Industrial Development Subsidiary Agreement

THE REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN INDUSTRIAL LAND STUDY

December 15, 1980

Research Report

Province of British Columbia

Ministry of Industry and Small Business Development

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THE REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN INDUSTRIAL LAND STUDY

December 15, 1980

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THE RESPONSIBILITY FOR THE CONTENT OF THIS REPORT IS THE CONSULTANT'S ALONE, AND THE CONCLUSIONS REACHED HEREIN DO NOT NECESSARILY REFLECT THE OPINIONS OF THOSE WHO ASSISTED DURING THE COURSE OF THIS INVESTIGATION OR THE FEDERAL AND PROVINCIAL GOVERNMENTS WHICH FUNDED THE STUDY.

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I. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The supply of available industrial land in the Regional District's communities is, in most cases, adequate to meet short-term (1991) requirements. The supply figures include vacant, appropriately zoned land which is adequately serviced and otherwise developable, as well as suitable land proposed for industrial uses in the Community Settlement Plans. Forecast demand estimates for industrial land are based on growth projections which envisage a slight decline from past rates and a shift in the industrial structure of the region to smaller manufacturing and local service-oriented industry rather than to larger scale resource-based industry. Only the City of Penticton is expected to experience shortages within the ten year planning period.

The strategy recommends that additional reserves of industrial land be put aside to provide a back-up supply of land for short-term needs, as well as assured supplies for longer-term requirements. Penticton and Summerland are the only communities that do not have sufficient long-term reserves of suitable industrial land available.

The strategy for servicing the required industrial lands in each community has focused on the requirements of the next 10 years and has considered private, B.C.D.C., IDSA loan assistance and Indian land development assistance funding sources.

The communities of Keremeos, Okanagan Falls and Princeton have relatively modest land and servicing requirements. Majority ownership by a single party, as well as site characteristics which should minimize servicing costs, suggest that servicing investments should be borne by the private sector. Summerland and Oliver, on the other hand, have larger land requirements plus lands which are predominantly municipally owned, and which will require more costly access and servicing expenditures to provide readily marketable industrial lots.

These communities are recommended for senior government financial assistance. The requirements of Osoyoos will be met through its current, IDSA assisted, industrial land development project.

A servicing strategy for Penticton's industrial land can not be recommended until suitable, adequate land reserves are identified. The most desirable option includes development of the Penticton Indian Band lands just west of the City. If the Band agrees, senior government financial assistance (DIAND and IDSA) may be available.

II. INTRODUCTION

The purpose of the Industrial Land Study is to determine the industrial land needs of the Regional District of Okanagan-Similkameen. In determining these needs, the study comprised three basic elements, as follows:

- o inventory of currently available industrial land;
- o estimation of industrial land requirements over the next 10 years; and,
- o recommendation of an industrial land strategy to meet the forecast land requirements that could not be satisfied with current supplies.

The conduct of the study was based on the Terms of Reference dated July 26, 1980, and the consultants' proposal dated October 14, 1980.

The information presented in this report has been obtained from the following sources:

- o the Profile of the Regional District
- o Community and/or Settlement Plans for the Regional District's communities
- o Land Use Survey and Community/Settlement Plan mapping for the Regional District's communities
- o on-site inspection of industrial areas

- interviews with the Mayors, Clerks &/or Treasurers, Engineers or Public Works Superintendents and other officials of each community

- interviews with the economic development and planning staff of the Regional District

- interviews with representative owners of industrial land and real estate agents in the communities

- interviews with officials of the Provincial Ministry of Industry and Small Business Development, the British Columbia Development Corporation and the Federal Departments of Indian and Northern Affairs, and Canada Employment and Immigration

- review of pertinent published reports, statistics and other technical documents.

The study team has been mindful of the need to complete the study within the agreed time frame and to avail itself of the experience and views of a wide variety of community representatives. The assistance provided by these people, listed in Appendix I, has been excellent.

III. AVAILABILITY AND DEVELOPABILITY OF INDUSTRIAL LAND

This part of the report summarizes the results of the inventory phase of the study. It contains information on the availability of industrial land in the communities in the Regional District, as well as an evaluation of available services and developability. The land considered was currently zoned industrial or proposed as such in the Settlement Plans. Undesignated and suitable land in rural areas was not inventoried as this type of supply is virtually limitless.

A. KEREMEOS

Industrial development in Keremeos is comprised mainly of a single major facility - a fruit processing and packing plant - located in the centre of town just south of the commercial centre. There is also a small amount of service-commercial type of light industry located on small scattered sites around the Village.

1. Available Land

There appears to be approximately 3 hectares (8 acres) of vacant industrial land in the vicinity of the fruit processing and packing plant, westerly on the north side of the railroad track to Fourth St. and, particularly, easterly on the north and south sides of the track to Tenth St. (See Illustration A). This excludes the railway right-of-way. There is additional vacant land, not zoned industrial or inside the Agricultural Land Reserve (ALR), available adjacent to this area.

A previous industrial area in the west end of the Village between the highway and the railway appears to have been converted to agricultural use. It is reported that this area (approx. 2 hectares) has been redesignated ALR. Another

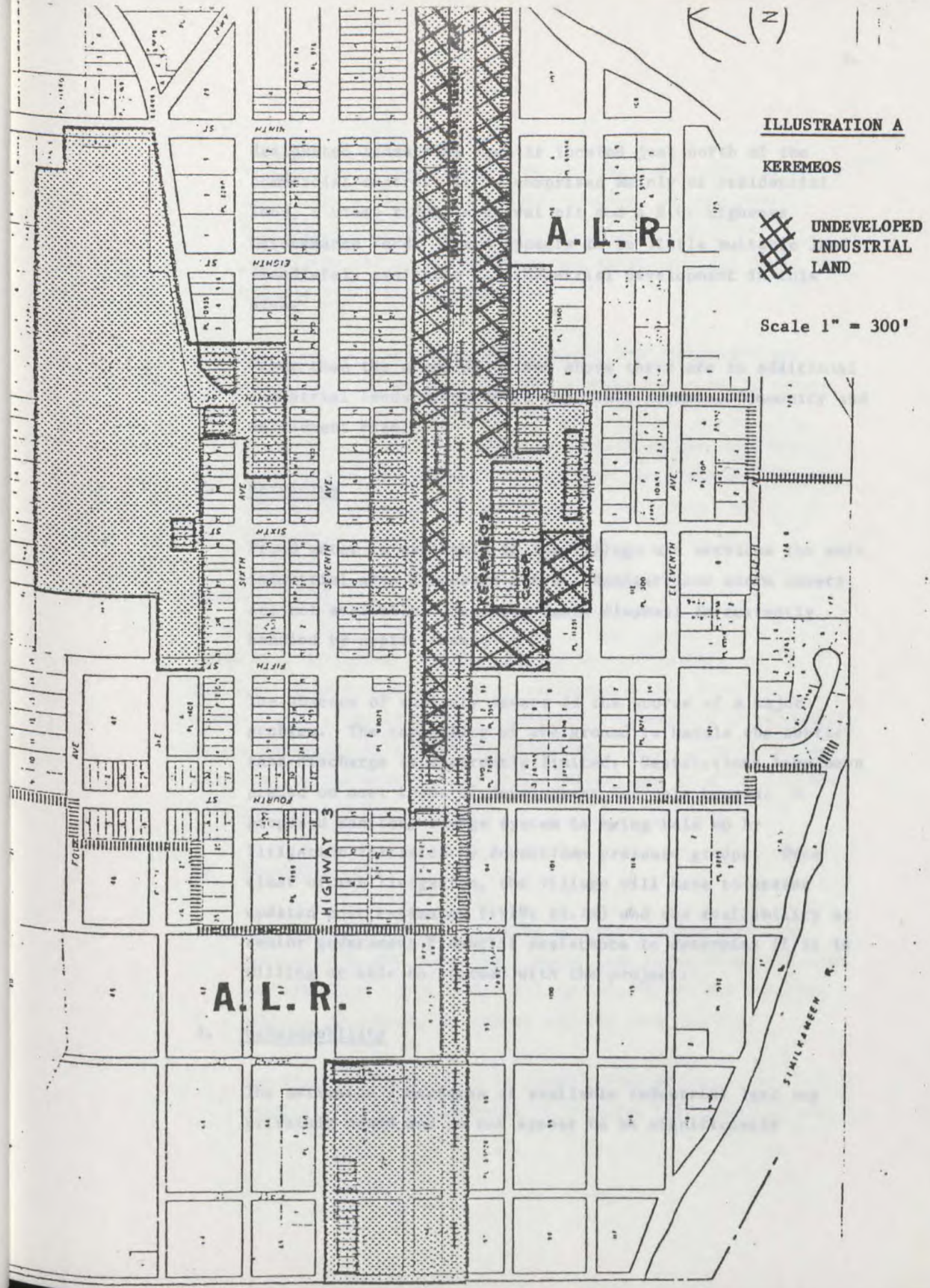


ILLUSTRATION A
KEREMEOS
UNDEVELOPED INDUSTRIAL LAND
Scale 1" = 300'
A.L.R.
A.L.R.
HIGHWAY 3
KEREMEOS
SIMILKAMEEN R.
SIXTH AVE.
SEVENTH AVE.
ELEVENTH AVE.
FOURTH ST
FIFTH ST
SIXTH ST
EIGHTH ST
NINTH ST

designated industrial area is located just north of the commercial centre. It is comprised mainly of residential land, a steep ridge, a gravel pit and a B.C. Highways Maintenance Yard. There appears to be little suitable land immediately available for industrial development in this area.

Other than the areas discussed above there are no additional industrial lands proposed in the draft Keremeos Community and Settlement Plan.

2. Servicing

Piped water is available in the Village and services the main industrial area discussed above. Sanitary and storm sewers are not available. Sanitary waste disposal is currently handled by septic tanks.

The absence of sanitary sewers is the source of a major problem. The capability of the ground to handle the septic tank discharge is apparently limited. Restrictions have been placed on most types of development for this reason. A proposed sanitary sewage system is being held up by litigation initiated by downstream pressure groups. Once clear of the litigation, the Village will have to assess updated cost estimates (1979: $1.7M) and the availability of senior government financial assistance to determine if it is willing or able to proceed with the project.

3. Developability

The estimated 3 hectares of available industrial land are privately owned and do not appear to be significantly

fragmented. However, the area is bisected by the railway line. The railway is currently dormant, but its owners, Burlington Northern, are reported to be desirous of preserving the right-of-way in the event that the mines to the northwest are reactivated.

The area is zoned industrial, access and topography are excellent, and surface drainage appears to be satisfactory.

There do not seem to be any constraints on the development potential of the available land, with the exception of the limited ability of the ground to handle septic tank discharge.

B. OKANAGAN FALLS

Industrial development in Okanagan Falls is comprised mainly of the Weyerhaeuser sawmill located southeast of the commercial centre, east of Maple Street. Additional industrial development in the community is comparatively modest. It is located in the same area on the west side of Maple Street, and in a few isolated locations around the community.

1. Available Land

At present, there is virtually no vacant industrial land available in the community. Small land sites have been made available for light industrial development in the past but principally through piecemeal removal from the ALR.

The draft Okanagan Falls Settlement Plan proposes the designation of approximately 20 hectares (50 acres) of new

industrial land in the vicinity of the Weyerhaeuser plant, mainly on the west side of Maple Street south of the Weyerhaeuser access road, with smaller areas on the east side of Maple St. and on the north side of the Weyerhaeuser access road. (See Illustration B).

2. Servicing

Piped community water is available through the proposed industrial area. The community also has a sanitary sewage system but the proposed site would require the construction of about 1500 meters of sewer main to the treatment plant. However, with relatively low density, light industrial development, a sanitary sewerage system may not be necessary (e.g. East Penticton Industrial Area). The capability of the land in the proposed site area is reported to have "slight limitations" for septic tank, sanitary waste disposal methods.

3. Developability

The estimated 20 hectares of proposed industrial land is privately owned and, with the exception of the existing small industrial and residential sites, is relatively unfragmented. Access to the site is good and surface drainage appears satisfactory. Although the topography of the site is varied, proper site layout and development should result in minimal loss of usable land.

About a quarter of the proposed site is currently zoned industrial. Rezoning of the remainder of the proposed site is required. In addition, it will be necessary to secure the release of about half of the site from the ALR. It is believed that both are likely in time.

