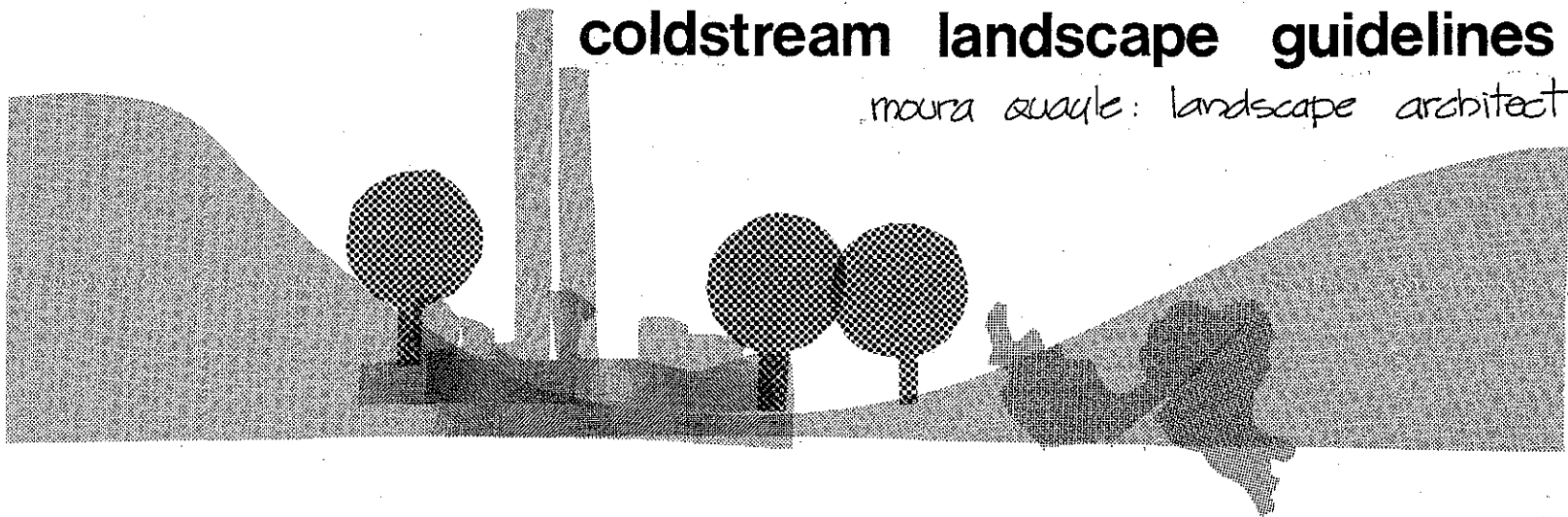


coldstream landscape guidelines

moura quayle: landscape architect



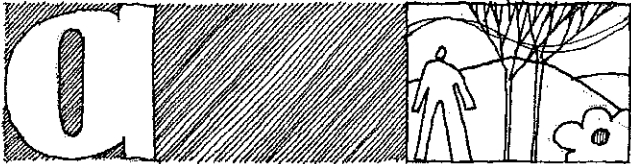
thanks to:

Coldstream Council
Dave Morris
Peter Tassie
People of Coldstream
Roger Horner, Resource Analysis Branch

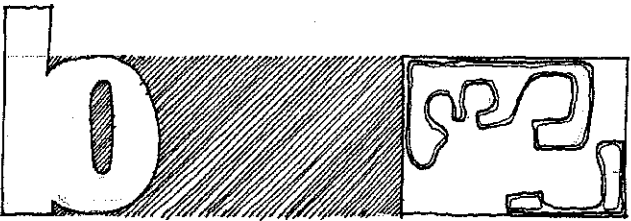
Intent.....	1
Objective a: maintaining visual quality.....	2
Visual units.....	4
Upper slopes.....	5
Lower slopes.....	8
Valley floor.....	10
Mobile Homes.....	12
Objective b: protecting open space.....	13
Recreational opportunities.....	14
Objective c: protecting natural resources.....	16
Erosion Control.....	16
Coldstream Creek.....	18
Vegetation.....	19
Photos/Sketches.....	21
Commercial.....	21
Roadways.....	25
Industrial.....	29
Implementation.....	33
Bibliography.....	34
Appendix	

contents

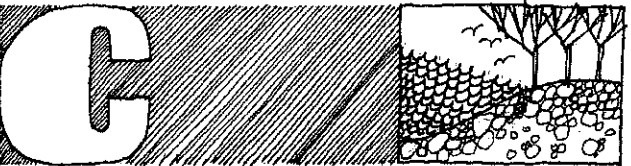
The intent of this report is to help the
District of Coldstream:



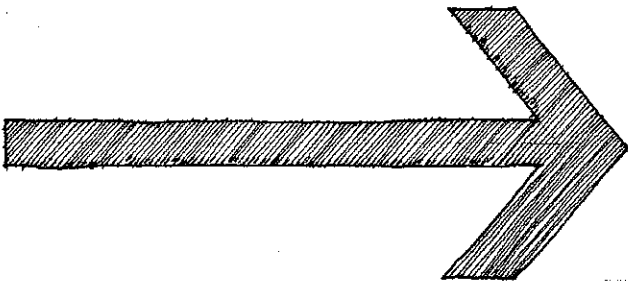
Maintain and enhance the Coldstream
visual quality and landscape character
in regard to any development in the valley
with special attention to residential development.



Protect and develop **open space** for
recreational opportunities in Coldstream.



Maintain and enhance the **natural resources**
of air, water, soil, vegetation and wildlife-
in short environmental protection.



The objectives are explored by:

- understanding the problems and opportunities
existing in Coldstream
- suggesting priorities
- identifying physical areas of concern
- developing guidelines to meet the objectives

This objective relates especially to those areas subject to development. of a residential nature. Also important is an understanding of the landscape character and appeal of the valley.

visual quality

to maintain and enhance
the coldstream visual
environment

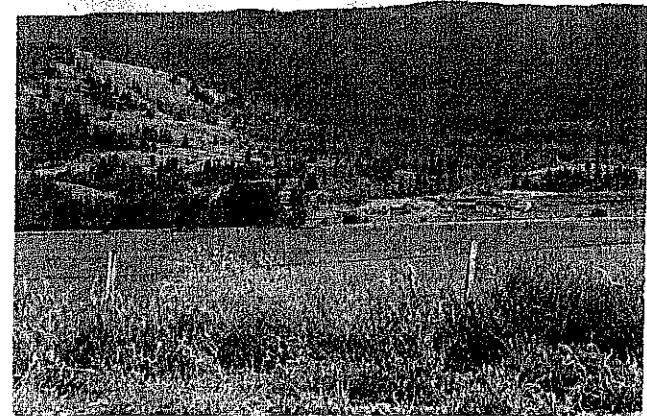
■ the landscape is rural, peaceful, friendly,
changing with the seasons, welcoming

■ the rhythm of the orchards and their changing
colours are reminders of Coldstream's history
and create questions of the future

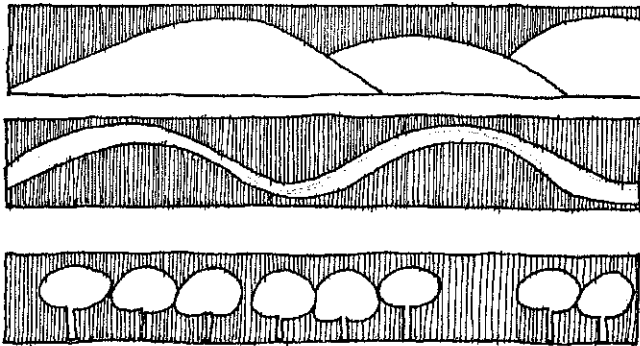
■ wide views create an open feeling in opposition
to the enclosure of the hills

■ simple bold lines of the ridges and hill
silhouettes enclose and protect the valley

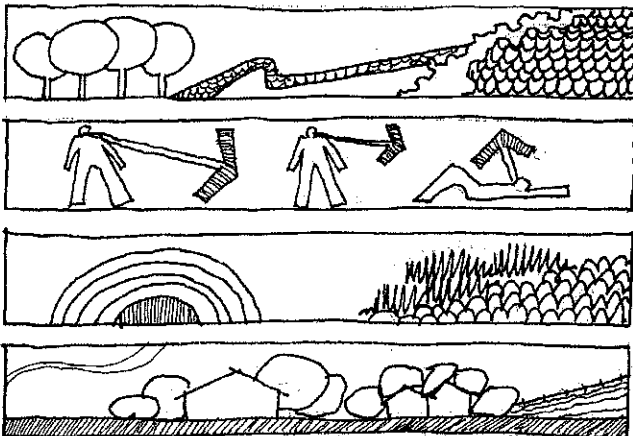
objective a



What elements should be maintained to retain this Coldstream visual identity?



- the dominant **forms** of hills
- the strong **lines** of the ridges and hill silhouettes
- the **rhythm** of the tree shapes (orchards)






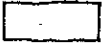

- landscape features: orchards, creek, lakeshore
- the varied **views**
- the changing **colours** and textures
- the character of the community: **rural**
open space feeling, farm buildings, fields

elements

3

Different parts of the Coldstream landscape have different abilities to absorb development and therefore specific guidelines are necessary. Development can then be guided to contribute positively to the image of Coldstream.

