion of display windows at street level to provide a visually interesting viewscape for pedestrians;
- .6 Exterior signs should avoid neon and backlit signs; and
- .7 Buildings should be oriented towards the street to enable pedestrian access.
- .8 Adequate off-street parking should be provided.

12.4. Development Permit Area # 4 – Avalanche Hazard Area

12.4.1. Authorization

Development Permit Area No. 4 is designated pursuant to *Local Government Act* section 919.1(1)(b) protection of development from hazardous conditions.

12.4.2. Designated Area

Development Permit Area No. 4 is the area shown as Avalanche Hazard Forecast Area on Schedule I.

12.4.3. Justification

Development Permit Area No. 4 seeks to protect development from avalanches. In 1994, an assessment of the avalanche risk was prepared for the District of Stewart entitled *Snow Avalanche Hazard Line, District of Stewart*. This report identified areas where there would be Plunging Avalanche Hazards. A subsequent report was prepared by the BC Ministry of Transportation entitled *Snow Avalanche Safety Recommendations for Mount Rainey* which identified safety measures that should be implemented in the event of increased acute risk of avalanche. This report identified the eastern part of the District townsite as having some risk of impacts from avalanches.

12.4.4. Development Permit Triggers

The *Local Government Act* imposes development permit requirements in development permit areas. Unless exempted by 12.4.6, a development permit must be obtained when any of the following types of development activity occur in Development Permit Area No. 4, in accordance with Section 920 of the *Local Government Act*:

- .1 Subdivision of land;
- .2 Construction, addition or alteration of a building or other structure; or
- .3 Alteration of land.

12.4.5. Objective

The objective of the Development Permit Area No. 4 designation is to protect development from hazardous conditions associated with the risk of avalanche.

12.4.6. Exemptions

The following Development Permit Guidelines apply in Development Permit Area No. 4:

- .1 The alteration of a building that is limited to the addition, replacement or alteration of doors, windows, building trim, awnings, or roofs;
- .2 Interior alterations to buildings;
- .3 The construction of new buildings or structures less than 10 square metres in area;
- .4 The erection of a sign or fence outside of a Ministry of Transportation and Infrastructure Right-of-Way;
- .5 The placement of temporary construction site offices, structures used for short-term special events and emergency facilities; or
- .6 The consolidation of a lot or road widening.

12.4.7. Avalanche Hazard Area Development Permit Guidelines

Development Permits shall be issued in accordance with the following:

- .1 Certification by a structural engineer that new principal buildings constructed in this area are able to withstand the impacts of plunging snow from an avalanche with only minor damage.
- .2 Lands within Development Permit Area No. 4 should generally remain free from development and should not be altered unless it can be demonstrated that the land may be used safely for the intended use, with appropriate protection from the risk of avalanche. The use of lands that are adjacent to hazard areas and that could be adversely affected by, or could increase, inherent hazards should be similarly be limited and subject to professional assessment.

PART 3: COMMUNITY DEVELOPMENT

Part 3 of the OCP includes the development of goals and policies pertaining to key Community Development topics such as economic development, infrastructure, environmental protection, community safety, social needs, community development, and housing. Finding solutions to issues in each of these topic areas will be critical for the long-term vitality of Stewart.

13. Economic Development

A healthy economy is key to a high level of community well-being, services and infrastructure provision, and quality of place. In Stewart, ensuring sustainable economic development in the long term and in the short term requires expanding employment, stabilizing the economy, and diversifying the economic drivers of the community. Stewart's economy is reliant on its access to natural resources which supports the tourism, shipping, mining and forestry industries. In the future, it is likely that the community will continue to rely on this natural resource base to provide employment for residents. Diversifying and expanding the economy will be important to sustaining the existing population, and attracting new residents and businesses to the community.

13.1. Goals

It is the goal of Council to:

- .1 Work with the community and key stakeholders to expand and diversify the economy to work towards increased economic stability in Stewart.

13.2. Policies

It is the policy of Council to:

- .1 Encourage partnerships with government agencies and local industries that will bolster economic and community development.
- .2 Provide the services, and facilities that businesses need to thrive and succeed.
- .3 Market tourism, natural resources, and transportation as key economic drivers for Stewart.
- .4 Maintain close ties with Hyder, Alaska, and recognize its importance to the economy of Stewart.
- .5 Support the incorporation of green and innovative technology in Stewart's economic development.

13.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Pursue government support to undertake an economic development strategy.

- .2 Encourage the reinvigoration of the Chamber of Commerce to be a unifying voice for all business in Stewart.
- .3 Support the viable operation of the port facilities in the community;
- .4 Work to ensure that there is sufficient land available for industrial expansion.
- .5 Support local businesses and entrepreneurs by identifying the needs of the business community and working together to address those needs.
- .6 Increase attractions and accessibility for tourism.
- .7 Encourage the development of vacant lots in the downtown area.
- .8 Identify key business gaps in Stewart, such as a pharmacy and bank, and develop a business recruitment strategy to address these gaps.
- .9 Develop a marketing package targeted at potential residents, such as retirees (including retirees who may live in the community part of the year), which highlights the ways in which Stewart is a great place to live and work. Consideration should be given to developing videos, brochures, and other information that captures the natural and community-based attributes of Stewart.
- .10 Develop a marketing package for potential industries and businesses to locate in Stewart highlighting Stewart's strategic transportation location, access to natural resources, and tourism potential. Consider marketing Stewart as a potential location for major industries such as a wood pellet plant, water bottling plant, alternative energy, and such.
- .11 Develop a plan to better leverage the airport as an economic development generator.
- .12 Prepare a Legacy Investment Strategy which identifies the key investments in community development that Stewart would like major industries to make into assets such as parks and recreation facilities.
- .13 Identify key tourism assets, including those in Hyder, such as access to natural areas, trails, heritage resources, hunting and angling, and wildlife and work with various community partners to ensure that the infrastructure to support and leverage these key tourism assets is in place.
- .14 Undertake a signage program for wayfinding and trails interpretation in order to provide a better user experience for residents and tourists, which would include unified graphics and community branding. At the same time, remove signage that is out of date in order to reduce confusion.
- .15 Develop community events to attract tourists to Stewart such as sports events (i.e. adventure races, triathlons, and hockey tournaments) and cultural events (i.e. festivals, concerts).
- .16 Encourage the Visitors Centre to maintain its operations and encourage it to provide up-to-date and accessible information about businesses and activities in Stewart and Hyder.
- .17 Develop a tourism map for Stewart highlighting key tourism-related businesses, such as hotels, campgrounds and restaurants, as well as key tourism activities including trails and boat charters.
- .18 Develop a downtown revitalization plan identifying key design characteristics, business gaps, development guidelines and infrastructure upgrades and consider the establishment of a

downtown revitalization tax exemption bylaw which could encourage reinvestment in the downtown area.

- .19 Request that senior government agencies provide better access to business permitting, particularly senior government permits (i.e. daycare, environmental).
- .20 Encourage local businesses and industries to establish good working relationships with surrounding First Nations communities including the Nisga'a Lisims and the Gitksan.
- .21 Require that traffic management issues be considered and addressed appropriately.

14. Infrastructure

Physical infrastructure provides a foundation for communities to survive and thrive. The District of Stewart offers services such as water distribution, sewage collection and treatment, and solid waste disposal, along with providing roads and trails. Many components of the District's infrastructure are in need of renewal in order to remain functional into the future. The challenge of providing appropriately maintained infrastructure in Stewart is compounded by the high water table and the isolation of the community which increases the cost of materials and construction. At the same time, provision of infrastructure by the provincial and federal governments, as well as the private sector, is critical to increasing the livability of the community. In the coming years, Stewart will need to invest significantly in infrastructure renewal to address existing issues and ensure that future issues are not exacerbated by neglect.

14.1. Goals

It is the goal of Council to:

- .1 Provide municipal infrastructure that meets the needs of the community and is maintained in a fiscally responsible, equitable, and sustainable manner.

14.2. Policies

It is the policy of Council to:

- .1 Invest in the maintenance and rehabilitation of municipal infrastructure.
- .2 Work to ensure that the provision of municipal infrastructure is compliant with senior government regulations and guidelines.
- .3 Develop and utilize municipal infrastructure in an optimal manner.
- .4 Advocate for senior government and private infrastructure to be provided in the community at a service level befitting a strategically important community.

14.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Develop an infrastructure asset management plan to identify when infrastructure will need to be rehabilitated and replaced and what financial resources will be required.
- .2 Consider using full cost accounting practices, including the future costs of replacing infrastructure when determining water and sewer rates.
- .3 Review opportunities for funding grants to accelerate the replacement of aging infrastructure.
- .4 Continue to study how to provide adequate fire protection in Stewart by reviewing the feasibility of providing a reservoir, upgrading fire hydrants and replacing underground infrastructure.
- .5 Undertake a wellhead protection study for the District's wells.

- .6 Develop sustainable stormwater infrastructure which balances engineered and natural solutions to stormwater management.
- .7 Review measures to reduce waste water.
- .8 Work with homeowners to provide alternatives and education programs to reduce the likelihood that people will connect sump pumps directly to the sewer network.
- .9 Address issues with the sewage system which include inflow and infiltration to reduce the amount of wastewater process at the sewage treatment plant.
- .10 Undertake a leak detection program for the water system to identify and fix key leaks.
- .11 Consider the implementation of a water meter program for industrial and commercial users.
- .12 Consider the designation of a development permit area for aquifer protection.
- .13 Work to ensure that the operation of the District's infrastructure achieves compliance with provincial and federal regulations.
- .14 Update the Subdivision Development and Servicing Bylaw to reflect new best practices for the provision of infrastructure servicing.
- .15 Invest in the closure of the landfill and determine the most cost effective means of operating a transfer station for the District's solid waste.
- .16 Acquire crown land to provide for a compost dump of yard waste and vegetation stripped from development sites.
- .17 Advocate for the provision of infrastructure such as cellular phone service and high speed internet.
- .18 Consider the needs of pedestrians and cyclists as part of future road works including the construction of new roads and the rehabilitation of existing roads.
- .19 Lobby the Ministry of Transportation and Infrastructure to develop a new road to service Stewart Bulk Terminals and bypass the downtown area.
- .20 Require that traffic management issues be considered and addressed appropriately.
- .21 Ensure that all accesses to Highway 37A are approved by the Ministry of Transportation and Infrastructure.
- .22 Ensure that developments adjacent to Highway 37A are referred to the Ministry of Transportation and Infrastructure for comment.
- .23 Lobby for increased maintenance of Highway 37A in the winter to support safe transport and promote economic development through Stewart's port facilities.
- .24 Request that BC Hydro provide a direct link to the Long Lake Hydro power station in order to ensure more reliable electricity for Stewart.

15. Environmental Stewardship

The natural environment is one of Stewart's key assets and fundamental to its economy. The Bear River Estuary, along with the abundant wildlife and other natural features are integral to the community and form the basis of its tourism industry. At the same time, the unique geographic landscape of Stewart is also what has fueled the mining industry in the area. It is vital to take steps towards greater environmental stewardship and sustainability.

