

MACKENZIE.

LAKE STEVENS INDUSTRIAL CENTER ANALYSIS REPORT

To
City of Lake Stevens

For
Lake Stevens Industrial
Analysis

Dated
May 17, 2023

Project Number
2220142.00



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I. INTRODUCTION AND CONTEXT

Purpose

The purpose of this report is to assess existing infrastructure conditions within the Lake Stevens Industrial Center (LSIC) boundaries, such as sanitary sewer, stormwater, the road network, and availability of high-speed internet capability, along with encumbrances like critical areas, and then recommend improvements to support future uses. An economic analysis has been prepared to identify highest and best uses, and potential funding sources. An evaluation of the existing zoning development standards and allowed uses was also conducted, including a review of three zoning scenarios.

Taken as a whole, this analysis will give the City of Lake Stevens (the City) the information necessary to determine the appropriate next steps to diversify the LSIC as a local employment center and make capital improvements decisions.

Project Background

The LSIC analysis covers approximately 241.37 acres, consisting of two storm drainage basins, two major road networks (Old Hartford and Machias Road), and limited sanitary sewer and stormwater utilities. Stakeholder meetings were held with the LSIC property owners (September 27, 2022, and March 13, 2023), the City Planning Commission (October 19, 2022), and the City Council (November 15, 2022). Meetings with City departments and leadership were also conducted. Various GIS data sets (Exhibit A.16), utility studies, as-builts of complete development, and pre-application notes were reviewed, and is included in this report.

To date, the lack of a comprehensive network of sanitary sewer, stormwater infrastructure, and physical distance from State Route 9 and other major truck/freight corridors has limited the quantity and scale of development. The LSIC development pattern shows sites within proximity to existing infrastructure are being redeveloped; the Hartford Industrial Center located at 3190 Old Hartford Road is one example with several others in the pipeline.

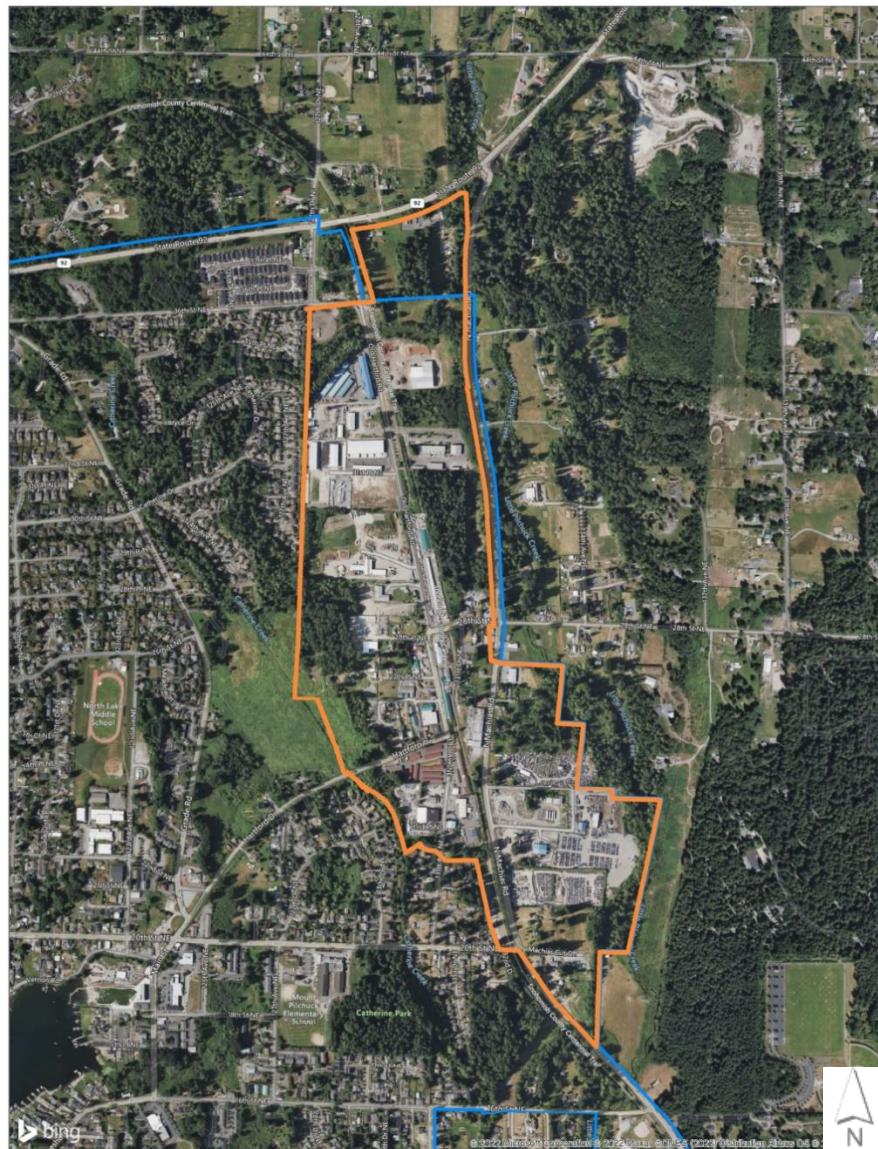
The goal of our analysis is to provide a multi-year vision for the LSIC to support potential additional building square footage and employment capacity yield as a result of redevelopment and infrastructure investment within the LSIC. Our analysis reflects how potential future development will occur based on a methodology focusing on individual areas within the LSIC. This classification overlay for the LSIC is included in this report. The three defined areas reflect the degree of difficulty to achieve new industrial development based on the availability of utilities, topography, and adjacency to existing development. The report recommends and prioritizes infrastructure projects to address infrastructure deficiencies along with potential funding sources as well as recommended zoning code changes to be competitive in today's market.

Site Overview

The study area is comprised of 128 tax lots, predominantly within the City of Lake Stevens' jurisdiction, excluding the northeast corner of the study area, which is in the unincorporated urban growth area (UGA) under Snohomish County jurisdiction. These lots total approximately 241.37 acres, with tax lots ranging from 0.02 acres to 22.51 acres in size. They are zoned General Industrial (GI), Light Industrial (LI) and Public/Semi-public Space (P/PS). No overlay zones apply to the site. Reference Figure I-1 below and Appendix F, Industrial Study Area Addresses, Tax Lots, and Ownership, for general study area and individual lot information.

For the purposes of this project, it is assumed that any future/potential redevelopment on the subject properties will include industrial and business park uses – new buildings with associated surface parking, utilities, stormwater, and landscaping. Future development applications will be required to provide technical information required by Title 14 of the Lake Stevens Municipal Code to fulfil the submittal requirement of the City's development review process such as site and use specific traffic, critical areas, geotechnical, and stormwater/drainage reports. This report reviews standards applicable to support such potential redevelopment.

Figure I-1: Lake Stevens Industrial Study Area Aerial Map



Map source: Mackenzie

Existing Conditions

Buildings/Site Elements

According to GIS assessor data, the Lake Stevens Industrial Center study area consists of 34 different uses including residential, commercial, and industrial. There are approximately 89 separate/individual ownerships within the study area. Particularly of note are public facilities uses which apply to approximately 16.65 acres. These lots will likely not be redeveloped, and for the purposes of this study will be assumed to remain under the ownership of each utility. Reference Table I-1 for a breakdown of the uses within the study area, including total lots by use and corresponding acreage and square footage.

TABLE I-1. STUDY AREA USE BREAKDOWN			
Use	Lot Count	Acreage	SF*
110 Senior Citizen Exemption Residual	1	1.76	76705.5
111 Single Family Residence - Detached	25	22.33	972005.8
117 Manufactured Home (Leased Site)	1	3.78	164682.1
118 Manufactured Home (Owned Site)	2	0.73	31402.6
130 Multiple Family 5 - 7 Units	3	0.35	15595.6
183 Non Residential Structure	2	5.89	256491.5
249 Other Lumber & Wood Products	7	17.90	780060.1
259 Other Furniture & Fixtures NEC	2	0.58	25426.7
339 Other Primary Metal Industries NEC	3	16.29	709567.8
349 Other Fabricated Metal Products NEC	1	0.41	17680.1
390 Cannabis Processing	1	0.59	25494.5
399 Other Miscellaneous Manufacturing NEC	2	1.50	64975.7
411 Railroad Transportation	1	0.19	8384.5
481 Electric Utility	1	4.53	197322.2
482 Gas Utility	6	3.18	138667.6
483 Water Utilities & Irrigation & Storage	1	12.12	528041.5
506 Coml Condo - Services	4	1.84	79868.4
521 Lumber & Other Building Materials	2	2.64	115357.4
549 Other Retail Trade - Food NEC	1	0.24	10334.5
599 Other Retail Trade NEC	1	4.50	195956.7
637 Warehousing & Storage Services	7	14.49	631276.9
638 Mini-Warehouse	6	9.56	416786.2
639 Other Business Services NEC	2	0.74	32540.8
641 Automobile Repair & Services	3	1.21	52853.3
649 Other Repair Services NEC	1	12.42	541133.3
659 Other Professional Services NEC	3	4.74	206511.9
661 General Contract Construction Services	1	2.84	123492.6
662 Special Construction Trade Services	1	2.57	111879.5
699 Other Miscellaneous Services NEC	2	5.34	232716.1
745-Trails (Centennial)	2	2.25	98387.3
850 Mining Claims, Mineral Rights or Mining NEC	1	22.51	980446.4
910 Undeveloped (Vacant) Land	28	54.61	2378921.5
916 Water Retention Area	1	0.83	36124.7
940 Open Space General RCW 84.34	1	5.79	252344.2
Blank	2	0.12	4938.0

Total	128	241.37	10514373.1
* Square footage calculations from Snohomish County Assessor data are not exact			

The study area includes a mixture of developed and undeveloped lots: approximately 22% (54.61 acres) of the study area is vacant land. Developed lots are mostly impervious surface with parking areas and outdoor storage with minimal landscaping. Some developed lots include a mixture of impervious surface and undeveloped area with ground and tree cover. There is significant tree cover on many of the vacant lots along the perimeter of the study area, and many include environmentally constraints such as steep slopes and/or wetlands.

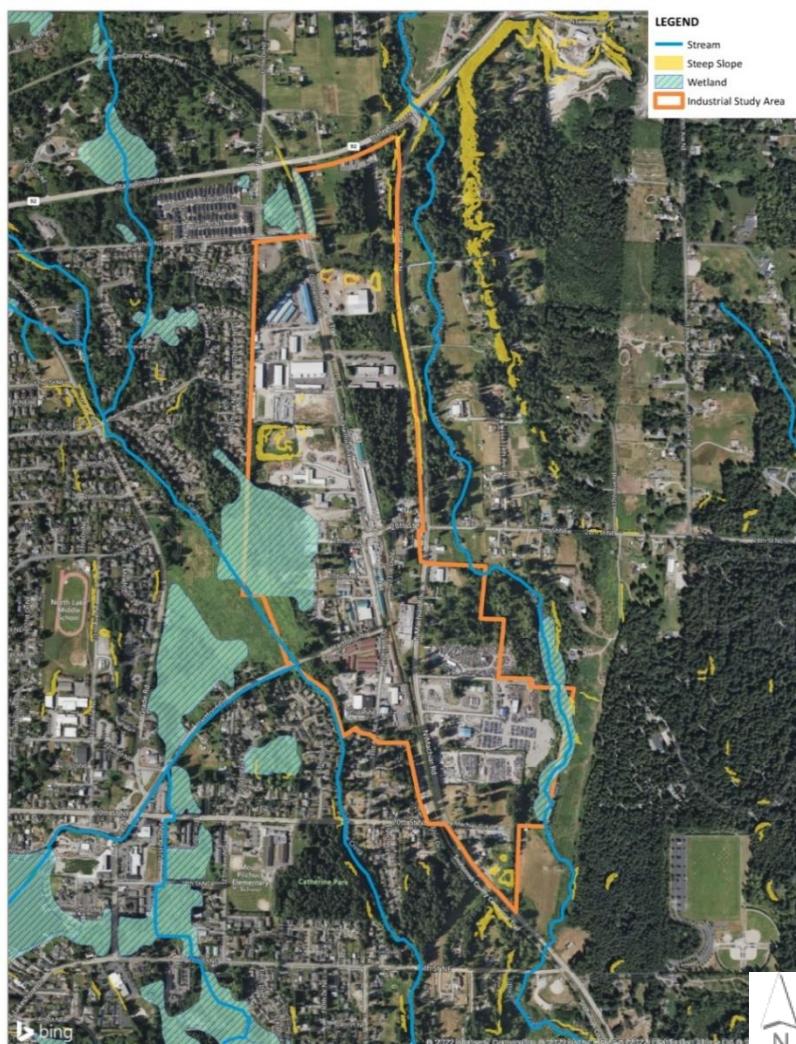
The popular 30-mile Centennial Trail also runs north to south through the entire study area directly to the east of Old Hartford Road and 131st Avenue NE and to the west of N Machias Road. The trail includes a 10-foot-wide paved multi-purpose trail and a 6-foot-wide natural surface equestrian trail. One of the Centennial Trail's trailheads is located off 20th Street NE in the southwestern corner of the study area. An additional trailhead is located adjacent to the northwestern corner of the study area off 36th Street NE and 127th Drive NE. The trail serves as a regional recreational trail and conservation corridor to provide multi-modal recreational opportunities and protect sensitive and important natural and cultural resources.¹ Continued conservation of this corridor will need to be considered with any future redevelopment.