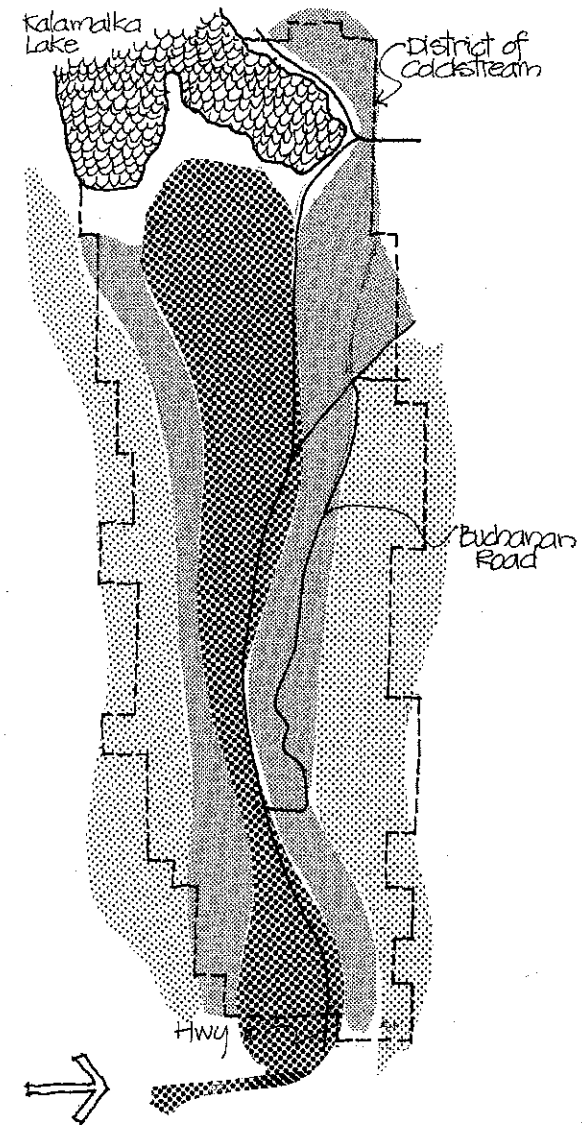
visual landscape units are:

-  the valley floor
-  the lower slopes (below the elevation of Buchanan Road on both sides of the valley)
-  the upper slopes (above the elevation of Buchanan Road on both sides of the valley)
-  ridgelines and hill tops
-  creek and lakeshore

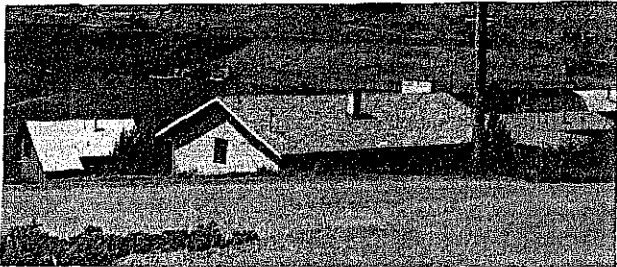
* unit locations on map are approximate.

visual sensitivity to development of each unit is:

- | | |
|--------------------------|------------------------|
| the upper slopes | . high sensitivity |
| ridgelines and hill tops | . high sensitivity |
| creek and lakeshore | . high sensitivity |
| the lower slopes | . moderate sensitivity |
| the valley floor | . low sensitivity |



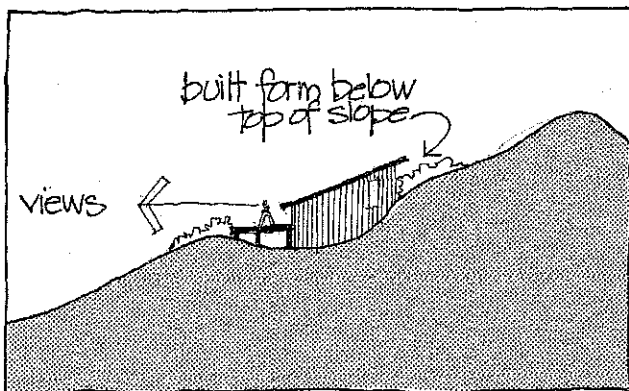
residential



Ridges, Hilltops
Creek, Lakeshore

Upper slopes

eg. upper Buchanan Road, upper
Middleton Mountain



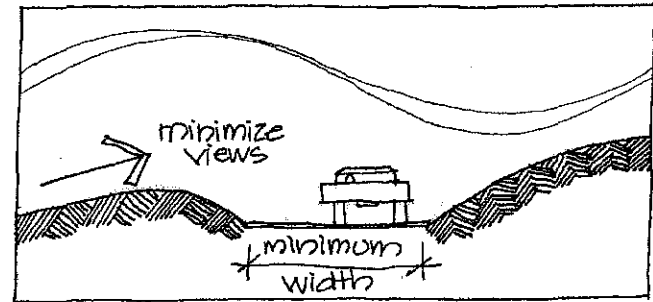
The landscape development guidelines for each unit are approached from both a site planning and building form point of view. The guidelines pertain generally to residential development because following the direction of the community plan that is where development will mainly occur.

These units are very sensitive visually and should be developed carefully, if at all, for recreational opportunities.

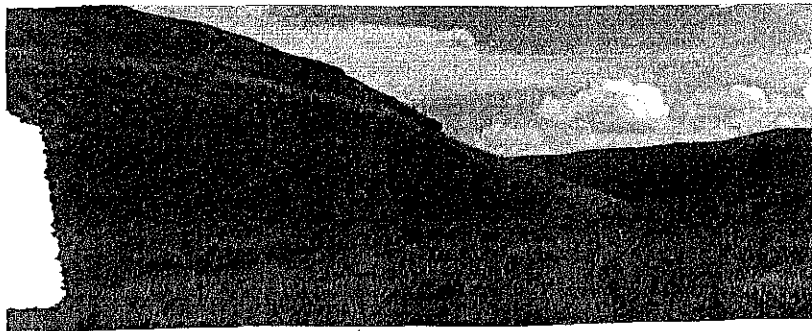
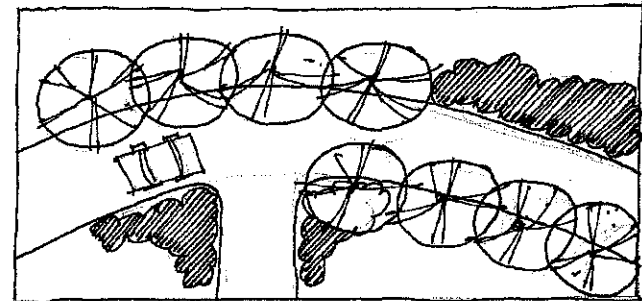
site planning

- . keep built forms below the top of the slope as viewed from major vantage points
- . consider views from and of built forms
- . retain natural features and enhance them through creative site planning

- . protect natural drainage patterns
- . roads and servicing should follow contours
- . roads should be of minimum width for the least visual and grade disturbance



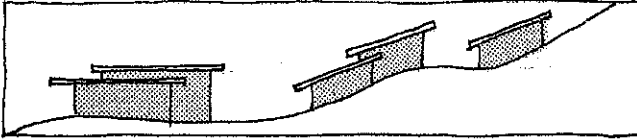
- . make use of slope of the land and build into the land, lean into the hills
- . unify a development by carrying a concept through to final details such as signage, planting schemes etc.
- . retain the top 60 metres of Middleton Mountain as a recreation area and avoid housing development or road construction



Middleton Mountain

building form

- . keep to low profile, horizontal development
- . one storey or underground/semi-underground development is preferable

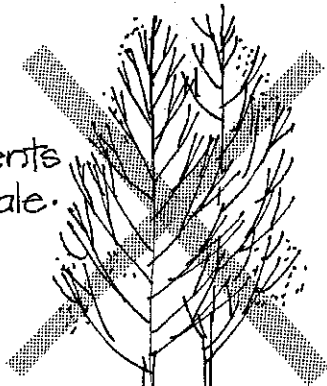


- . roofs should reflect lines of the landscape. Low, flat roofs are most appropriate.

- . forms and colours should blend into the background of the upper slopes

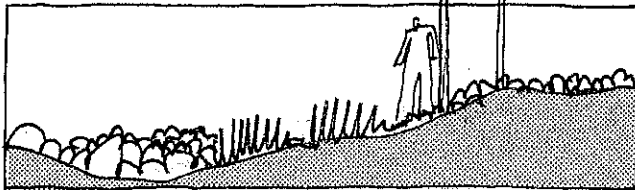
- . natural materials suit the upper slopes area especially with the natural finish maintained.

tall elements
out of scale.



vegetation

- . plant to enhance the grassland quality, mainly ground covers and shrubs (see plant list in Appendix)
- . avoid strong tall vertical elements



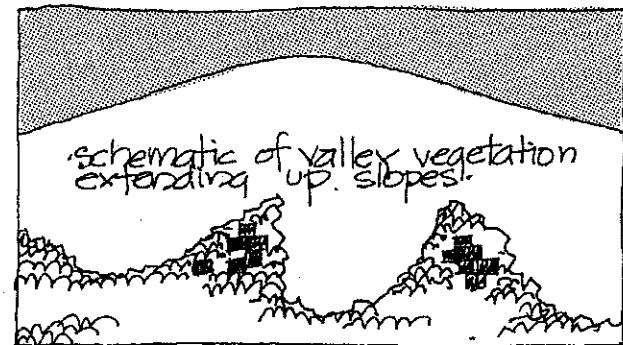
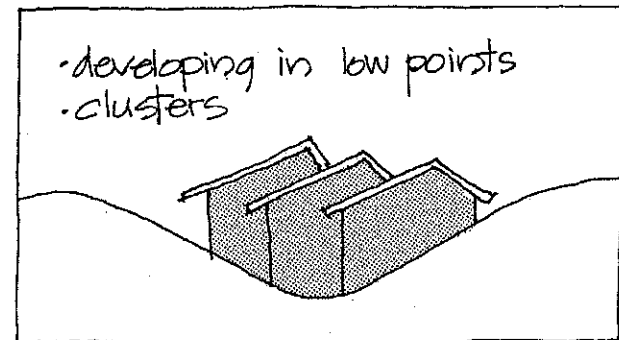
This unit is the transition zone between the upper slopes and the valley floor. It therefore borrows guidelines from both units depending on the location of the specific site.

site planning

- . protect natural drainage patterns and deal with changes following sound grading techniques
- . follow contours with roads and servicing and consider cluster developments which minimize both roads and servicing
- . develop within the draws or low points in this unit to minimize visual impact
- . extend the valley floor up the slope in valley-like forms
- . road standards should be minimal to accommodate local traffic and to create the least visual and grade disturbance

Lower slopes

Kalview, residential developments just above the valley floor, lower Middleton Mountain)



building form

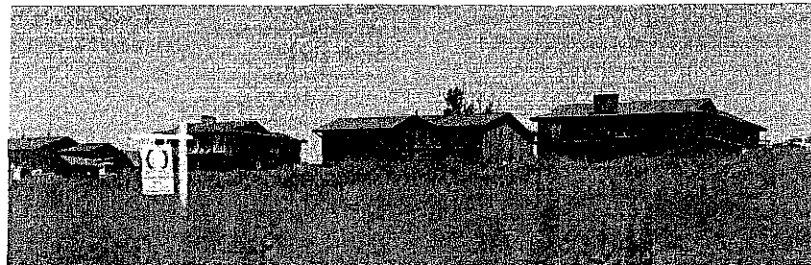
- . borrow from appropriate unit--the upper slopes or valley floor.

vegetation

- . extend valley floor vegetation up the slope to screen or to complement development
- . generally avoid the use of tall, vertical elements and emphasize the native material found in this visual unit (see plant list in Appendix)



. valley vegetation
extends up slope.