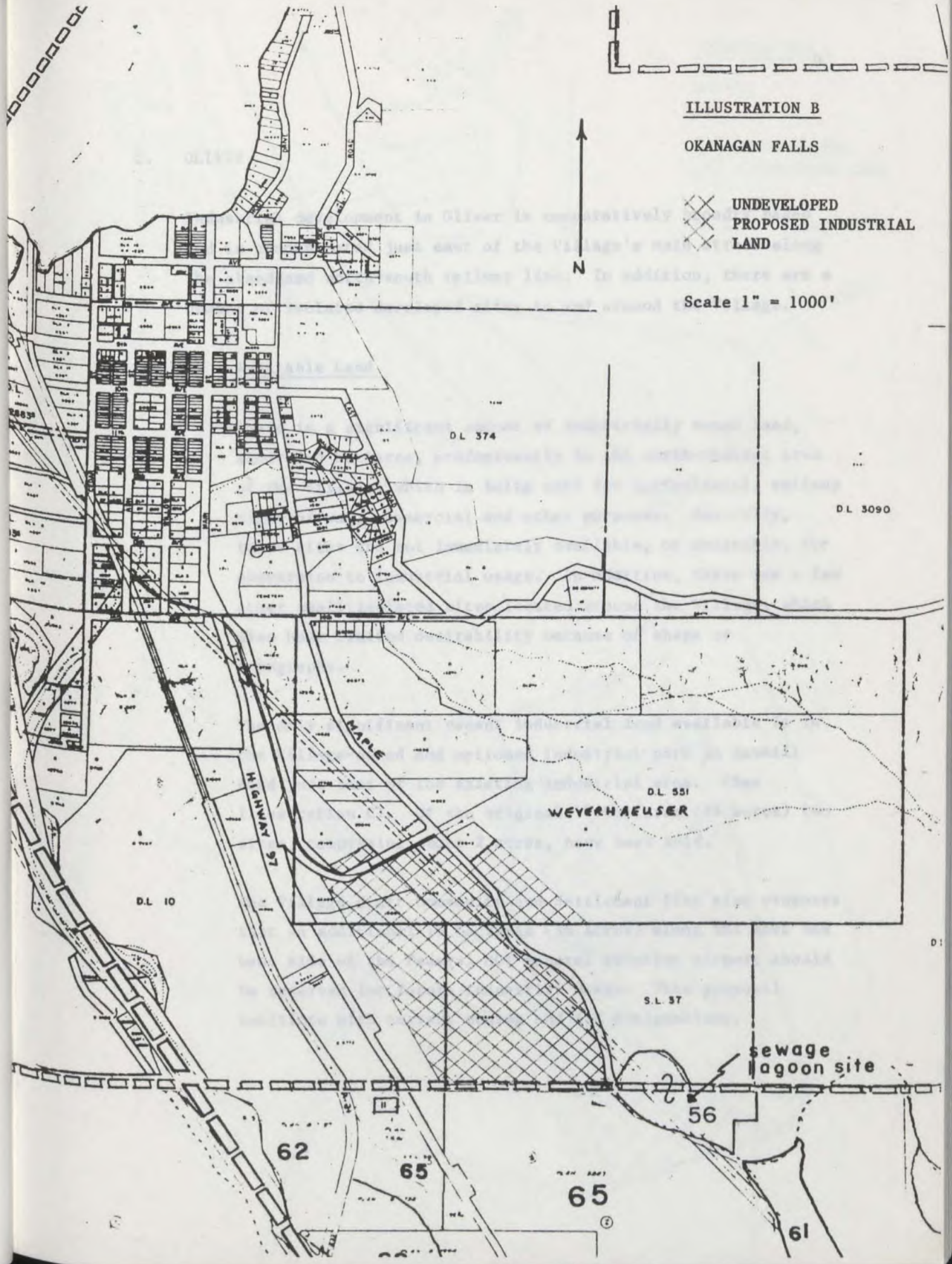


ILLUSTRATION B
OKANAGAN FALLS
UNDEVELOPED
PROPOSED INDUSTRIAL
LAND
Scale 1" = 1000'
N
D.L. 374
D.L. 3090
D.L. 551
WEYERHAEUSER
MAPLE
HIGHWAY 97
D.L. 10
S.L. 37
sewage
lagoon site
56
62
65
65
61

C. OLIVER

Industrial development in Oliver is comparatively broadly based and is concentrated just east of the Village's main street along the abandoned north-south railway line. In addition, there are a number of isolated developed sites in and around the Village.

1. Available Land

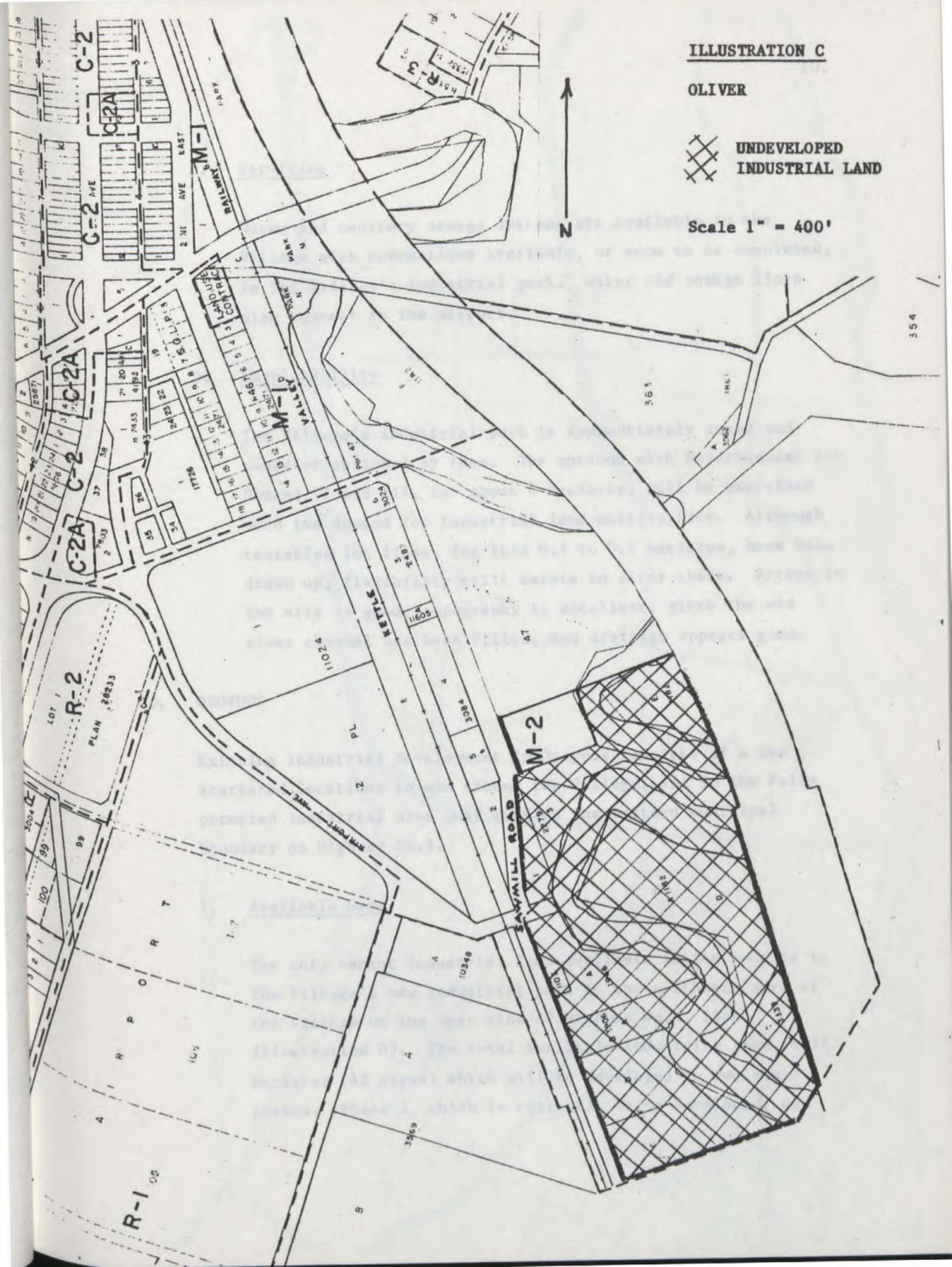
There is a significant amount of industrially zoned land, about 3-5 hectares, predominantly in the north-central area of the Village, which is being used for agricultural, railway right-of-way, commercial and other purposes. Basically, these sites are not immediately available, or desirable, for conversion to industrial usage. In addition, there are a few other small isolated sites located around the Village, which also have limited desirability because of shape or topography.

The only significant vacant industrial land available is in the Village-owned and optioned industrial park on Sawmill Road just east of the existing industrial area. (See Illustration C). Of the original 10 hectares (25 acres) two sites, comprising about 2 acres, have been sold.

The Village draft Community and Settlement Plan also proposes that an additional 15 hectares (36 acres) along the east and west side of the Federal MOT general aviation airport should be reserved for future industrial usage. This proposal conflicts with current zoning and ALR designations.

ILLUSTRATION C

OLIVER



2. Servicing

Water and sanitary sewage systems are available in the Village with connections available, or soon to be completed, to the Village's industrial park. Water and sewage lines also connect to the airport.

3. Developability

The Village's industrial park is appropriately zoned and owned or optioned by them. The options with Weyerhaeuser for Phases II and III, for about 6 hectares, will be exercised when the demand for industrial land materializes. Although tentative lot lines, for lots 0.1 to 0.4 hectares, have been drawn up, flexibility still exists to alter these. Access to the site is good, topography is excellent, since the old river channel has been filled, and drainage appears good.

D. OSOYOOS

Existing industrial development in Osoyoos consists of a few scattered locations in and around the Village, and in the fully occupied industrial area just outside the eastern municipal boundary on Highway No.3.

1. Available Land

The only vacant industrial land available in the area is in the Village's new industrial park in the northwest part of the Village on the west side of Highway No.3 (See Illustration D). The total available industrial land is 17 hectares (42 acres) which will be developed in two equal phases. Phase I, which is currently being developed, was

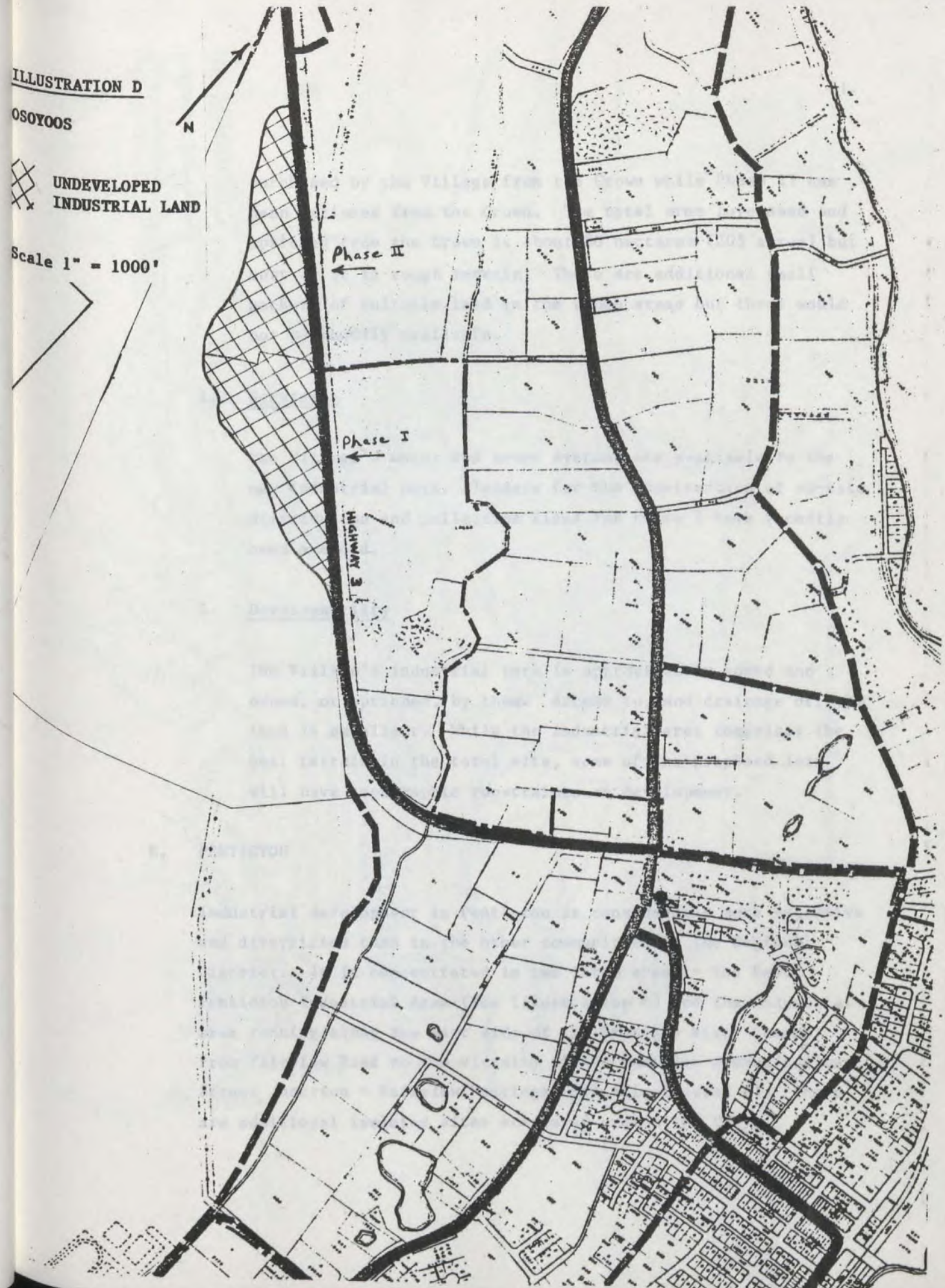


ILLUSTRATION D
OSOYOOS
N
UNDEVELOPED
INDUSTRIAL LAND
Scale 1" = 1000'
Phase II
Phase I
HIGHWAY 3

purchased by the Village from the Crown while Phase II has been optioned from the Crown. The total area purchased and optioned from the Crown is about 80 hectares (205 acres) but most of it is rough terrain. There are additional small pockets of suitable land in the rough areas but these would not be readily available.