15.1. Goals

It is the goal of Council to:

- .1 Protect sensitive natural assets such as the estuary, riparian areas, wildlife and freshwater resources; and
- .2 Reduce the community's impact on the natural environment.

15.2. Policies

It is the policy of Council to:

- .1 Encourage the reduction of community greenhouse gas (GHG) emissions and energy consumption.
- .2 Work with senior government to protect key ecological habitats.
- .3 Provide stormwater management techniques that are environmentally sustainable and cost effective.
- .4 Encourage the protection and sustainable use of water resources including aquifer protection, water conservation, and wastewater treatment.
- .5 Reduce community and municipal greenhouse gas. Emissions.

15.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Work with senior government to protect and enhance the Bear River Estuary.
- .2 Support reduced use of motor vehicles by encouraging the development of a community car share program, encouraging shared transportation to nearby service centers; and encouraging active transportation in the community.
- .3 Become engaged with and monitor ongoing environmental assessments for major projects relevant to the Stewart area and effectively communicate the importance of preserving natural assets for quality of life and the tourism industry.
- .4 Work with the community and provincial government agencies to develop a Bear Aware program for Stewart.

- .5 Work with senior government partners to effectively monitor ecological habitats to encourage their vitality.
- .6 Reduce community and municipal greenhouse gases by 10% below 2010 levels to 3600 tonnes by 2024 by encouraging sustainable transportation and encouraging the use of wood heat to replace the use of heating oil and propane.
- .7 Undertake a water conservation program focused on reducing indoor water use.
- .8 Support and facilitate energy efficient development and land use patterns to create complete, compact community development.
- .9 Develop a corporate energy consumption measurement strategy for the District.
- .10 Develop a vehicle anti-idling strategy.
- .11 Work with School District # 82 to provide environmental education programs to children in order to connect them to the natural environment.
- .12 Work with community partners such as Bear Valley School and Border Town Recycling to implement environmental programs.
- .13 Continue to support the efforts of Border Town Recycling to undertake waste reduction efforts including recycling and potentially composting.

16. Community Safety

Stewart has a low crime rate, and a high degree of perceived safety. It is desirable to maintain this into the future. In order to do so, it is important to take a proactive approach to maintaining community safety by considering not only crime, but also access to emergency health services, natural disaster mitigation planning and fire protection. Given the vulnerability of Stewart to natural disasters, combined with its isolation, it is critical that the community take steps to ensure that it is adequately prepared in the event of an emergency.

16.1. Goals

It is the goal of Council to:

- .1 Enable all residents have access to emergency services at all times; and
- .2 Reduce risks associated with natural disasters.

16.2. Policies

It is the policy of Council to:

- .1 Advocate for higher levels of service from the province for emergency services such as ambulance and healthcare.
- .2 Maintain appropriate investment levels in policing and fire protection to maintain a safe and secure community.
- .3 Work with community partners to prepare the community for natural disasters such as avalanches, floods, and tsunamis.

16.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Construct a reservoir to increase water pressure exists for fire protection.
- .2 Undertake a community education program to educate residents and businesses on the actions they need to take in the event of a natural disaster such as a tsunami, avalanche, or flood.
- .3 Investigate how to have emergency generators located in the community on a full-time basis to provide electricity at times when the main grid is out of service.
- .4 Continue to advocate for a sustainable level of policing to be maintained in the community.
- .5 Work with the RCMP to promote cycling education and consider re-starting the annual bike rodeo.
- .6 Work with BC Ambulance to find creative means to fund permanent ambulance attendants by combining with other community needs (i.e. could ambulance attendant also be a paid volunteer coordinator).
- .7 Work with senior government to update floodplain mapping.

- .8 Identify long-term solutions to address flood threats to Stewart through the *Flood and High Groundwater Mitigation Plan* (planned for completion by 2015).
- .9 Work to maintain the dyke and raise it in order to reduce the potential risk of flooding.
- .10 Work with key partners to ensure the ongoing dredging of the Bear River in order to reduce the potential risk of flooding.
- .11 Require adequate setbacks of buildings and key activities from waterways such as rivers and streams.
- .12 Review options to maintain adequate levels of service for residents in lieu of the increased demand placed on the Health Centre due to injuries at industrial work sites in the summer months.
- .13 Continue to work with provincial government ministries to ensure that avalanche risk is mitigated as much as possible and ensure that avalanche forecasting continues to be undertaken.
- .14 Require that development in avalanche hazard areas be designed to withstand major damage from an avalanche.
- .15 Work with senior government to identify the tsunami inundation area for Stewart.
- .16 Encourage the demolition of abandoned buildings that are beyond the point of being effectively refurbished.

17. Social Needs

Meeting social needs helps to increase the quality of life in Stewart, boost economic activity, and retain families, seniors and residents of all ages. Addressing basic social needs provides a foundation for community building, participation and individual well-being. The community has long been concerned about access to social services. With population decline over the last two decades, there has been a gradual reduction in the services offered in the community including, most prominently, education, healthcare, and other social services such as family support services. If Stewart is expected to grow again, it will be critical to have an increase in social services in the community to make Stewart attractive to potential residents.

17.1. Goals

It is the goal of Council to:

- .1 Develop a community where all ages can thrive and meet many of their social needs in Stewart.

17.2. Policies

It is the policy of Council to:

- .1 Support community groups and volunteers providing social services.
- .2 Provide the support needed for people of all ages, infants, families and seniors, to thrive in Stewart.
- .3 Work with community partners and provincial agencies to expand the range of social services offered in Stewart.
- .4 Diversify educational opportunities for all ages in the community.
- .5 Support the initiatives of the Stewart Services Society and Stewart Community Connections in their work to improve social conditions in Stewart.
- .6 Encourage community volunteers to continue assisting with addressing key social needs.
- .7 Encourage the development of more daycare resources in the community.
- .8 Support the continued operation and expansion of Stewart's health services to support Stewart's diversifying population.

17.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Request that RCMP officers working in Stewart are trained to assist with mental health issues, particularly in crisis situations.
- .2 Lobby the provincial government to improve the services available, such as counselling, healthcare, physical wellbeing, foster parenting and peer support groups, for children and parents to promote healthy families.

- .3 Provide programs and support needed for seniors to reside in their homes in Stewart longer, without having to move to a larger community.
- .4 Support the implementation of parks and recreation programs to encourage a healthy and active lifestyle for people of all ages.
- .5 Encourage, through the high school and businesses, the development of a Snow Angels program to help seniors clear driveways and walkways.
- .6 Encourage the development of a Meals on Wheels program for seniors.
- .7 Explore the feasibility of using under-utilized hospital beds at the Health Centre for seniors who need extra care.
- .8 Lobby Northern Health to attract nurses, mental health professionals and support staff to Stewart.
- .9 Encourage provincial government agencies to provide incentives to professionals such as nurses, ambulance attendants, and school staff who choose to live in Stewart permanently.
- .10 Review opportunities to recruit other health professionals such as physiotherapists, chiropractors, optometrists, orthodontists, dieticians and dentists to establish part-time services in Stewart.
- .11 Encourage the development of transportation options to provide affordable connections to Terrace and Smithers such as a Northern Health bus, private transportation, and a rideshare board.

18. General Community Development

Community development considerations address the questions “What does Stewart need to be a thriving community?” and “What does Stewart look like when it is at its best?” The intention of goals and policies in this section is to bolster an active community where volunteerism flourishes, art, culture and heritage are tangible and accessible, where youth are engaged in shaping the community, and where recreation and outdoor activities are enjoyed by the whole community. Community development also means ensuring that Stewart is better off as a result of industrial and natural resource projects in the area.

18.1. Goals

It is the goal of Council to:

- .1 Ensure a high quality of life in Stewart; and
- .2 Promote community engagement amongst residents of all age through volunteerism, active lifestyles, and access to arts, culture and heritage.

18.2. Policies

It is the policy of Council to:

- .1 Celebrate the strengths of local community assets including people skills and talents, local associations and institutions, and businesses and infrastructure and use these as the building blocks of a great community.
- .2 Encourage active living in the community.
- .3 Support the development of an arts and culture community.
- .4 Encourage volunteerism and to support volunteer efforts to make the community a better place to live.
- .5 Support efforts to enhance food security.
- .6 Work with the volunteer community and other partners to provide a wide range of recreational/sports programs for various groups including youth, adults, and seniors.
- .7 Encourage the development of a program that links and connects seniors with youth and young adults in the community to promote greater intergenerational learning and awareness.
- .8 Preserve Stewart’s historical significance.

18.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Review the feasibility of re-opening the swimming pool or re-purposing the building.
- .2 Develop a fitness gym that can be used year round by residents of all ages.

- .3 Work with key community partners, including youth, to determine the feasibility of constructing and operating a BMX bike track and/or a skateboard park.
- .4 Encourage private and/or non-profit investment in a golf course.
- .5 Continue to partner with School District # 82 on the provision of facilities for recreation and sports facilities.
- .6 Review strategies to promote greater use of the arena.
- .7 Continue to support the development of community sports organizations by providing affordable and quality space for community sports to thrive and work with the volunteer base to ensure that these sports are sustainable over the long-term.
- .8 Utilize the potential development of an industry-led legacy fund to pay for parks and recreation facilities and programs.
- .9 Partner with various regional, provincial, industry and non-government organizations to enhance the quality of trails and natural areas.
- .10 Work with the community to develop a non-profit trails stewardship committee.
- .11 Continue to provide access into natural areas for a variety of uses including hiking, biking, ATVs, snowmobiles.
- .12 Consider the development of mountain bike trails, a disc golf course and other facilities that can be used by a wide range of people
- .13 Complete and continually maintain of the estuary boardwalk. Community input should be sought on the final design of the boardwalk.
- .14 Encourage BC Parks to maintain viable provincial parks in the Stewart area.
- .15 Maintain the Rainey Creek Trail.
- .16 Maintain existing trails and consider the development of new trails.
- .17 Maintain the baseball field and tennis court.
- .18 Develop a campaign whereby residents make three personal commitments to improve Stewart as a community such as planting trees, volunteering for committees or events, or helping seniors or youth.
- .19 Identify potential initiatives to encourage the production of food locally including community gardens, community greenhouses, food production on individual lots, and backyard egg production.
- .20 Establish a community garden and compost facility to encourage the production of local food and greater social connection in the community.
- .21 Continue to support active transportation in the community by installing bike racks, maintaining sidewalks, and having a bike repair station.