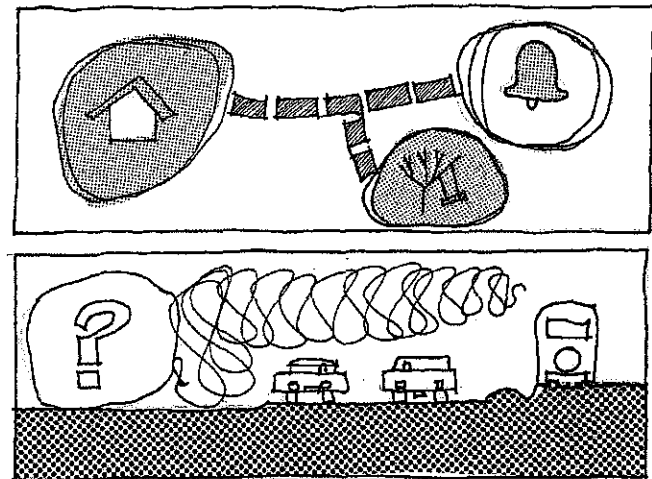
The guidelines for this unit pertain to development anywhere on the valley floor including non-agricultural lands and land within the agricultural land reserve.

site planning

- . consider vehicular, pedestrian and recreational linkages from residential areas to schools and to community activity areas and parks.
- . restrict development in areas close to the highway and rail corridors to avoid safety, noise and visual problems
- . restrict development close to the creek for the purposes of environmental protection for that resource
- . retain existing landscape character by retaining and adding to hedgerow planting
- . restore landscape patterns ie. the orchards and hedgerows

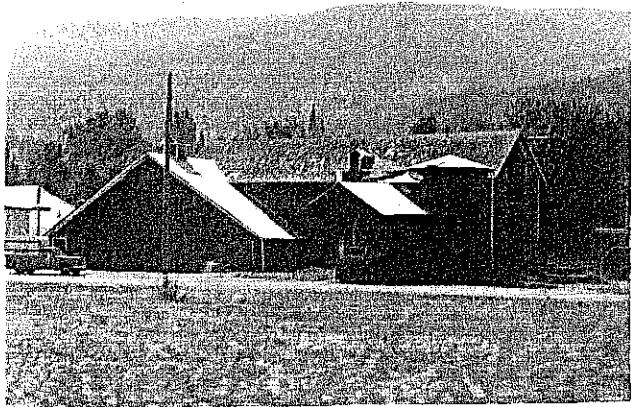
Valley Floor

Kalvista (representing the western portion)
Lavington (representing the eastern portion)



landscape patterns





building form

. towards the eastern portion of this unit the historically characteristic building form is the barn, farm buildings, and ranch or farm houses. The landscape accepts them well!

. in the western portion of the unit the vegetation and established scale of development is suitable and should be respected.

. therefore new buildings in the agricultural or eastern portion of the valley should take note to follow the scale and character of the farm buildings.



vegetation

. the orchards and hedgerows should remain as dominant

. site plan in **clusters** to allow more usable and private space. Unit size and density puts a premium on outside space so care should be taken to plan accordingly.

. mobile homes can appear very 'unconnected' to the ground. Set homes at depressed grades or **design** skirtings to tie the unit visually to the ground.

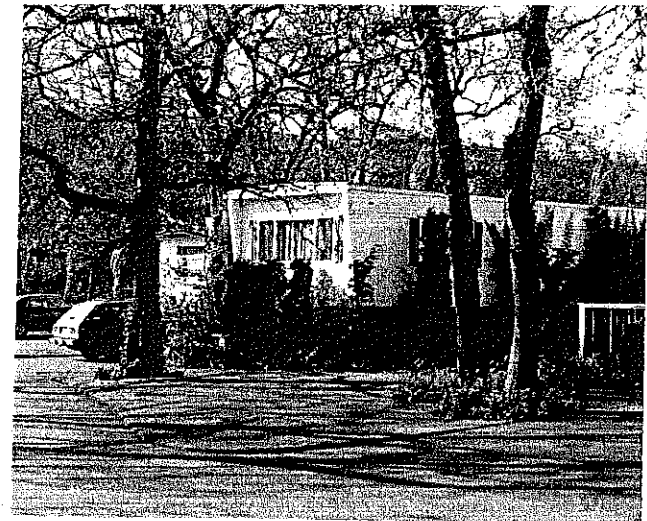
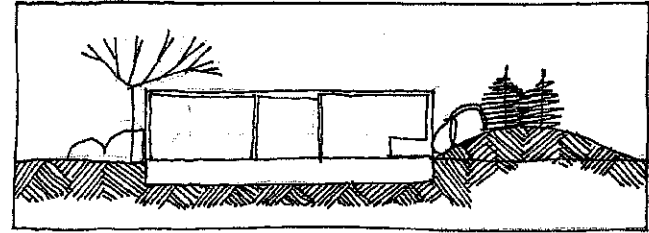
. site units for views and variety. Create berms or walls of planting to provide variety and privacy. In large areas look for ways of creating 'neighborhood' feelings around each group of units.

. create a **focus** for the development like a natural feature, a social or recreation centre depending on the site.

. unify development by using street **trees** planting, a signage and numbering system and colour coordination

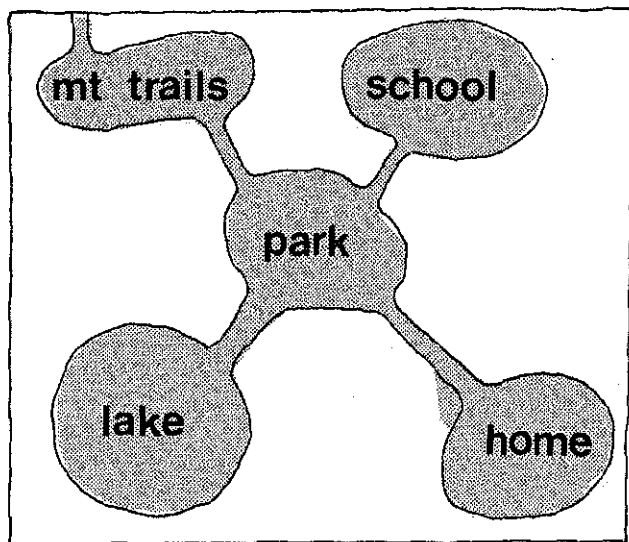
. follow guidelines for the visual unit which the mobile home development occurs in.

mobile homes



open space

to protect and develop
open space for
recreation



objective b

The main reasons for open space preservation are:

- . for present and future recreational use
- . for preservation of existing natural and cultural features which are representative or special in the Coldstream area eg. Middleton Mountain, Coldstream Creek, the Irrigation ditches, Kalamalka Lakeshore

The objectives of an **open space** network or system are to:

- . represent all land types
- . provide a space for active (facility) uses which can be linked together and can also link residential to schools to shopping or to other recreational areas
- . protect ecologically sensitive areas or unique or scarce resources
- . link in a way which separates vehicular and pedestrian activity

The Coldstream community should consider the future of its open space because an open space network depends on the demands of the people who live in Coldstream and their needs and wants.

* many of these guidelines are general and require attention to specific sites for complete site guidelines or design

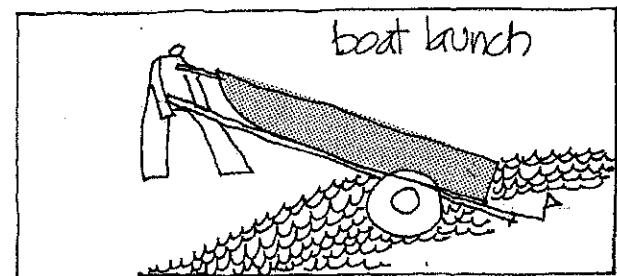
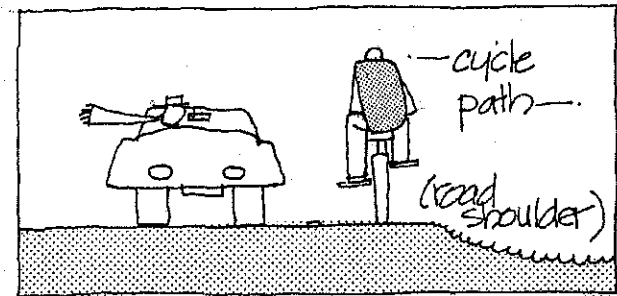
Trails

- . pedestrian, cross country skiing, cycling, equestrian
- . part of open space network/linkage system
- . multi-use and continuous
- . simple signage system for trail information
- . designate historic sites/trails and provide info
- . designate corridors for future recreational use

Lakeshore/Beach

- . retain natural character of lakeshore edge
- . site access points with regard to grade and elevation problems
- . consider parking availability and pedestrian access
- . boat access points need detailed study *

Recreational Opportunities

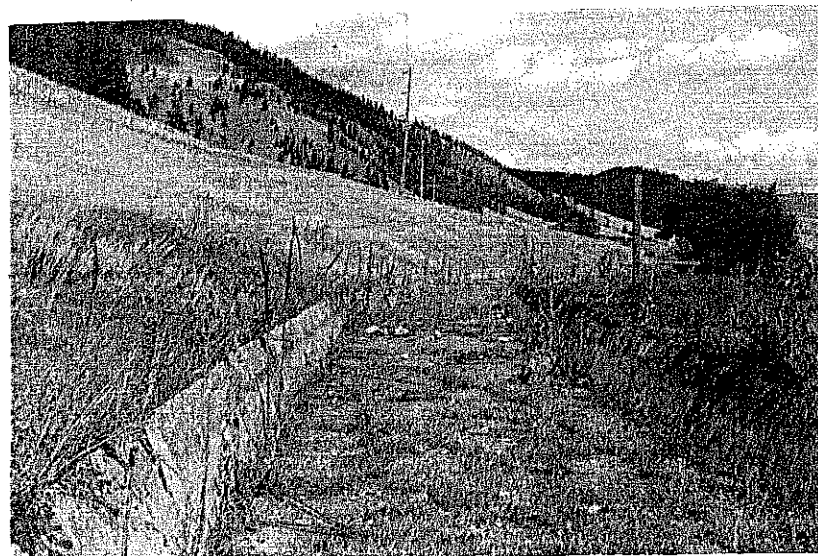
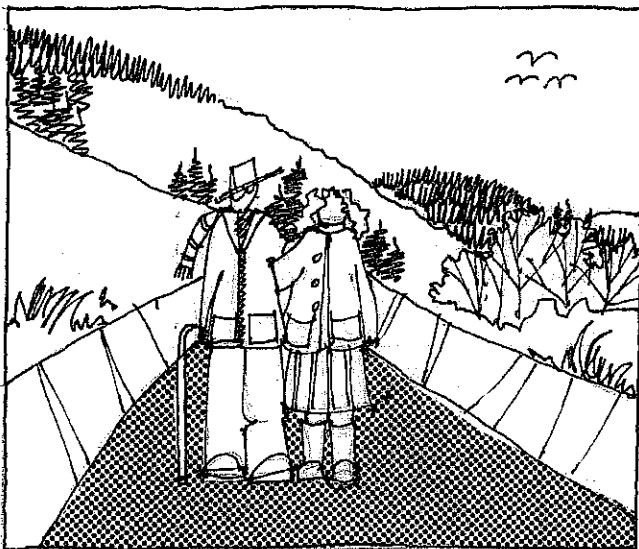