2. Servicing

The Village's water and sewer systems are available to the new industrial park. Tenders for the construction of on-site distribution and collection lines for Phase I have recently been awarded.

3. Developability

The Village's industrial park is appropriately zoned and owned, or optioned, by them. Access to, and drainage of, the land is excellent. While the industrial area comprises the best terrain in the total site, some of the proposed lots will have topographic constraints on development.

E. PENTICTON

Industrial development in Penticton is considerably more extensive and diversified than in the other communities in the Regional District. It is concentrated in two large areas - the East Penticton Industrial Area (See Illustration E) and the industrial area running along the east side of the Okanagan River Channel from Fairview Road to the vicinity of the Hastings Avenue/Railway Street junction - Fairview/Hastings (See Illustration F). There are additional isolated sites scattered around the City.

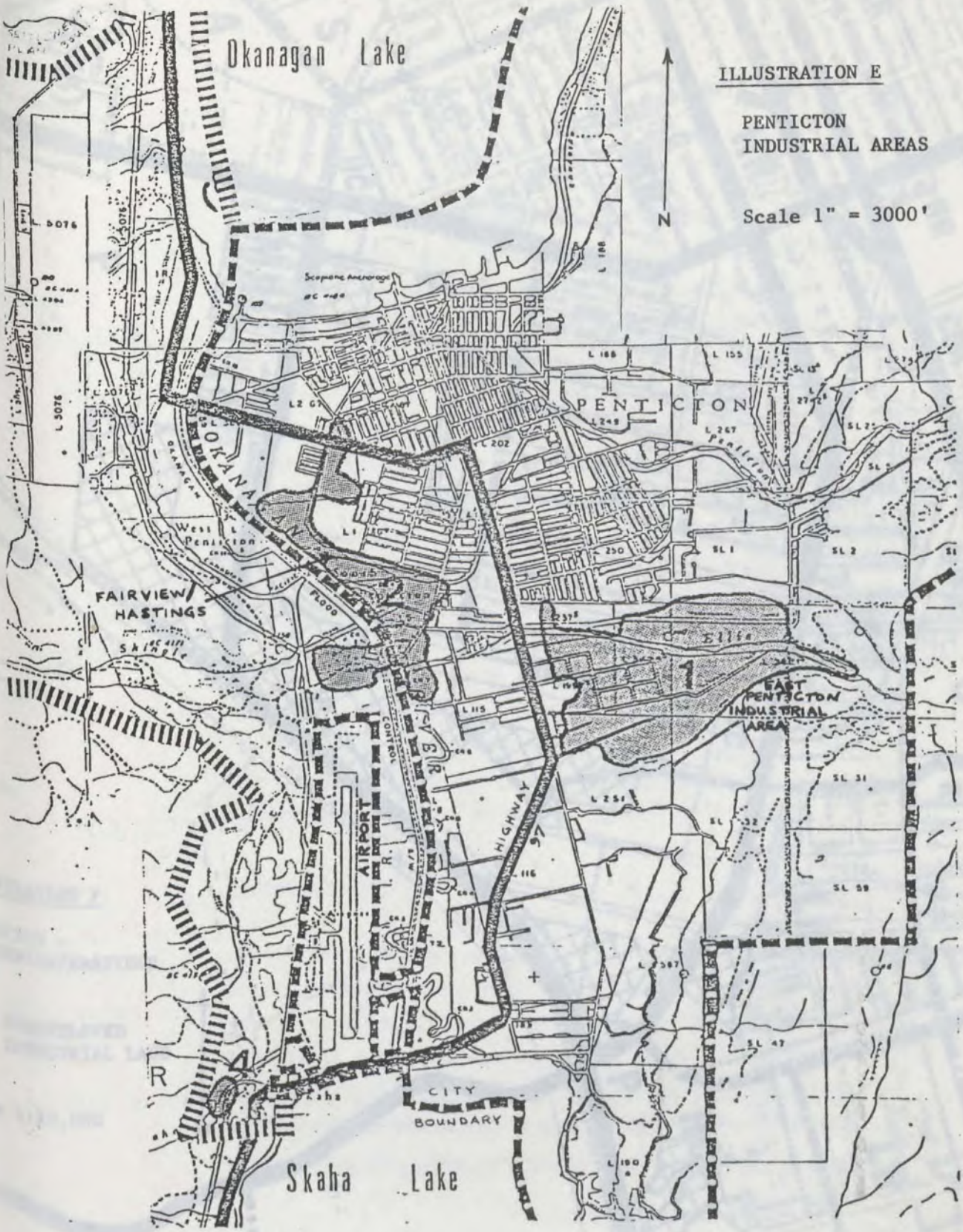


ILLUSTRATION E

PENTICTON
INDUSTRIAL AREAS

Scale 1" = 3000'

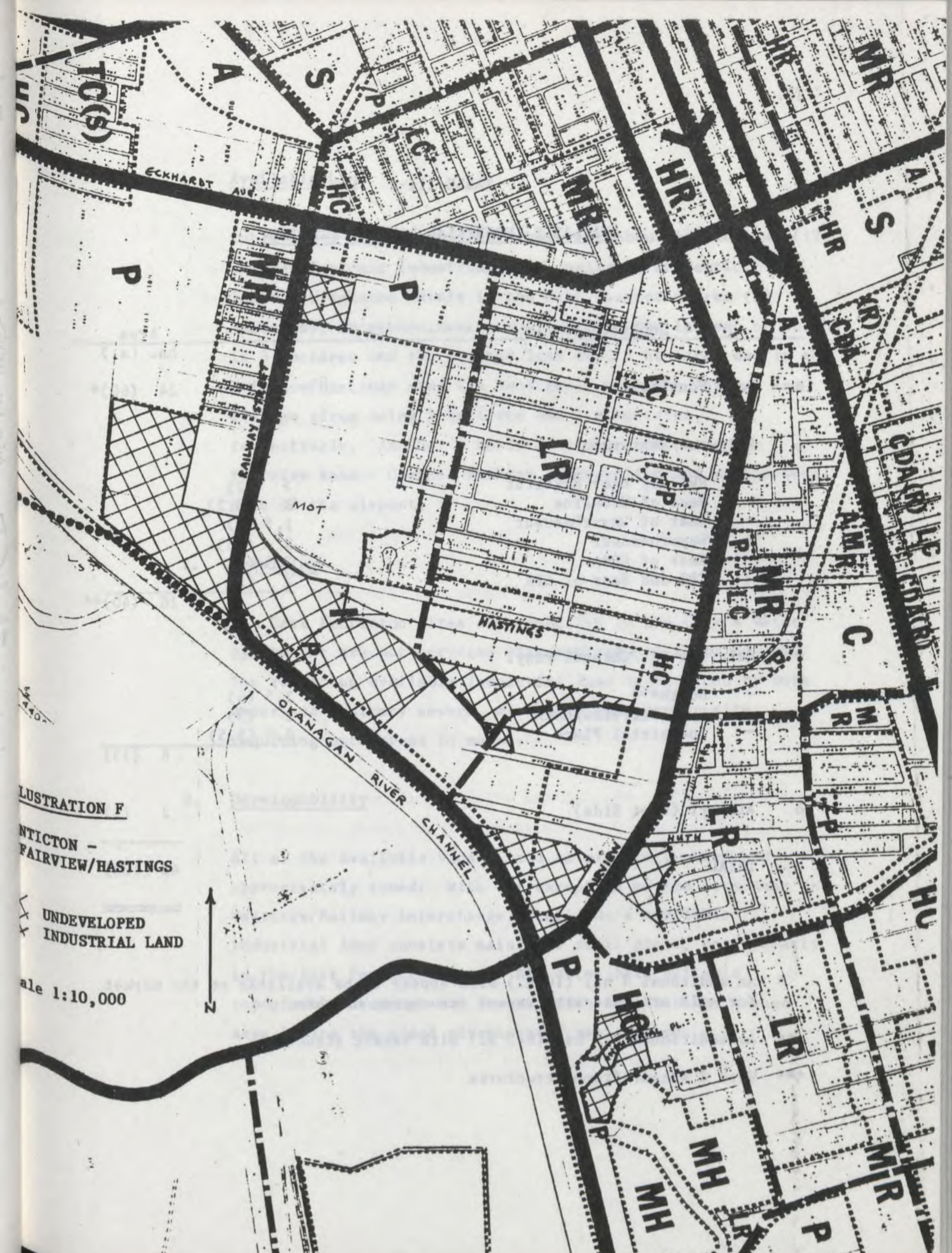


ILLUSTRATION F

PENTICTON - FAIRVIEW/HASTINGS

Scale 1:10,000

TABLE III-1

AVAILABLE INDUSTRIAL LAND - PENTICTON

Location		Area ha. (a.)
o East Penticton		24 (60)*
o Fairview/Hastings		
- Railway near Eckhardt	1 (2)	
- Rear of Moduline	3 (8.2)	
- Rear of Weyerhaeuser	1.5 (4)	
- Weyerhaeuser	5 (13)	
- Rear of CPR	3.5 (9)	
- CPR and Rear of CPR	2 (5)	
		16 (40)**
o Fairview Rd./Channel Pkwy.		
- North***	2.5 (6)	
- S.E. Fairview/Huth	1 (3)	
- Industrial Place	2.5 (5.5)	
		6 (15)
o Airport (West Side)		2 (5)
TOTAL		48 (120)

* An additonal 4 ha. (10 a.) also appear to be available on the market for sale or lease with vacant structures on them.

** An additional 2.5 ha. (6.5 a.) with vacant structures

*** With 2 vacant frame structures

1. Available Land

Table III-1 illustrates that there are about 48 hectares (120 acres) of vacant industrial land available in Penticton. These are located mainly in the East Penticton area (24 hectares), in predominantly small sites, the largest of which is 3 hectares and the average less than 1 hectare, and in the Fairview/Hastings area (16 hectares), with the largest and average sites being 5 hectares and 1.5 hectares, respectively. Another 8 hectares are located near the Fairview Road - Channel Parkway intersection and on the west side of the airport.

2. Servicing

The East Penticton sites are connected to the City's water system but are not serviced with sanitary or storm sewers. The remaining available industrial land is serviced by both water and sanitary sewers, with only the airport site requiring extensions to mains.

3. Developability

All of the available vacant land is privately owned and appropriately zoned. With the exception of the lots near the Hastings/Railway interchange, Penticton's available industrial land consists mainly of small plots, particularly in the East Penticton area. All sites have suitable topography, drainage and access, with the Hastings Avenue area having the added advantage of rail access.

F. PRINCETON

Industrial development in Princeton consists mainly of the Weyerhaeuser mill east of the Village and the small scattered industrial sites located adjacent to the CPR line. There are additional small isolated industrial sites located around the Village.

1. Available Land

The only vacant industrial land available in Princeton is situated along the CPR line in the south end of the Village and principally in the west section. It is estimated that approximately 8 hectares (20 acres) are vacant and available at this time (See Illustration G).

The large Weyerhaeuser mill site and the mine tailings site south-east of the Village are zoned industrial but cannot practically be considered as prime candidate areas for industrial development in the foreseable future.

The draft Princeton Community and Settlement Plan proposes the future conversion of approximately 5 hectares (13 acres) of residential land on the south side of the eastern section of the CPR line (Burton Flats). It also proposes land adjacent to the airport for future industrial development.

2. Servicing

Both the existing and proposed available industrial areas near the CPR have municipal water and sanitary sewage service to them.

ILLUSTRATION G
PRINCETON
AVAILABLE
INDUSTRIAL LAND
Scale: 1cm = 50m
N
65
RIVER
TOWN FLATS
CANADIAN PACIFIC RAILWAY
KETTLE VALLEY RAILWAY
(ABANDONED)
TRANS-CANADA HWY.
PARSONS AVE
D.L. 706 OS
PL 18281
PL A 301
PL A 9567
PL A 9648
66
67
65
51
91
93
43
83
45
23
27
25
ASPEN
VERNON
ROCKLIN
PENRYN
BURTON
CRESCENT
AUBURN
SUNSET
VERMILION
AVE.
ST.

3. Developability

The existing available industrial area is appropriately zoned and predominantly owned by Marathon Realty (CP). Its topography and drainage are good, although access to most of it from the main highway is over the CPR line.