- .22 Review strategies to work collaboratively with neighbouring First Nations communities and to celebrate the First Nations heritage in the Stewart area.
- .23 Establish a volunteer database which will summarize the skills and interests of various volunteers in the community.
- .24 Develop a welcome package for new residents which highlights existing services and facilities in the community as well as potential volunteer opportunities.
- .25 Review potential permanent locations for the museum which would provide adequate space and would be attractive to residents and tourists alike.
- .26 Work with community groups to identify important heritage resources and buildings in Stewart and identify appropriate levels of investment to preserve and acknowledge the historical significance of various buildings.
- .27 Consider engaging a professional to determine which historical buildings in Stewart can be invested in for a continual use; which should be retained for their historical façade; and which buildings should be demolished but recognized with a plaque acknowledging the former use of the land.
- .28 Support the continued operation of festivals in the community, including Bear Fest.
- .29 Consider the development of an artist's residence in Stewart.
- .30 Encourage the community to establish youth leadership programs such as Cubs, Scouts, and Beavers to promote youth involvement in leadership and community development.
- .31 Develop a Youth Council to empower teenagers to take the lead on various initiatives to provide activities.
- .32 Support the ongoing operation and enhancement of the museum and library.

19. Housing

Housing is important to a community on many levels. Houses are where families and neighbours interact. Houses have a direct influence on personal health and well-being. A house also represents, for many people, their largest purchase, or their largest monthly expenditure, and where the majority of their personal wealth is invested. The goals and policies in this section aim to encourage housing that reflects the values of the community. This includes accessible housing for those with limited mobility, housing for seniors, and policies that ensure that the history and character of Stewart is preserved and respected.

19.1. Goals

It is the goal of Council to:

- .1 Encourage the development of an affordable and safe housing stock in Stewart.
- .2 Encourage an increase housing accessibility for seniors and others with limited mobility.
- .3 Encourage diversity in housing types.

19.2. Policies

It is the policy of Council to:

- .1 Encourage housing accessibility.
- .2 Encourage different types of housing (single family dwellings, townhouses), and different tenure types.
- .3 Encourage the retrofit and renovation of existing homes, where feasible, to improve the housing stock.
- .4 Encourage the construction of new homes on vacant serviced residential lots in existing blocks.

19.3. Actions

Proposed actions for the District and/or the community to lead include:

- .1 Encourage new houses to be constructed to achieve greater visitability for people with reduced mobility by establishing visitability guidelines for the design of new homes and the renovation of existing homes.
- .2 Work with the provincial government to encourage the development of affordable housing for seniors to enable them to stay in the community.
- .3 Enable the construction of rural residential lots provided that water and sewer service is provided on-site and that they are located in close proximity to a road that is maintained by the District or the Ministry of Transportation and Infrastructure.

PART 4: IMPLEMENTATION STRATEGY

Part 4 summarizes the strategy for implementing the policies and actions outlined in this OCP and suggests potential timelines and responsibilities for implementation.

Action	Relevant Policies	Priority	Leadership	Support
Develop a Subdivision and Development Servicing Bylaw	5.8 14.3.14		District of Stewart	
Develop a Downtown Revitalization Plan	7.3.4 7.3.7 13.3.7 13.3.18		District of Stewart	
Develop a Heavy Industrial Park feasibility study	7.5.2 13.3.4		District of Stewart	Ministry of Forests, Lands and Natural Resources Operations
Undertake an Airport Lands Master Plan	7.6.3 13.3.11		District of Stewart	
Undertake a Port Industrial Master Plan	7.7.5		District of Stewart	Ministry of Forests, Lands and Natural Resources Operations
Undertake a Parks Master Plan	8.3.3 8.3.4 16.3.4 18.3.1 18.3.2 18.3.3 18.3.4 18.3.5 18.3.6 18.3.7 18.3.12		District of Stewart	
Work with BC Government to remove royalties from extraction from Bear River	11.3.5		District of Stewart	Provincial and Federal Governments
Undertake an economic development strategy	13.3.1 13.3.5 13.3.8 13.3.9 13.3.10		District of Stewart	Northern Development Initiative Trust, Community Futures, Provincial Government
Re-invigorate the Chamber of Commerce	13.3.2		Stewart Business Community	District of Stewart
Undertake strategies/investments to increase tourism	13.3.6 13.3.13 13.3.15 13.3.16 13.3.17		District of Stewart, Kitimat-Stikine Regional District	
Prepare a Legacy Investment Strategy which identifies community contributions major industries could make	13.3.12 18.3.8			

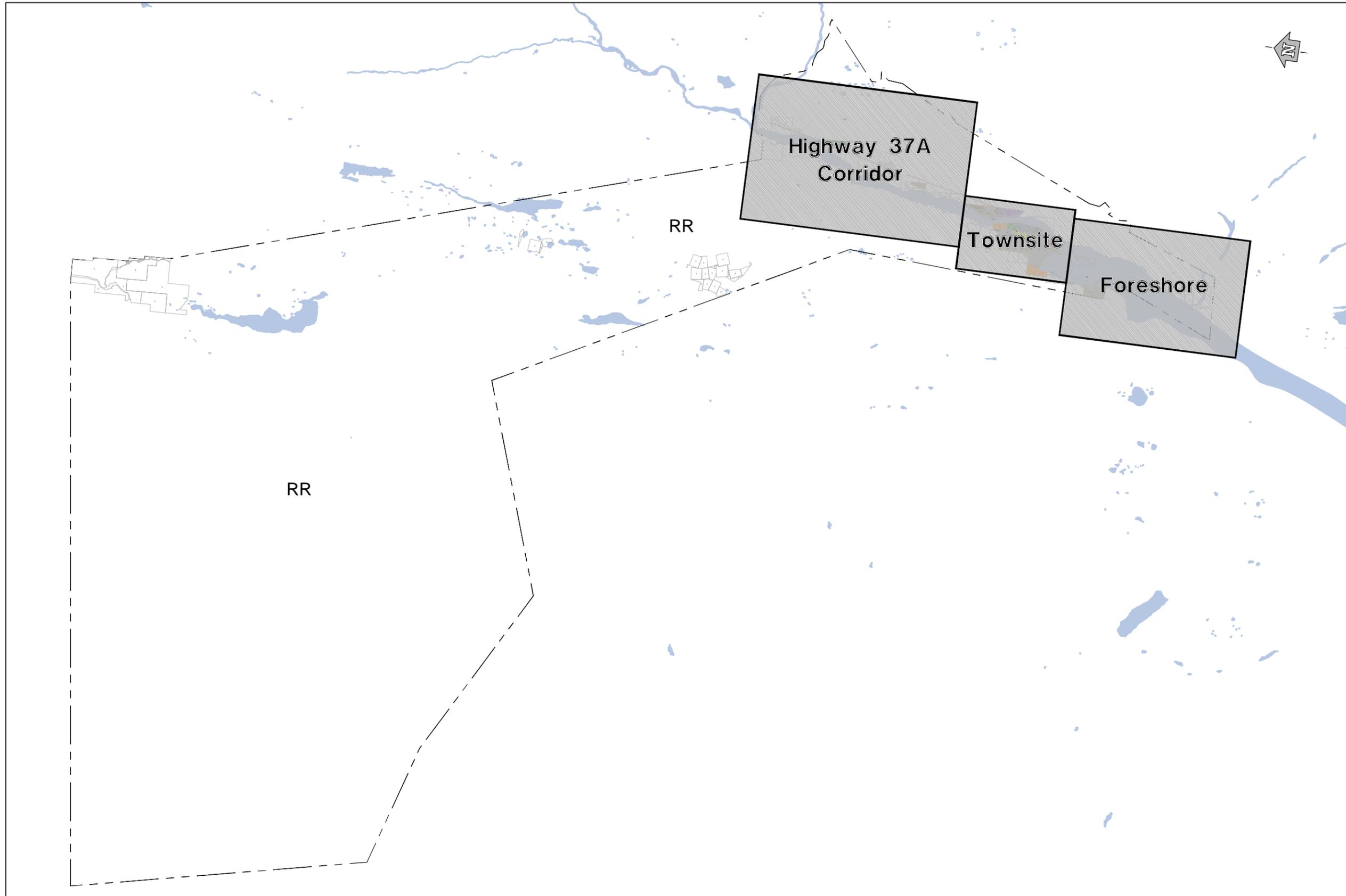
Action	Relevant Policies	Priority	Leadership	Support
Develop a signage and wayfinding program	13.3.14		District of Stewart/ Business Community	
Develop an infrastructure asset management plan	14.3.1 14.3.3		District of Stewart	
Update water rates to incorporate full cost accounting	14.3.2		District of Stewart	
Undertake a wellhead protection study	14.3.5		District of Stewart	
Undertake a leak detection program	14.3.10		District of Stewart	
Invest in the closure of the landfill	14.3.15		District of Stewart	
Acquire crown land for yard waste composting	14.3.16		District of Stewart	Ministry of Forests, Lands and Natural Resources Operations
Address sewage inflow and infiltration issues	14.3.9		District of Stewart	
Undertake a water conservation program	14.3.7 14.3.8 14.3.11 15.3.7		District of Stewart	
Construct a reservoir to provide adequate fire protection	14.3.4 16.3.1		District of Stewart	
Educate community members on responses to natural disasters	16.3.2		District of Stewart/ Provincial Emergency Program	
Develop sustainable stormwater infrastructure	14.3.6		District of Stewart	
Consider the designation of an Aquifer Protection Development Permit Area	14.3.12		District of Stewart	
Advocate for the provision of cellular phone infrastructure and better high speed internet	14.3.17		District of Stewart/ Stewart Business Community	
Lobby for the development of a new road to service Stewart Bulk Terminals	14.3.19		District of Stewart/ Ministry of Transportation and Infrastructure	
Lobby for increased maintenance of Highway 37A	14.3.20		District of Stewart/ Ministry of Transportation and Infrastructure	
Advocate for more reliable electricity service by connecting to the town to the Long Lake Hydro project or having emergency generators available	14.3.21 16.3.3		District of Stewart/ BC Hydro	
Work with senior government to protect the Bear River Estuary	15.3.1 15.3.5		District of Stewart/ Provincial and Federal Governments	
Develop a Bear Aware program	15.4.4		District of Stewart,	

Action	Relevant Policies	Priority	Leadership	Support
			BC Conservation Foundation	
Provide environmental education of children	15.3.11		Bear Valley School	Border Town Recycling
Support Border Town Recycling in efforts to reduce solid waste	15.3.13		Border Town Recycling	District of Stewart
Secure BC Ambulance service	16.3.6		BC Ambulance, Ministry of Health	
Update floodplain mapping	16.3.7		Provincial Government	
Identify and invest in measures to reduce the risk of flooding	16.3.8 16.3.9 16.3.10		District of Stewart, Provincial Government	
Encourage senior government agencies to mitigate avalanche risk to largest extent possible	16.3.13 16.3.14		Provincial Government	
Identify the tsunami inundation area for Stewart	16.3.15		Provincial Emergency Program	
Encourage the demolition of abandoned buildings	16.3.16		Property Owners	
Request that RCMP officers working in Stewart have training in mental health crisis response	17.3.1			
Provide key social services such as healthcare, counselling, etc.	17.3.2		Northern Health Authority	
Encourage community agencies to provide support to seniors to live in Stewart longer	17.3.3 17.3.5 17.3.6 17.3.7		Northern Health Authority	
Attract social service professionals to work in Stewart including nurses, mental health practitioners, other healthcare providers, and teachers	17.3.8 17.3.9 17.3.10		Provincial Government agencies	District of Stewart
Encourage the development of transportation options to Terrace and Smithers	17.3.11			
Provide continued maintenance of existing parks-related facilities	18.3.15 18.3.16 18.3.17		District of Stewart	
Complete the estuary boardwalk	10.3.13		District of Stewart	
Encourage options to increase local food production	18.3.19 18.3.20			
Review potential permanent locations for the museum	18.3.25		District of Stewart, Community	
Develop a heritage preservation plan	18.3.26		District of Stewart	
Develop affordable housing in Stewart	19.2.2		Development Community	