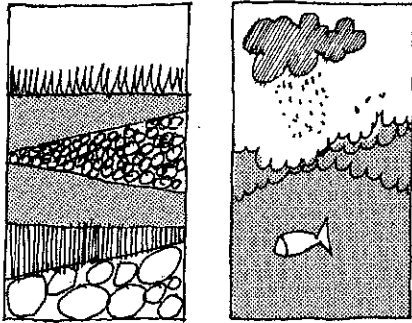
Creek

- . system of picnic sites along creek linked by trails
- . siting of areas and trails needs detailed study*
- . erosion control- See environmental protection

Irrigation Canals

- . possibilities for trail use
- . important to designate trails as open space to establish continuity





environmental protection

to maintain and enhance natural resources

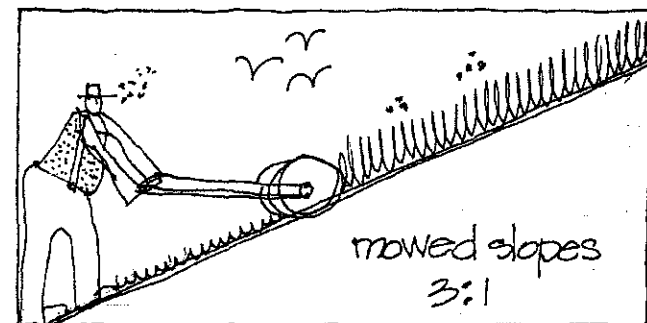
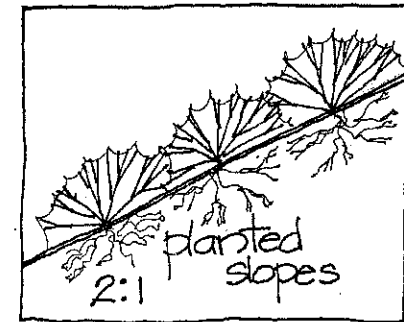
The prime agricultural soils of the Coldstream valley are a valuable resource. Historically the combination of water and soil was the livelihood of the community and therefore necessity protected these resources. Now more external controls are needed not only to protect agricultural soils but to also protect mountain slopes and all water resources.

Erosion Control

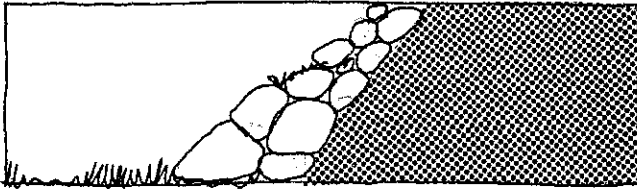
For protection of slopes:

- grades should be kept to less than 2:1 for planted slopes and less than 3:1 for mowed grass slopes.

- planting slopes is the most visually appealing method for erosion control. Certain plants have extensive root systems to retain the soil. See appendix.

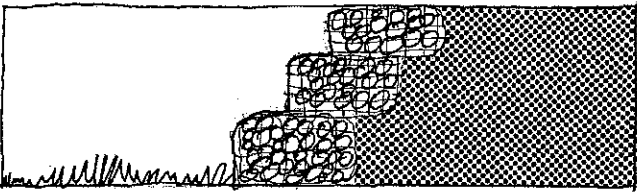


Erosion control

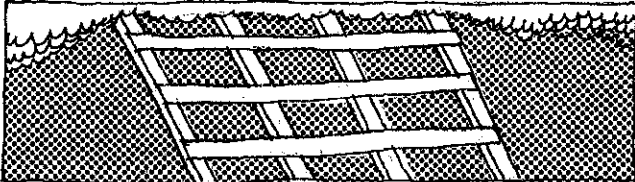


structural techniques may also be used to protect soils:

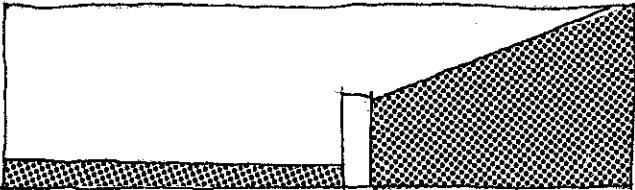
1. **rip rap**: large boulders set on slope to stabilize it- maximum slope 1:1



2. **gabion**: large rectangular wire baskets filled with rocks; may be laid on an angle/stepped back/ or set vertically



3. **cribbing**: system of laying timbers or precast concrete with spaces between members which are stepped back and tied into a bank for support



4. **retaining walls**: made of concrete, wood, stone or masonry

Diversion techniques also protect soil.

Slope drains, swales, surface or underground pipes are all ways of carrying water to avoid disturbing soil.

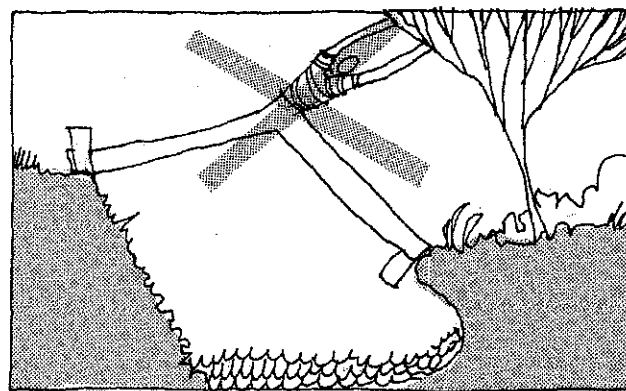
Excess run off due to natural causes and man-created environmental changes are affecting the water quality and bank stability of Coldstream Creek. It is important that a strict program be undertaken to repair damage and prevent future problems. The Ministry of the Environment has a River Protection Assistance program which could be approached.

Coldstream Creek

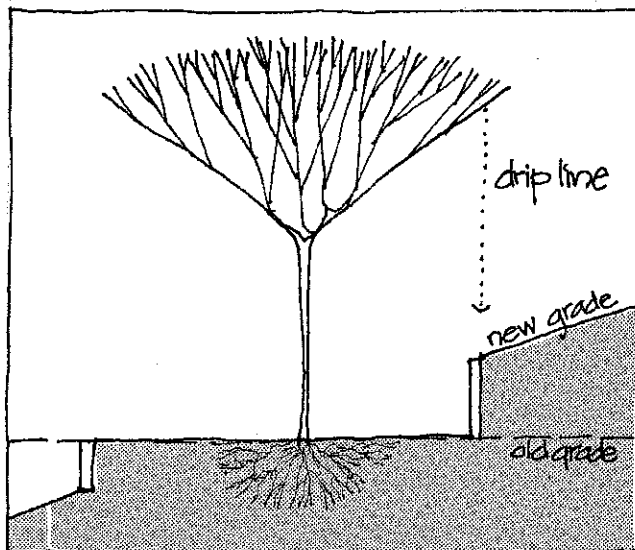
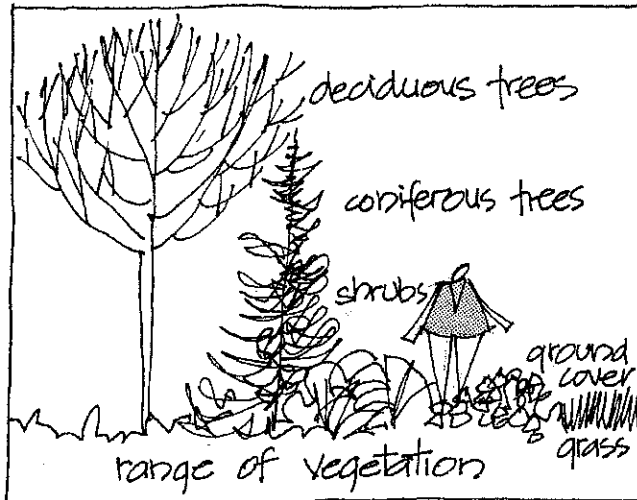
The following are general guidelines:

- . control traffic along banks and restrict crossings
- . use vegetation stabilization where possible and structural techniques if necessary
- . practice velocity reduction by installing check dams, weirs or spillways
- . sediment control measures (traps or basins) should also be undertaken
- . follow the recommendations of the Ministry of Environment and Agriculture regarding animal waste management

erosion control



Vegetation



Vegetation continues to serve many purposes in the Coldstream landscape. Historically it was important for livelihood, property definition, wind protection and has always contributed to the valley character and image. Now vegetation can be a solution for erosion problems and visual or noise screening. It provides wildlife habitats, can give visual definition to large areas and add life and colour to the landscape.

General guidelines for protection and use of vegetation:

- . retain and add to hedgerow planting as an important landscape pattern in the valley
- . never disturb the grade around a tree ie. cut or fill. Use the dripline as a guide for its "protection" zone. Employ tree wells or other methods to protect tree roots.
- . add new "orchard" like trees to continue the orchard patterns
- . use as much native plant material as possible to keep maintenance low and support the natural visual environment

. use few types of plant material and mass the same type together in a group. This keeps the design simple, economical and effective.

. tree protection program should be undertaken involving the pruning and surgery to save older trees.

See appendix for suggested plant material list.

