



**URBAN DEVELOPMENT INSTITUTE- OKANAGAN CHAPTER**

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1435 Water Street  
Kelowna, BC V1Y 1J4

**Attention: Moudud Hasan**

**Subject: UDI Review of Hillside Cross Sections**

The Urban Development Institute (UDI) is a national association (with international affiliations) of the development industry and its related professions. The corporate members of the UDI - Okanagan Chapter represent hundreds of individuals involved in all facets of land development and planning, including: developers, property managers, financial lenders, lawyers, engineers, planners, architects, appraisers, real estate professionals, local governments and government agencies.

As a Partner in Community Building, the UDI Okanagan is committed to working with communities and governments to create and achieve the vision of balanced, well-planned, sustainable and affordable communities.

In response to the updated Hillside Road cross sections, please note the following general and specific comments:

General:

1. UDI suggests that typical plan views for each road section be developed to help in the review and analysis. Plan views should illustrate the typical arrangement envisioned for all above and below ground features and services including curbs and sidewalks, lot lines, driveways, parking “bump-outs”, street trees, streetlights, hydrants, sewers, water mains, water and sewer service connections, sewer inspection chambers, water curb stops, CB’s and leads, electrical / tel / cable conduits, shallow utility service boxes and vaults, gas lines, transformers, etc.
2. In hillside areas, driveway locations will typically be at the high side of the lot. Successfully integrating all of the components of these typical cross sections will vary depending on the specific terrain, the frequency of fronting lots and driveway spacing. UDI hopes that the eventual cross sections will remain somewhat flexible to deliver the appropriate functionality while accommodating the desired mix of lots and land use adjacent to the roadway.
3. The broad issue of “grandfathering” existing cross sections in areas where there is a master plan or continuation of larger developments must be addressed in the bylaw.

4. While we appreciate that the City has determined sidewalks will be present on all classifications of new roads, UDI still feels that short cul-de-sacs and low volume local roads can function under a shared use approach without the need for dedicated sidewalks.
5. Shallow utilities can, in most cases, be provided only on one side of the street with conduit crossing for individual services.
6. The shallow utility companies typically will not approve of their conduit lines running under curbs as shown on a number of the road sections.
7. A number of the road sections show the gas line located under the sidewalk. This will make it hard for the gas company to install the house service connections, normally done after the sidewalks are complete.
8. As a general principle in low density residential areas, UDI recommends that the cross section does not include landscaping, but rather the landscaping is introduced on the lot side of the cross section. Homeowners are much more likely to maintain the area between property line and the street if it is contiguous with their yard than if it is separated by a sidewalk. In addition, it will be difficult for homeowners to install underground irrigation to a boulevard area separated from their yard by an existing sidewalk.
9. UDI is unsure of the consequences of stating a maximum and minimum slope outside and adjacent to the road right of way. These slopes will be dictated by the civil and geotechnical engineering required to support the road cross section. For example, you may be near a vertical rock cut or on top of a structure retaining system that would exceed these grade limitations.

#### Cul-de-Sac:

1. UDI recommends design speed of 30km/h.
2. S/W to be located at back of curb.
3. Shallow utilities can be on one side only and should be behind a curb or sidewalk. This could result in an offset cross section to the dedication and will eliminate service boxes in the sidewalk.
4. If shallow utilities are behind the sidewalk on one side, UDI is unsure of the benefit of a 1.5 m boulevard on the non-fronting lot side of the cross section.

#### Local:

1. UDI recommends design speed of 30 km/h.
2. S/W to be located at back of curb and likely on one side only unless the local road serves unique land uses on both sides (such as a school or park).
3. Shallow utilities can be on one side only and should be behind curb or sidewalk. This could result in an offset cross section to the dedication and will eliminate service boxes in the sidewalk.
4. If shallow utilities are behind the sidewalk on one side, UDI is unsure of the benefit of a 1.5 m boulevard on the non-fronting lot side of the cross section.
5. Where parking spaces are provided in "bump-outs" a simple cross fall back to the main roadway may not be sufficient for drainage. Catch basins may be required at the downhill end of these parking bays on sloped streets.

6. On the cross section for fronting lots one side or no sides, please take mind of the location of the storm main. There may not be enough separation to fit catch basins.

Minor Collector:

1. UDI recommends design speed of 40km/h.
2. S/W to be located at back of curb.
3. UDI recommends the same standard separation for deep utilities.
4. Shallow utilities can be on one side only and should be behind a curb or sidewalk. This could result in an offset cross section to the dedication and will eliminate service boxes in the sidewalk.
5. If shallow utilities are behind the sidewalk on one side, UDI is unsure of the benefit of a 1.5 m boulevard on the non-fronting lot side of the cross section.

Major Collectors:

1. UDI recommends design speed of 50km/h.
2. Typically there are no driveway access points on Major Collectors. The difference between boulevards and without boulevards will therefore be one of aesthetic and maintenance issues. As mentioned under the general comments, homeowners are more likely to maintain boulevards that are contiguous with their yards versus ones that are separated from their yard by a separate sidewalk.

Sincerely

**URBAN DEVELOPMENT INSTITUTE OKANAGAN CHAPTER**

Per: Andrew Bruce, Past President of UDI Okanagan

*Andrew Bruce*