SCHEDULE B – DISTRICT WIDE MAP



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\FIG-0895000101-Schedules B C D E.dwg, Schedule B, 2014-06-06 09:26 am jcrozman



Legend

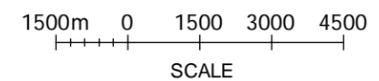
- GR General Residential
- CR Commercial Recreation
- TC Downtown Commercial
- GC General Commercial
- AC Airport Commercial
- PWI Public Works and Infrastructure
- IN Institutional
- PR Parks & Recreation
- PIND Port Industrial
- HIND Heavy Industrial
- SG Sand & Gravel
- ESA Environmentally Sensitive Area
- FD Future Development
- RR Rural Resource

DATE: 2014-06-24

SOURCES:
Cadastral - District of Stewart
TRIM - Land & Resource Data
Warehouse via Regional District of
Kitimat-Stikine
Water and Sewer Infrastructure -
District of Stewart

MAP PROJECTION:
UTM NAD 83 Zone 10

District of Stewart - OCP District Wide Map

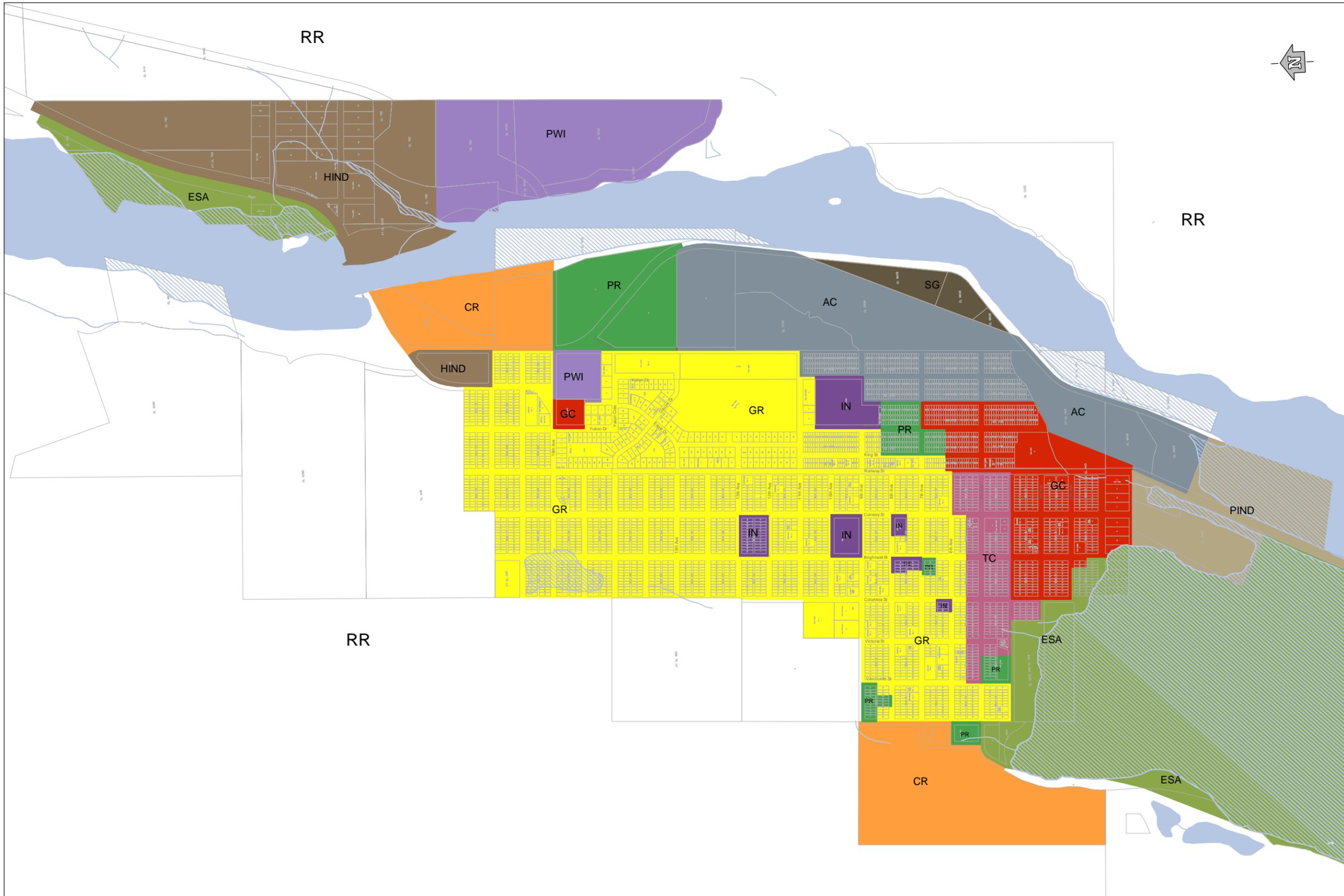


SCHEDULE 'B'

SCHEDULE C – TOWNSITE MAP



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\FIG-0895000101-Schedules B C D E.dwg, Schedule C, 2014-10-21 09:53 am jcrossman



Legend

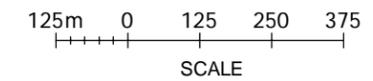
- GR General Residential
- CR Commercial Recreation
- TC Downtown Commercial
- GC General Commercial
- AC Airport Commercial
- PWI Public Works and Infrastructure
- IN Institutional
- PR Parks & Recreation
- PIND Port Industrial
- HIND Heavy Industrial
- SG Sand & Gravel
- ESA Environmentally Sensitive Area
- FD Future Development
- RR Rural Resource

DATE: 2014-10-21

SOURCES:
 Cadastral - District of Stewart
 TRIM - Land & Resource Data
 Warehouse via Regional District of
 Kitimat-Stikine
 Water and Sewer Infrastructure -
 District of Stewart

MAP PROJECTION:
 UTM NAD 83 Zone 10

District of Stewart - OCP Townsite Map



SCHEDULE 'C'

SCHEDULE D – FORESHORE AREA





Legend

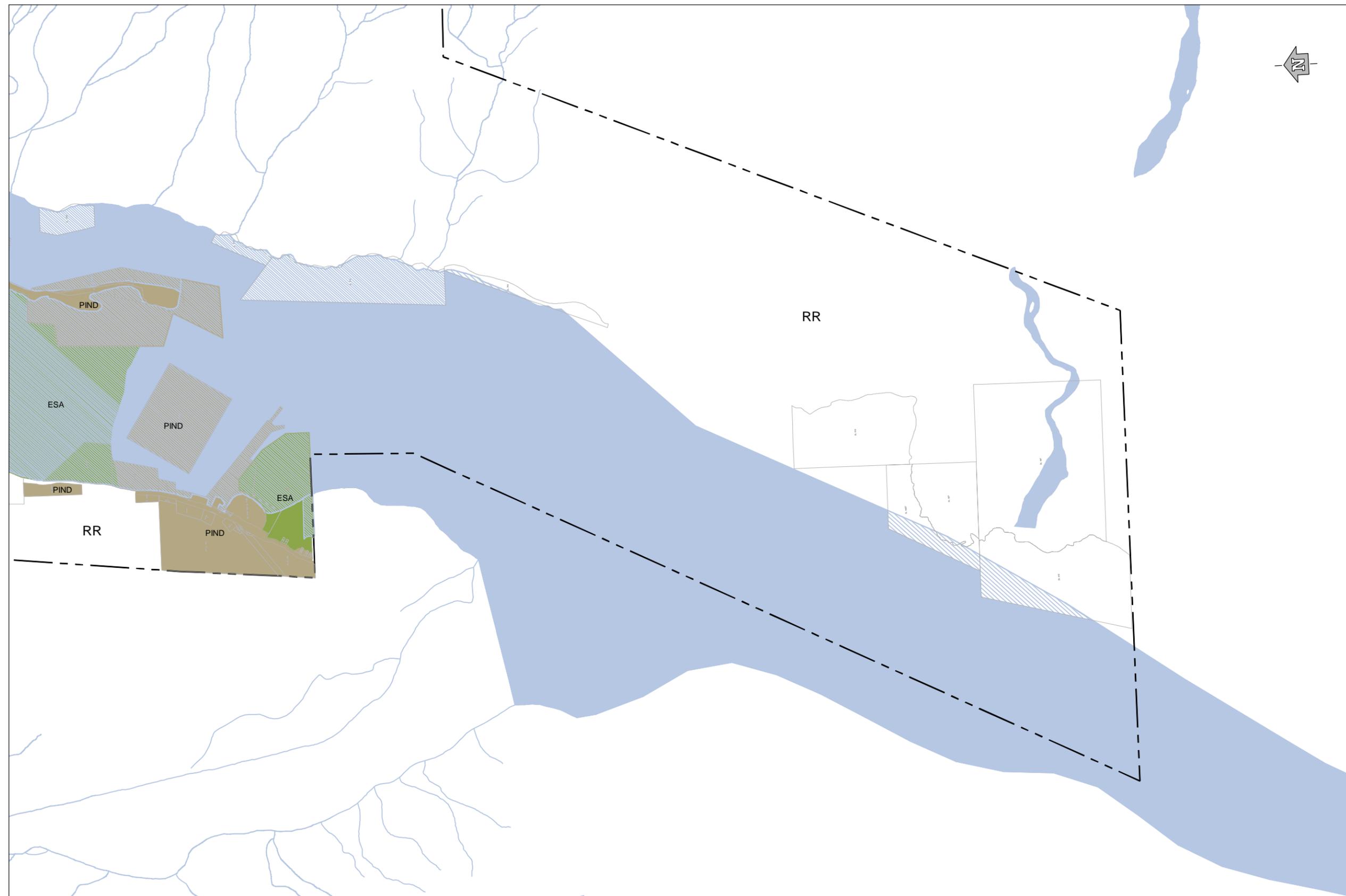
- GR General Residential
- CR Commercial Recreation
- TC Downtown Commercial
- GC General Commercial
- AC Airport Commercial
- PWI Public Works and Infrastructure
- IN Institutional
- PR Parks & Recreation
- PIND Port Industrial
- HIND Heavy Industrial
- SG Sand & Gravel
- ESA Environmentally Sensitive Area
- FD Future Development
- RR Rural Resource

