Conservation Design

Conservation design, or cluster development, refers to the practice of concentrating new development on one part of a property while leaving the remainder largely undisturbed or rehabilitated. It is an alternative to the typical “cookie-cutter” style of subdivision and is beneficial in the protection of environmentally sensitive areas.

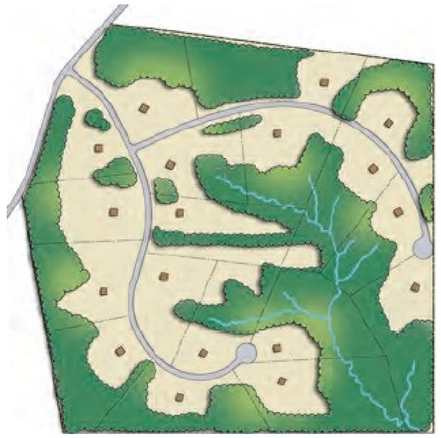


Figure 1: Conventional Development Pattern[1]

Under the conservation design method, the first stage of a development application would be a site assessment to determine the portion of the parcel that is most suitable for development.

In a conservation design scenario, the developer would be allowed to concentrate density in areas appropriate for development in exchange for setting aside the remaining land for environmental protection. This would result in the same number of lots, only smaller in size, with less road surface and more public green spaces. This type of subdivision commonly results in higher property values due to the increased green space included in the development.

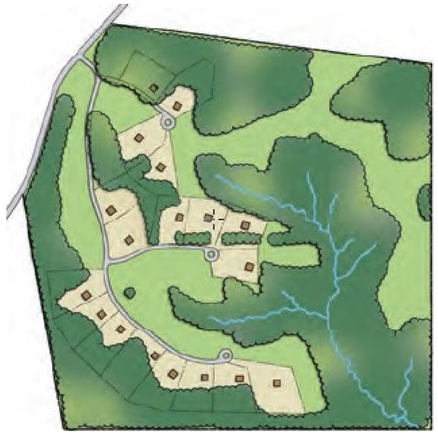


Figure 2: Subdivision by Conservation Design[1]

Note: Same overall density across the parcel, but smaller lots ensure that environmentally sensitive areas are protected as open space.

How can conservation design be applied in the Alberni-Clayoquot Regional District?

Conservation development in the Regional District is not common. However, the use of conservation design principles for new development could be a great benefit to the Alberni Valley. New development in key areas such as Sproat Lake and along the Somass and Stamp Rivers would see improved environmental protection with cluster development.

With these principles, potential subdivision of farm land across the Regional District would also be less detrimental to agriculture in the Valley. Development is clustered on less productive land while protecting the remainder for active agricultural use.

Sources:
1 - Conservation Subdivision Design Handbook. Southwestern Illinois Resource Conservation & Development Inc. http://www.swircd.org/
2 - Smart Bylaws Guide. West Coast Environmental Law. http://www.wcel.org/
3 - Green Communities Guide. Land Stewardship Centre of Canada. http://www.landstewardship.org/

Conservation Design for Subdivisions. Randall G. Arendt, 1996.
Rural By Design. Randall G. Arendt, 1994.

Examples of Conservation Design

1. District of Highlands

The District of Highlands, near Victoria, addresses most development applications through unique zoning. An example of this kind of development is the subdivision of a 190 hectare property at Scafe Hill.

Previous zoning on the property would have permitted a subdivision of 15 lots with a minimum lot size of 12 hectares (29.6 acres) and no retained public green space. Due to environmentally sensitive areas and the cost of building roads, spot zoning was brought in to encourage cluster development. As a result, 26 lots were created, averaging 1.5 hectares (3.7 acres), and 145 hectares (358.3 acres) was protected for residents and public use and was added to an adjacent regional park.

The land owners, municipality and a conservation trust also registered joint conservation covenants on the newly created lots in order to protect smaller environmental features. This resulted in approximately 90% of the original property remaining in its natural state.[2]

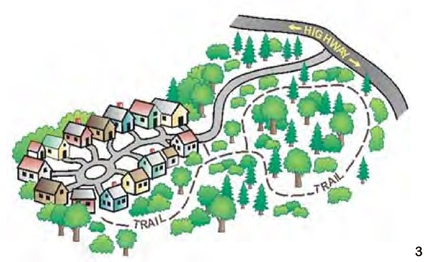
2. Strathcona County, Alberta

Strathcona County promotes more compact development to lessen the encroachment onto agricultural and environmentally sensitive land.

Deer Mountain Estates was a 53 lot development with a minimum parcel size of 2 hectares (5 acres). Due to the application of conservation design, 43% of the property was preserved as open space. Conservation easements were used to create wildlife corridors around the perimeter of the development and each lot contains a 50m (164 ft) conservation covenant, a legal document requiring vegetation retention. An additional 7.8 hectare (19.2 acre) marsh area was protected as a Public Utility lot.[3]

Advantages of Conservation Design

- Developments are designed to minimize impact on environmentally sensitive areas.
- Protected green space corridors are created, which provide habitat for wildlife.
- Improved storm water filtration through protected watercourse riparian setbacks.
- Protection of agricultural land.
- Vegetation retention acts as a carbon sink by removing CO_2 and other pollutants from the atmosphere.
- Preserves rural character of the area.
- Reduced water usage by creating smaller lots.
- Houses can be sited in areas with the most suitable soils for sewage disposal.
- Maintaining open spaces and public parks can benefit tourism.



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- Lower cost to the developer due to less road and utilities infrastructure.
- Higher property values due to protected green spaces and common use parks.
- Provides the opportunity to create public park land at no cost to the taxpayer.