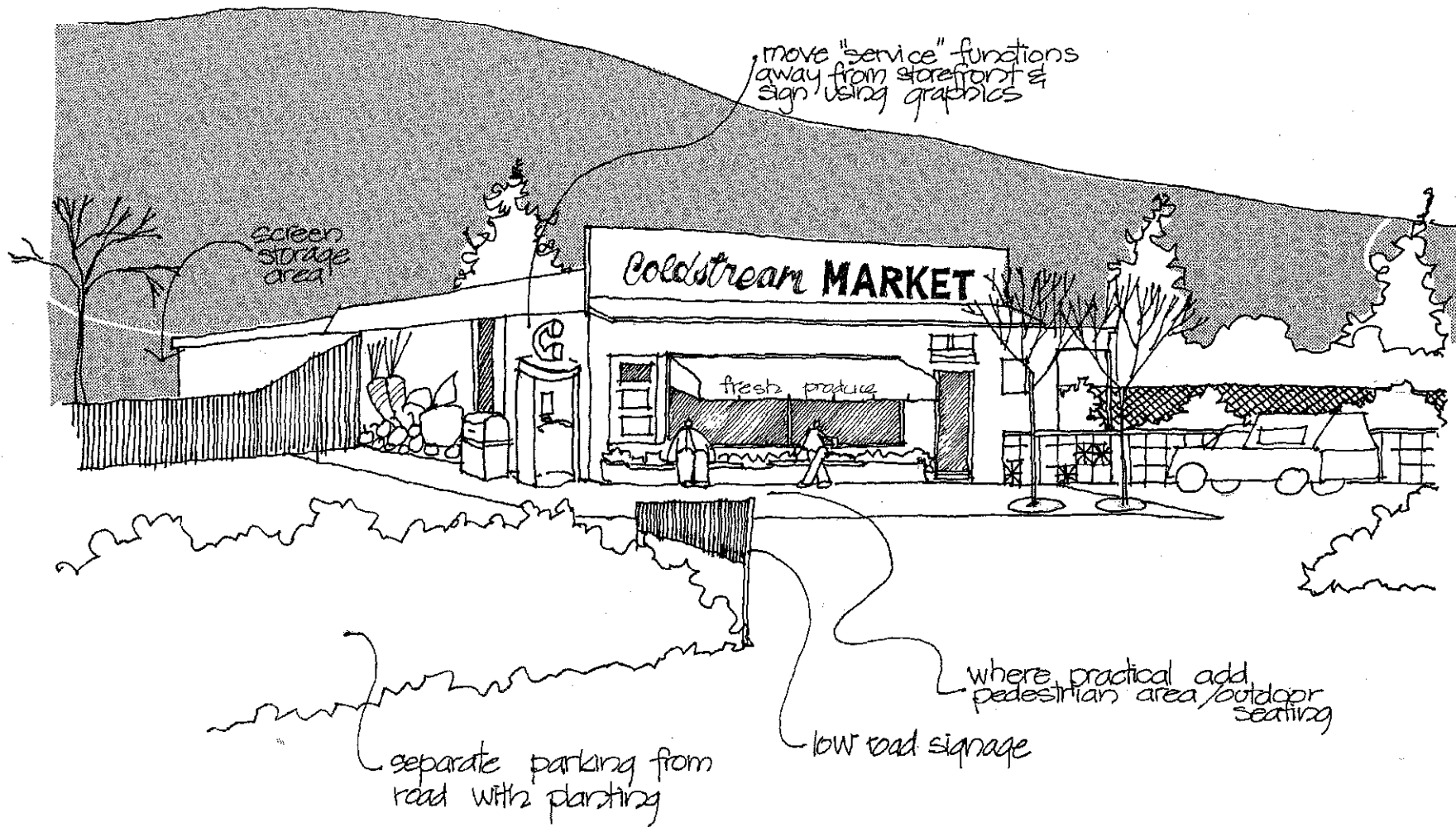


Vegetation

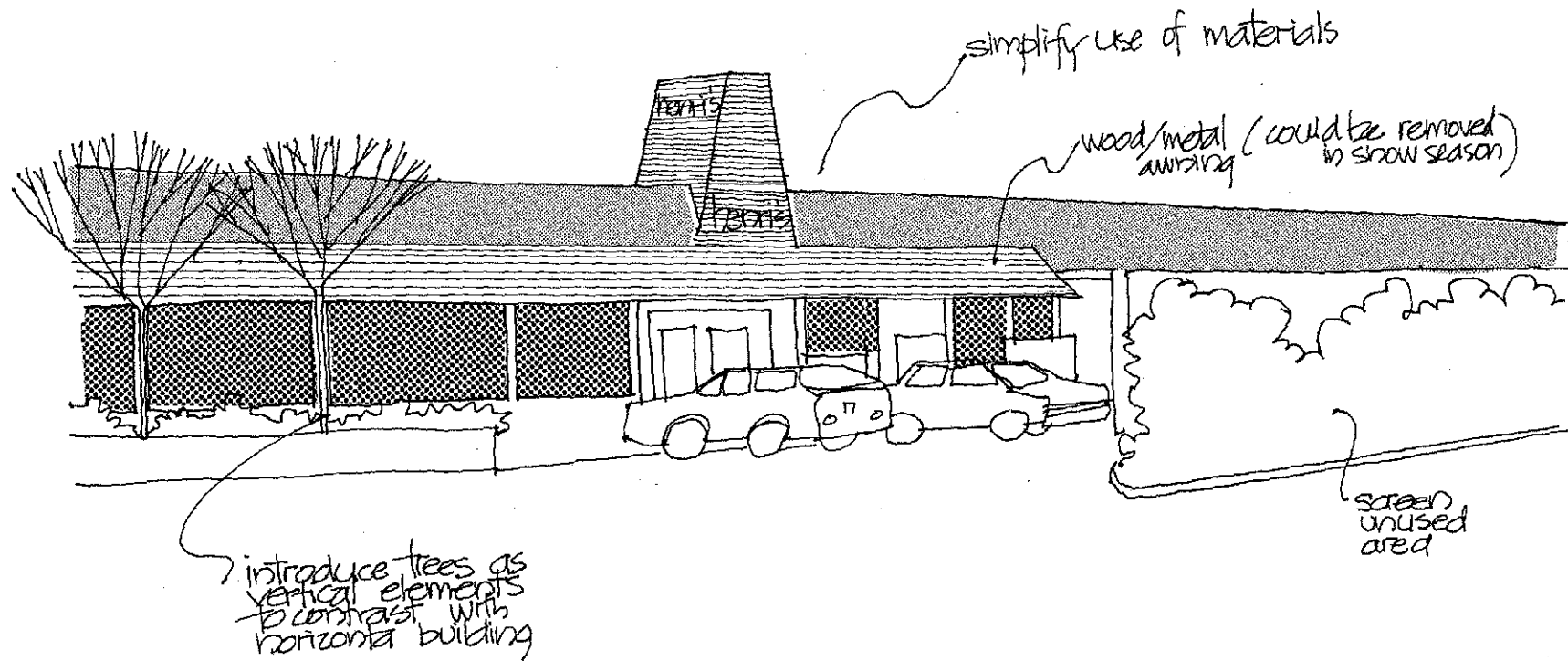
The following photos and sketches show comparisons between existing developments and suggested possibilities for improvement of those developments. Also included are some general guidelines for commercial and industrial development and roadways.