DATE: 2014-06-24

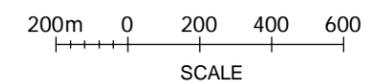
SOURCES:
Cadastral - District of Stewart
TRIM - Land & Resource Data
Warehouse via Regional District of
Kitimat-Stikine
Water and Sewer Infrastructure -
District of Stewart

MAP PROJECTION:
UTM NAD 83 Zone 10

SCHEDULE 'D'



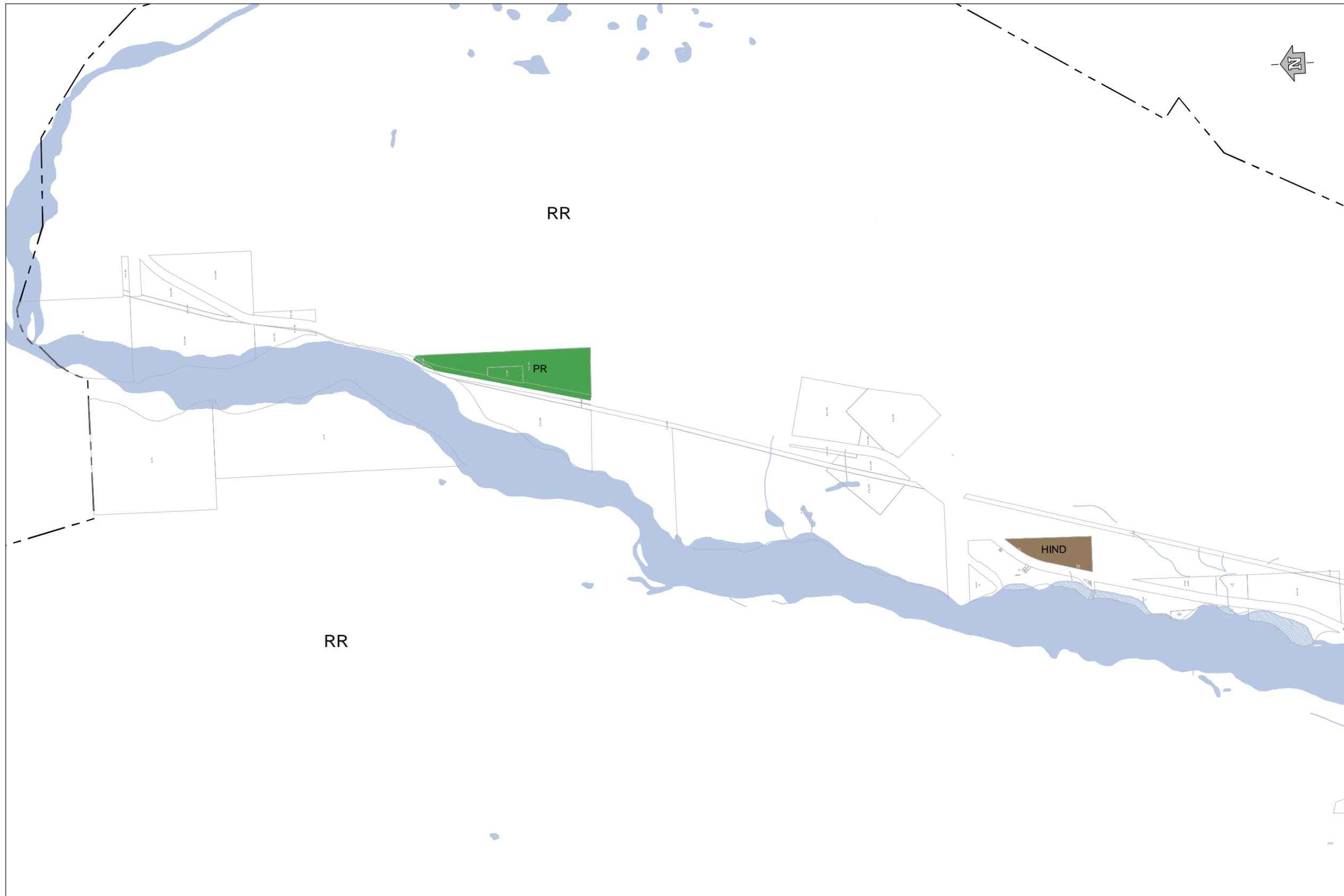
District of Stewart - OCP Foreshore Area



SCHEDULE E – HIGHWAY 37A CORRIDOR



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\FIG-0895000101-Schedules B C D E.dwg, Schedule E, 2014-10-21 09:53 am jrceman



Legend

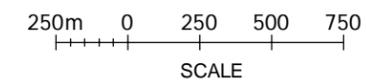
- GR General Residential
- CR Commercial Recreation
- TC Downtown Commercial
- GC General Commercial
- AC Airport Commercial
- PWI Public Works and Infrastructure
- IN Institutional
- PR Parks & Recreation
- PIND Port Industrial
- HIND Heavy Industrial
- SG Sand & Gravel
- ESA Environmentally Sensitive Area
- FD Future Development
- RR Rural Resource

DATE: 2014-10-21

SOURCES:
Cadastral - District of Stewart
TRIM - Land & Resource Data
Warehouse via Regional District of
Kitimat-Stikine
Water and Sewer Infrastructure -
District of Stewart

MAP PROJECTION:
UTM NAD 83 Zone 10

District of Stewart - OCP Highway 37A Corridor

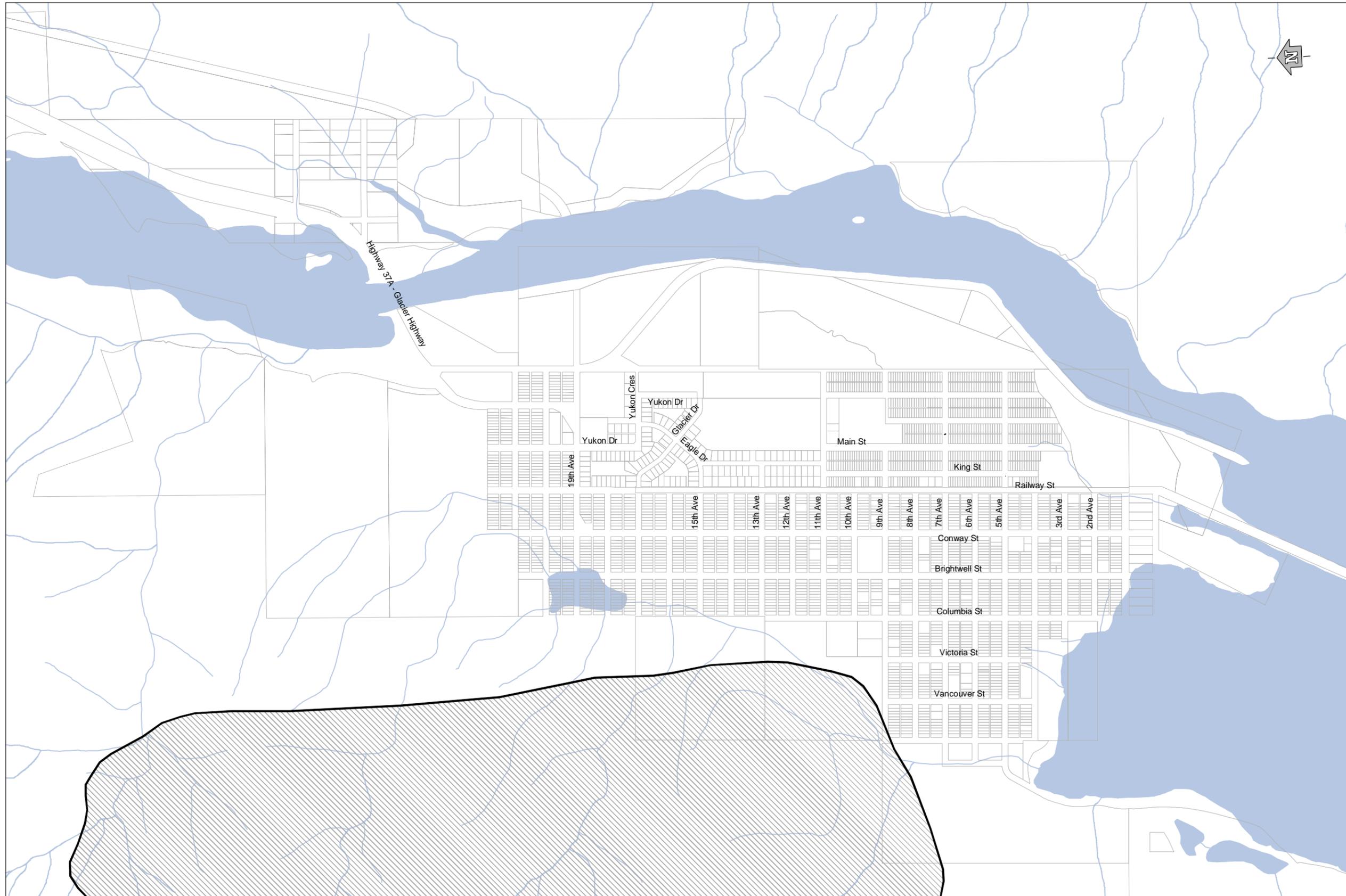


SCHEDULE 'E'

SCHEDULE F – DEVELOPMENT PERMIT AREA # 1 – HAZARDOUS AREAS



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\CP\FIG-0895000101-Schedules F G H J.dwg, Schedule F, 2014-06-27 10:00 am jrcresman



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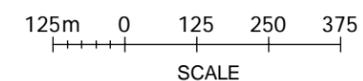
-  Hazardous Area

DATE: 2014-06-24

SOURCES:
Cadastral - District of Stewart
TRIM - Land & Resource Data
Warehouse via Regional District of
Kitimat-Stikine
Water and Sewer Infrastructure -
District of Stewart