¹ Snohomish County, Parks and Recreation

Environmental Constraints

The Lake Stevens Industrial Center study area includes numerous environmental constraints impacting approximately 20.43 acres. Constraints include wetlands, steep slopes, flood zones, and streams (Little Pilchuck Creek and Catherine Creek). Reference Figure I-2 and Table I-2 below for the location and spatial breakdown of environmental constraints impacting the study area. The figures were created utilizing data provided by Snohomish County and the City of Lake Stevens. Refer to Exhibit A.16 for specific data sources.

Figure I-2: Lake Stevens Environmental Constraints Map



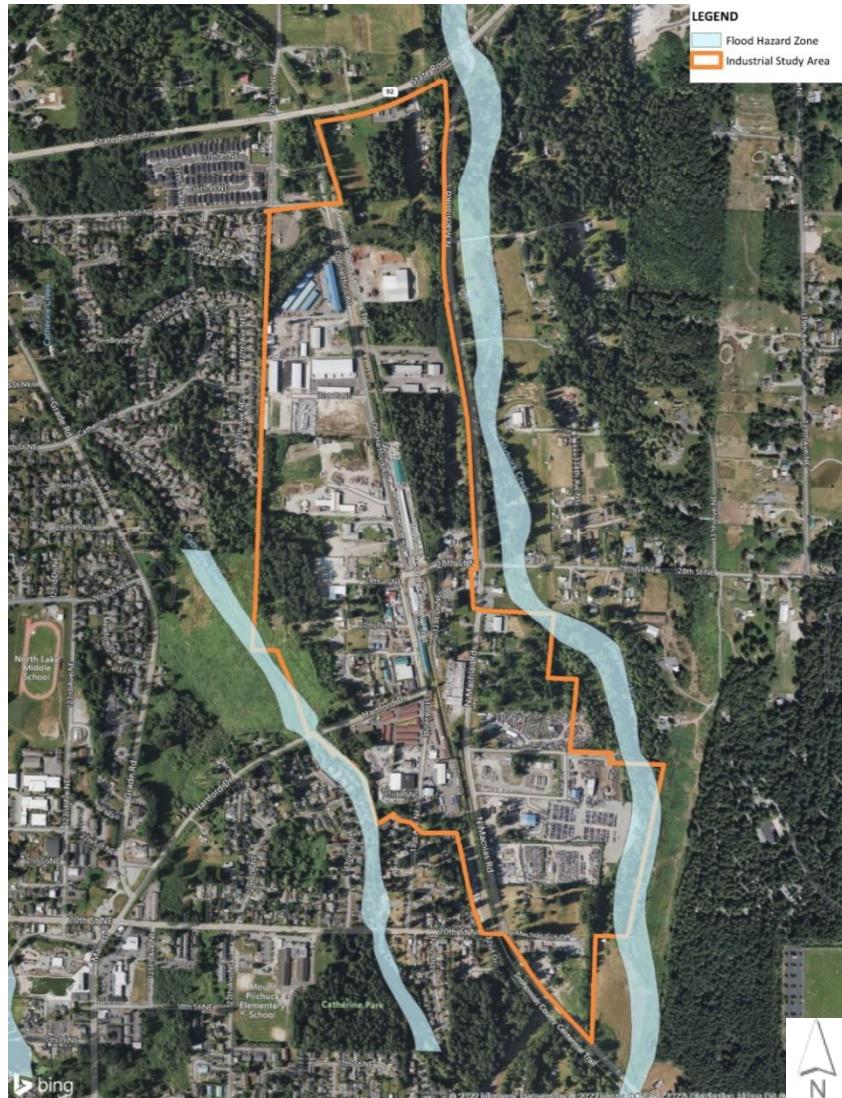
Map source: Mackenzie

TABLE I-2. ENVIRONMENTAL CONSTRAINTS

Environmental Constraint	Acreage	SF
Wetlands (including streams)	17.3	753,588
Steep Slopes	3.13	136,343
TOTAL:	20.43	889,931

Floodplain

The Lake Stevens Industrial center study area also includes minimal properties within special flood hazard areas. As shown in Figure I-3 below, flood hazard areas impact a small area along the southeastern perimeter of the study area.

Figure I-3: Lake Stevens Flood Hazard Area Map

Map source: Mackenzie

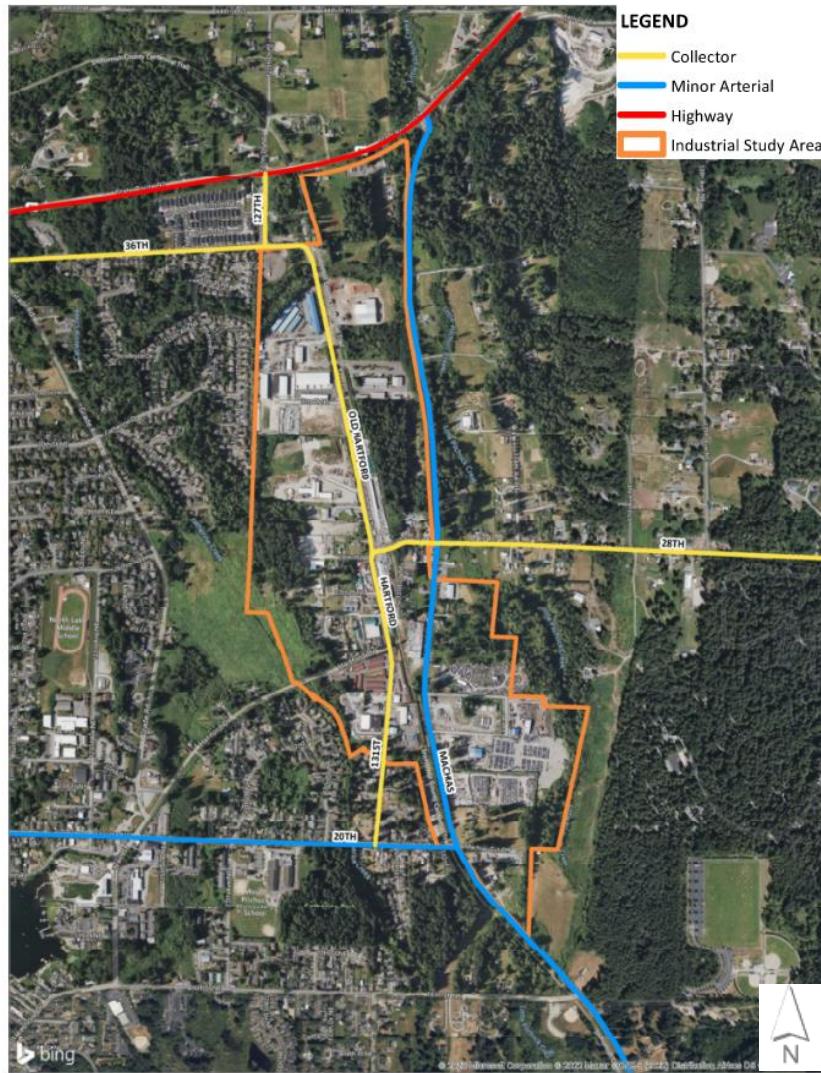
Access

The Lake Stevens Industrial Center study area currently has access from 36th Street NE, Hartford Drive, and 20th Street NE to the west; Old Hartford Road to the north and south; and N Machias Road and 28th Street NE to the east.

Circulation Standards

Direct frontage for the Lake Stevens Industrial Center study area is outlined in Figure I-4 and Table I-3 below. All public streets are under City of Lake Stevens jurisdiction. Standard driveway width for commercial/industrial driveways is a minimum of 30 feet wide to a maximum of 40 feet wide, and no wider than 30% of the property's roadway frontage. Additional driveway and circulation standards are outlined in Section 2-105, Entering Site Distance and Section 3-103, Driveways of the Lake Stevens Engineering Design and Development Standards (EDDS).

Figure I-4: Lake Stevens Transportation System Classification Map



Map source: Mackenzie, Lake Stevens 2015 Transportation Classification Map

TABLE I-3. FRONTAGE AND CLASSIFICATION

Street	Classification
36th Street NE	Collector
Old Hartford Road	Collector
31st Place NE	Local Access
28th Street NE	Collector
28th Place NE	Local Access
27th Place NE	Local Access
131st Drive NE	Local Access
N Machias Road	Minor Arterial
Hartford Drive	Local Access
131st Avenue NE	Collector
22nd Place NE	Private
20th Street NE	Minor Arterial
Machias Cut Off	Collector

II. LAKE STEVENS MUNICIPAL CODE

The following section describes regulations of the Lake Stevens Municipal Code that will affect redevelopment of the subject sites.

Land Use Overview

Zoning Descriptions:

The LSIC is comprised of three zone districts: General Industrial (GI), Light Industrial (LI), and Public/Semi-public Space (P/PS).

The Lake Stevens Industrial zones are geared towards manufacturing, resource extraction, agriculture, warehousing, and other intensive uses. The GI zone is intended for a full range of industrial uses, which have the potential to impact surrounding properties, while the LI zone allows for a full range of industrial uses but those with less impact to surrounding properties than GI zoned properties. The LI zone also acts as a transitional zone to commercial/mixed-use areas. Industrial zones should be located in areas with direct access to highways and arterials in addition to transit facilities and adequate public services. Both industrial zones do not allow residential uses, except for temporary or caretaker residences according to the Lake Stevens Comprehensive Plan; however, the City zoning code permits apartments above nonresidential uses. The P/PS zone includes public buildings, public services, and transportation facilities to support City, school district, fire district, and miscellaneous governmental operations. This zone may also allow a limited range of commercial uses.

Allowed Uses:

See Table II-4 below.

TABLE II-4. ALLOWED USES²

Use	General Industrial (GI)	Light Industrial (LI)	Public/Semi-Public Space (P/PS)
Retail			
a. Small/Medium	A	A	P
b. Large	A	A	-
Outdoor Retail Displays	P	P	P
Marijuana Retail	P	P	-
Open-Air Markets	P	P	P
Outdoor Plant Nurseries, Commercial Greenhouses, Farm Supply Stores	P	P	-
Wholesale	P	P	-
Vehicles Sales	P	P	-
Mobile Home Sales	P	P	-
Personal Storage Facilities	A	A	-
Gas station	P	P	-
Pet Care, except Veterinary and Kennel	P	P	P
Kennel	P	P	-
Automotive Repair	P	P	-
Crematorium	P	P	C
Funeral Home/Crematorium	P	P	P/C
Dry Cleaning, Laundry Services	P	P	-
Rental (Miscellaneous Equipment, Heavy Equipment, and Automobile)	P	P	-
Automobile Parking	P	P	P
Level III Healthcare Facility	-	P	A
Medical, Dental or other Healthcare Clinic	A	A	-
Office and Professional Services	P/A	P/A	P
Light Manufacturing	P	P	-
Heavy Manufacturing	P	A	-
Wineries, Distilleries, and Breweries	P	P	-
Warehousing	P	P	-
Salvage Yards	P	A	-
Marijuana Processing/Production	A	A	-
Soil Processing	P	A	-
Restaurants/Food Services	P/A	P/A	P/-
General Residential	-	-	-
Apartment(s) above permitted nonresidential	P	P	-
Mobile/manufactured home or apartment exclusively for a night watchman and their family	A	A	-
P – Permitted Use; A – Administrative Conditional Use; C – Conditional Use			

² Reference Lake Stevens Municipal Code Table 14.40-II for a comprehensive list of all permitted uses across all three zones in the study area.

Regulatory Requirements

Existing Development Standards

The industrial study area is located within the General Industrial (GI), Light Industrial (LI), and Public/Semi-public Space (P/PS) zones. No overlay zones apply to the site. The following tables outline applicable development standards for future redevelopment under the existing zoning.