20 photos sketches

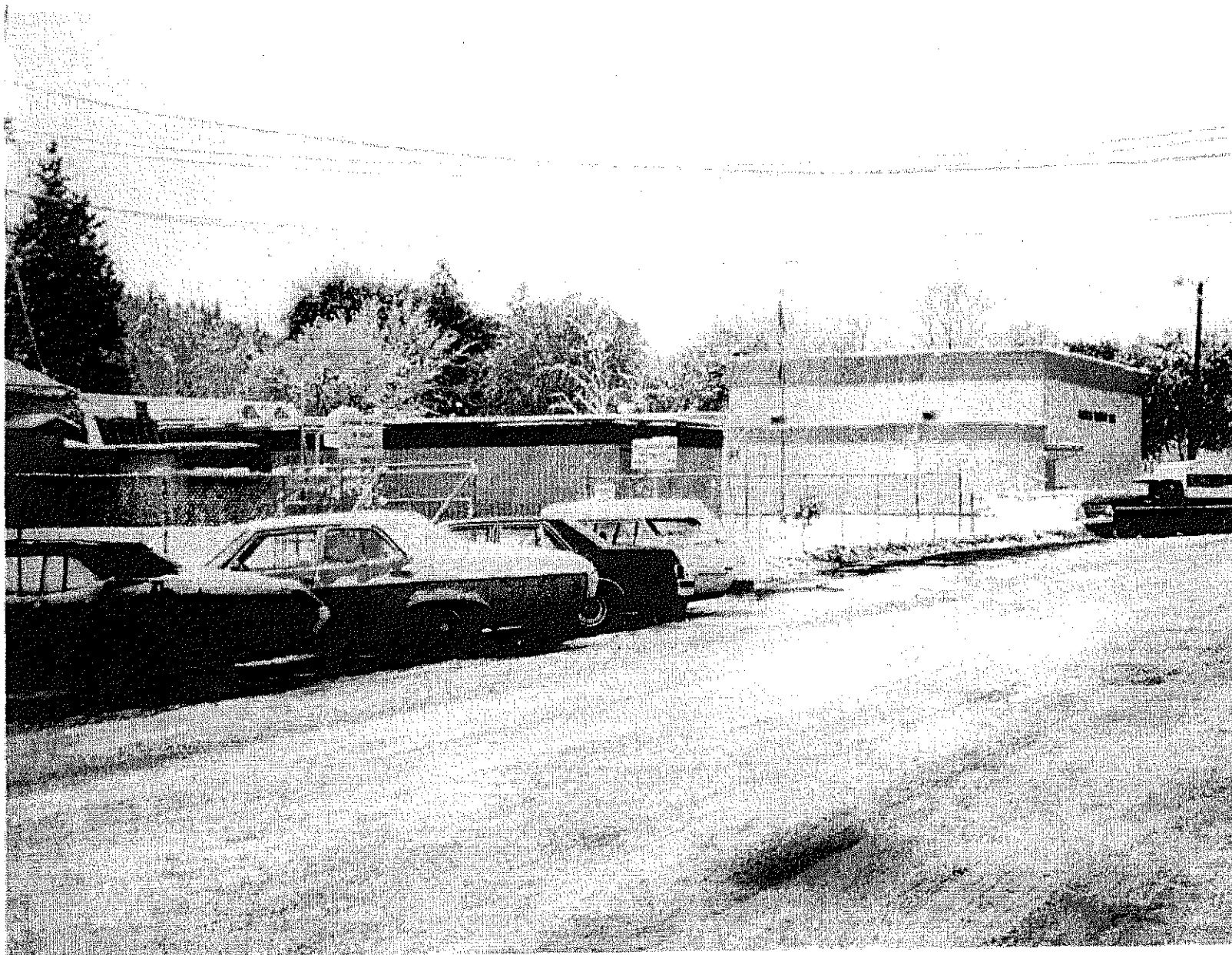


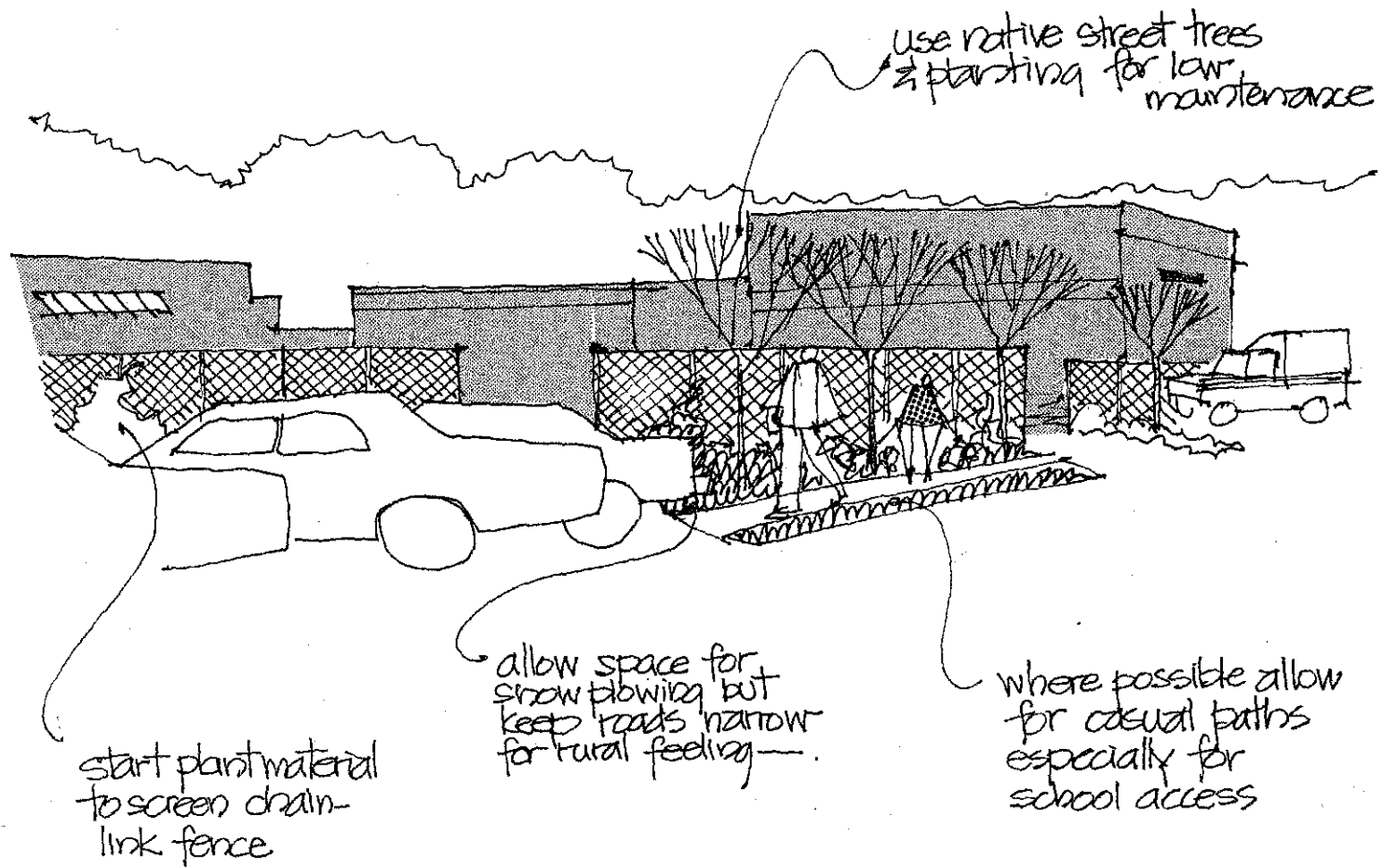


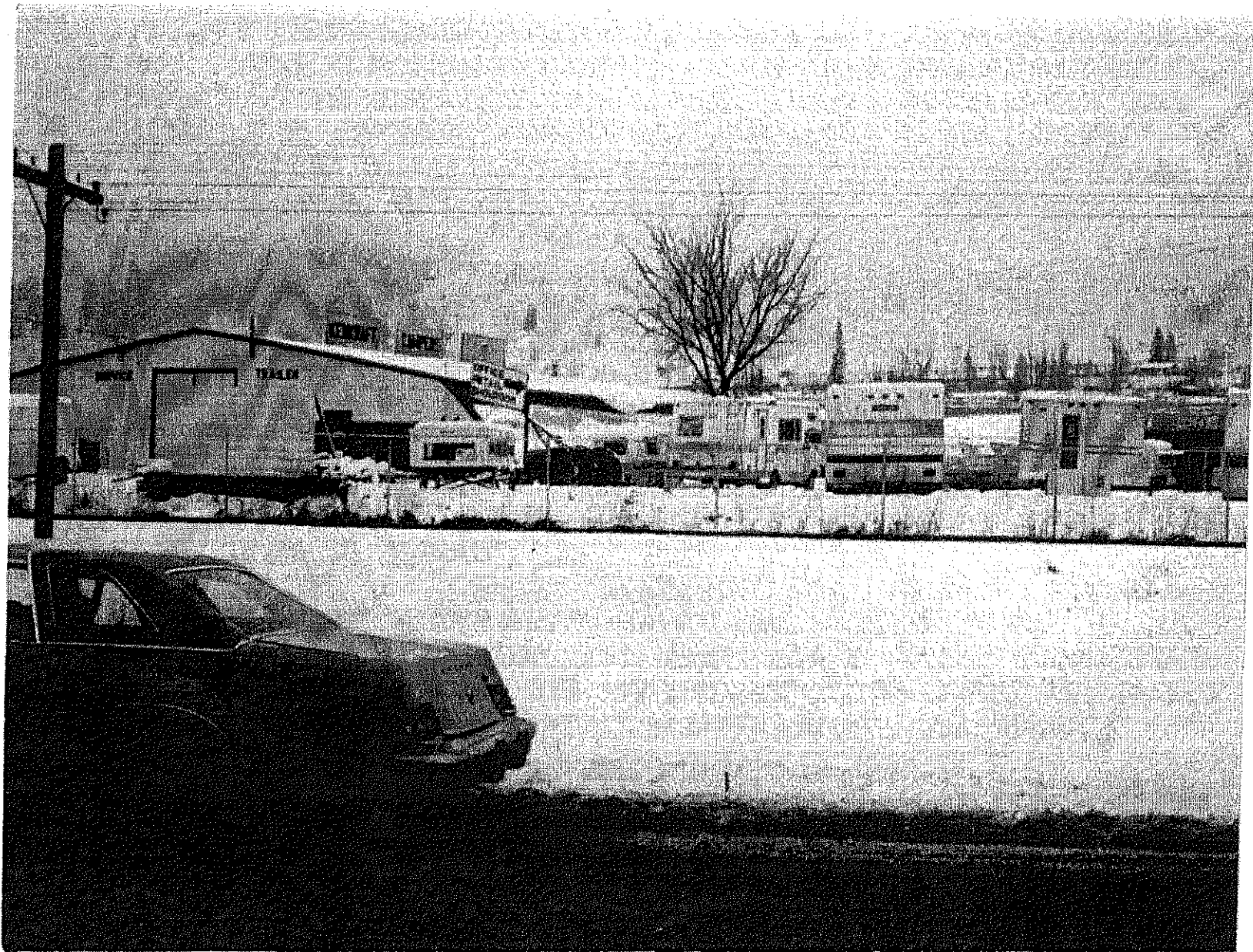


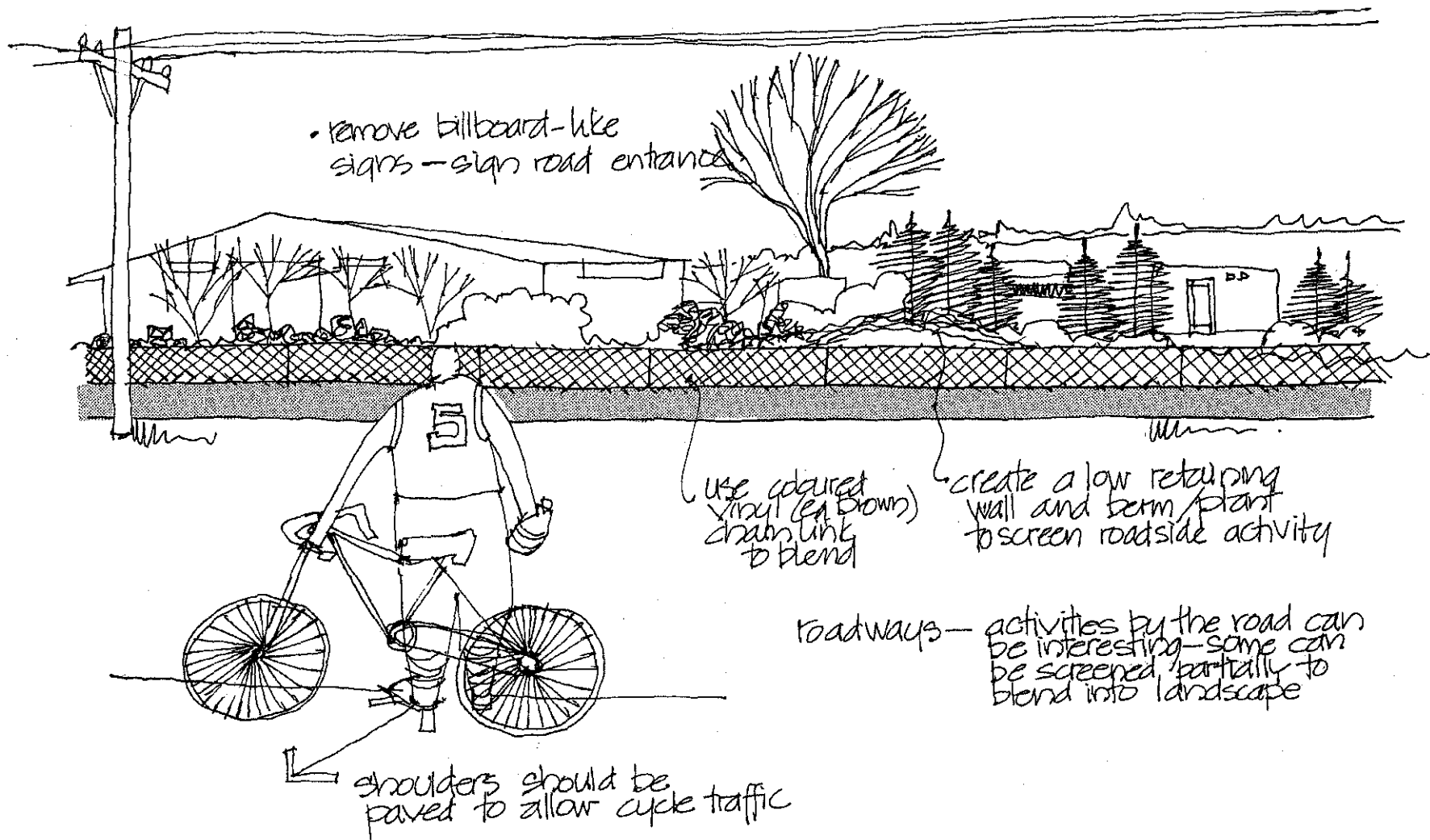