MAP PROJECTION:
UTM NAD 83 Zone 10

District of Stewart - OCP Development Permit Area #1 - Hazardous Areas

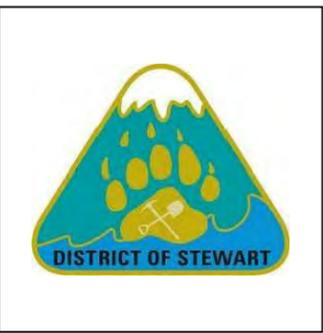
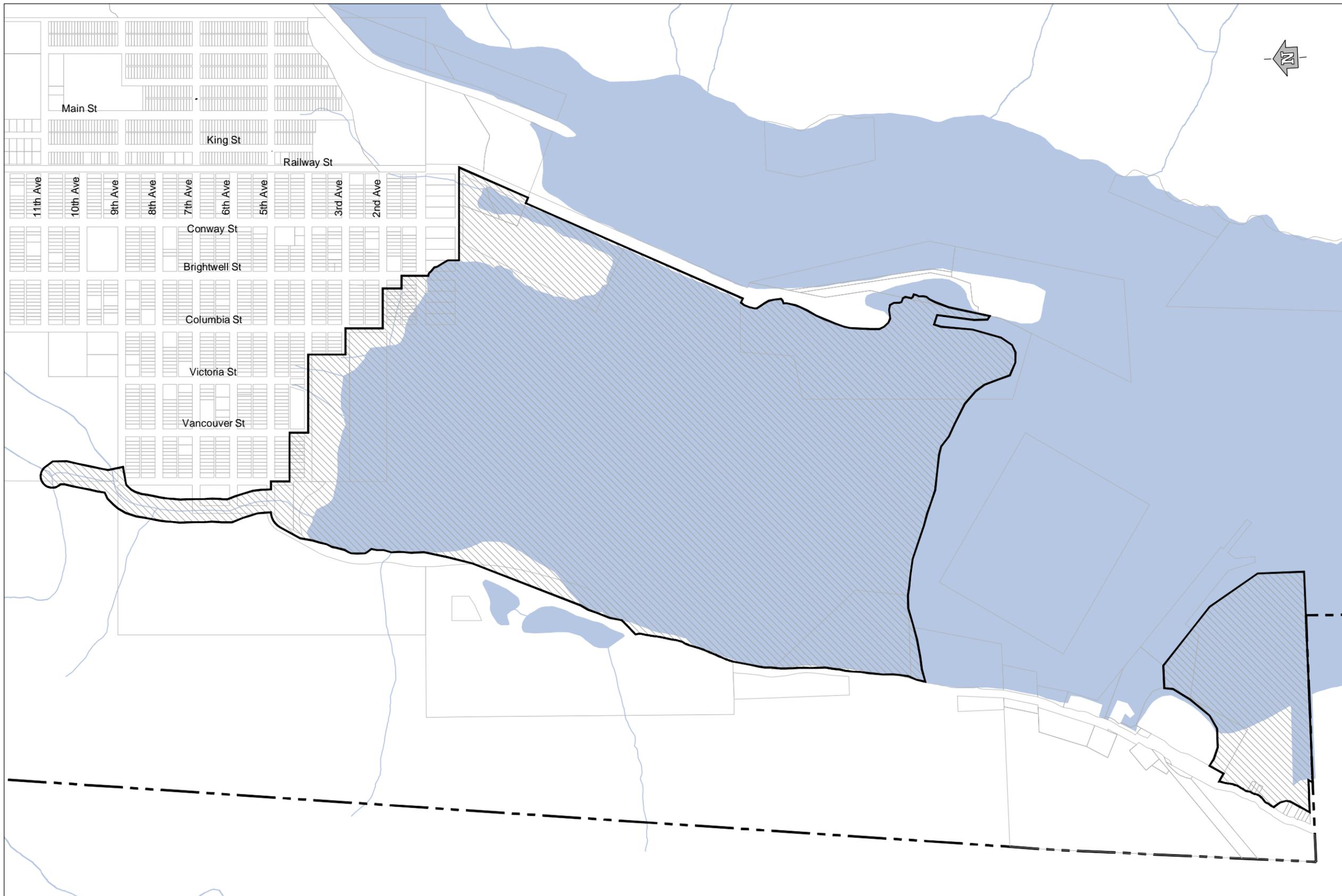


Schedule 'F'

**SCHEDULE G – DEVELOPMENT PERMIT AREA # 2 –
BEAR RIVER ESTUARY**



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\FIG-0895000101-Schedules F G H J.dwg, Schedule G, 2014-06-27 10:00 am jrceman



Legend

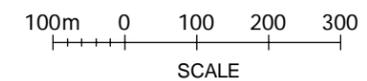
 Bear River Estuary

DATE: 2014-06-24

SOURCES:
 Cadastral - District of Stewart
 TRIM - Land & Resource Data Warehouse via Regional District of Kitimat-Stikine
 Water and Sewer Infrastructure - District of Stewart

MAP PROJECTION:
 UTM NAD 83 Zone 10

District of Stewart - OCP Development Permit Area #2 - Bear River Estuary

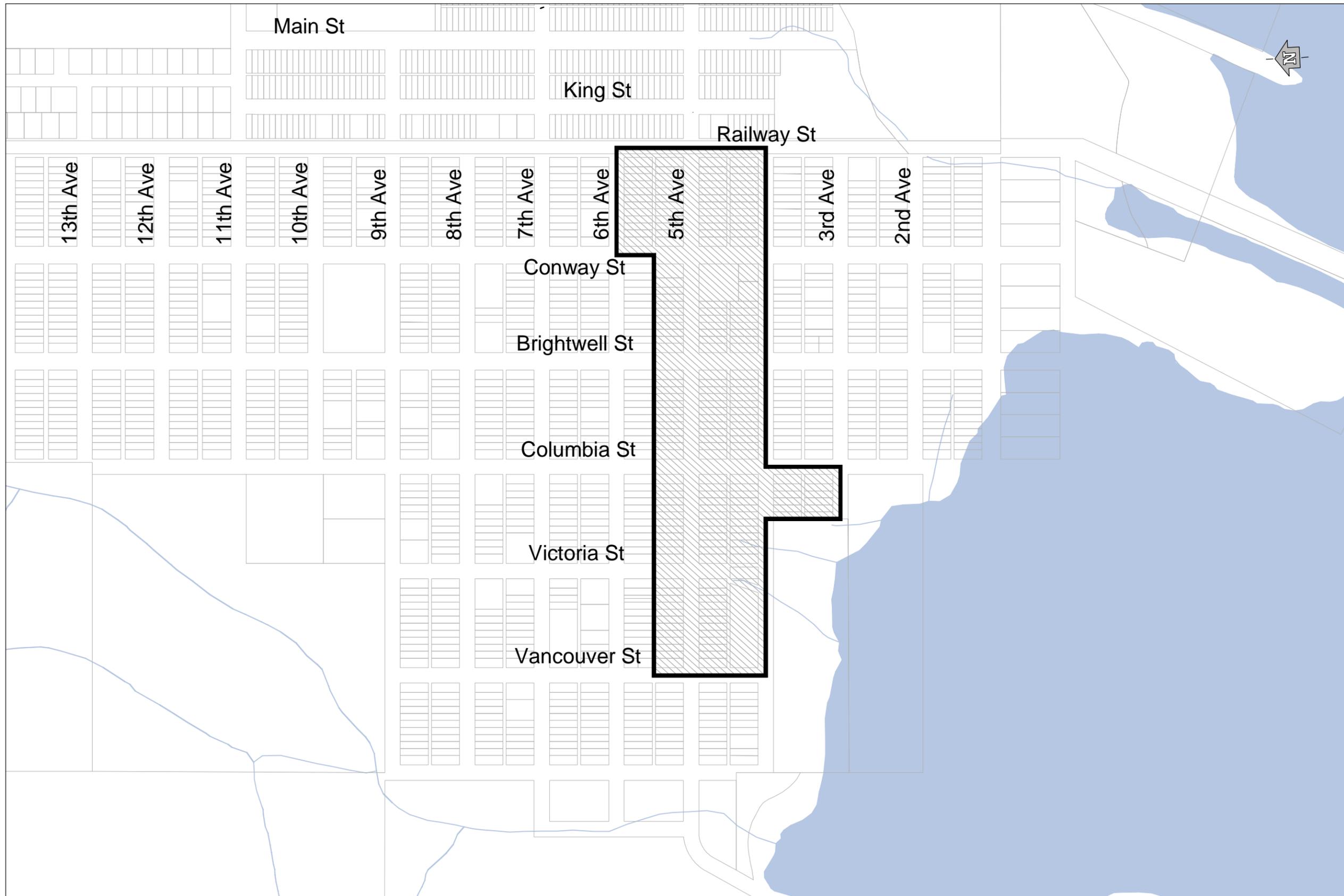


Schedule 'G'

**SCHEDULE H – DEVELOPMENT PERMIT AREA # 3 –
DOWNTOWN COMMERCIAL**



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\CP\FIG-0895000101-Schedules F G H J.dwg, Schedule H, 2014-06-27 10:00 am jcrsman



Legend

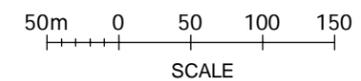
 Downtown Commercial

DATE: 2014-06-24

SOURCES:
 Cadastral - District of Stewart
 TRIM - Land & Resource Data
 Warehouse via Regional District of
 Kitimat-Stikine
 Water and Sewer Infrastructure -
 District of Stewart

MAP PROJECTION:
 UTM NAD 83 Zone 10

District of Stewart - OCP Development Permit Area #3 - Downtown Commercial

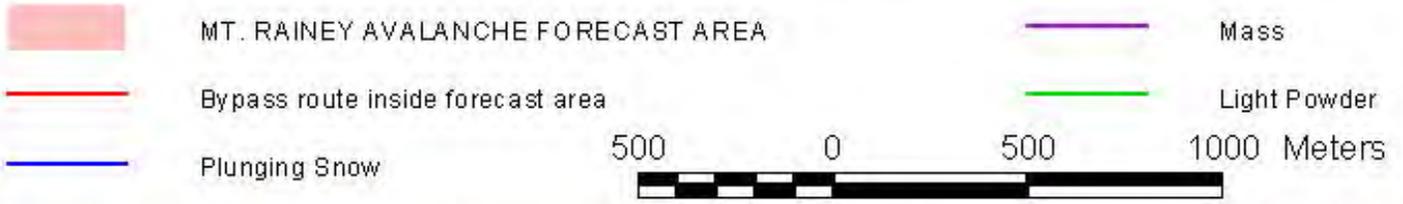


Schedule 'H'