G. SUMMERLAND

Industrial development in Summerland is located in three areas - the Logie Rd. area, the Bentley Rd. area and the James Lake area. (See Illustration H).

The first of these is fully developed and the second virtually fully developed because remaining undeveloped areas are on rough terrain. About a half of the James Lake area is already developed or committed for development. There are also a few isolated industrial operations located elsewhere in the community.

1. Available Land

The only vacant industrial land available therefore, is located in the James Lake area. It totals 9 hectares (23 acres) and is comprised of 6 hectares (16 acres) of District owned land on the east side of Cedar Ave. and 3 hectares (7 acres) of privately owned land on the west side of Cedar Ave. (See Illustration I). Additional industrial land potential exists to the north and south of the James Lake area.

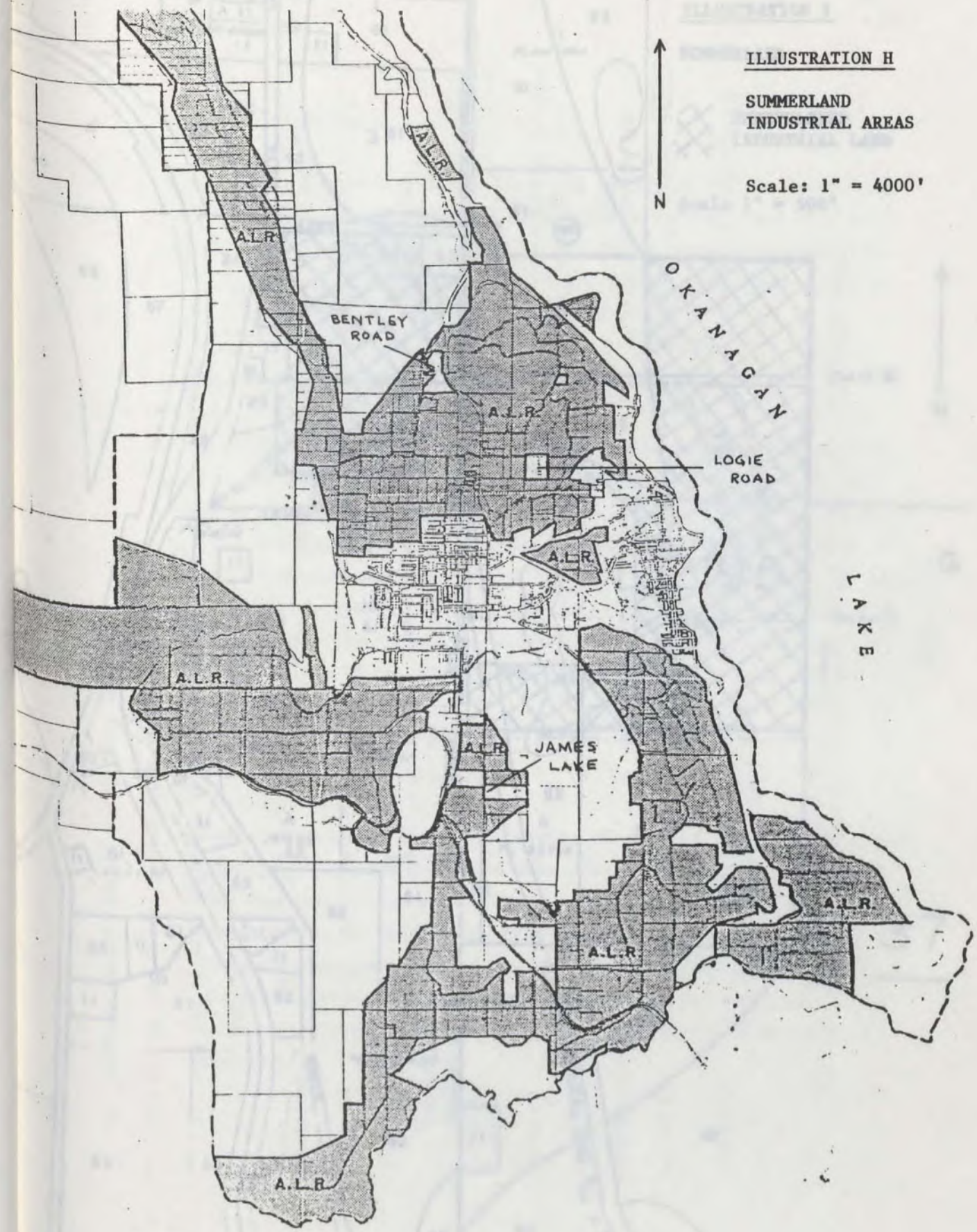


ILLUSTRATION H
SUMMERLAND
INDUSTRIAL AREAS
Scale: 1" = 4000'
N
A.L.R.
A.L.R.
A.L.R.
BENTLEY
ROAD
A.L.R.
OKANAGAN
LOGIE
ROAD
A.L.R.
LAKE
A.L.R.
A.L.R.
JAMES
LAKE
A.L.R.
A.L.R.
A.L.R.

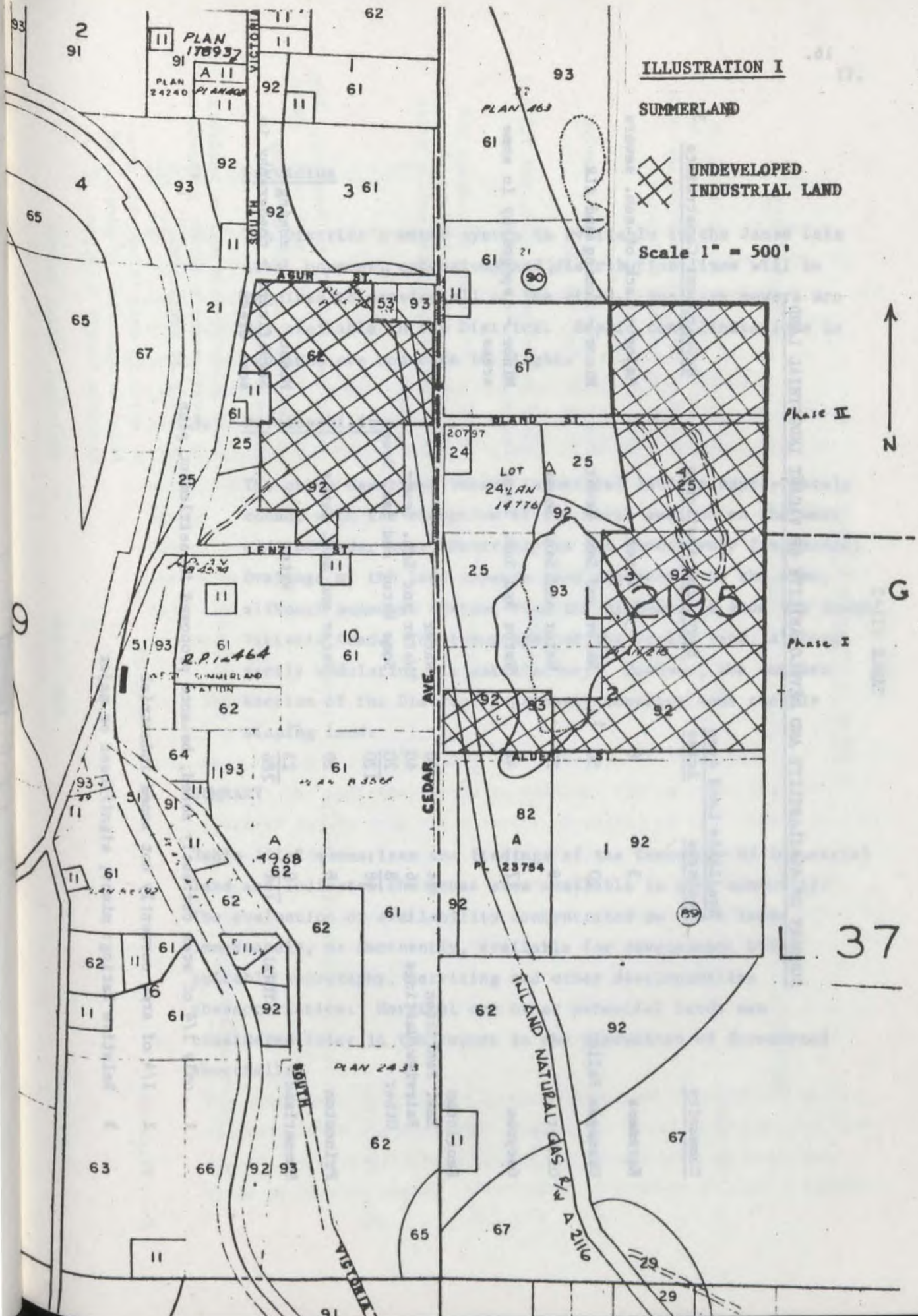


ILLUSTRATION I
SUMMERLAND
UNDEVELOPED INDUSTRIAL LAND
Scale 1" = 500'
N
Phase II
Phase I
L. 2195
L. 37
G
PLAN 17893
PLAN 24240
PLAN 463
SOUTH VICTORIA
AGUR ST.
BLAND ST.
LENZI ST.
ALDER ST.
CEDAR AVE.
LOT 24 PLAN 14776
R.P. 1464
PL. 23754
PLAN 2433
INLAND NATURAL GAS R/W A 2116
SOUTH VICTORIA

TABLE III-2

SUMMARY OF AVAILABILITY AND DEVELOPABILITY OF VACANT INDUSTRIAL LAND

Community	Available Land Area Hectares	Acres	Servicing Available	Development Constraints [3]
Keremeos	3	8	Water	Major - lack of san. sewers
Okanagan Falls	20	50 [1]	Water and San. Sewer	Minor - Zoning and ALR
Oliver	9	23	Water and San. Sewer	-
Osoyoos	17	42	Water and San. Sewer	Minor - topography in some areas
Penticton				
East Penticton	24	60	Water	-
Fairview/Hastings	16	40	Water and San. Sewer	-
Other	8	20	Some Water and San. Sewer	-
	48	120		
Princeton	8	20	Water and San. Sewer	-
Summerland	9	23 [2]	Water	Minor - zoning Significant - topography in some areas
TOTAL	114	286		

1 only 1/4 of area currently zoned; balance proposed in settlement plan

2 1/4 of area currently not zoned industrial

3 Relative Rating: minor, significant or major

2. Servicing

The District's water system is available in the James Lake area, however, extensions and distribution lines will be required to service all of the sites. Sanitary sewers are not available in the District. Septic tank limitations in the area are moderate to slight.

3. Developability

The above described vacant industrial land is appropriately zoned, with the exception of the north section on the west side of Cedar Ave. Ownership is not excessively fragmented. Drainage of the land appears good and access to the area, although somewhat distant from the highway, is good via South Victoria Road. The topography of the vacant land, although gently undulating, is satisfactory. However, the eastern section of the District's property contains some steeply sloping land.

H. SUMMARY

Table III-2 summarizes the findings of the inventory of industrial land and indicates the gross area available in each community. The evaluation of availability concentrated on those lands immediately, or imminently, available for development with suitable topography, servicing and other developability characteristics. Marginal and other potential lands are considered later in the report in the discussion of forecasted shortfalls.

TABLE IV-1

SUMMARY OF PRICE ESTIMATES

Municipality/Area	Price Per Acre Parcel	Comment/Source
A. Keremeos	$30-40,000	No sales. Based on appraisal of existing industrial land owned by Keremeos Co-op, and interviews with other owners and real estate representatives.
B. Okanagan Falls	$17-20,000	Based on one recent sale & asking price of land for sale.
C. Oliver	$35-45,000	Based on one recent sale, and Village asking price for land.
D. Osoyoos	$35-40,000	Based on interviews with owner and real estate representatives, as well as Village's estimated asking price for land.
E. Penticton		
A. East Penticton Industrial Section	$50-75,000	Varies considerably by location. Few sales recorded over past year. Based on interviews as well as asking prices of land.
B. Fairview/Hastings	$65-75,000	Based on interviews and an analysis of Weyerhaeuser's recent proposal to the City of Penticton.
F. Princeton	$40,000	No sales in main industrial area. Based on appraisal of portion of Marathon Realty holdings.
G. Summerland	$30-35,000	Municipal asking price.

IV. PRICING OF INDUSTRIAL LAND

The following section regarding pricing, uses recent arm's length sales, wherever possible, as an indication of market prices. In the case of some of the municipalities studied, a sufficient number of arm's length transactions has not taken place to establish a market price for industrial land. In fact, a very limited number of transactions has taken place in the past year in any of the communities. The predominant input into this section is, therefore, the result of interviews with land owners' representatives, including municipal governments themselves where appropriate, and real estate agents. All price estimates are for single acre parcels. The price per acre of larger parcels may be lower by an amount which varies with the parcel size; the converse, in terms of parcels under one acre, is also true. Pricing information, along with indications as to the sources used, is discussed below and summarized in Table IV-1.