TABLE II-5. DEVELOPMENT STANDARDS			
Standard	General Industrial (GI)	Light Industrial (LI)	Public/Semi-Public Space (P/PS)
Minimum Lot Size	N/A	N/A	N/A
Maximum Lot Size	N/A	N/A	N/A
Minimum Lot Dimensions	Width: 0' Depth: 0' Lot frontage: 20'	Width: 0' Depth: 0' Lot frontage: 20'	Width: 0' Depth: 0' Lot frontage: 20'
Maximum FAR	N/A	N/A	N/A
Maximum Building Height³	55'	45'	55'
Minimum Setbacks			
Front	20'	20'	5'
Side and Rear	10'	10'	10'
Maximum Setbacks	N/A	N/A	N/A
Maximum Building Coverage	N/A	N/A	N/A
Minimum Landscaping	N/A	N/A	N/A
Minimum Landscape Buffer⁴	5'	5'	5'

³ Per Lake Stevens Municipal Code Section 14.16C.045, the City of Lake Stevens will consider an increase in maximum height up to 80' with a conditional use permit.

⁴ Per Lake Stevens Municipal Code Section 14.76.040 and Table 14.76-I, landscape buffers on Light Industrial and General Industrial zone properties will be comprised of a Type A screen when abutting the Centennial Trail, a Type B screen when abutting other industrial properties, and a Type A screen when abutting Public/Semi-Public properties. The landscape buffer may be waived if adjacent properties share parking, access, or other common features.

TABLE II-6. LANDSCAPE SCREENING REQUIREMENTS

Zone in which Development Occurs	General Industrial (GI)	Light Industrial (LI)	Public/Semi-Public Space (P/PS)
Zone of Adjacent Property			
R4, WR, R6, R8-12	A	A	B
LI	-	B	-
GI	B	-	A
SRC/PBD	A	A	-
P/SP	A	A	-
Centennial Trail	A	A	-

Refer to LSMC Section 14.76.040 for definition of screening types.

III. LAND USE ALLOWANCES AND LIMITATIONS FOR REDEVELOPMENT

This section of the report assesses the development allowances and limitations of the Lake Stevens Municipal Code as it pertains to industrial redevelopment of the study area. The table below outlines the zoning breakdown of the Lake Stevens Industrial Center study area.

TABLE III-7. ZONING			
Zone	Lots	Acreage	SF
General Industrial (GI)	87	189.9	8,272,044
Light Industrial (LI)	39	39.35	1,714,086
Public/Semi-Public (P/PS)	2	12.12	527,947.2
TOTAL:	128	241.37	10,514,077.2

Zoning Code – GI and LI (Chapter 14.36)

The GI zone provides areas for a full range of industrial uses which have the potential to impact surrounding properties; such uses include manufacturing, resource extraction, agriculture, warehousing, and other intensive uses. The LI zone also provides areas for a full range of industrial uses but those expected to create less impact on surrounding properties. The LI zone also acts as a transitional zone to commercial/mixed-use areas. Both industrial zones do not allow residential uses except for temporary or caretaker residences according to the Lake Stevens Comprehensive Plan; however, the City zoning code permits apartments above nonresidential uses.

Limitations and Restrictions

In the GI and LI zones, both small-scale and large-scale retail uses, personal storage facilities, medical clinics, large offices (greater than 4,001 SF), and marijuana processing/production facilities are an administrative conditional use. Heavy manufacturing, salvage yards, and soil processing are also an administrative conditional use in the LI zone. Civil defense operations, correctional facilities, airports, colleges, and solid waste transfer stations are a conditional use. A broad range of leisure, accommodation, and food services are permitted outright or allowed as an administrative conditional use. Manufacturing and industrial uses are allowed in both zones, except when adjacent to or across the street from a residential zone which will require an administrative or conditional use permit.

Personal storage facilities, also referred to as self-storage or mini-storage, are allowed as an administrative conditional use. They may contain outdoor, long-term storage of vehicles, recreation vehicles, boats, and other similar vehicles. Storage facilities must be located in multi-story structures and constructed in one of the site configurations outlined in Lake Stevens Municipal Code Section 14.44.044.

Allowances

- Flexible industrial and commercial use categories, allowing wide range of industrial users.
- No maximum Floor Area Ratio (FAR).
- No maximum building setbacks.
- No minimum landscaping requirement (other than required landscape setbacks) and parking.
- No maximum building coverage per site.
- Land use review is required per LSMC Title 14, to ensure zoning standards are met.

Zoning Code – P/PS (Chapter 14.36)

The P/PS zone provides areas for governmental operations including public buildings, public services, and transportation facilities. This zone may also allow a limited range of commercial uses.

Limitations and Restrictions

In the P/PS zone, most uses not related to governmental operations are prohibited excluding small-scale retail (less than 10,000 SF), outdoor retail displays, open-air markets, pet care, funeral homes, automobile parking, and office related uses. Crematoriums are a conditional use and level III healthcare facilities are an administrative conditional use. A broad range of leisure, accommodation, and food services are permitted outright or allowed as an administrative conditional use.

Allowances

- Limited commercial use categories.
- No maximum Floor Area Ratio (FAR).
- No maximum building setbacks.
- No minimum landscaping requirement (other than required landscape setbacks and parking).
- No maximum building coverage per site.

Land use review is required per LSMC Title 14, to ensure zoning standards are met. Special Flood Hazard Areas (Chapter 14.64)

As shown in the Environmental Constraints section and Figure I-3, special flood hazard areas impact a small area along the southeastern perimeter of the study area. Future redevelopment on these properties will likely be impacted by additional standards and regulations that are outlined in the City's Special Flood Hazard Areas chapter 14.64 LSMC and 14.88 Critical Area— Part V.

Limitations and Restrictions

The City's Special Flood Hazard Areas chapters outline additional standards and regulations that apply to properties within flood hazard areas. Properties located within these areas will need to address these standards at the time of redevelopment.

A floodplain development permit is required prior to construction and/or development begins within any regulatory floodplain.⁵ Uses permitted within regulatory floodplain must also be consistent with Critical Area and Shoreline Management standards and regulations. The following activities are exempt from a floodplain development permit if all other Federal, State, and local requirements are met: routine maintenance of landscaping, removal of hazard vegetation, and normal maintenance of structures, above ground utilities and facilities, streets, and roads. Structures, impervious surfaces, and other development

⁵ Lake Stevens Municipal Code Section 14.64.060 defines floodway as “the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as “regulatory floodway.” Area of special flood hazard is defined as “the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR. “Special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard.”

must be located to avoid flood damage. Specific development and construction standards are outlined in Lake Stevens Municipal Code Section 14.64.040.

Due to the small flood hazard area within the study area, this report finds no need to make recommendations or changes to the existing Floodplain regulations.

Critical Areas (Chapter 14.88)

As shown in Figure I-2, the Lake Stevens Industrial Center study area includes numerous environmental constraints impacting approximately 21 acres. Constraints include wetlands, steep slopes, and streams (Little Pilchuck Creek and Catherine Creek) and associated buffers. The figures were created utilizing data provided by Snohomish County and the City of Lake Stevens. Please refer to Exhibit A.16 for specific data sources. Future redevelopment on these properties will also likely be impacted by additional standards and regulations that are outlined in the City's Critical Areas chapter.

Limitations and Restrictions

The City's Critical Areas chapter (14.88) outlines regulations and standards for the development and use of properties which contain or adjoin critical areas for the protection of public health, safety, and welfare. Chapter 14.88 LSMC also outlines standards and regulations to ensure that there is no net loss of acreage or functions and values of critical areas.

All development should take "reasonable effort" to avoid and minimize impacts to critical areas and buffers by avoiding impacts altogether, minimizing impacts, reducing, or eliminating impacts over time through preservation and maintenance operations, or compensating for unavoidable impacts by replacing, enhancing, or substituting resources or environments. Per Section 14.88.270, all applications for land use or development permits on properties, including or adjacent to critical areas or their defined setbacks or buffers, are required to include site/resource specific reports to describe the environmental limitations of the site and determine compliance with Chapter 14.88 LSMC. Reports must be prepared by a qualified biologist or geotechnical engineer. If mitigation or enhancement is required, a mitigation plan will be required along with a performance and maintenance bond. In the case of unavoidable impacts to critical areas or buffers, the Planning Director may approve the use of a mitigation bank or in-lieu fee mitigation program as outlined in Section LSMC 14.88.276.

Land Use Recommendations

The following points should be considered by the property Owners, planning commission, City council, and community when considering future zoning changes.

- Annexation of the northeast corner of the study area into the City of Lake Stevens.
- Excluding P/PS zoned lots, consolidate private parcels within the entire LSIC area into one zoning designation: General Industrial (GI) or Light Industrial (LI). The use table can be combined as many of the uses identified in Table 14.40 are allowed in both industrial zones. The one permitted residential use of "apartment(s) above permitted nonresidential use" and possible other uses (such as gas stations) should be evaluated for removal from the consolidated industrial zone. The discrepancy between the Code and Comprehensive Plan which prohibits residential uses excluding temporary or caretaker residences in industrial zones adds further weight to our recommendation to remove this residential use. When evaluating the uses of the zone, we also recommend adding makerspace and caretaker housing as permitted uses.

- Implement design standards specific to industrial zones beyond the citywide design standards. As an example, the architectural standards within the citywide design standards were not created with industrial buildings in mind. Implementing industrial building design standards will create transparency to business activities and property owners within the LSIC to create an environment that is welcoming to business and employment growth. The current landscape standards require a type A landscape buffer for industrial development adjacent to the Centennial Trail. This conflicts with siting future industrial buildings to take advantage of the Centennial Trail as an amenity. Develop design standards that promote flex style industrial users including maker spaces and small-scale manufacturing. Complementary or accessory uses which support commercial and industrial operations.

The LSIC currently consists of three zoning designations: General Industrial (GI), Light Industrial (LI), and Public/Semi-Public (P/PS). Excluding P/PS zoned lots, we recommend consolidating private parcels within the entire LSIC area into one zoning designation as identified in the second land use recommendation. The use table can be combined as many of the uses identified in Table 14.40 are allowed in both industrial zones. The one permitted residential use of “apartment(s) above permitted nonresidential use” and possible other uses (such as gas stations) should be evaluated for removal from the General Industrial (GI) zone. The discrepancy between the Code and Comprehensive Plan which prohibits residential uses excluding temporary or caretaker residences in industrial zones adds further weight to our recommendation to remove this residential use. When evaluating the uses of the GI zone, we also recommend adding makerspace and caretaker housing as permitted uses. Lastly, in addition to use consolidation and evaluating the uses of the zone, we recommend implementing design standards specific to industrial zones beyond the citywide design standards.

Net Developable Area

Through our analysis, we have identified net developable area within the LSIC broken down by individual segments. The net developable area was calculated by subtracting constrained acreage from the gross study area acreage. Constrained acreage consists of public facilities and gas utility properties that will not be redeveloped, critical areas (e.g., steep slopes, streams, wetlands and associated buffers), and public trails. Refer to Table III-8 below.

TABLE III-8. NET DEVELOPABLE AREA

Area	Lots	Gross Acreage	Constrained Acreage ⁶	Net Acreage
1	66	108.54	20.03	88.51
2	17	74.16	5.15	69.01
3	45	58.67	14.16	44.51
TOTAL:	128	241.37	39.34	202.03

⁶ Constrained acreage consists of public facilities and gas utility properties that will not be redeveloped, critical areas (e.g., steep slopes, streams, wetlands, and associated buffers), and public trails.

IV. ENGINEERING STANDARDS

This section summarizes requirements of the City of Lake Stevens engineering-related departments.

Transportation-Related Considerations

Transportation Classifications

The Lake Stevens Industrial Center and its frontage streets are shown in Figure I-4 above. The area contains 13 roadways of significance, summarized in Table I-3 above. The area is partially bounded by SR 92 to the north, which is the only roadway under State jurisdiction; all other streets fall in the City of Lake Stevens.

Figure 8.2 of the City of Lake Stevens Comprehensive Plan establishes the classification of transportation facilities. The classifications help to determine characteristics such as travel lanes and widths, driveway access, etc.

Table IV-9 summarizes the classification of roadways in the area and inventories available facilities.