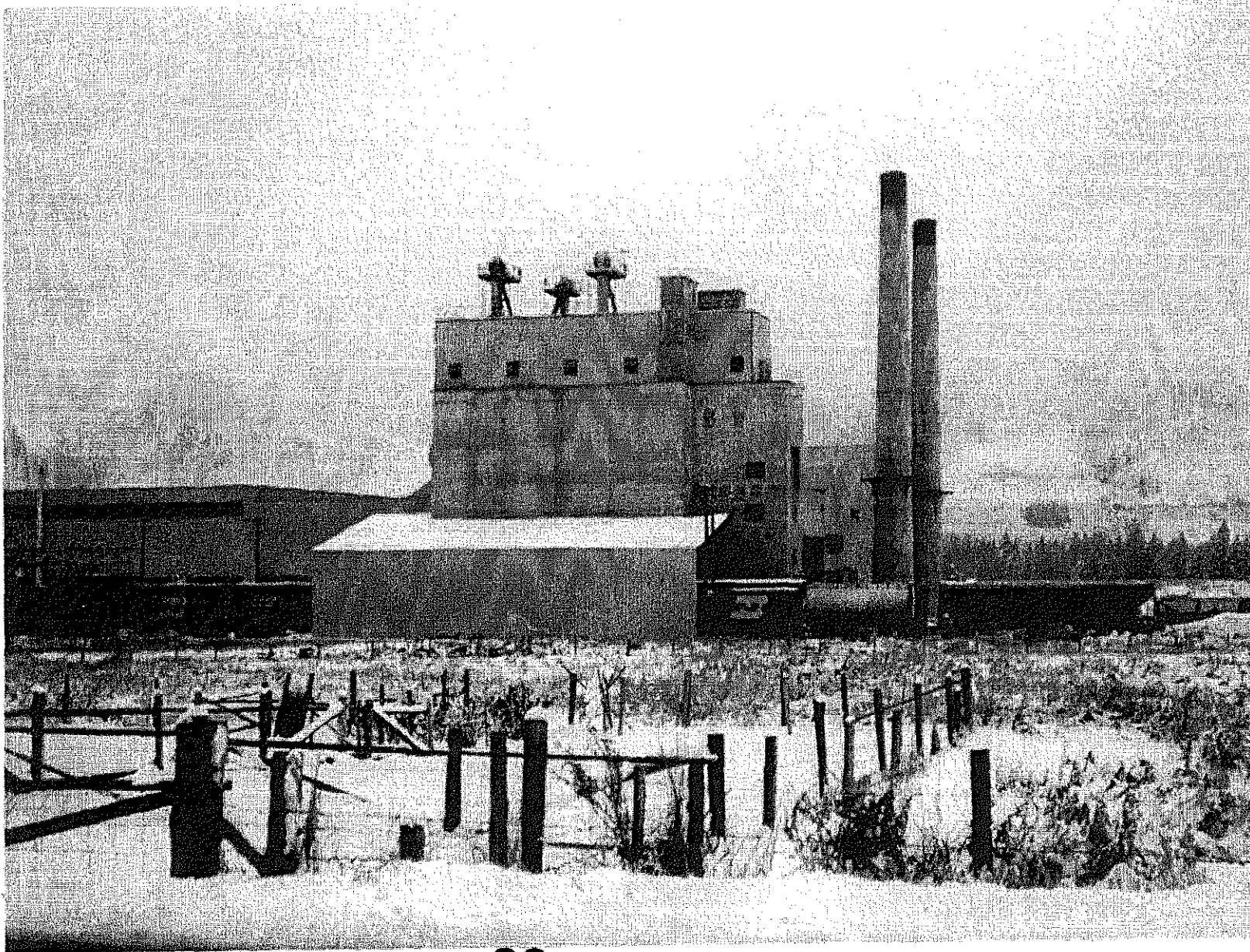
- commercial:
- single storey / low scale development
 - coordinate facade & signage
 - screen storage or unused areas
 - allow visibility of merchandise