A. KEREMEOS

No sales of industrial land have taken place in Keremeos in recent years. The indicators used to estimate the value of industrial property in the area are a recent appraisal of land owned by, and adjacent to, the Keremeos Growers Cooperative, the major industrial employer in the Village, and the estimates of other owners and a local real estate agent. Based on these sources, the price of an acre of industrial land is estimated at between $30,000 - $40,000.

B. OKANAGAN FALLS

The development of industrial land by private individuals has recently taken place in this community. Based on interviews with agents, as well as the result of one recent sale of land, the price of an acre parcel is estimated at between $17,000 - 20,000.

C. OLIVER

Available industrial land for sale in the Village of Oliver is predominantly owned by the Village itself. From the land being developed as the first phase of the Village's industrial park, one half-acre parcel has been sold for $17,000 and the Village has estimated the sale price of the other parcels. Prices are estimated on the basis of this at between $35,000 - 45,000 per acre for a one-acre parcel.

D. OSOYOOS

The Village is in the process of marketing land in its own new industrial park. There was a recent sale in the Village but the parcel sold is located in a different location and with frontage on a provincial highway. The price is reported to have been $60,000 per acre but, under the circumstances, is viewed as a biased indicator. The Village's anticipated selling prices for the land now being developed fall within the $35,000 - 40,000 per acre range.

E. PENTICTON

There are two major areas of available industrial land in Penticton. The East Penticton Industrial area is not serviced with sewage facilities and contains parcels which are farther from the main transportation arteries than is the second area - Fairview/Hastings. In the East Penticton area, land ownership is diffuse and few sales have taken place in the past year or two.

Furthermore, some parcels enjoy proximity to Main Street and paved access from more than one direction, while other sites are relatively poorly located. Based upon interviews with owners'

representatives and real estate agents, the value of an acre of industrial land in the East Penticton area is estimated at between $50,000 - 75,000. Land in the Fairview/Hastings area is likely to be more expensive as it is serviced with sewage facilities and is close to both rail and road links. However, ownership of parcels of land in this area is in few hands. Recently, the Weyerhaeuser Corporation proposed the sale of a parcel of more than eight acres to the City. Based upon the asking price of this land, as well as interviews with real estate agents in Penticton who deal with industrial land, an acre parcel in this area is estimated at between $65,000 - 75,000.

F. PRINCETON

A recent appraisal of land undertaken for Marathon Realty indicated that the value of an acre parcel of land which it holds is approximately $40,000. However, a one-acre sale which has recently taken place was for $60,000 for a one acre parcel. Given the very limited market activity with respect to land in Princeton, it is difficult to establish market values. It is expected, however, that the $40,000 price is more relevant, as it is more in line with the other communities which, like Princeton, experience a very limited demand for industrial land.

G. SUMMERLAND

The municipality is proceeding with the development of parcels in the James Lake area. It has stated, after an analysis of acquisition costs and projections of the costs of servicing, that it expects to charge between $30,000 - 35,000/acre.

TABLE V-1

MANUFACTURING ACTIVITY, EMPLOYMENT AND
VALUE OF INDUSTRIAL CONSTRUCTION (MUNICIPALITIES ONLY)
OKANAGAN - SIMILKAMEEN REGIONAL DISTRICT

	Value of Shipments* ($000)	No. of Employees*	Value of Industrial Construction** ($000)
1971	$35,407	1,265	333
1972	54,252	1,566	430
1973	68,842	1,860	1,646
1974	70,957	1,641	663
1975	74,650	1,600	1,738
1976	80,999	1,634	3,669
1977	87,690	1,515	772
1978	N/A	N/A	2,859
1979	N/A	N/A	794
1980(through July)	N/A	N/A	887

* Source: Statistics Canada Catalogue No. 31-209
** Source: Statistics Canada Catalogue No. 64-203. Based upon building permit information provided by each municipality.

V. FUTURE DEMAND FOR INDUSTRIAL LAND

This section will project the demand for industrial land in the Regional District through 1991. The basic method employed entails the estimation of density ratios, number of workers/hectare, for three different segments of the market users of industrial land. These ratios are then applied to forecasts of incremental workers expected to take up residence in the District. Prior to the development of forecasts in this manner, data regarding industrial land was examined along with the feasibility of employing alternate means of forecasting.

A. HISTORICAL DATA

Although no source of data exists which provides a historical perspective on industrial land use, indicators of the change in demand for industrial land have been examined. The purpose of this section is to review those indicators to see whether they can assist in the derivation of land use forecasts. Table V-1 opposite shows the magnitude of three indicators from 1971 up to the latest year for which they are available. These three indicators are the value of manufacturers' shipments, the number of employees engaged in manufacturing, and the value of industrial construction. They are not complete indicators, as any trends which they reveal will not fully indicate the industrial land requirements. Manufacturing requirements account for only a portion of industrial land use demand. Construction, utility and service industries (e.g. auto-related shops) will enhance that demand.

Reference to Table V-1 shows that, in terms of the value of industrial construction, no patterns have emerged over the seven year period. A few relatively large projects served to increase

the total value of municipal industrial building permits, particularly in 1973, 1975, 1976 and 1978. Even when these large projects are subtracted from the total, no growth pattern emerges in real (i.e. uninflated) terms. The lack of real growth over the past two years which is apparent from the statistics regarding industrial building permits, was also implicit in the comments of a number of interviewees who stated that a perceptible growth in the demand for industrial land has not been felt during this period.

A curious aspect of the statistics presented in Table V-1 is the relationship between the stated value of shipments of goods from industries within the District, and the number of employees. While shipments have experienced steady growth, there has been no growth in the number of employees required to produce these goods. This suggests that the area's employees have become markedly more productive, the increase in value of shipments is inflationary or that the data is in error. The latter is a distinct possibility considering the difficulty small firms with minimal accounting personnel have in complying with Statistics Canada's request for information. It is concluded on this basis that indicators which might be used to project the demand for industrial land are not sufficiently reliable for this purpose. Due to this weakness in the data, including the lack of trends apparent in building statistics, it will not be possible to employ the preferred methods of forecasting, namely, relating the demand for industrial land to either historical trends or to the growth in production for which such land will be required as an input.

B. FORECAST METHODOLOGY

As there is little in the way of useful statistical information, the present situation regarding the density (i.e. number of employees per hectare) of existing development will be examined

and used as a basis for forecasting the demand for land. Then, the population and work force projections made by the planning department of the Regional District will be used in conjunction with the density estimates (employees/hectare), to derive the land demand forecasts. A step by step outline of the methods used is as follows:

- The density of industrial development in terms of numbers of employees per hectare was estimated by means of a sample of twenty-five firms in the Okanagan - Similkameen area.

- The density of land in terms of number of hectares per firm, for different types of firms, was estimated on the basis of the same sample.

- Projections made by the Regional District of the growth in the work force of each municipality were reviewed.

- Forecasts of the industrial work force were then translated into land requirements for each municipality.

Forecast land requirements are in the form of the total number of hectares required for all industry, and by the number of parcels of various sizes required by the different types of industry.

C. DENSITY OF INDUSTRIAL DEVELOPMENT

The density of industrial development, defined here as the number of employees per hectare of developed industrial land, will form the basis of the forecasts of land requirements.

In order to assess current densities, a sample of firms was examined in six industrial areas: East Penticton and

Fairview/Hastings in Penticton; Bentley Road, Logie Road and the James Lake industrial areas in Summerland; and the industrial area in Oliver. Information as to the size of parcels owned by a variety of companies in these areas was gathered from maps, and from regional and municipal authorities. These areas were matched to employment information for firms which were listed in either of two directories (the 1979 B.C. Manufacturers Directory and the 1980 Scott's Industrial Directory for Western Canada). This resulted in the generation of ratios for twenty-five firms in these six areas.

Densities varied widely from one firm to another. However, when the firms are segmented by type of operation, a more consistent, clearer picture emerges. The results of the sample performed in this manner can be summarized as follows:

TABLE V-2

ESTIMATED EMPLOYEE DENSITY BY TYPE OF OPERATION

Type of Operation	Average No. of Employees Per Hectare
Large Export-Oriented Manufacturers	15
Smaller Manufacturing Firms	30
Utilities, Construction and Service Companies	25

The three categories of firms shown in Table V-2 encompass the vast majority of individual land tenants and owners in the District. These three market segments may be further described as follows:

1. Large Export-Oriented Manufacturers

These firms are of basically two kinds. The first engages in the processing of natural resources and includes sawmills, planing and plywood mills, as well as fruit and vegetable canners, and processing firms such as wineries. These firms include the larger operations in the area, along with non-resource based manufacturers, some of which were drawn to the Region after the 1965 adoption of regional economic incentives under the Federal Area Development Incentives Act.

These non resource-based firms, for the most part, are engaged in the manufacture, largely for export, of transportation equipment, specifically mobile homes and recreational vehicles. Export-oriented resource and non-resource firms, taken together, are the area's largest employers and have a greater capital base. Some, particularly those engaged in the wood products industry, have relatively large land holdings and act as land bankers. Because of the nature of their operations, as well as their propensity to bank land, the density of these larger export-oriented firms is the lowest of the three market segments.

2. Smaller Manufacturing Firms

These firms are much more varied in terms of the type of operations as well as the intended market. Most small

manufacturing firms make goods for the local market, either for the area's population or for incorporation in goods made by the large local firms manufacturing for export. Examples of the former (firms manufacturing for the local population), include companies involved in custom sheet metal work, precast concrete products, bakery-products and meat packing. Firms producing goods as inputs to larger export-oriented operations include, for example, companies producing windows for recreational vehicles and mobile homes, and canopies for trucks. The third type of firm in this category is small export-oriented firms. These include, as examples, manufacturers of wood products and fireplaces and fireplace inserts. All these firms have in common a tendency toward the more efficient use of land and, in most cases, eschew the banking of land. On the basis of the sample employed, it is estimated that the average small manufacturing operation has 30 employees/hectare. Typically, such firms employ fewer workers, and occupy parcels which are smaller than one hectare.

3. Utilities, Construction and Service Companies

These operations are not engaged in manufacturing but provide services, including the provision of utilities, the repair or dismantling of automobiles, wholesaling and construction. The common element of all such firms, despite their heterogeneity in terms of function, is that their land requirements are higher than smaller manufacturing firms, and their employment density is lower. All of these operations typically require some land for the storage of automobiles, or the marshalling of equipment.

D. OTHER CHARACTERISTICS OF CURRENT INDUSTRIAL DEVELOPMENT

In order to forecast the demand for industrial land in a meaningful way, which enables the development of a strategic approach to supplying land, it is necessary to segment the market demand. With this in mind, this section will present further estimates of the characteristics of the three market segments which were outlined in Section C.

Table V-3 below presents estimates of three characteristics of the users of industrial land. The estimate of the average number of hectares per firm was derived from a sample of firms in the six industrial areas outlined in Section C. As the only parameter being examined was size of land holding per firm, it was possible to include more firms than the previous estimate of numbers of employees per hectare.

TABLE V-3

CHARACTERISTICS OF INDUSTRY TYPES

	Average Ha./Firm	Average No. Of Employees Per Hectare	Average Employees/Firm	No. of Employees and % of Regional District Labour Force Employed in Industry (1979)
Large Export-Oriented Manufacturers	5.0	15	75	1410 (6%)
Smaller Manufacturing Firms	0.5	30	15	1290 (5.5%)
Total Manufacturing				2700 (11.5%)
Utilities, Construction & Service Companies	0.8	25	20	2350 (10%)

The numbers appearing in Table V-3 are averages for sixty-three firms which were broken into the three categories. Large export-oriented firms have an average of 5 hectares, smaller manufacturing firms have 0.5 hectares, and the service, construction and utility firms, which require space for marshalling equipment and storage, have, on average, 0.8 hectares.

Estimates of the average number of employees per firm is a product of the two previous estimates (Average no. of hectares per firm and average no. of employees per hectare). An average of seventy-five employees work for the larger firms, 15 for the small manufacturing companies, and 20 for the utilities and service companies.

The last column of Table V-3 provides a partial breakdown of the labour force of the Regional District, based on estimates made by Canada Employment and Immigration. That Department estimated that in 1979, 2700 workers or 11.5% of the labour force was engaged in manufacturing. Based on employment information presented in the Scott's Industrial Directory For Western Canada and the B.C. Manufacturer's Directory, it is estimated that 6% are working for the larger export-oriented firms, and 5.5% for smaller manufacturing firms.

Estimates by Canada Employment and Immigration are that 7.2% of the work force are engaged in construction work, over 2.7% in communications and utilities, and over 4.5% in business, amusement and other services. Although it is not possible to obtain further breakdowns with any accuracy, it is estimated that the utilities, construction and service entities of the type which would require industrial land, would employ approximately 10% of the labour force or, in the case of 1979 estimates, some 2350 people.