TABLE IV-9. CITY OF LAKE STEVENS FACILITIES INVENTORY					
Street	Classification	ROW Width	Travel Lanes	Pedestrian Facilities	Bicycle Facilities
36th Street NE	Collector	40-60 feet	2	Sidewalks, intermittent	None
Old Hartford Road	Collector	40-60 feet	2	Sidewalks, intermittent Shared-use trail, intermittent	Shared-use trail, intermittent
31st Place NE	Local Access	30 feet	2	None	None
28th Street NE	Collector	40-60 feet	2	None	None
28th Place NE	Local Access	60 feet	2	None	None
27th Place NE	Local Access	60 feet	2	None	None
131st Drive NE	Local Access	10 feet	2	None	None
N Machias Road	Minor Arterial	60-80 feet	2	Shared-use trail, intermittent	Shared-use trail, intermittent
Hartford Drive	Local Access	30 feet	1	Ped/bike lane	Ped/bike lane
131st Avenue NE	Collector	50-60 feet	2	None	None
20th Street NE	Minor Arterial	50-60 feet	2	Sidewalks, intermittent	None

Access

Most sites in the Lake Stevens Industrial Center currently have access from either Old Hartford Road or N Machias Road. The City's requirements for driveway spacing and other access standards are summarized in Section 3 of the Lake Stevens Engineering Design and Development Standards (EDDS).

As noted above, standard driveway width for commercial/industrial driveways is a minimum of 30 feet wide and a maximum of 40 feet wide. Full-movement driveways on Arterials with a posted speed of 35 mph are required to be spaced 150 feet from another driveway or stop-controlled intersection, and 250 feet from a signalized intersection. Access standards decrease slightly for right-in/right-out driveways.

For non-arterial streets, more than one access is only permitted on lot frontages over 75 feet. Access is generally limited to the lower-volume or lower-classification roadway on lots with frontage on more than

one street. Driveways are required to be spaced a minimum of 5 feet from the property line and 50 feet from the nearest traveled way.

Planned Improvements

The City of Lake Stevens Transportation Improvement Plan (TIP) for 2022-2027, adopted April 28, 2021, includes the following projects as planned improvements in the area:

- Old Hartford Road Improvement (36th Street NE to Hartford Drive), which has an estimated cost of \$11,650,000 and will include infrastructure analysis, ROW Acquisition, construction of sewer lift station, utilities, sidewalk, planter, and road improvement.
- North Machias Road (SR 92 to 20th Street NE), which has an estimated cost of \$9,100,000 and will include ROW Acquisition, construction of utilities, sidewalk, planter, and road improvement.
- 131st Avenue NE Sidewalk Improvement, which has an estimated cost of \$2,000,000 and will include sidewalk construction between 20th Street NE and Hartford Drive, and possible ROW acquisition.

Right-of-Way Standards

The City of Lake Stevens EDDS dictate the standard cross section for all roadway classifications. The standards also include reduced standards, which remove some landscape width and/or bike lane(s) for a ROW decrease of about 10 feet, and Lower Impact Development (LID) standards, which reduce pavement width to add approved LID facilities. These requirements are summarized below, with a range from reduced to standard widths:

- Minor Arterial (70 foot ROW): 5-6 foot sidewalk, 4.5 foot landscape strip, 11 foot travel lane, 11-12 foot two-way left-turn lane or median.
- Collector (60 foot ROW): 5-6 foot sidewalk, 4.5 foot landscape strip, 8 foot parking lane, 4 foot bike lane(s), 10 foot travel lane.
- Local Access (50 foot ROW): 5 foot sidewalk, 4.5 foot landscape strip, 10 foot travel lane, 8 foot parking lane.

Transportation Constraints

When considering development of the Lake Stevens Industrial Center, there are several areas of concern where the current roadway geometry poses safety concerns under existing conditions as well as increased development.

- Access to SR 92 from the area can be challenging during peak times, especially for trucks. The existing volume on SR 92 is approximately 13,500 vehicles per day (approximately 1,380 per peak hour) with a posted speed of 55 mph.
- At the intersections of 127th Drive NE, left turns and through movements are prohibited from both approaches of 127th Drive NE.
- At the intersection of N Machias Road, a single lane stop-controlled approach is provided with an acceleration lane for left turns to the highway. A left turn lane is provided for westbound to southbound movements off the highway. Based on the roadway volumes, it is estimated the left turn movement from N Machias Road to SR 92 is operating at a level of service "F."
- The Grade Road approach to SR 92 does not have any lane restrictions, but the level of service is also anticipated to be "F" for left turns to SR 92 and no left turn lanes are provided on any

approaches. Some traffic from the industrial area may find this route to be most attractive compared to using Machias Road and would result in travel through residential areas.

- In order to address long delays and safety concerns related to the volume and speeds on SR 92, improvements should be considered to address the need for safe and convenient movements to and from SR 92 for both employees and trucks.
- The intersection of Old Hartford Road with 28th Street NE is offset in both directions, has narrow lanes on Old Hartford Road, and has no sidewalks or bicycle facilities except for the adjacent Centennial Trail.
- The 28th Place NE approach is located just to the south of the intersection. The offset, coupled with fencing and vegetation at the edge of the roadway, limits sight lines and is difficult for larger vehicles to maneuver.
- The Centennial Trail runs along the east side of Old Hartford Road to the north of the intersection and on the north side of 28th Street NE to the east, with a crossing to the south about 175 feet from the intersection. To improve circulation and safety for the industrial area, improvements should be made to the intersection alignment and roadway widths should be brought to current standards.

Trip Generation Potential

In order to estimate the potential trip generation for industrial development in the study area, we first reviewed the vacant developable areas and areas with potential for additional or redevelopment (generally underutilized lots). Lots that have recently been developed were assumed to not have any further potential for trip generation.

Public Utilities and trails were not included in the assessment; also removed is acreage constrained by wetlands, steep slopes, and other geographical and environmental considerations.

As noted above, approximately 43.1 acres are vacant and not environmentally constrained, and an estimated 132.3 acres are subject to redevelopment – including the area in unincorporated Snohomish County.

For vacant areas, lot coverage of 30-40% is assumed for general industrial development, office, and a mix of land uses.

For the re-developable areas, it was assumed these lots are currently developed to approximately 25% of their potential, so the coverage was adjusted accordingly. The resulting building area potential for each of the three development areas is up to 1,228 kilopounds per square foot (KSF) for Area 1, 962 KSF for Area 2, and 607 KSF for Area 3.

Trip generation estimates were prepared using the “General light Industrial” (LUC 110) from the Institute of Transportation Engineers (ITE) Trip Generation Manual. This covers the likely range of uses allowed in the zones, including light industrial, warehousing, and manufacturing.

TABLE IV-10. – PROPOSED TRIP GENERATION

Area	30% coverage				40% Coverage			
	Building Area	AM	PM	Daily	Building Area	AM	PM	Daily
1	921 KSF	630	599	3,515	1,228 KSF	839	798	4,669
2	722 KSF	494	469	2,763	962 KSF	658	625	3,668
3	455 KSF	313	296	1,761	607 KSF	416	394	2,332
TOTAL	2,097 KSF	1,437	1,364	8,039	2,797 KSF	1,913	1,817	10,669

As shown in Table 6, the Lake Stevens Industrial Area has an estimated 1,364 and 1,913 peak hour trips and 8,039 to 10,669 daily trips.

Approximately 25% of these trips would be expected to travel to/from SR 92 to the north. This is a general estimate based on surrounding development and anticipated routes through the study area. The addition of this level of trips will exacerbate the capacity and safety issues at the existing SR 92 intersections. It is likely the potential for industrial development will be limited without improvements to SR 92 access or traffic will travel through more residential areas.

Traffic Recommendations

- Improve truck access by providing protected left turn movements to and from SR 92 to address long delays and safety concerns. Alternative is routing trucks through more residential areas. Improvements could include signalized intersections at Machias or 127th Drive NE intersections, or a grade separated crossing at the trail crossing near the 127th Drive NE intersection.
- Improve Old Hartford Road to collector standards as frontages develop, which is listed on the City's TIP.
 - Option A: The suggested cross section below is consistent with the City's collector roadway width of 36' (standard plan 2-020), allowing for parking on one side lane, and will better accommodate truck turns than a 24' width.
 - Option B: An alternative option would remove trees on both sides of the road and implement with LID stormwater conveyance.
 - Option C: An alternative option would be to provide a center turn lane.