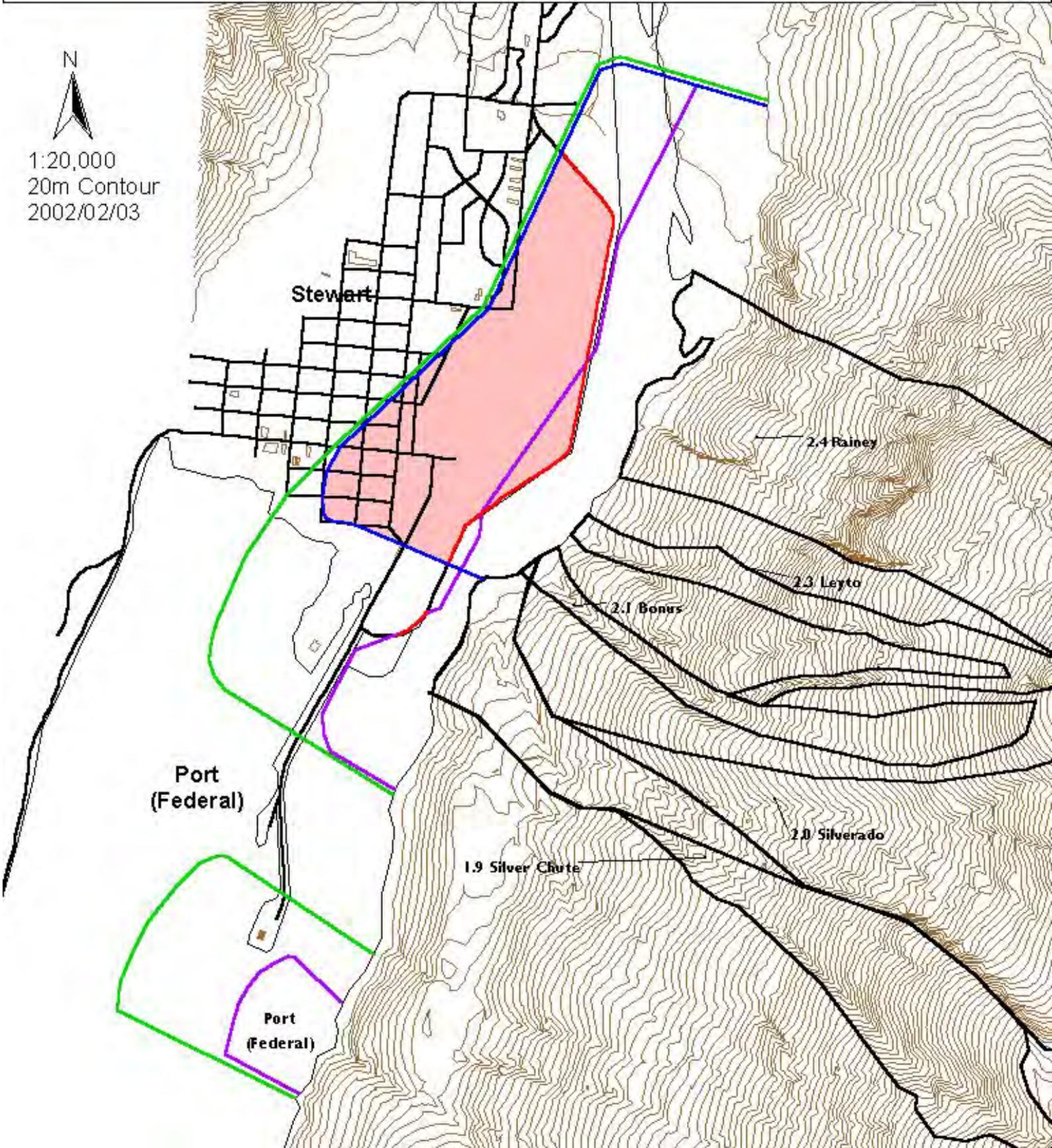
**SCHEDULE I – DEVELOPMENT PERMIT AREA # 4 –
AVALANCHE HAZARD AREA**



AVALANCHE HAZARD FORECAST AREA, Mt. Rainey, District of Stewart



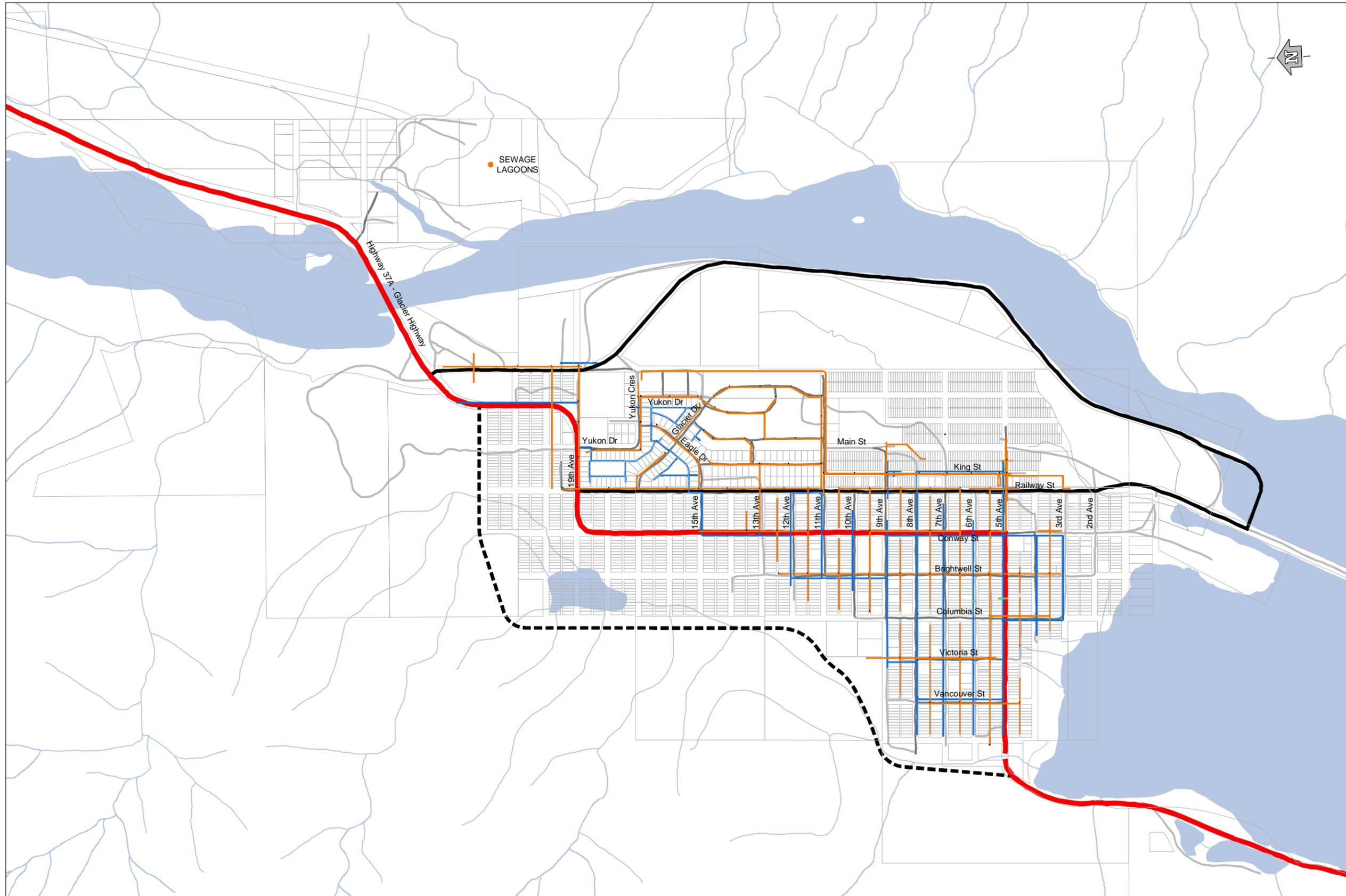
N
1:20,000
20m Contour
2002/02/03



SCHEDULE J – MAJOR INFRASTRUCTURE



U:\Projects_KAM\08950001010-Drafting-Design-Analysis\CADD\CURRENT\PRODUCTION\CP\FIG-0895000101-Schedules F G H J.dwg, Schedule J, 2014-06-27 10:00 am jrosman



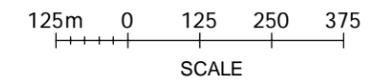
- Legend**
- Provincial Highway
 - Major Road (Municipal)
 - Proposed Major Roadway
 - Paved Road
 - Gravel Road
 - Sanitary Main
 - Water Main
 - Storm Culvert

DATE: 2014-06-24

SOURCES:
 Cadastral - District of Stewart
 TRIM - Land & Resource Data
 Warehouse via Regional District of
 Kitimat-Stikine
 Water and Sewer Infrastructure -
 District of Stewart

MAP PROJECTION:
 UTM NAD 83 Zone 10

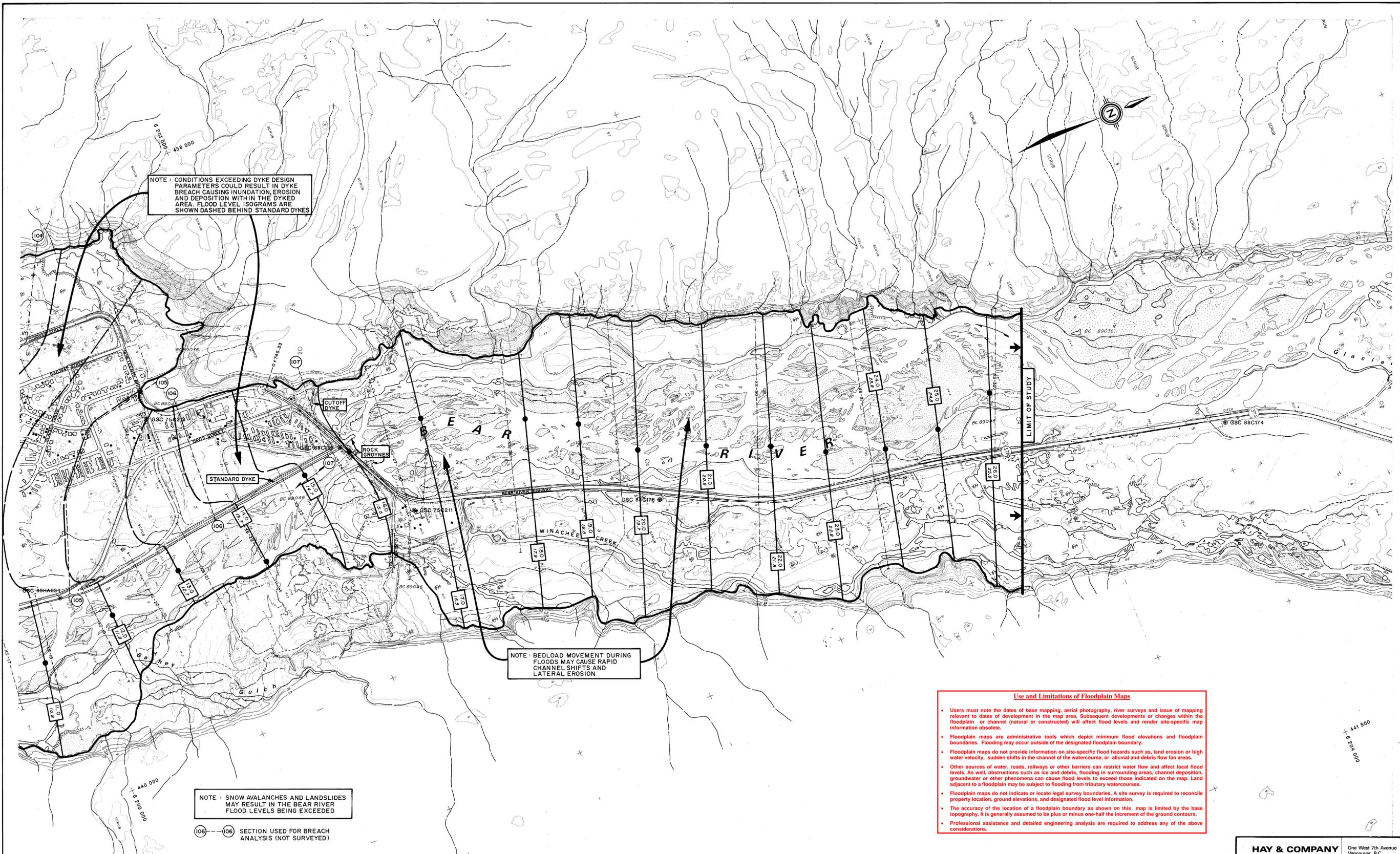
District of Stewart - OCP Major Infrastructure



Schedule 'J'

SCHEDULE K – FLOODPLAIN MAPPING





NOTE: CONDITIONS EXCEEDING DYKE DESIGN PARAMETERS COULD RESULT IN DYKE BREACH CAUSING INUNDATION, EROSION AND DEPOSITION WITHIN THE DYKED AREA. FLOOD LEVEL ISOGRAMS ARE SHOWN DASHED BEHIND STANDARD DYKES

NOTE: BEDLOAD MOVEMENT DURING FLOODS MAY CAUSE RAPID CHANNEL SHIFTS AND LATERAL EROSION

NOTE: SNOW AVALANCHES AND LANDSLIDES MAY RESULT IN THE BEAR RIVER FLOOD LEVELS BEING EXCEEDED

106 SECTION USED FOR BREACH ANALYSIS (NOT SURVEYED)

Use and Limitations of Floodplain Maps

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

NOTES

Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Survey Section, Water Management Branch, Project 9109 P037, April 1988.