TABLE V-4

INCREMENTAL LABOUR FORCE BY 1991

Community	No. of Workers (1976)	Forecast No. of Employees (1991)	Increment No.	Increment %
Keremeos	1,250	1,512	262	21
Okanagan Falls	765	1,473	708	93
Oliver	2,580	3,538	958	37
Osoyoos	1,682	2,450	768	46
Penticton	11,700	19,122	7,422	63
Princeton	2,005	2,403*	398	20
Summerland	3,510	4,472	962	27
	23,492	34,970	11,478	

*Note: No labour force projections were made for Princeton. This figure was estimated using the mid-point of two population forecasts and the 1976 labour force/population ratios for the Princeton Sub-region

TABLE V-5

FORECASTS OF INDUSTRIAL LAND FOR THE REGIONAL DISTRICT - 1991

	(1) Revised Labour Force Distribution*	(2) Allocation of Incremental Work Force **	(3) Average Employees Per Firm	(4) No. of Parcels Required (Col. 2÷3)	(5) Average Hectares Per Firm***	(6) No. of Hectares (Col. 4x5)
Large Export-Oriented Manufacturers	2.0%	230	75	3	5.0	15
Smaller Manufacturing Firms	7.5%	860	15	57	0.5	28
Utilities, Construction and Service Companies	12.0%	1,375	20	69	0.8	55
						98

* Percentages refer to the no. of incremental workers in each sector divided by the total no. of workers added to the Regional District by 1991. See Appendix II for derivation.

** Based on Employed Labour Force Increment - 11,478 - See Table V-4.

*** See Table V-3

E. PROJECTIONS OF LABOUR FORCE GROWTH AND INDUSTRIAL LAND REQUIREMENTS

This section will present and examine estimates of the work force growth by community to 1991 which have been done by Currie, Coopers and Lybrand. These estimates were made by revising forecasts done by the Regional District Planning Department. These forecasts along with the revisions are discussed in Appendix II.

1. Labour Force Projections

Table V-4 summarizes the projections of labour force growth to 1991. A full discussion of these projections appears as part of Appendix II. The Table shows that an increase of almost 11,500 workers is expected by 1991, representing an increase of almost 50% over the 1976 level. The vast majority of this increase is expected to occur in Penticton.

Translating the labour force projections into the demand for industrial land requires one additional step. Changes in the structure of the labour force must be anticipated in order to apply the correct density estimates to the projected labour force. This has been done in the manner discussed in Appendix II.

2. Projections of Industrial Land Requirements

Table V-5, opposite, contains the forecast of industrial land requirements for the District as a whole. The Table is based on the labour force forecasts outlined in table V-4, along with estimates of the shift in structure of the labour force as discussed in Appendix II.

TABLE V-6

INDUSTRIAL LAND REQUIREMENTS BY MUNICIPALITY - 1991

Community	No. of Incremental Workers*	% of Incremental Workers	Incremental Land Requirements
Keremeos	262	2.3	2.3 hectares
Okanagan Falls	708	6.2	6.1
Oliver	958	8.3	8.1
Osoyoos	768	6.7	6.6
Penticton	7,422	64.6	63.3
Princeton	398	3.5	3.4
Summerland	962	8.4	8.2
	11,478	100	98.0**

* See Table V-4, column 3
** See Table V-5, column 6

The greatest amount of land, 55 hectares in 69 parcels, will be required by utilities, construction and service-oriented firms, as a result of the expected shift of the industrial mix to that section. That shift also increases the relative requirements of smaller manufacturers which are expected to require 28 hectares in 57 parcels. Large manufacturers will require the least land, 15 hectares in 3 parcels.

3. Projections of Land Requirements by Municipality

Each municipality in the Regional District has something different to offer potential new industry. It is unlikely that industrial development in each community will assume the same mix between large and small manufacturers, and service industries. However, it is not possible to anticipate at this juncture the ultimate mix in each community. Rather, an overall land requirement forecast, allocated on the basis of the labour force forecasts, is presented in Table V-6.

As is evident from Table V-6, Penticton will require the greatest amount of land, based on its expected population increase. This is followed by Oliver and Summerland, then Osoyoos and Okanagan Falls. The requirements of Keremeos and Princeton are expected to be relatively small.

TABLE VI-1

SHORTFALL OR SURPLUS OF INDUSTRIAL LAND

Community	Available Land Area [1]		Forecast Req'ts to 1991				Shortfall (-)/ Surplus (+) - Ha.	
			ILS [2]		RDPD [3]			
	Ha.	a.	Ha.	a.	Ha.	a.	ILS	RDPD
Keremeos	3	8	2.3	6	4	10	+ 0.7	-1
Okanagan Falls	20	50 [4]	6.1	15	22	55	+13.9	-2
Oliver	9	23	8.1	20	16	40	+ 0.9	-7
Osoyoos	17	42	6.6	16	19	48	+10.4	-2
Penticton	48	120	63.3	158	142	350	-15.3	-94
Princeton	8	20	3.4	8	-	- [5]	+ 4.6	-
Summerland	9	23 [6]	8.2	20	13	33	+ 0.8	-4

1 See Table III-2
2 See Table V-6
3 From RDPD Settlement Plan Technical Supplements
4 only 1/4 of area curently zoned; balance proposed in settlement plan
5 not estimated
6 1/4 of area currently not zoned industrial

VI. PREDICTION OF THE SHORTFALL OR SURPLUS OF INDUSTRIAL LAND

Chapter III presented the results of the inventory phase of the Industrial Land Study, and included estimates of the amount of vacant industrial land available in each of the Regional District's communities. Table VI-1 shows these estimates, along with forecasts of the requirements for industrial land to 1991 prepared in Chapter V, as well as the forecasts for each community prepared by the Regional District's Planning Department (RDPD) and contained in their Settlement Plan technical supplements.

There is a notable disparity between the two forecasts, and the shortfall/surplus estimates. Those of the RDPD indicate a higher level of demand than the ILS forecasts. This is due primarily to the following factors:

- The RDPD forecasts implicitly assume that the industry mix over the next 10 years will continue, while the ILS forecasts assume that particularly larger land consuming industries (large, export-oriented firms) will represent a substantial declining proportion of forecast demand

- The ILS forecasts include an updated base (to 1980 as opposed to 1976) for work force projections

- The ILS forecasts have also been adjusted to account for an unemployment factor.

The two forecasts have been presented for comparison purposes as well as to illustrate a range of shortfall/surplus in industrial land requirements. Table VI-1 indicates that only Penticton will experience a significant shortfall within the next 10 years. Of the remaining six communities, Oliver and Summerland could experience some shortfall,

Keremeos, Osoyoos and Okanagan Falls only minimal shortfalls, and Princeton no shortfall.

For the reasons discussed earlier, the strategy portion of the study will utilize the ILS forecasts and their related shortfall/surplus estimates.

Before proceeding to the strategy, it must be recognized that while the selected demand forecasts can be viewed as a credible estimate of requirements over the next 10 years, precise forecast totals or phased absorption rates can not be determined. Unpredictable and relatively minor events during that time period can have significant impacts on the estimated demand, causing it to materialize in advance of, or after, the planning period.

VII. INDUSTRIAL LAND SERVICING STRATEGY

This section of the report will essentially draw together information from previous sections on supply, demand and shortfall and, with some additional inputs concerning developability of available land and servicing cost estimates, will enable the formulation of a recommended industrial land servicing strategy. However, before doing that, a number of strategic considerations have been examined.

A. STRATEGIC CONSIDERATIONS

Examination of these matters is important to ensure that the recommended strategy and its rationale are basically complete and sound.

1. Community Acceptance

As part of the inventory phase of the study, community representatives were interviewed to assess the disposition of the elected councils, as well as perceptions of community residents, towards industrial expansion. In all cases, the response was the same. Industrial development, so long as it is at a relatively modest scale and with minimal environmental impacts, is an acceptable development option and, in some communities, is an extremely attractive one. This attitude pertains particularly to the developed and developing areas of the communities. It is quite possible that larger and heavier types of industry, excluding pulp mills and the like, would be acceptable if they were somewhat removed from settlement areas.

As a result, and within the limits discussed above, there do not appear to be community attitudinal constraints to industrial development, and so all of the communities can be considered candidates for future development.

2. Regional Concentration

Consideration of a servicing strategy implies a concern for investment efficiencies. If this is the case, then the concept of centralization versus decentralization of industrial development and industry groupings must be considered. Although thorough examination of the subject is beyond the terms of reference of the Industrial Land Study, it is felt that any such attempts to manipulate or direct future industrial growth would produce quite predictable negative reactions and only questionable benefits. Consensus among the Regional District's communities on a strategy that favoured some and not others would likely be impossible to achieve. The industrial community would also likely take a dim view and consider it as interference with their free choice. Although linkages between industries might be made more efficient, there would be offsetting inefficiencies and inequities in other aspects of the communities' functioning and development. For example, it is possible that a higher degree of commuter transportation would result, and the taxation base of those communities receiving industrial concentration would be stronger than those that did not.

Consequently, given the scale of estimated industrial development over the next 10 years, the strategy should be to let natural forces continue to have the predominant effect and to avoid manipulation. Industrial development in one community should be neither favoured nor discouraged in relation to other communities. This is particularly valid when the changing structure of industrial development, towards smaller and more local service-oriented operations, is also considered. Furthermore, this strategy is consistent with the perceived attitudinal preference of the Regional District's population discussed above.

3. Specialization

Another strategic consideration relates to the type of industrial development permitted within a community, or in an industrial area in a community. For example, Osoyoos intends to accommodate only non-local, non-service oriented industrial operations that will have significant economic activity generating impacts in its new industrial park, while Penticton is considering allowing office and other non-industrial uses into its East Penticton industrial area to get some usage out of the vacant land.

A general consideration for some communities is the shortage of suitable land for industrial purposes, due to topography and the ALR, and the possible need to exclude non-industrial, service-oriented businesses, such as contractors' offices and electrical and automotive shops, from scarce industrial land. The fact is, however, that these services are vital to a community and have to be provided for. Perhaps there is no alternative to allowing them on industrially zoned land, which is often cheaper. For the purposes of this study, no adjustments have been made to the estimated land requirements for each community to reflect specialization preferences. Conversely, the estimates have adequate flexibility built into them to accommodate most specialization options.

4. Locational Flexibility

Because most of the communities in the Regional District are located within commuting distance of a number of other communities inside of, and adjacent to, the District, the estimated demand derived for each community is somewhat

"footloose" and could, in part, materialize in a neighbouring community. For example, a service-oriented business required in one community could, because of the insensitivity of short travelling distances, locate in a nearby community. Some contributing factors would include the availability and price of land, and perhaps the location of employees or suppliers.

These types of decisions should, as already discussed, not be influenced by governments. They will, however, be made by some companies with the result being that some communities' demand for industrial land will be satisfied in other communities. The actual impacts can not be estimated beyond suggesting that the smaller communities are more likely to have some of their requirements fulfilled by larger communities rather than the converse.

B. INDUSTRIAL LAND RESERVES

Because of the industrial structure of the region, and recent growth rates, large scale land banking is neither necessary nor justifiable. However, it is a well established fact that to attract industrial development a community must be able to offer a reasonable range of choice of industrial land in terms of locational characteristics, lot size and shape, and price.

For the purposes of estimating land reserve requirements over the next 10 years, the ILS demand forecasts have been used. Of the Regional District's seven communities, only Penticton has large scale industrial land requirements, approximately 63 hectares, while the remaining six each have requirements of less than 10 hectares. Given the fact that the land requirements for the

TABLE VII-1

INDUSTRIAL LAND RESERVES

Community	Short-term Req'ts Zoned & Serviced (1991)		Back-up and Med.-term Req'ts - Zoned		Long-Term Reserves		Available supply		Shortfall(-)/Surplus(+) in supply vs short-term Req'ts	
	Ha.	a.	Ha.	a.	Ha.	a.	Ha.	a.	Ha.	a.
Keremeos	2.3	6	2.3	6	2.3	6	3	8	+ 0.7	2
Okanagan Falls	6.1	15	6.1	15	6.1	15	20	50	+13.9	35
Oliver	8.1	20	8.1	20	8.1	20	9	23	+ 0.9	3
Osoyoos	6.6	16	6.6	16	6.6	16	17	42	+10.4	26
Penticton	63.3	158	32	80	63.3	158	48	120	-15.3	38
Princeton	3.4	8	3.4	8	3.4	8	8	20	+ 4.6	12
Summerland	8.2	20	8.2	20	8.2	20	9	23	+ 0.8	3
Totals	98.0	243	66.7	165	98.0	243	114	286		

average, larger size industry in the Regional District is 5 hectares, and for the smaller ones is close to 1 hectare, it would seem reasonable to build some land banking factor into each community's recommended industrial land requirements. This would allow communities to provide a reasonable degree of choice to industrial prospects and to have some reserves still available in the event that large scale development wants to locate there.

General land development guidelines* suggest that industrial land requirements for a minimum of 50 years future growth should be reserved. Within the scale and growth context of the Regional District's industrial structure, this guideline is viewed as excessive. However, it strongly supports the concept of generous land banking reserves.