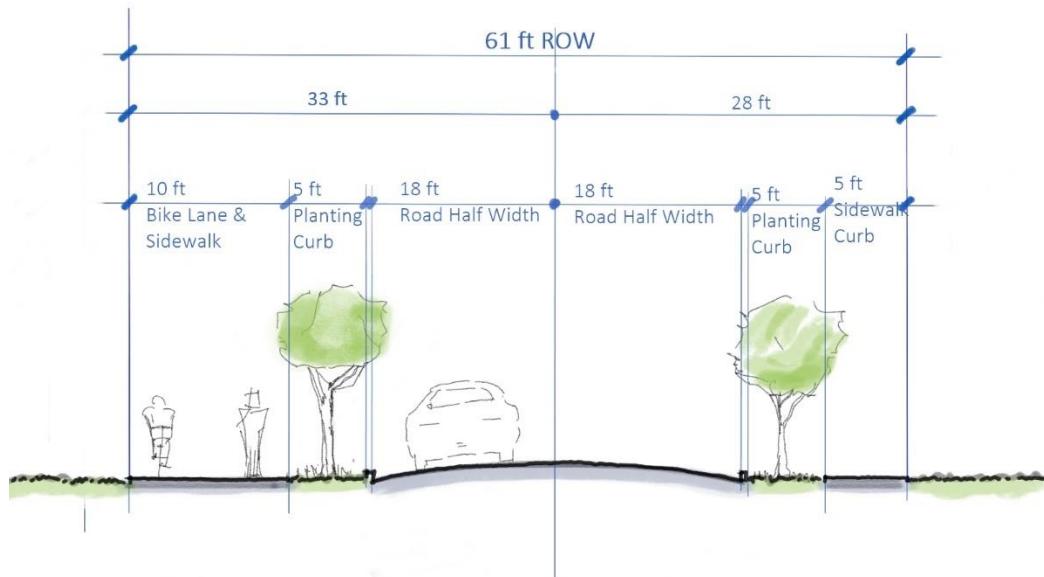


Figure IV-1: Suggested Cross Section A

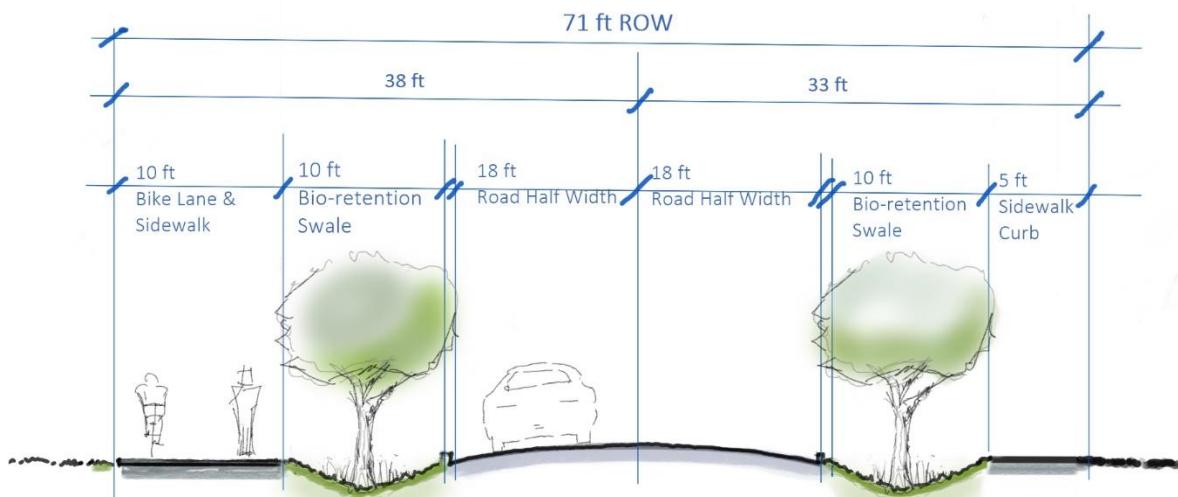


Figure IV-2: Suggested Cross Section B

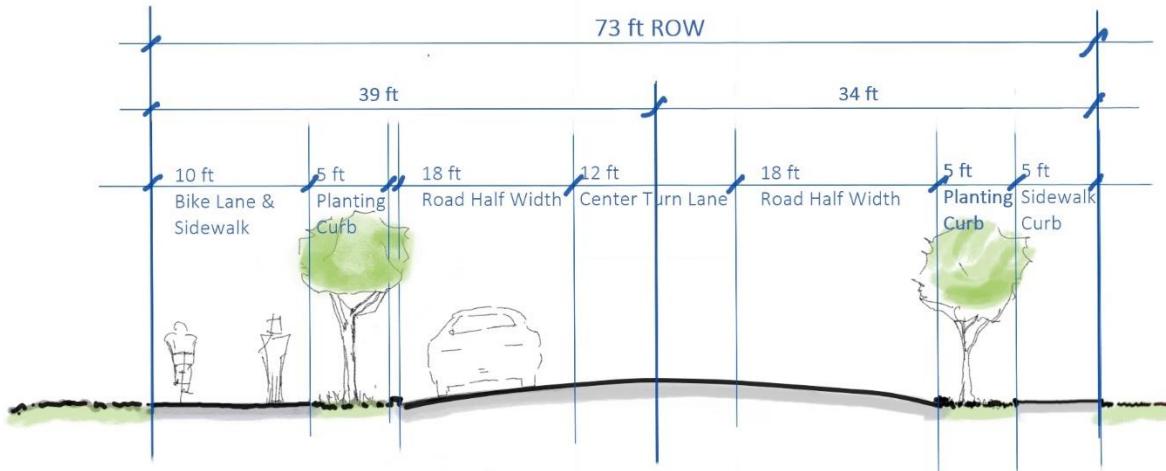
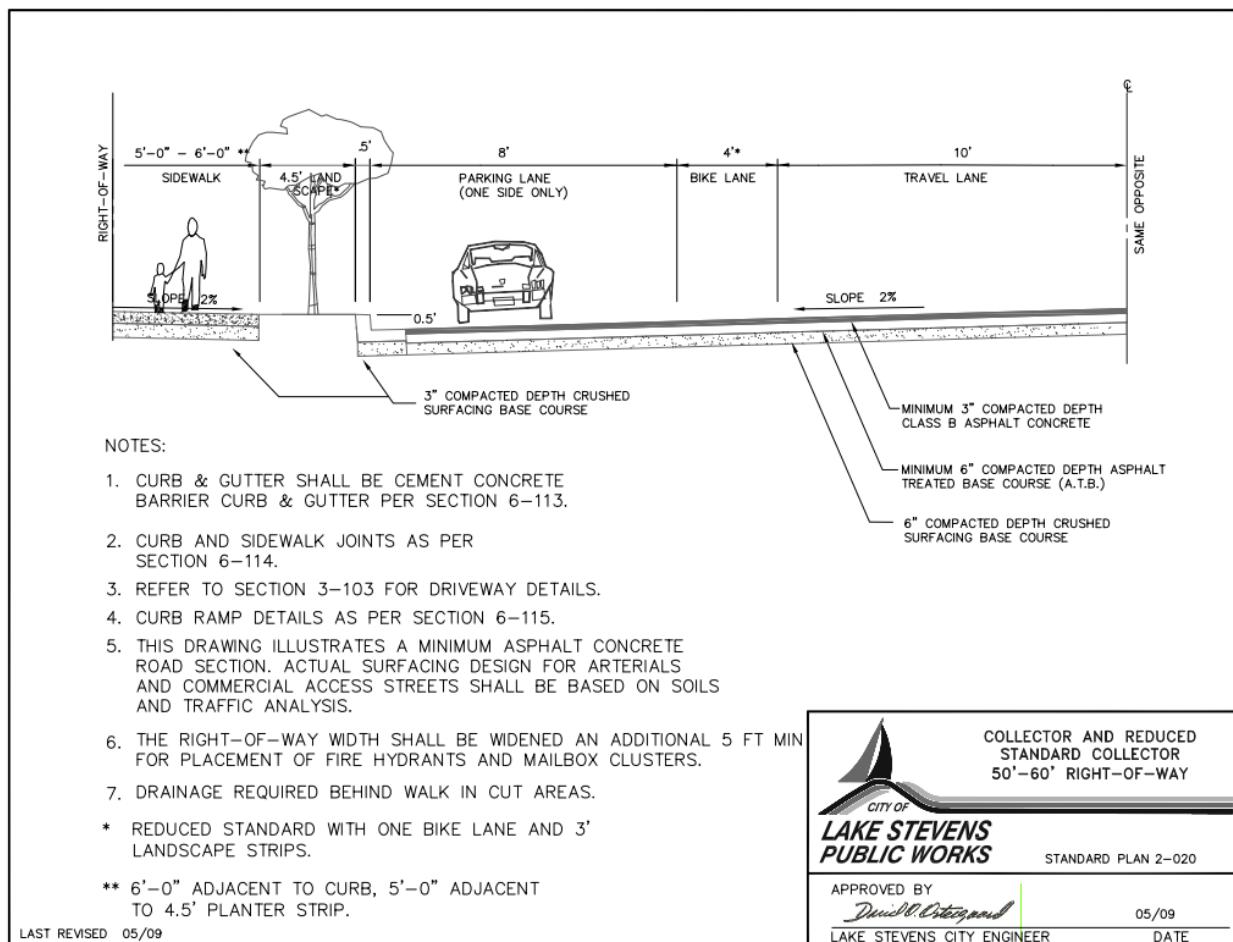


Figure IV-3: Suggested Cross Section C

Graphic source: Mackenzie



- Improve the existing intersection alignment at Old Hartford Road/28th Street NE to address turning movements and safety.

- Consider providing a new connection between Machias Road and Old Hartford Road south of Hartford Drive along an alignment of the Centennial Trail. This would result in an alignment Machias Road from the south into Old Hartford Road to the north and consolidate access at SR 92. Without an improved access to the highway, development in this area could be limited.

Utilities

Water

Domestic water service is provided by the Snohomish Public Utility District (SnoPUD). SnoPUD has multiple public lines within the study area as published in the Snohomish Public Utility District 2021 Draft Water System Plan, ranging from six to 24 inches diameter; refer to Figure IV-1. The Lake Stevens Well Pump Station is located at 2008 131st Avenue NE is outside the study area but within close vicinity.

The public main located in Old Hartford Road is 12 inches with 6-inch and 8-inch service mains servicing properties with connections to Old Hartford Road. The 12-inch Old Hartford Road public water main connects to the Walker Hill area as a redundant source and crosses south of the 2910 Old Hartford Road property (current location of Evergreen Sanitation). The public main located in N Machias Road is shown as a 24-inch line.

Information regarding private service taps and sizes are not available, and therefore it is anticipated that new development/redevelopment anywhere within the study boundary will need to make appropriate service connections instead of reusing the existing services. No public extensions are assumed at this time but will need to be considered on a case-by-case basis.

The water transmission main is owned by the City of Everett (Everett Transmission Line) and are part of the regional water supply. SnoPUD buys water from the City of Everett and augments with local wells including the one southwest of the study area.

Figure IV-4: Water Service Map



Map source: Snohomish Public Utility District 2021 Draft Water System Plan, Figure 4-4A, with Mackenzie annotations

Fire Flow

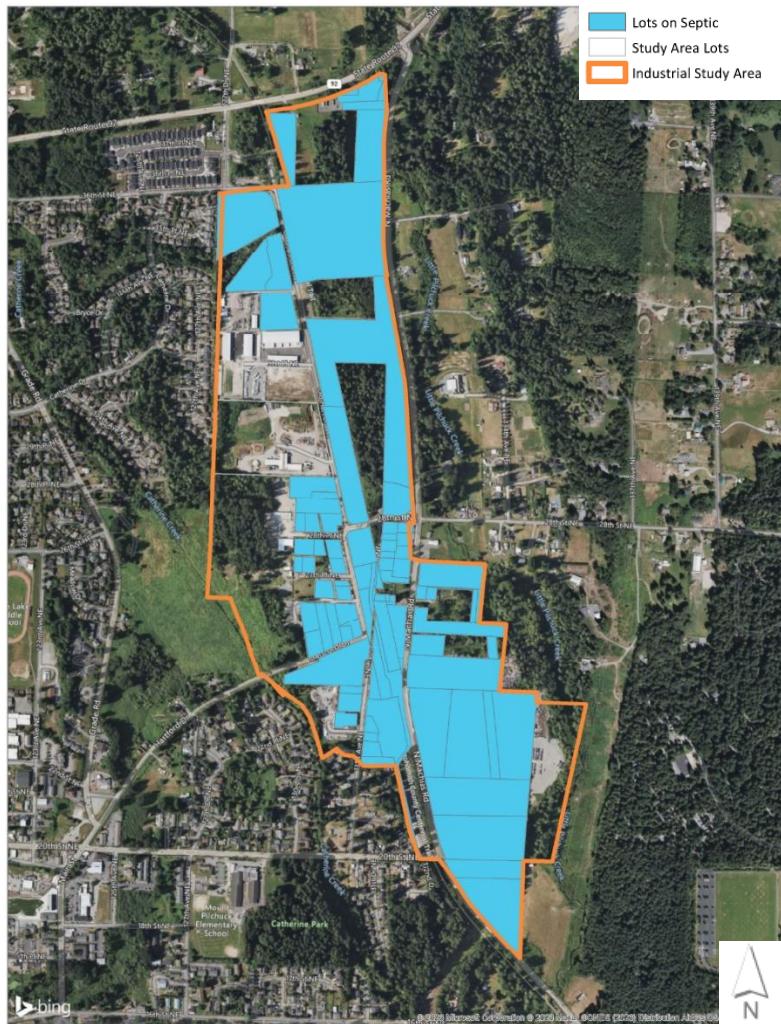
A fire flow test has not been formally requested through SnoPUD, although SnoPUD has supplied pressures from their model of the area ranging from 103 psi to 121 psi and confirmed no known deficiencies in the area. A flow test will need to be requested, performed, and analyzed to determine if there are any capacity issues for additional development/redevelopment within sections of the study area. Based on this information, there are no recommended infrastructure improvements at this time.

Sanitary Sewer

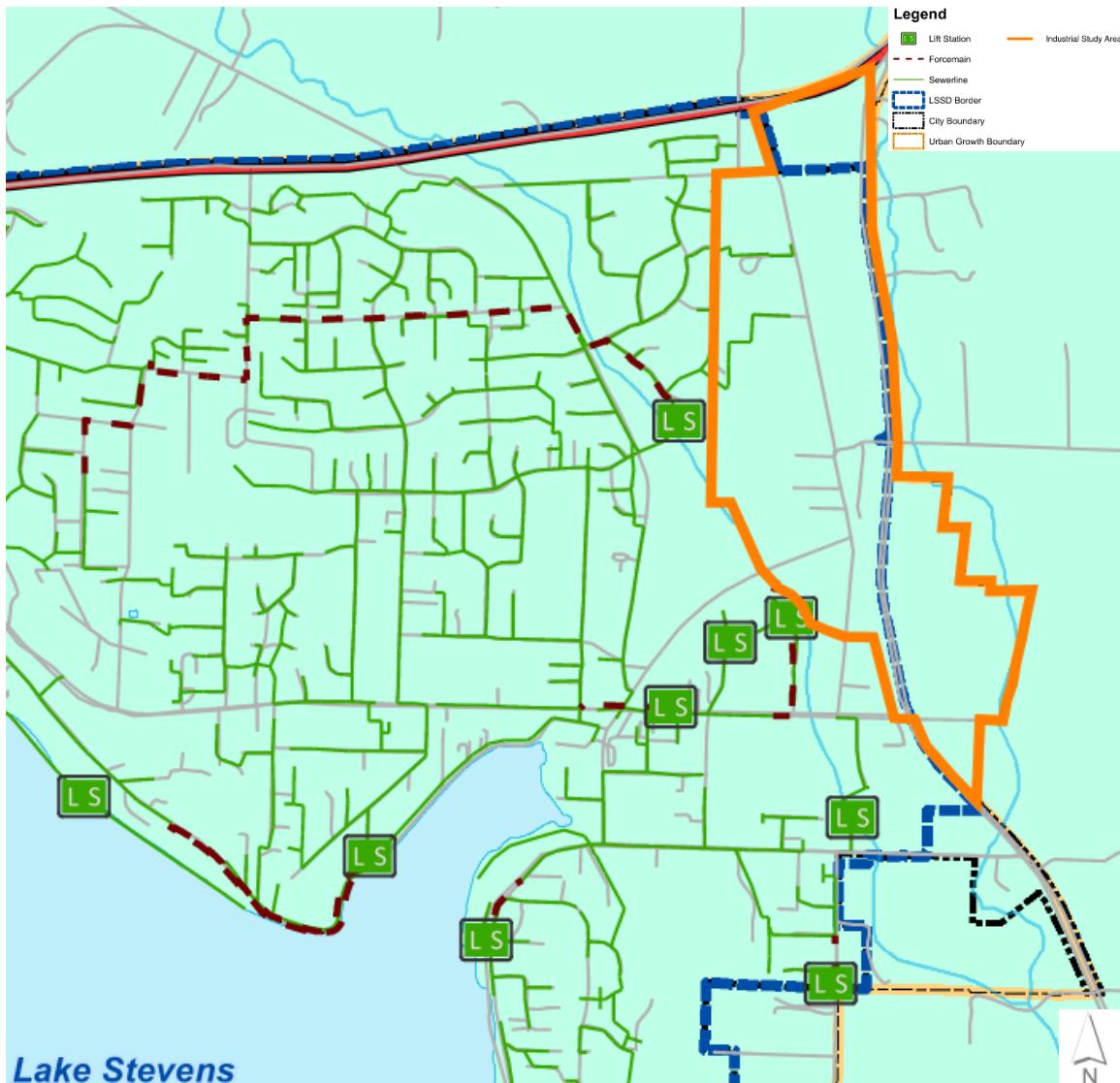
The Industrial Study Area is within the service boundary of the Lake Stevens Sewer District (LSSD), which provides sanitary sewer to the area.