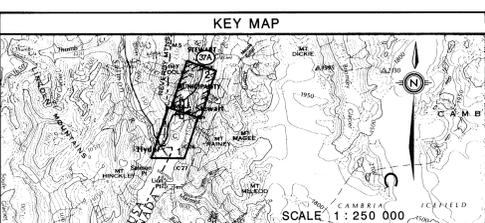
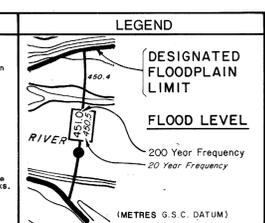
Mapping: Base mapping done by Map Production Division, Survey Section, Mapping Branch, Project 89-008, dated February 1991. NAD 83. Air Photographs 1989.

a) Contour interval 1 metre and greater; spot elevations shown to 0.1 metres with accuracy to ± 0.3 metres, except where noted.

b) Grid origin referred to U.T.M. Projection Zone 9.

FLOODPLAIN DATA

1. The floodplain areas as depicted on this map have been interim designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1989) by the Minister of the Environment for Canada and the Minister of Environment, Lands and Parks for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map.
2. The Designated Flood has a statistical frequency of occurrence of once every 200 years.
3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
4. The floodplain limits assume the absence of all dykes.
5. The floodplain limits and flood levels include an allowance for freeboard.
6. The floodplain limits are not established on the ground by legal survey.
7. The floodplain limits are not delineated for side streams and tributaries.
8. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment, Lands and Parks.
9. MAPS AVAILABLE FROM MAPS B.C. MAP AND AIR PHOTO SALES, VICTORIA, B. C.



REVISIONS

No.	DESCRIPTION	DATE

ISSUE OF MAPPING

DATE	SEPTEMBER 30, 1993
DRAWN	HNC
CHECKED	
RIVER SURVEY	M. P.
DESIGNED	
ENGINEER	R.J. Woodard
RECOMMENDED	M. Macdonald
APPROVED	E. B. J.

HAY & COMPANY CONSULTANTS INC.

One West 7th Avenue
Vancouver, B.C.
Canada V6Y 1L5
(604) 875-6391

ENVIRONMENT CANADA / INLAND WATERS
ENVIRONNEMENT CANADA / SAUV. INTERIEURES

BRITISH COLUMBIA MINISTRY OF ENVIRONMENT
COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

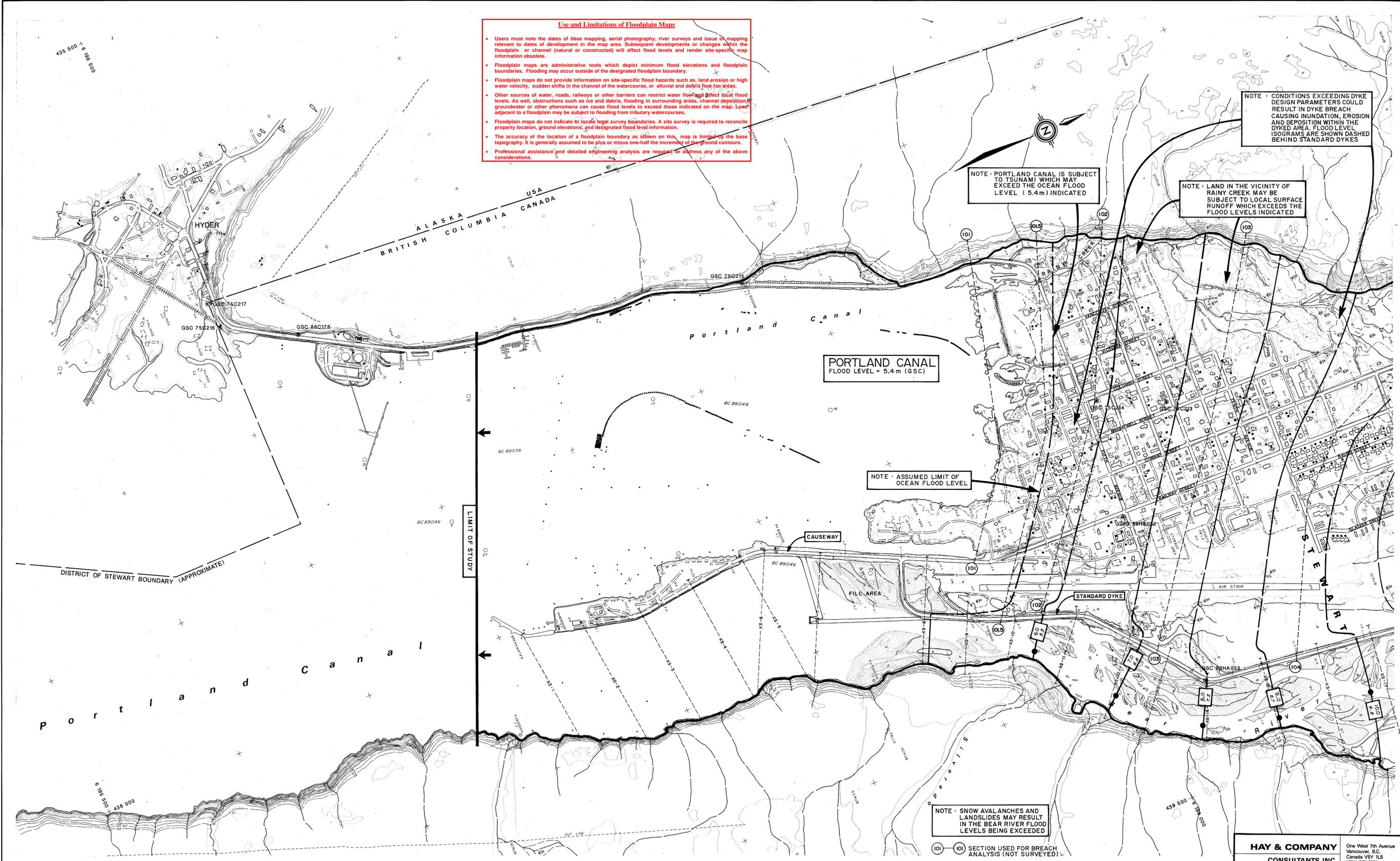
CANADA-BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT
L'ACCORD CANADA-COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

FILE No. 910-9994
N.T.S. MAP No. 1030/P. 104A
SCALE 1:5 000
NEGATIVE No.

DRAWING No. 91-30-2
REV. SHEET 2 of 2

Use and Limitations of Floodplain Maps

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NOTE: CONDITIONS EXCEEDING DYKE DESIGN PARAMETERS COULD RESULT IN DYKE BREACH CAUSING INUNDATION, EROSION AND DEPOSITION WITHIN THE DYKED AREA. FLOOD LEVEL ISOGRAMS ARE SHOWN DASHED BEHIND STANDARD DYKES

NOTE: PORTLAND CANAL IS SUBJECT TO TSUNAMI WHICH MAY EXCEED THE OCEAN FLOOD LEVEL (5.4m) INDICATED

NOTE: LAND IN THE VICINITY OF RAINY CREEK MAY BE SUBJECT TO LOCAL SURFACE RUNOFF WHICH EXCEEDS THE FLOOD LEVELS INDICATED

PORTLAND CANAL
FLOOD LEVEL = 5.4m (G.S.C.)

NOTE: ASSUMED LIMIT OF OCEAN FLOOD LEVEL

NOTE: SNOW AVALANCHES AND LANDSLIDES MAY RESULT IN THE BEAR RIVER FLOOD LEVELS BEING EXCEEDED

(10) - (10) SECTION USED FOR BREACH ANALYSIS (NOT SURVEYED)

HAY & COMPANY
CONSULTANTS INC.
One West 7th Avenue
Vancouver, B.C.
Canada V6Y 1L5
(604) 675-6391

FILE NO.	910-9994
N.T.S. MAP NO.	1030/P. 104A
SCALE	1:5 000
NEGATIVE NO.	
DRAWING NO. / REV.	91-30-1
SHEET	1 of 2

NOTES

Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Survey Section, Water Management Branch, Project # 09 F037, April 1988.

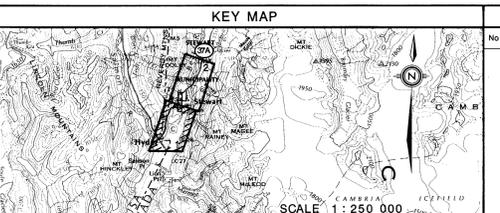
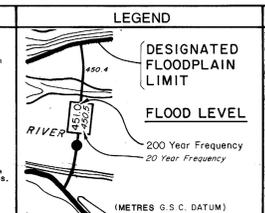
Mapping: Base mapping done by Map Production Division, Survey and Resource Mapping Branch, Project # 09 F036, dated February 1991. NAD 27. Air Photography 1988 and greater.

a) Contour elevations shown to 0.1 metres, with accuracy to ± 0.3 metres, except where noted.

b) Grid origin referred to U.T.M. Projection Zone 9.

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- The floodplain limits and flood levels include an allowance for freeboard.
- The floodplain limits are not established on the ground by legal survey.
- The floodplain limits are not delineated for side streams and tributaries.
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- MAPS AVAILABLE FROM MAPS B.C. MAP AND AIR PHOTO SALES, VICTORIA, B.C.



REVISIONS

No.	DESCRIPTION	DATE

ISSUE OF MAPPING

DATE: **SEPTEMBER 30, 1993**

DRAWN: HNC

CHECKED: _____

RIVER SURVEY: M. P.

DESIGNED: _____

ENGINEER: R.J. Woodhead

RECOMMENDED: _____

APPROVED: _____