On the basis of the above, it is recommended that:

- Provision be made to have available zoned and serviced industrial land in each community equal to the ILS forecast 1991 requirements (See Table VII-1);

- Additional provision be made to have available zoned industrial land, preferably with service trunk lines to or near it, in each community, equal to the ILS forecast 1991 requirements, with the possible exception of Penticton which, because of the relative size of its requirements, could probably manage with as little as an additional 50% of the forecast requirements; and,

- Consideration be given to setting aside an additional long-term reserve of industrial land for each community equivalent to the ILS forecast requirements for 1991.

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* Urban Land Institute Publication, Urban Land, Vol. 20, No. 5

TABLE VII-2

SERVICING SYSTEM PLANS AND COSTS

Community	Servicing Plans/Proposals	Estimated Cost	Cost Per Acre of Industrial Land	Notes
Keremeos	Village Sanitary Sewers	$1.7M (1979)	N/A	-
Okanagan Falls	Industrial Area Water Distr'n. [1]	-	-	-
	Industrial Area Sewer Trunk and Collectors [1]	-	-	-
Oliver	Sawmill Road Industrial Area, Water and Sanitary Sewer Connectors, Roads, Drainage, Power, Telephone, and Street Lighting			
	Phase I	$197,500 (8.7a.)	[2] $22,700	Including cost for sewer pumping station and some resurfacing of Sawmill Road.
	Phase II	$253,900 (10.3a.)	[2] $24,900	
Osoyoos	Industrial Park Phase I Water and Sewer Connectors, Roads, Power, Telephone	$465,000 (21a.)	$22,100	-
Penticton	Hastings/Railway - Water Distr'n, Sewage Collectors, Electricity and Roads	$162,500 (8.9a.)	$18,000	Water and sewer mains at site
Princeton	Marathon Realty Land Connectors, road access and lighting	$120,000 (5a.)	$24,000	Including mains for possible future development of MR lands to the south.
Summerland	James Lake (East) Water Distr'n, Communal Sanitary Sewage System, Roads and utilities	$660,000 (21a.)	$31,400	New, larger water main to be brought to site and communal sewer system result in higher costs.
AVERAGE PER ACRE COST FOR ON-SITE SERVICES [3]			$23,000	

1 Not planned but will be considered if demand exists.
2 Net acreage.
3 Based on eliminating the highest and lowest numbers, and averaging the rest.

This recommended strategy will thus ensure that adequate serviced reserves are available to meet short-term requirements, an additional back-up reserve (of 50 to 100% of immediate reserves), with services available within reasonable time and cost factors to meet unforeseen demands within the short-term, as well as to ensure that medium-term reserves are available, and that additional reserves have been set aside and protected for longer-term requirements. For the latter two categories of reserves, the concept of sequential land use should be applied. This will permit the viable use of the reserved lands for agriculture, mineral extraction or other such productive purposes, until they are required for their ultimate intended use.

C. SERVICING OF REQUIRED INDUSTRIAL LAND

This section of the report will review the industrial requirements of each community against its inventoried availability of suitable vacant land. Wherever necessary, additional industrial land will be identified, its servicing requirements suggested, and servicing cost guidelines indicated, where possible. With respect to the cost guidelines, Table VII-2 presents information on a variety of planned/proposed servicing schemes reported during the inventory phase of the study. They are presented to indicate how an average servicing cost guideline figure of $23,000/acre has been obtained. It must be emphasized that the cost guideline is only a rough indicator and not based on thorough engineering design and costing studies.

1. Keremeos

The Village of Keremeos will require an estimated 2.3 hectares (6 acres) of industrial land over the next 10 years. At present, there is an estimated 3 hectares (8 acres) of

vacant industrial land in the Village and apparent suitable land available in the east-central and north-central part of the Village to provide the remaining suggested medium and long-term reserves. The east-central area, adjacent to the railway line, is probably more desirable for industrial purposes, but is currently not zoned industrial. The north-central area, currently zoned industrial, should be viewed more as a longer-term reserve.

All of the areas are serviced by water, but not sanitary sewers. This imposes a significant limitation on future industrial development, as well as other types of development, because of the limited capacity of the ground to dispose of septic tank discharge. Until the Village's proposed sanitary sewer system is introduced ($1.7M 1979), very little or no industrial development will take place. The two senior levels of government have designated funds for the system but the delays in obtaining the required approvals may have affected the availability of those funds.

Until the municipal sanitary sewer system matter is settled, it would be impossible to estimate servicing costs for Keremeos' industrial land. Assuming the system is built, on-site servicing costs for roads, water connectors, etc. would only be a fraction of the average estimate of $23,000 per acre, because of the location and size of the land parcels.

2. Okanagan Falls

The unincorporated settlement area of Okanagan Falls has a forecast industrial land requirement of 6.1 hectares (15 acres). The recently adopted Settlement Plan for the area

contained provision for 20 hectares (50 acres). This is more than adequate to provide for forecasted short, medium and long-term requirements. Some of the land requires rezoning, and removal from the ALR. Water mains exist through the proposed area, however, on-site distribution will be required. Although extension of a sanitary trunk would be required to provide sanitary sewage service, it may not be necessary, as septic tank disposal would probably be adequate.

Table VII-2 indicates that an average cost to provide sewer and water main connections and on-site distribution and collection, along with other on-site improvements such as roads, electricity, telephones and lighting, is approximately $23,000 per acre. It is suggested that this figure be considered a high estimate for servicing improvement costs for Okanagan Falls' industrial land.

3. Oliver

The Village of Oliver has an estimated requirement (to 1991) of 8.1 hectares (20 acres) and currently is providing services to the first phase of its own park with a total of 9 hectares (23 acres) still available. There is adequate additional land available adjacent to, predominantly north of, the new industrial park as well as adjacent to the MOT airport. Both of these areas have water and sanitary sewer service connections to them. On-site services, at an estimated average cost of $24,900 per acre, will likely be required to service most of the second phase of the Village's industrial park prior to 1991.

4. Osoyoos

The Village of Osoyoos has just commenced development (i.e. servicing) of Phase 1, 8.3 hectares (21 acres), of its new industrial park, 16.6 hectares (42 acres). Phase 1 will more than provide for its estimated 1991 requirements of 6.6 hectares (16 acres) and with Phase II's additional 8.3 hectares (21 acres), the park will provide for all of the Village's medium-term requirements as well as most of its long-term requirements. The site of the industrial park should also be able to provide the remaining 3.2 hectares of long-term requirements.

5. Penticton

In addition to having the largest estimated land requirements to 1991, Penticton will have the greatest difficulty in meeting its requirements - short, medium and long-term. Its current supply is 15 hectares (38 acres) short of its short-term (1991) requirements. Beyond the possibility of a very difficult and therefore expensive minor eastward expansion of the East Penticton industrial park for 4 hectares (10 acres) and conversion of the Drive-In site for another 4 hectares (10 acres), the most apparent reasonably close option seems to be consideration of further industrial development of Penticton Indian Band owned lands immediately west of the Okanagan River Channel near Fairview Rd. Other options, particularly reasonably close, are limited due to topography, the lakes and existing development, but would include:

- Crown lands west of the City

- o Reliance on the ample reserves available in Okanagan Falls

- o Redevelopment of other areas of Penticton

The outstanding requirements are for 7 to 15 hectares for short-term needs, 32 hectares for back-up and medium-term reserves and an additional 63 hectares for long-term reserves.

6. Princeton

The Town of Princeton has 8 hectares (20 acres) of available, readily serviceable industrial land. This is adequate to meet estimated short and medium-term requirements, as well as part of the long-term needs. For the remaining requirements, the Settlement Plan's proposed long-term conversion of the Burton Flats area would be adequate.

7. Summerland

The District of Summerland has 9 hectares (23 acres) of suitable industrial land available with water service nearby, and there is a proposal to improve the municipality owned portion (6 hectares) with water connectors, a communal sanitary collection and disposal system, roads and utilities at an estimated $31,400 per acre. The currently available land exceeds forecast short-term requirements of 8.2 hectares (20 acres) by only 1 hectare. Back-up and medium-term requirements may be found to the north and south of the municipality's holdings in the James Lake Area. However, as with Penticton, long-term reserves are not apparently available.

TABLE VII-3

SUMMARY OF INDUSTRIAL LAND AND SERVICING REQUIREMENTS

Community	Land Availability for Est'd Req'ts			Servicing Req'ts For Short-Term Needs					Ownership
	Short-Term	Medium-Term	Long-Term	Trunks to Site	On-Site	Cost Guidelines	Area to be Serv'd ha.	a.	
Keremeos	OK	OK	OK	o Water O.K. o Municipal San. Sewers Required	Limited Req'ts	Significantly less than average of $23,000/a.	2.3	6	o Private - major owner Burlington Northern
Okanagan Falls	OK	OK	OK	o Water O.K. o Sanitary trunk extension may be required or septics may do	Required	Depending on san. trunk but likely less than $23,000/a.	6.1	15	o Private o Some fragmentation
Oliver	OK	OK	OK	OK	o Phase I U/C o Phase II only req'd	- $24,900/a.	- 4	10	o Municipally owned IDSA funded
Osoyoos	OK	OK	OK	OK	o OK o Phase I U/C	-	-		o Municipally owned o IDSA funded
Penticton	7 to 15 ha. not available	Not Available	Not Available	To be determined when sites found	Required	$23,000/a. depending on availability of trunks	15	38	o Existing - private and fragmented o Required - First option, Penticton Indian Band
Princeton	OK	OK	OK	OK	Required	$24,000/a.	3.4	8	o Private - major owner Marathon Realty
Summerland	OK	Probably OK	Likely not Available	o Some extension to water required o Sanitary not available	Required	$31,400/a.	8.2	20	o 6.5 ha. Municipally owned

D. INDUSTRIAL LAND SERVICING STRATEGY

The remaining and concluding part of the strategy will summarize the forecasted land and servicing requirements which can not be met with currently available or planned supply, and recommend how these requirements should be provided.

Table VII-3 summarizes the forecasted requirements of each of the Regional District's seven communities, in comparison with their current supply, and focuses on outstanding unfulfilled, or difficult to fulfill, needs. These unfulfilled needs will be dealt with in two parts - land needs and servicing needs.

1. Land Needs

All of the communities in the Regional District have adequate supplies of industrial land to meet their forecasted requirements to 1991 and beyond, with the exception of Penticton and Summerland.

Summerland has an adequate available supply to meet its 1991 and most of its back-up requirements, but does not appear to have adequate identifiable long-term reserves. The District and the Okanagan-Similkameen Planning Department should cooperatively undertake a study of the District, and perhaps surrounding territory, to identify suitable long-term industrial land reserves.

Penticton, on the other hand, is faced with what could be a significant short-term shortage, as well as having no identifiable reserves to meet medium and long-term requirements. The City and the Regional District Planning Department should cooperatively undertake a study of the City

and its surroundings to identify suitable short, medium and long-term industrial land reserves. As part of this exercise, the Penticton Indian Band should be approached on an official level to determine their disposition towards industrial development of some of their land. If the reaction is favourable, then the Band should investigate the availability of financial assistance from the Federal Department of Indian and Northern Affairs and IDSA for industrial land development purposes. Subsequently, the Band, the City and Regional District should jointly consider the formulation of an agreement towards meeting the area's industrial land requirements to the mutual benefit of the residents of the Reserve and the City. If it turns out that Reserve lands are not available, then alternative options should be actively explored, including other rural lands near Penticton, as well as the extra industrial land reserves in Okanagan Falls. Until the required reserves are secured, it would be advisable to continue to restrict the use of Penticton's current supply of industrial land to industrial uses.

2. Servicing Needs

The communities of Oliver and Summerland own prime industrial land that will, based on demand forecasts, likely require servicing within the next ten years. Costs are roughly estimated at $250,000 and $660,000, respectively. These communities should consider the conclusions and recommendations of this study and decide whether investment in the servicing of industrial land is a manageable priority within the context of their available and forecast resources, their debt capacity and other municipal priorities. If the subsequent decisions reaffirm previous commitments to industrial land development, then they should investigate the

availability of financial assistance from senior levels of government, particularly the IDSA industrial land development program. The responsibility for servicing the remaining 2 hectares of Summerland's 1991 requirements, which are privately owned, should be left to the private sector owners, or industrial purchasers, to provide. This is, in fact, what is happening at present on part of the private owners' total available holdings of 3 hectares.

Oliver has already received the commitment of IDSA funds for the first phase of its industrial park and, therefore, could reasonably expect favourable consideration of its phase II requirements. Summerland's requirements are quite similar to Oliver's with respect to scale and industry types. In addition to anticipated high on-site servicing costs for road access and service connections, these communities offer municipally owned land, which has the added advantage of not having land assembly and accummulation problems. Accordingly, Summerland is also recommended for consideration for IDSA assistance.