According to the Lake Steven Sewer District General Sewer/Wastewater Facility Plan, dated October 2022 and prepared by Gray & Osborne, Inc., there are no public sanitary sewer or wastewater systems within the study area and most of the properties within the study area are on septic systems; refer to Figure IV-2 through Figure IV-4.

Figure IV-5: Estimated Existing Septic Parcel Map

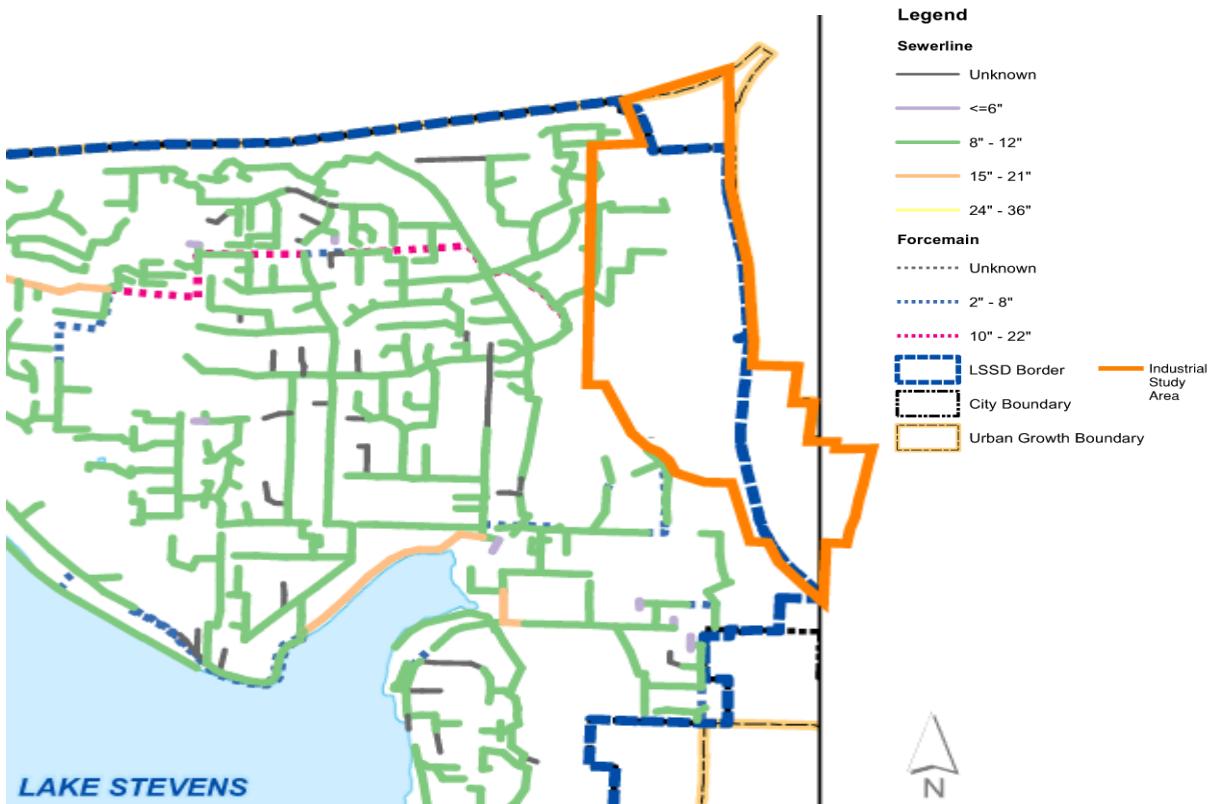


Map source: Lake Steven Sewer District General Sewer/Wastewater Facility Plan, Figure 3-7, with Mackenzie annotations

Figure IV-6: Sanitary Sewer Asset Map

Map source: Lake Steven Sewer District General Sewer/Wastewater Facility Plan, Figure 3-1, with Mackenzie Annotations

Figure IV-7: Sanitary Sewer Pipe Size Asset Map



Map source: Lake Steven Sewer District General Sewer/Wastewater Facility Plan, Figure 4-1, with Mackenzie Annotations

There are multiple lift stations in the vicinity of the Study Area with adequate coverage, as analyzed in the 2022 Wastewater Facilities report, but without the ability to serve the Industrial Study Area which falls into Basin E8 (abbreviated E8 hereafter) and Basin E9 (abbreviated E9 hereafter). The 2022 Wastewater Facilities plan indicated a need for two new future lift stations (LS) for the Study Area (LS E8 and LS E9 from the Gray & Osborne Report), as well as a 4-inch force main to convey outflow from the proposed LS E8 and E9 lift stations to existing manholes before gravity flowing; refer to Figure IV-7 for LS locations and 4-inch force main route. Gravity sanitary sewer lines will be needed to convey waste to the new lift station for development in the southeast Study Area.

To determine the best routing for the new sanitary sewer, a master plan is recommended to consider the current capacity, anticipated future load, and invert elevations available for connections to the existing system. This study will need to be completed by the Lake Stevens Sewer District in conjunction with the City of Lake Stevens.

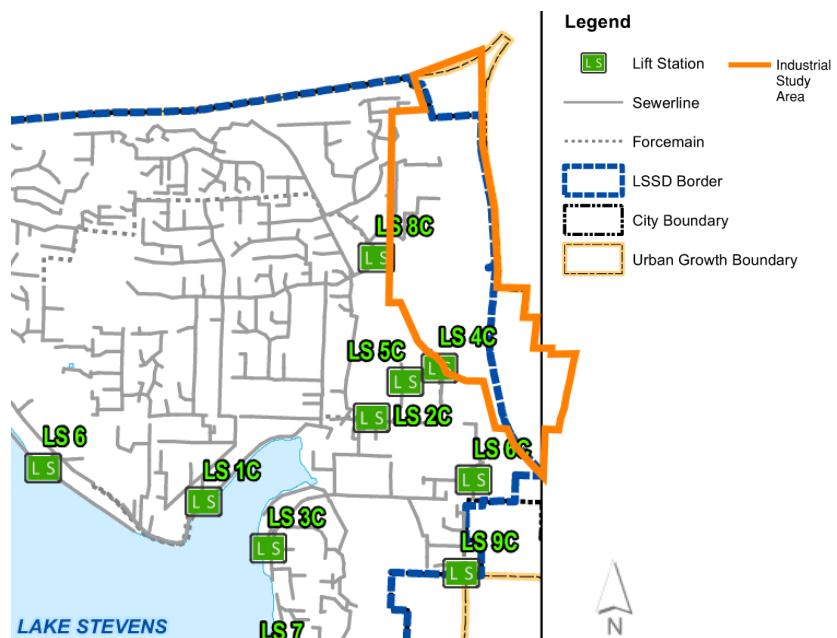
For the purposes of establishing each area for the Industrial Study Center, it has been assumed a main line based on the Gray & Osborne Report is proposed within Old Hartford Road south of 28th Street NE will be required to serve properties within the Study Area south of 28th Street NE (as shown in Figure IV-6). These sanitary sewer mains are assumed to gravity flow to one of the new lift stations.

Additionally, a main sewer line within Old Hartford Road between 28th Street NE and 36th Street NE has been assumed to serve properties adjacent to Old Hartford Road. From existing maps, there are two constructed sanitary lines west of Old Hartford Road in this area that can be analyzed for connection and whether another LS is warranted.

Other improvements to the system within and outside of the Study Area might be needed before the Industrial Study Area can be fully brought onboard; refer to the Lake Steven Sewer District General Sewer/Wastewater Facility Plan, dated October 2022 and prepared by Gray & Osborne, Inc. for further information regarding system upgrades.

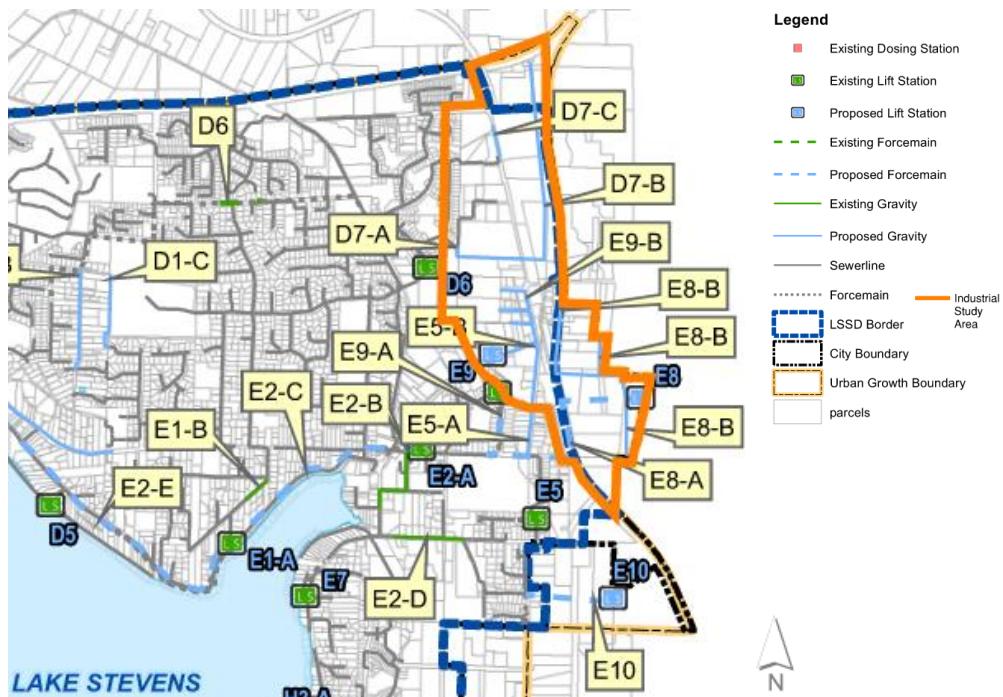
Lake Steven Sewer District General Sewer/Wastewater Facility Plan, dated October 2022 and prepared by Gray & Osborne, Inc., outlines capital projects to provide sanitary sewer to the LSIC. At this time, the capital projects are funding dependent and the District's dept-to-asset ratio is already quite high, so the District will need to secure approximately \$21.4M in new debt to cover these projects in 2027, with the debt burden falling on all District rate payers; refer to Chapter 9 of the Gray & Osborne, Inc. Report. Sanitary sewer improvements to the LSIC may occur sooner if they are paid for by a private development proposal and/or grants and other funding sources become available.