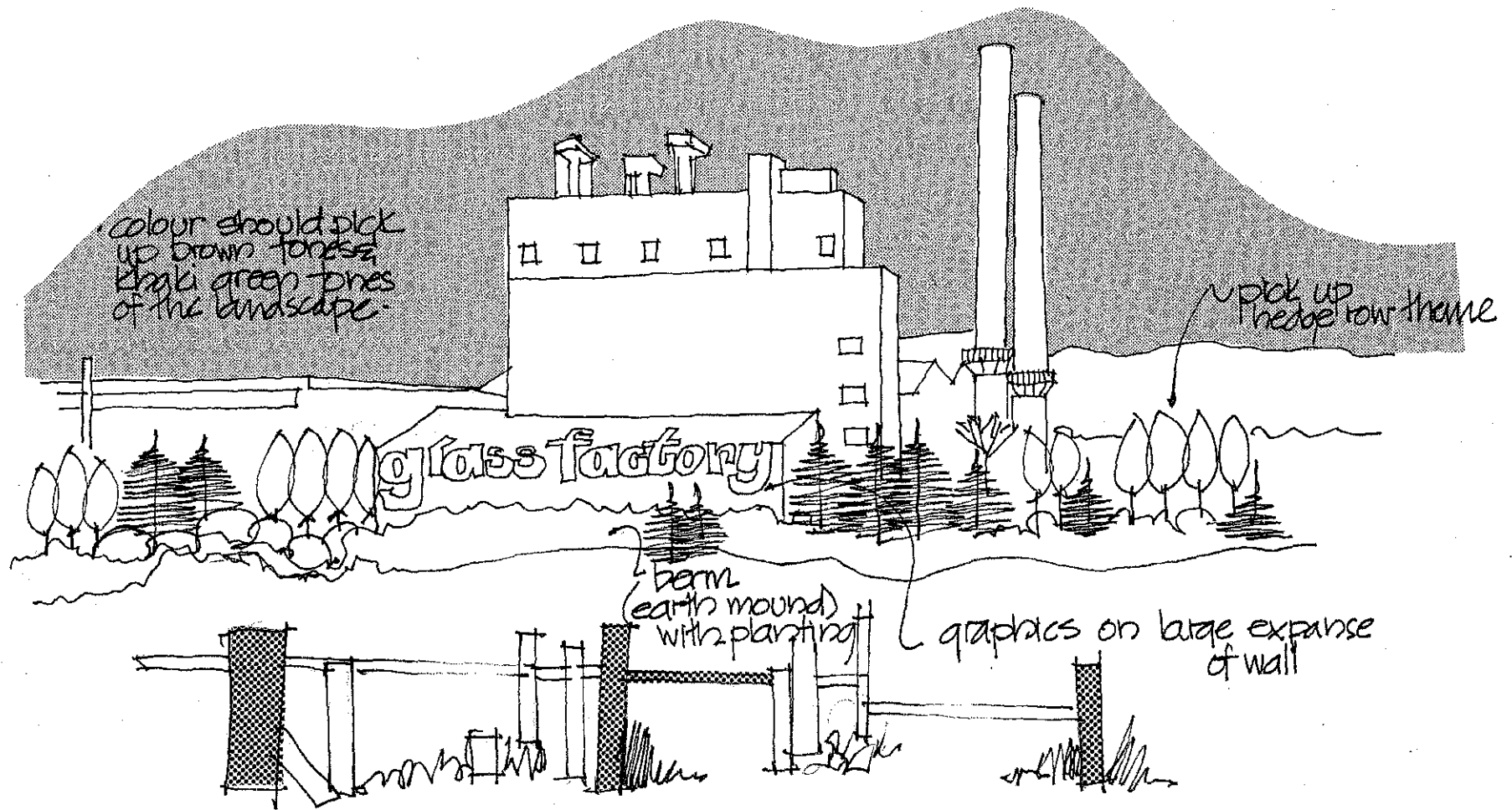


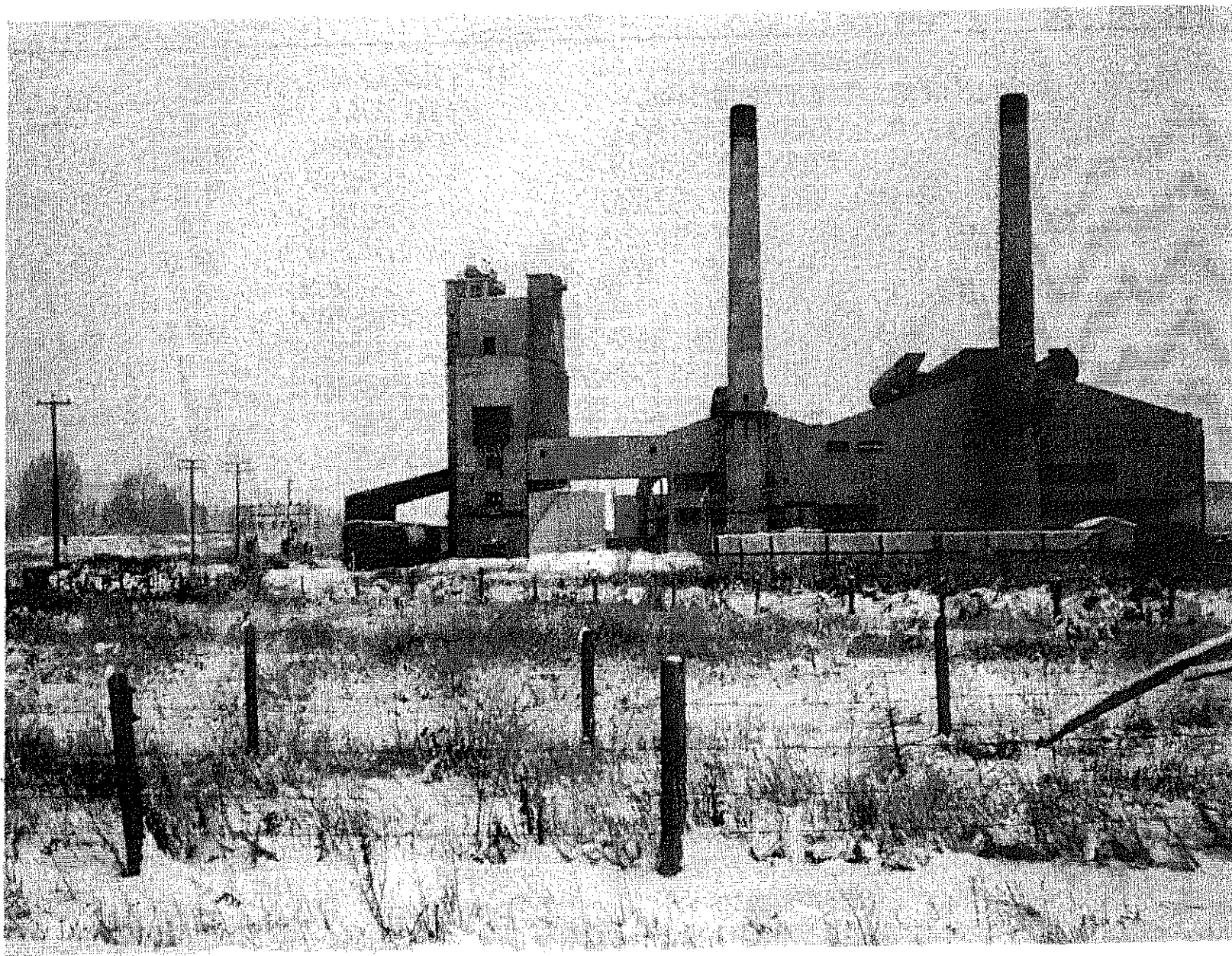


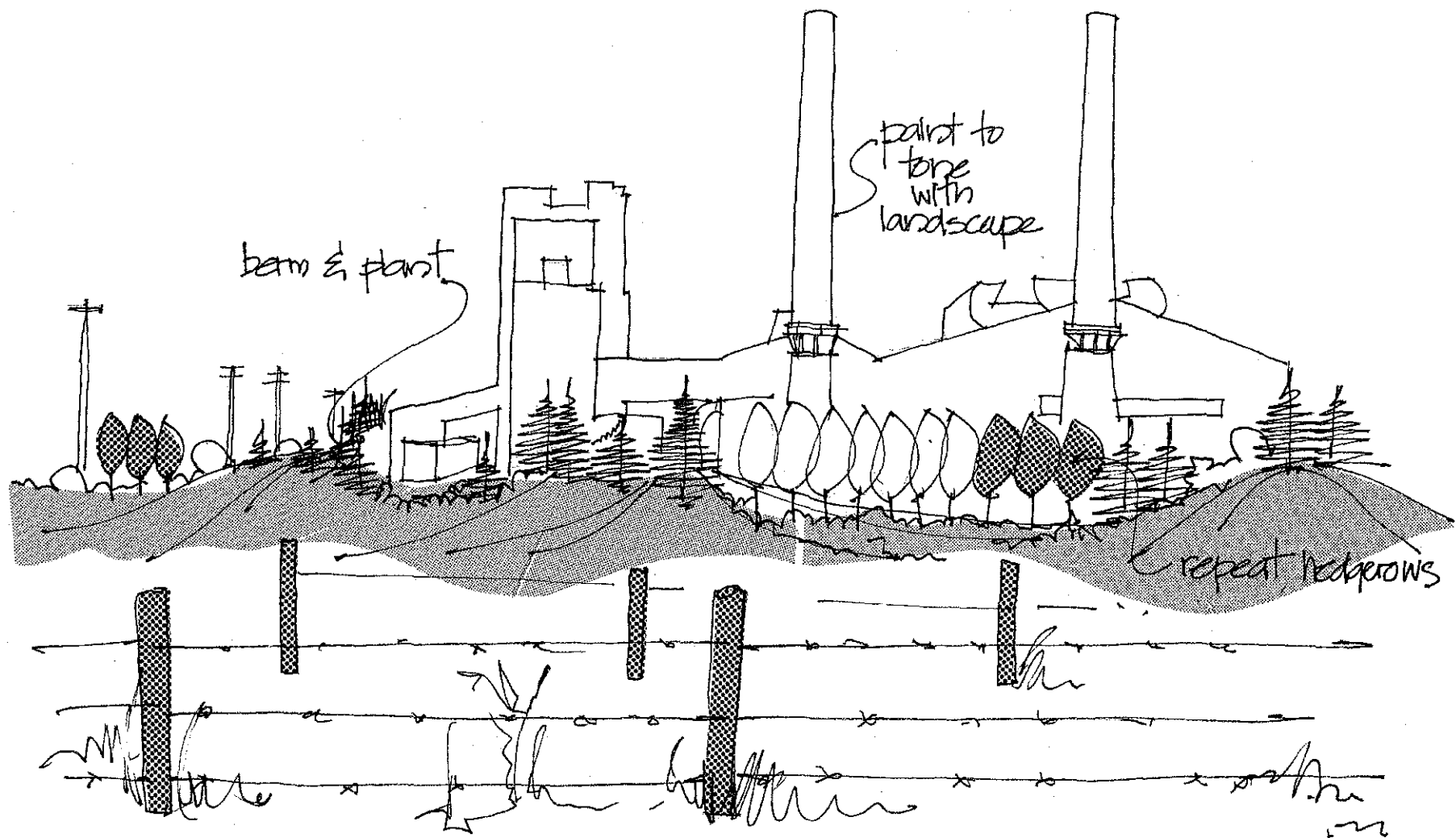












■ Designation of development permit areas to have **control** over sensitive landscape areas such as Middleton Mountain and Buchanan Road. (See official Community Plan)

■ Encourage the involvement of professionals with a **team** approach to development: planners, engineers, landscape architects, architects, This involvement could perhaps only occur in development projects of a significant nature although the team approach could be encouraged at any development level.

■ An advisory design panel could be appointed to review preliminary applications and working drawings.

■ **bonding** should be required to ensure landscape designs are carried out as per approved plans.

■ It is important that the Coldstream District makes clear its concern over the environmental protection of its natural resources to the appropriate government agencies.

Esthetics and Visual Resource Management for Highways, Jones & Jones, Seattle, Washington for U.S. Dept. of Transportation, 1977.

planning/visual analysis

Site Planning, Kevin Lynch, Cambridge, Mass. for the M.I.T. Press, 1962.

Spallumcheen: the visual environment, Bill Yeomans, B.C. Land Commission, 1977.

I-70 In a Mountain Environment, Vail Pass Colorado, Colorado Dept. of Highways, FHWA- TS- 78-208

erosion control

Michigan Soil Erosion and Sedimentation Control Guidebook, Michigan Bureau of Water Management, 1975.

Local nursery catalogues

plant material

Lyons, C.P. Trees, Shrubs & Flowers to know in B.C., J.M. Dent & Sons, Toronto, Vancouver, 1952.

Sunset Western Garden Book Land Magazine & Book Co. California, 1967.

Wyman, Donald Wyman's Gardening Encyclopedia Macmillan Publishing Co. Inc. New York 1971

note:

Moura Quayle: Landscape Architect is now
Quayle. Gauld: Earth Art Partners.

Landscape architects involved:

Moura Quayle, John Gauld, Catherine Berris

appendix

□ recommended ■ highly recommended

Recommended plants for general landscape use:
(coldstream)

		windbreak	hedge/screen	erosion control	native plant	drought resistant
deciduous trees	Acer sp.				□	□
	Betula sp.				□	
	Crataegus sp.				□	■
	Fraxinus sp.					
	Gleditsia sp.					
	Malus sp.				□	□
	Platanus acerifolia					
	Populus sp.	□			□	
	Prunus sp.				□	□
	Quercus sp.					
	Robinia pseudoacacia					■
	Salix sp.	□			□	
	Sorbus sp.				□	□
	Tilia sp.					
conifers	Juniperus scopulorum	■	■		■	■
	Larix sp.				□	
	Picea sp.	□	□		□	□
	Pinus sp.	■	■		□	■
	Thuja occidentalis	■	■			
	Tsuga sp.	■	■		□	
shrubs (deciduous)	Amelanchier sp.	■	■		□	
	Caragana sp.		■			□
	Cornus sp.		■	■	□	
	Cotoneaster sp.			■		□
	Maple					
	Birch					
	Hawthorn					
	Ash					
	Honey Locust					
	Crabapple					
	London Plane Tree					
	Poplar	□				
	Cherry / Plum					
	Oak					
	Black Locust					
	Willow	□				
	Mountain Ash					
	Linden					
	Rocky Mt. Juniper	■	■		■	■
	Larch				□	
	Spruce	□	□		□	□
	Pine	■	■		□	■
	Eastern red cedar	■	■			
	Hemlock	■	■		□	
	Serviceberry	■	■		□	
	Pea shrub		■			□
	Dogwood		■	■	□	
	Cotoneaster			■		□

		windbreak	hedge/ screen	erosion control	native plant	drought resistant
Eleagnus sp.	Russian olive	■	■		□	□
Euonymus alata	Burning Bush		■			
Hippophae rhamnoides	Sea Buckthorn	■	■			■
Lonicera sp.	Honeysuckle	■	■	■	□	
Philadelphus sp.	Mock orange		■		□	
Physocarpus opulifolius	Ninebark		■			■
Potentilla sp.	shrubby cinquefoil				□	□
Prunus sp.	cherry / Fl. Almond		■		□	□
Rhus sp.	Sumac			■	□	□
Ribes sp.	currant	■	■		□	
Rosa sp.	rose		■	■	□	□
Sambucus sp.	elderberry	■	■		□	
Spiraea sp.	Spiraea		■		□	
Symphoricarpos sp.	Snowberry		■		□	
Syringa sp.	Lilac	■	■			
Viburnum sp.	Viburnum	□	■		□	□
Juniperus sp.	Junipers		□	□	□	□
Pinus mugo	Mugo Pine	■	■	■		■
Thuja sp.	Arbor vitae	■	■		□	
* marginally hardy - plant in sheltered locations / hardy strains						
Barberis sp.	Barberry		■		□	□
Cotoneaster sp.	Cotoneaster			□		□
Cytisus / Genista	Broom			□	□	■
Euonymus sp.	Euonymus		□	□		□

ground cover

		windbreak	hedge/screen	erosion control	native plant	drought resistant
Adiantum, Blechnum, Polystichum	Ferns				<input type="checkbox"/>	
Kalmia latifolia	Mountain Laurel	<input checked="" type="checkbox"/>			<input type="checkbox"/>	
Mahonia aquifolium	Oregon Grape	<input type="checkbox"/>			<input type="checkbox"/>	
Pieris japonica	Andromeda	<input checked="" type="checkbox"/>				
Pyracantha	Firethorn		<input type="checkbox"/>			<input type="checkbox"/>
Rhododendron	Rhododendron	<input type="checkbox"/>		<input type="checkbox"/>		
Arctostaphylos uva-ursi	Bearberry		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Gaultheria procumbens	Wintergreen		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Hedera helix	English Ivy		<input checked="" type="checkbox"/>			
Lonicera sp.	Honeysuckle		<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Rachysandra terminalis	Japanese Spurge		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Paxistima sp.	Oregon Boxwood		<input checked="" type="checkbox"/>			
Vaccinium vitis-idaea	Lingonberry		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Vinca	Periwinkle		<input checked="" type="checkbox"/>			