It should be realized that such assistance can only be reasonably expected if funds are still available, and the program is still in place. At present, the program is scheduled to terminate in mid-1982. This fact will have to be borne in mind when the communities consider the timing of their industrial land servicing projects. Summerland's holdings of 6 hectares (16 acres) are of such a size that it would probably be best to consider a single development phase. Considering the fact that its available serviced land is so limited, it should, if it so decides, proceed immediately to reopen discussions with the Provincial Ministry of Industry and Small Business Development and the

Federal Department of Regional Economic Expansion. Oliver, on the other hand, is currently constructing phase I services in its industrial park. The land in Phase II will not likely start to be required until about 1985-86. Given lead times of about two years they should consider initiating their IDSA application in 1983. However, given the assistance program's currently scheduled termination date, the Village should assess its requirements in early 1982 and, if the circumstances are favourable, initiate negotiations with the IDSA sponsors at that time.

The requirements of Keremeos are the most modest of the communities in the Regional District. It is estimated that only 2.3 hectares (6 acres) will require relatively inexpensive service connections, due to land parcel size and location, with respect to road access and service lines. However, the demand as well as the required approval for industrial development will be severely restrained until the community's sanitary sewer system is installed. Accordingly, the senior levels of government which are involved with assisting in the funding of such systems, should be made aware of the overall importance of supporting such a system. Once the sanitary waste problem is resolved, then more detailed estimates of providing the required service connections should be developed. This will provide accurate guidance as to who should fund such improvements. Generally speaking, it is likely that private sector owners, purchasers or lessees could be reasonably expected to fund them. With regard to this, Burlington Northern is reported to be the largest owner of prime industrial land in the Village, and the company currently leases some of it to the Keremeos Growers Cooperative.

Okanagan Falls will require an estimated 6.1 hectares (15 acres) of serviced industrial land by 1991. At present, the water main runs through the site and it appears that septic tanks may be adequate for sanitary waste disposal. Similar to Keremeos, on-site service connections and road access could be provided relatively inexpensively. If this is the case, the private sector - owners or purchasers - should be viewed in the first instance as the bearer of these costs, particularly given the current, relatively lower land prices for industrial land. More detailed servicing costs should be determined to test this proposal. Another possibility is B.C.D.C. In addition, if the industrial land reserves of Okanagan Falls are needed to meet some of the requirements of the Penticton area, then a closer examination of the amount, timing and servicing of these will be necessary.

The prime industrial land reserves of Princeton are owned by Marathon Realty, which is currently considering servicing and marketing some of those lands. Given the interest of Marathon in developing its land holdings, and the restriction of the Municipal Act on the Town's financial participation in such a venture, it would seem logical to leave the development to Marathon and for the Town to provide whatever support and assistance it can with respect to such things as development approvals.

Penticton's servicing requirements, like its land requirements, are the largest, and likely to be the most expensive. Currently, available land is either serviced or with services to it. Any required on-site servicing improvements, because of the size of the parcels of land, should be borne by private sector owners, purchasers or lessees. The servicing requirements and costs for the remaining land requirements,

which have yet to be identified, can not be estimated at this time, nor can the responsibility for funding be proposed. Once suitable land is identified, then cost estimates should be prepared and a strategy for funding formulated.

The most obvious option includes development of the Penticton Indian Band lands. If this option is eliminated then, once the required lands have been identified, B.C.D.C. participation should be explored. The size of the land area and the supporting demand estimates, along with the possible involvement of Crown Land, suggest that it may be of interest to them.

PERSONS INTERVIEWED

Regional District of Okanagan-Similkameen	Mr. D. McDougall	Chairman
	Mr. P. Rawkins	Econ. Devel. Officer
	Mr. Harold Thomson	Planning Director
	Mr. P. Cornelissen	Project Planner
Village of Keremeos	Mrs. F. Peck	Mayor
	Mr. D. DeGagne	Clerk
Village of Oliver	Mr. K. Petty	Mayor
	Mr. R. Martineau	Clerk/Treasurer
Village of Osoyoos	Mr. R. Frost	Mayor
	Mr. L. Miles	Clerk/Treasurer
City of Penticton	Mr. I. Messmer	Mayor
	Mr. M. Brown	City Engineer
	Mr. C. Wahl	Deputy Bldg. Insp.
Town of Princeton	Ms. S. Henson	Mayor
	Mr. G. Sanderson	Clerk/Treasurer
	Mr. D. Coyle	Town Engineer
District of Summerland	Mr. K. Blagborne	Mayor
	Mr. B. Fehrmann	Treasurer
	Mr. H. Felker	Works Super.

Penticton Indian Band	Mr. M. Kruger	Chief
B.C. Ministry of Industry and Small Business	Mr. I. Back	IDSA Research Coord'n
B.C. Development Corp.	Mr. B. MacFarlane	
Canada Employment Centre	Mr. B. Daniels	
Federal Dept. of Indian and Northern Affairs	Mr. A. MacMillan	
A & G Holdings	Adam Bowman	
Block Bros.	William Binfet William Ross	
Bowsfields	Norman Giddy	
B.C. Assessment Authority	Jack Bieber	
Burlington Northern	Mr. D. Miller	Ind'l Lands Sec.
Evan Cameron	No Affiliation	
Kenyon Construction	Allan Kenyon	
Kruggerrand Realty	Larry Young	
Len Reeve Realty	Len Reeve	
Locke Realty	Phil Locke	

Marathon Realty	Mr. M. Carpenter Mr. J. Edwards
OK Welders	Robert Wise
Similkameen Agencies	Richard Marveu
Summerland Realty	John Mitchell

DERIVING INDUSTRIAL WORK FORCE ESTIMATES FROM REGIONAL DISTRICT PROJECTIONS

In forecasting the incremental work force to 1991, two adjustments were made to the Regional District's base forecasts. Also, in order to estimate the industrial work force, potential shifts in the industrial structure of the Region during this period were anticipated. These adjustments are outlined below.

1. Estimating the Employed Incremental Work Force (1991 vs. 1980) from Regional District Forecasts

The table below shows the two adjustments which have been made to projections of incremental work force made by the Regional District.

Adjustments to 1991 Work Force Projections

	(1) Regional District Increment 1991 vs 1976	(2) 1991 Increment Over 1980	(3) Reduction for Unemployment (6%)	(4) Employed Labour Force Increment 1991 vs 1980
Keremeos	346	279	17	262
Okanagan Falls	935	753	45	708
Oliver	1,265	1,019	61	958
Osoyoos	1,014	817	49	768
Penticton	9,800	7,895	473	7,422
Princeton	525	423	25	398
Summerland	1,270	1,023	61	962
	15,155	12,209	731	11,478

a. Evaluation of the Regional District forecasts

The forecasts made by the Regional District of the numbers of additional workers by 1991, appear as column 1. These forecasts are based on population projections which assume a continuation of past long-term trends in terms of birth and death rates as well as migration. The labour force participation rates for each community are held approximately constant in forecasting, at the ratios reported in the 1976 census. However, in each community, the future population is expected to be older than at present, resulting in a higher porportion of the population being included within the work force. This assumption can be justified in light of the continued in-migration of older residents who will help increase the population percentage of those over 15 years of age.

A summary of these projections which form part of the Technical Supplements to the plans of each of the seven communities appears in Table V-4. It should be noted that the increments are for the 1991 work force over the levels reported in the 1976 census and not the current labour force levels.

The total increment of 15,155 represents an increase of more than 64% over the 1979 work force of 23,500 estimated by Canada Employment and Immigration. Although this increase is high, it represents an average annual growth rate of 4.2% which is somewhat less than the 4.8% historical average which prevailed between 1971 and 1976. The population projections from which the labour force increases are estimated, represent a decrease in the growth rates of certain Regional District sub-regions from rates which prevailed from 1971-1979, including notable declines in the Penticton, Keremeos and Princeton sub-regions. Overall, the

Regional District's projected growth rate is expected to decline between 1976-1991 (to 2.7%/year) from the rates experienced in 1971-76 (3.8%/year).

This forecast growth rate does not appear high, at least in comparison with the extensive economic projections undertaken in 1974 as part of the Canada-British Columbia Okanagan Basin Agreement, which employed three cases for projecting both population and economic activity. An assumption inherent in the low growth case - the only case which anticipated a substantial decline in population growth rates after 1980, is that public pressure will develop for slow growth in the region in order to maintain environmental quality. The other two cases anticipated a continuation or an increase in population growth rates which prevailed during the 1970's. In summary, it is expected that the population projections are reasonable, and that the assumptions as to a higher proportion of the population over 15 years of age which result in a net increase in the proportion of the population in the work force, is sustainable in light of past trends. It is reasonable therefore to employ these estimates as the base for projecting the demand for industrial land.

b. Adjustment of the Regional District forecasts

The first adjustment shown in the second column of the table above, entails a scaling down of the forecasts as they represent an increment between 1976 and 1991. In order to bring these projections up to the present, the increments have been reduced between 1976 and 1980 by the average annual growth rate of 4.2%, which represents the rate at which the work force is estimated to grow between 1979 and 1991.

The third column on the table reduces the labour force forecast by an estimate of the structural rate of unemployment. This is being done because at any given time, the entire labour force will not be employed. Forecasting the demand for industrial land on the basis of the entire incremental labour force, without netting out some estimate of the proportion of the work force who are chronically unemployed, will overstate the land requirements. Estimating the proportion is difficult, as unemployment statistics at the local/regional level are based on a small sample which yields unreliable results. The 6% estimate used represents the lowest level which is thought to occur during the economic peak summer months. The result of these two adjustments, in terms of the employed work force increment 1991 vs 1980, is presented in the last column of the table.

2. Anticipating Adjustments in the Region's Industrial Structure

Forecasts of land demand based on employment must take into account any structural changes in the economy which would alter the relationship between the number of employees and the land requirements necessary for employment. It is anticipated that structural change will take place over the next ten years, and alter the breakdown of the labour force between the market segment users of industrial land which was estimated in Table V-3. This structural change will be toward greater industrial development, and hence employment, in smaller manufacturing firms and utilities, construction and service industries. Relatively smaller growth will be experienced in the larger export-oriented sector.

This is anticipated for the reasons outlined below:

a. Availability of resources will act as a constraint on the growth of the manufacturing sector

One segment of the large export-oriented firms is located in the Regional District area because of the availability of resources. These are mature industries in the sense that the capacity for rapid growth is limited by the availability of wood, fruit and vegetables. This was also the view of the economic growth study established under the Canada - British Columbia Okanagan Basin Agreement which concluded that "...raw material constraints for sawmills and planning mills, plywood plants, and lower long-term rates of growth for dairy products and fruit and vegetable canning are expected to reduce the rapid rate of growth in resource-based manufacturing..." (Technical Supplement X, p. 86).

b. Senior Government assistance to small business is more prevalent than programs assisting large enterprises. This is not expectd to change in the near future.

The original program which helped large non-resource manufacturing operations settle in the Regional District was the federal Area Development Incentive Act. This program is no longer in effect, and given the financial state of the federal government and its fiscal restraint posture, it appears unlikely that any similar program will be reinstated. Instead, industrial assistance is provided predominantly to small industry by the Provincial Government as well as the Federal Department of Regional Economic Expansion. Such programs as the Assistance to Small Enterprise Programs (ASEP), the Agriculture and Rural Development Subsidiary Agreement (ARDSA) and the Low Interest Loan Assistance (LILA) Program are available. The elimination of the large scale program, the effects of which were felt throughout the late 1960's

and early 1970's, and its replacement with programs which assist predominantly smaller as well as larger businesses will contribute to a shift toward small, rather than large, enterprises.

c. Population trends are expected to enlarge the local markets for small manufacturing and service-oriented firms.

The engine of economic growth in the region will not be government assistance programs, but rather the increasing population which comes to take advantage of the area's climate and other resources. The projected increase in the population of the Regional District from 51,520 in 1976 to 77,000 in 1991, represents almost a 50% change.

The conclusion of this section of the Appendix, that industrial growth will be primarily in the direction of service-oriented firms and small manufacturers producing predominantly for local consumption, will mean the growth and establishment of machine shops, soft drink manufacturers, slaughter houses, bakeries, construction companies, small conractors, automobile repair shops and wreckers, and so forth. The growth of these two sectors, as opposed to sawmills, planing mills, canneries and large export-oriented firms, will result in a shift in the labour force content. As indicated in the following table, we anticipate a large shift toward utilities, construction and services which will absorb 12% of the incremental employed labour force (versus an estimated 10% in 1979). Small manufacturers are expected to employ 7.5% of this increment (versus 5.5%), and larger export-oriented firms are expected to absorb a smaller proportion, estimated at 2% (versus 6%). The total proportion of employees working in these combined sectors is expected to remain the same, at an estimated 21.5%. This is summarized in the following table.

ESTIMATED SHIFT IN THE WORK FORCE STRUCTURE

	% of Total Regional District Labour Force	
	1979*	1991
Large Export-Oriented Manufacturers	6.0%	2.0%
Smaller Manufacturing Firms	5.5%	7.5%
Total Firms Manufacturing	11.5%	9.5%
Utilities, Construction and Service Companies	10.0%	12.0%
TOTAL	21.5%	21.5%

* See Table V-3