Figure IV-8: Sanitary Sewer Pump Station Asset Map



Map source: Lake Steven Sewer District General Sewer/Wastewater Facility Plan, Figure 4-4, with Mackenzie Annotations

Figure IV-9: Collection System Improvement Projects



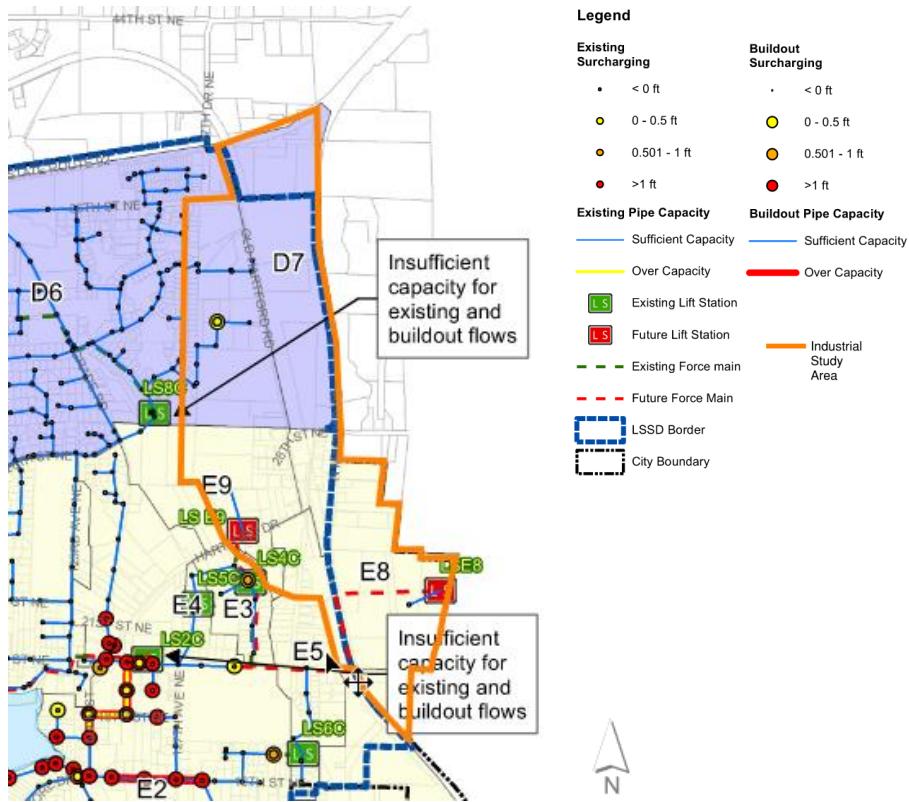
Map source: Lake Steven Sewer District General Sewer/Wastewater Facility Plan, Figure 6-2, with Mackenzie annotations

Improvement Prioritization

Area 1 is the most feasible area to bring online with public sanitary sewer utilities followed by Area 2 and then Area 3. The LS E9 is situated in Area 1 allowing Area 2 to be serviced afterwards with the addition of LS E8. Area 3 is an independent area that does not rely on either of the other two for implementation. In order for Area 3 to be served by sanitary sewer, updates to the existing sanitary sewer system outside the Study Area are needed; see Osborne & Gray report for detailed information.

TABLE IV-11. – PROPERTIES SERVED	
Area	# of Properties Served
1	46
2	10
3	39
TOTAL	95

Figure IV-10: Gray & Osborne, Inc. Model Results



Map source: Lake Steven Sewer District General Sewer/Wastewater Facility Plan, Figure 6-5, with Mackenzie annotations

Surface Water Management

The City of Lake Stevens division of Public Works manages the public stormwater system and surface water management. Most of the area within the Industrial Study Center is within the eastern Little Pilchuck Creek drainage basin and the remainder is within the western Catherine Creek drainage basin. As shown in Figure IV-8 below, Old Hartford Road generally lies along the ridge between the drainage basins.

Figure IV-11: Drainage Basin and Storm Drain Asset Map



Map source: Mackenzie

Limited public stormwater infrastructure, including catch basins, storm pipes or ditches are available in the study area. Any property which develops or redevelops will be required to manage stormwater according to the current Department of Ecology stormwater manual and connect to the public storm drain lines to and capture site runoff from their development and contributing upstream properties. Both new

and reuse of existing outfalls are expected for Catherine Creek and Little Pilchuck Creek, with most improvements occurring in the Little Pilchuck Creek drainage basin. A regional stormwater study is recommended to determine the best course of action for both the Catherine Creek and Little Pilchuck Creek drainage basins to connect each property to a stormwater outfall. This recommended study is beyond the scope of this report.

For the purposes of establishing functional segments for the Industrial Study Area, the geotechnical engineer (The Riley Group) has indicated that soils within the Catherine Creek drainage basin are expected to have adequate infiltration capacity to fully handle developed site stormwater runoff through infiltration. If site-specific infiltration is determined to be infeasible, a public conveyance pipe may be required along the western edge of the study area, with discharge to Catherine Creek.

The Little Pilchuck Creek drainage basin within the limits of the Industrial Area Study boundary is divided into two separate basins separated by 28th Street NE. To the south, stormwater management is expected to be provided through regional storm drainage facilities, either public or privately maintained, located within the 50-foot-wide creek buffer adjacent to the urban growth boundary; this area adjacent to the creek would not be developable and therefore an efficient use of the land. To the north, stormwater management may be provided through expansion of the existing facility at the public works building, with associated piped conveyance to lots within the drainage basin. Should the existing facility not be able to be expanded, a regional facility, either public or privately maintained, can be located adjacent to the existing facility. Little Pilchuck Creek is outside of Lake Stevens growth boundary and within Snohomish County jurisdiction; therefore, any connections to Little Pilchuck Creek will need to be approved by the County.

Stormwater Management

The City of Lake Stevens adopted the State Department of Ecology Storm Water Management Manual for Western Washington (SWMMWW). The most current edition is dated July 2019. Information from the Riley Group indicates there will be limited to no infiltration available within the Industrial Study Area. As properties develop or redevelop, site-specific geotechnical investigations will be needed to evaluate local infiltration capacity and onsite stormwater solutions. Improvements within the public right of way will incorporate low impact design (LID) to address stormwater conveyance and/or treatment as depicted in the proposed Old Hartford Street cross section in Engineering Section, traffic recommendation.

The SWMMWW has minimum requirements (MRs) based on various thresholds within the project area as described in Volume I. Any project that results in 2,000 square feet (SF) or greater of new plus replaced hard surface area or has land disturbing activity of 7,000 SF or greater, will be subject to MRs. It is assumed all MRs apply to the study area when considered as a whole. As properties develop or redevelop, a licensed professional engineer will need to follow the SWMMWW provided flow charts (Volume I, Figure 1-3.1 and/or Figure 1-3.2) to determine and adhere to the specific requirements on a site-by-site basis. The minimum requirements include:

- MR1. Preparation of Stormwater Site Plans
- MR2. Construction Stormwater Pollution Prevention Plans (SWPPP)
- MR3. Source Control of Pollution
- MR4. Preservation of Natural Drainage Systems and Outfalls
- MR5. On-Site Stormwater Management
- MR6. Runoff Treatment
- MR7. Flow Control
- MR8. Wetlands Protection

MR9. Operation and Maintenance

Western Washington's stormwater management requirements are system- and site-specific. MR Nos. 1, 2, 3, 4, and 9 require different plans, narratives, and a list of BMPs to be accounted for during construction. MR5 is notable for stormwater facility installation, which could require relatively significant space on the sites for retention ponds or could require underground detention vaults.

MR5 calls for either a prescribed implementation (List #1 from Table I-3.2) of BMPs or the achievement of the Low Impact Development (LID) Performance Standard by means of any BMP outlined in the SWMMWW. The LID Performance Standard is such that stormwater discharges shall match developed discharge duration to pre-developed durations for the range of pre-developed discharge rates from 8%-50% of the 2-year peak flow.

MR6 is also notable in that stormwater treatment facilities are sized for the entire area that drains to them, not just for pollution-generating surfaces.

MR7 adds to the discharge rate requirements of MR5 by requiring developed stormwater discharges to match flow durations between 8% of the 2-year flow through the full 50-year flow.

MR8 regulates the type and quantity of direct and indirect stormwater discharges to wetlands and may affect stormwater facility design if there are wetlands on-site or as part of the outfall location.

Natural Gas

The LSIC contains six lots utilized for natural gas utility distribution based on Snohomish County Assessor Data; reference Figure IV-9 below for the location of these uses within the study area. These lots total approximately 3.17 acres. Three lots in the northern corner of the study area, totaling approximately 1.59 acres, are owned by Puget Sound Energy and Gas along with one approximately 0.05-acre lot owned by the Northwest Pipeline Corporation. The two lots in the southeastern portion of the study area are also owned by the Northwest Pipeline Corporation and total approximately 1.53 acres. The Williams Gas Pipeline West runs directly to the east of the study area. The Puget Sound Energy and Gas owned lots are currently in operation and will not be redeveloped. The current status of the Northwest Pipeline Corporation owned lots will need to be confirmed with the property owner (Northwest Pipeline Corporation) to determine if any natural gas infrastructure exist and if they can be redeveloped.

Figure IV-12: Natural Gas Utility Lot

Map source: Mackenzie

Electrical Service

Snohomish County PUD provides electrical service to the LSIC. Snohomish County PUD has confirmed there is sufficient electrical service to power the existing LSIC and any immediate future needs. There is an electrical substation owned by Snohomish County PUD on the northern end of the LSIC. There is sufficient space at the substation to expand electrical service should more power be required. Based on this information, there are no recommended infrastructure improvements at this time.

High Speed Internet

Ziply Fiber provides internet service to the City of Lake Stevens and specifically the LSIC. High speed internet (fiber) is not available to the LSIC; however, it is within proximity of the LSIC – please reference Exhibit 15. Fiber service is available within the Lake Stevens Downtown Subarea Plan; any expansion of fiber service can be accommodated by extending fiber through Hartford Drive to Old Hartford. As of January 2023, Ziply Fiber has added fiber to more 1,260 additional home and business locations in Lake Stevens in the last two months. Future greater demand for fiber service will be necessary for Ziply Fiber to expand their service. Recommendations on funding for grants or co-location of utility facility easements should be noted with the roadway infrastructure improvements.

V. ECONOMIC ANALYSIS

Refer to Appendix A for Lake Stevens Industrial Market Study by ECONorthwest, dated February 24, 2023.

VI. ENVIRONMENTAL CONSTRAINTS

The Riley Group provided both an environmental risk assessment and a geotechnical analysis based on historical records; no field work was performed. There are 26 properties within the LSIC that are currently listed on various environmental regulatory databases reviewed by Environmental Risk Information Services (ERIS). Of the 26 properties listed, seven properties are considered an elevated environmental risk to soil, groundwater, and/or soil vapor. The at-risk properties include the following; the table below reflects remediation or clean up status of each site:

- Lake Stevens Best Storage (formerly Cooper Lumber/Old Cedar Mill) – 2303 and 2311 131st Avenue Northeast
- Lake Conner Grocery – 2730 Hartford Drive (and North Machias Road)
- Arnold's Body Shop – 2710 and 2720 North Machias Road
- Old Apex Wood Building – 2524 North Machias Road
- Gunner Auto Parts and Braven Metals and (formerly NW Auto Recyclers) – 2315 and 2317 North Machias Road
- 360 Auto Recycling – 2017 North Machias Road
- Furby's Truck Repair – 1901 North Machias Road

The geology of the LSIC indicates the central portion of the site as underlain by Till, which is a mixture of clay, silt, sand, and gravel deposited at the base of the Vashon ice sheet. The western portion of the site is primarily mapped as Older Alluvium, which is sand and gravel deposited as terraces above the younger alluvium. The LSIC site generally does not have high erosion hazard areas. There are certain areas along the western bank of Little Pilchuck Creek with steeper slopes, specifically adjacent to Machias Road. A Snohomish County Well Head Protection Radius occupies the northern portion of the site. Stormwater infiltration may be feasible in the younger and older alluvial deposits on the site, specifically in the area west of Hartford Road.

Refer to Appendix B and C for the Geotechnical Evaluation and Environmental Risk Assessment.

TABLE VI-12.

Site Name	Lake Stevens Site Address	Soil Status	Groundwater Status	Ecology Site Status
Lake Stevens Best Storage (formerly Cooper Lumber/Old Cedar Mill)	2303 and 2311 131st Avenue NE	Remediated Below Cleanup Levels	Suspected/Confirmed Above Cleanup Levels No Groundwater Cleanup Conducted (Data Gap)	No Further Action
Lake Conner Grocery	2730 Hartford Drive (and North Machias Road)	Unknown – No Soil Sampling Conducted	Unknown – No Groundwater Sampling Conducted	N/A – No Cleanup Conducted
Arnold's Body Shop	2710 and 2720 North Machias Road	Soil Above Cleanup Levels	Groundwater Monitoring Data Unavailable for Review	Awaiting Cleanup
Old Apex Wood Building	2524 North Machias Road	Unknown – No Soil Sampling Conducted	Unknown – No Groundwater Sampling Conducted	N/A – No Cleanup Conducted
Gunner Auto Parts and Braven Metals and (formerly NW Auto Recyclers)	2315 and 2317 North Machias Road	Unknown – No Soil Sampling Conducted	Unknown – No Groundwater Sampling Conducted	N/A – No Cleanup Conducted
360 Auto Recycling	2017 North Machias Road	Unknown – No Soil Sampling Conducted	Unknown – No Groundwater Sampling Conducted	N/A – No Cleanup Conducted
Furby's Truck Repair	1901 North Machias Road	Soil Above Cleanup Levels	No Groundwater Cleanup Conducted (Data Gap)	Awaiting Cleanup Interim Cleanup Conducted. Additional Cleanup Action Recommended by Ecology.

VII. REDEVELOPMENT CONCEPTS

Strategic Concepts

In conjunction with other analyses, an overall strategic vision for the LSIC should unite the engineering, the market requirements, the local assets, and the City's own vision. An Overall Strategic vision was also requested by the Planning Commission and City Council.

The report provides three broad Strategic Concepts of the LSIC. In these concepts, major actions are explored to envision scenarios and possibilities for the industrial district. These include connection points to SR 92, vehicular routes through the district, alignment and re-alignment of the Centennial Trail, modifications to the intersection of Old Hartford and 28th Street NE, and prioritization of land uses within the industrial district from larger scaled industrial developments to Maker/Start-up industrial uses to community commercial/industrial support uses. Each concept has been developed to elicit conversation on the path to developing a Strategic Concept for the LSIC.

- Access to SR 92: A full access intersection from the LSIC to SR 92 has been identified as a key improvement for the full success of the LSIC. The cost, timeline, and ability of WSDOT to construct is also seen as a real barrier. All options include an option.
- Impact to existing roads (ROW): All options include creating an appropriate road network overtime to move vehicles, bikes, and pedestrians through the LSIC.
- Impact to Old Hartford and 28th Street NE intersection: It has been recognized that this intersection needs an improvement to improve circulation through the LSIC. All options include an option.

Option 1: Refer to Exhibit C-1

- Connection to SR 92 created at NE 127th Drive NE with full turning movements included.
- Machias south of 28th Street NE is improved.
- Machias north of 28th Street NE is not improved.
- 131st Avenue NE south of 28th Street NE is not improved.
- Intersection at Old Hartford and 27th Street NE is rebuilt.
- Centennial trail amenity spaces are improved at both end of KSIC.
- Centennial trail feeder route is constructed to link downtown via Hartford Drive.

Pros and Cons

Resulting impact to a strong LSIC: This option provides a modest result for a refined strategic approach to the LSIC with a few valuable improvements to existing challenges.

Access to SR 92: With the construction of a full access intersection at 127th Drive NE and SR 92 a “better” solution for LSIC regional access is provided.

Impact to existing roads (ROW): This option offers the least impact to existing roads.

Impact to Old Hartford and 28th St NE intersection: This option offers the greatest impact by creating a new intersection and a new road west of Old Hartford to serve existing properties.

Impact to Centennial Trail: This option offers the least impact to the Trail.

Option 2: Refer to Exhibit C-2

- Connection to SR 92 rebuilt at Machias with full turning movements included.
- 27th Street NE west of Old Hartford is removed.
- 131st Avenue NE south of 28th Street NE is not improved.
- Centennial trail amenity spaces are improved at both end of LSIC.
- Centennial trail is rerouted to parallel Old Hartford within the ROW design built at Hartford Industrial center. This profile is carried through the entire Old Hartford zone. Trail is diverted to parallel Machias south of 28th Street NE.

Pros and Cons

Resulting impact to a strong LSIC: This option provides a modest result for a refined strategic approach to the LSIC with very little improvement in existing deficiencies.

Access to SR 92: With the construction of a full access intersection at Machias and SR 92, a good solution for LSIC regional access is provided.

Impact to existing Road (ROW): This option offers the medium level of impact to existing roads but includes improving Machias along the entire length and Old Hartford north of 28th Street NE.

Impact to Old Hartford and 28th Street NE intersection: This option offers the least impact by creating a new “T” intersection and utilizing driveways from Old Hartford to serve existing properties.

Impact to Centennial Trail: This option impacts the trail significantly by relocating its ROW along Old Hartford, routing it along 28th and south along Machias. This would be constructed with the ROW improvements.

Option 3: Refer to Exhibit C-3

- Connection to SR 92 built at the natural extension of Old Hartford to SR 92 with full turning movements included.
- Old Hartford is extended south to Hartford drive and rerouted to link to Machias.
- 27th Street NE west of Old Hartford is removed.
- Centennial trail amenity spaces are improved at both end of LSIC.
- Centennial trail is rerouted to parallel Old Hartford within the ROW design built at Hartford Industrial center. This profile is carried through entire Old Hartford zone to Machias.
- Centennial trail feeder route is constructed to link downtown via Hartford Drive.

Pros and Cons

Resulting impact to a strong LSIC: This option provides the best overall resulting strategic approach to the LSIC.

Access to SR 92: With the construction of a full access intersection at an extension of Old Hartford to SR 92 a “best” solution for LSIC regional access is provided.

Impact to existing Road (ROW): This option offers the highest level of impact to existing roads and adds a new road extension from old Hartford to Machias directly, but does not include improving Machias along the entire length.

Impact to Old Hartford and 28th ST NE intersection: This option offers the least impact by creating a new “T” intersection and utilizing an existing road and driveways from Old Hartford to serve existing properties.

Impact to Centennial Trail: This option impacts the trail significantly by relocating its ROW along Old Hartford, and its new extension to link up with Machias. This would be constructed with the ROW improvements.

Site Development Scenarios

In reviewing the LSIC as a whole, we must also look at the development profile of individual lots and the patterns of private development and land usage that reinforce the City’s goals. To illustrate common site usage, we developed four Site Development Scenarios. Refer to Exhibit C-4. These illustrate typical options an architect considers when maximizing a site for industrial development. The site dimensions reflect a real lot within the LSIC with specifics removed to guide our analysis and conclusions. The types of industrial users are very diverse and the resulting building needs vary greatly. These illustrate relationships the City can influence in the Development Standards and Design Guidelines. Lake Stevens Development Standards are applied, but not the full breath of the existing Design Guidelines. This was elected to suggest a clean starting point may be needed to align LSIC Design Guidelines with this use in mind. All four options can be seen in existing developments in LSIC today.

Option 1: This single building option places staff and customer parking at the front and loading areas and yard space at the rear. Storm water detention is shown underground and at the rear in this option. This layout suggests the possibility of increased glazing at the street face and other design features aligned with the interior functions of the tenant. Increased landscape can also be provided on the street face to enhance the community.

Option 2: This multi-building option places staff and customer parking at the side linked to loading areas. Storm water detention is shown as a pond in this option. This layout suggests the benefits of comparable overall building areas but smaller building footprints. This configuration offers partially screened truck/yard area, an active customer face at the bottom, and a potentially inactive face along the top. Development, with parking at the side, offers the option for buildings to move close to the street.

Option 3: This single building option places staff and customer parking at the rear and loading areas and yard space at the front yard. Storm water detention is shown as a pond in the front yard. This option demonstrates a site option with the “working side” of an industrial building being placed in the front yard. Some Cities do not prefer this relationship and develop guidelines to restrict truck court placement in the front yard. Lake Stevens should leverage all its tools to increase the viability of the LSIC while not uniformly restricting some site relationships and resulting in a negative impact on develop.

Option 4: This single building option places staff and customer parking at the side and loading areas and yard space at the rear. Storm water detention is shown underground and at the rear in this option. This layout suggests the possibility of decreased glazing at the street face along. Glazing and other design features aligned with the interior functions would tend to be clustered close to the indicated tenant entry at the corner. Decreased landscaping at the street face is a result of this layout since the building is pushed up to the front setback.

Redevelopment Potential Results

The tables below – Table VII-13, Scenarios 1-2 – show the redevelopment potential analysis results for each scenario. By applying the assumptions for redevelopment Scenario 1 and 2 described above by user type and the employees per SF for each user type, the analysis shows net new employees ranging from 26 to 493 and new area between 94,000 and 230,000 SF, depending on the user type/employment mix. The full technical analysis per tax lot is included in Appendix B.

TABLE VII-13. – SCENARIO 1: AGGREGATED SITES				
	Average Building Coverage	Total Redevelopment Building SF	Total Redevelopment Employees	Net New Building SF and Employees
Low intensity redevelopment: Warehouse	40%	317,000 SF	254 (1,250 SF per employee)	50 230,000 SF
Medium intensity redevelopment: Manufacturing	32%	247,000 SF	309 (800 SF per employee)	105 160,000 SF
High intensity redevelopment: Office	13%	209,000 SF	697 (300 SF per employee)	493 122,000 SF

TABLE VII.13 – SCENARIO 2: TAX LOT BY TAX LOT				
	Average Building Coverage	Total Redevelopment Building SF	Total Redevelopment Employees	Net New Building SF and Employees
Low intensity redevelopment: Warehouse/Flex	26%	265,000 SF	230 (Warehouse: 1,250 SF per employee Flex: 900 SF per employee)	26 178,000 SF
Medium intensity redevelopment: Manufacturing	25%	231,000 SF	289 (800 SF per employee)	85 144,000 SF
High intensity redevelopment: Office	8%	181,000 SF	604 (300 SF per employee)	399 94,000 SF

VIII. SUMMARY

The City of Lake Stevens LSIC is positioned to emerge as a tertiary industrial center, and future growth will require an integrated approach to the challenges identified below. At the same time, the City must establish industrial design guidelines that build on the qualities and character of the Lake Stevens LSIC.

Based on the inventory of existing utilities and infrastructure, land use development patterns, zoning and development standards, and environmental constraints, we feel the following are key to the long-term success for future development within the LSIC:

- **Strategic Development Plan**

Three Strategic Development Plans are offered which demonstrate options for addressing some key issues for the district. These are mostly transportation focused and offer a glimpse at the potential possibilities for a full LSIC build-out. Each brings challenges and opportunities, like nearly any long-term view of a district seeking to reshape an existing environment for an updated vision. With a commitment from the residents, impacted Owners, and the City, change can be realized. Bringing together each of the aspects below into a unified strategic vision is now a possibility. A singular LSIC Future Vision Document can be developed, forged through consensus, information, and vision. It can be the tool to drive a multiple year process in public/private partnership.

- **Sanitary Sewer**

Based on the Lake Stevens Sewer District general sewer/wastewater facility plan published October 2022, and our analysis utilizing existing as-builts, the summary of potential properties served reflect a consistent path toward expanding sanitary sewer service within the LSIC.

- **Transportation**

A lack of current traffic volumes makes it impossible to provide more concrete analysis or recommendations. In order to make a credible decision for how to move forward, more data is needed regarding the existing traffic volumes and patterns. We anticipate the need for collection of turning movement counts at all key intersections and a full traffic study to evaluate the existing conditions and analyze operations under buildout of the study area. This traffic study would contain a more robust matrix of solutions that can be evaluated and estimated for cost and impact. Key issues include a better access to SR-92, improving alignment of the Old Hartford Rd/28th St NE intersection.

- **Stormwater**

The LSIC contains two separate drainage basins as described above. The geographic nature of the soils, as identified by the Riley Group, lends to infiltration with the Catherine Creek basin, while the Little Pilchuck basin does not infiltrate well. Based on the economic analysis by ECONorthwest and the ultimate development potential within the LSIC, it is advised that each development should design and accommodate their own stormwater facility. A public regional storm system would not make financial sense.

- **Entitlements (Land Use and Design Review) or Possible Sub Area Plan**

Based on the limited number of larger parcels for redevelopment, a majority of the development patterns within the LSIC will consist of smaller built to suit buildings. Once industrial design guidelines are established, we recommend the City adopt an entitlement process that consists of a site plan review and design review processed concurrently at staff level.

The current Lake Stevens industrial economy is tied to construction and some wholesale trade and manufacturing activities, largely associated with specialized construction or contracting, truck transportation and warehousing, equipment rental, repair shops, and storage occupying much of the space established in the Industrial Area.

Several of the region's industrial sectors have seen growth in the past few years. Industrial uses positioned to derive a premium or locational advantage from Lake Steven's Industrial Center are construction, manufacturing, truck transportation, and warehousing.

The LSIC has a few vacant and underutilized parcels that do provide opportunities for new businesses which would likely be available for affordable prices relative to the North Snohomish region; however, large industrial development is unlikely to be seen in Lake Stevens. This is primarily due to small parcel size, infrastructure limitations, and configuration of land. In addition, the high costs of building ground-up concrete tilt-up industrial buildings create financial obstacles for local businesses that do not have the capital to finance such large projects and speculative development. All this indicates that Lake Stevens will continue to see built-to-suit development or low-cost industrial development. This may include steel warehouses and some flex industrial development that combines traditional office space with industrial space, offering versatility and adaptability of various business needs.

The purpose of the information and recommended considerations within this document are to be used by the City to solicit input from the property owners, Planning Commission, City Council, and the community to make future decisions on: 1) infrastructure improvement to resolve existing deficiencies; 2) zoning changes; 3) development of industrial design standards; 4) funding opportunities; 5) marketing strategies to retain and attract new businesses to increase employment within the City; etc. After this input, it will be possible to site the locations of the recommended considerations.