IBRAHIM STORMWATER CONSULTANTS

Low Level Properties

Basically the area between your front kerb and boundary is council owned and most councils require that the drainage from a property be conveyed across this area via gravity means. So as you can see from the photos for a pipeline to travel across this area with a fall to the street, it would need to connect to a council pipeline in the street as the kerb is too high.

Many councils impose a strict design procedure to be followed if your property falls in this category. Reasons are explained later in this document.

The options that some councils allow in order of preference are:

1. An easement. Explained below.

2. An absorption / dispersion system. (Used to be called Rubble pits) Generally only allowed in sandy/clay soils. Most council restrict total hard surface area allowed per property as a percentage of the site area.

3. A charged system. Only some council allow this for single dwellings. Basically works by having a sealed pipe system where the top of pipe (your downpipe) is higher than the kerb.

4. A pump out system. Again only a couple of councils allow it, and is generally a very costly option to comply with council requirements.

The first course a property owner wishing to undertake any redevelopment of their property must take is to approach the adjoining down-slope owners to request that an easement be granted for the purpose of draining stormwater to Council's drainage system.

Please note that majority of single dwelling builders will NOT perform the task of obtaining an easement or constructing the pipeline in it, or investigating it. It will be the owners sole responsibility in providing the evidence that the easement exists and is functional. ISC's role is only to provide initial advice as below and possibly design the pipeline in the easement if the owner's surveyor or plumber do not provide that service. If this is required ISC will require a detailed contoured survey of all the properties affected and copies of the proposed easement drawings. This service will costed separately to any services provided by your builder.

<u>**Some Background:**</u>

A significant number of Development Applications received by Councils for dwellings are on the low side of the road. Up until now most houses built on these properties have either had direct access to a drainage easement, or have drained to a rubble pit, or to a dispersion trench. These dispersion structures have often proved ineffective, with pits being placed in clay (highly impermeable) or cut into solid rock in order to meet Council's drainage requirements, or are under the required size to disperse the expected loading. This means that stormwater fills the trench and then surcharges, flowing overland through downstream properties.

As houses and related hardened areas have become larger, increasing the amount of runoff and decreasing the amount of landscaped area, these systems have become increasingly ineffective. Many of these newer houses are situated such that there is only a meter between the house and the side boundaries, leaving only 2 meters for sheet flow to pass between the dwellings.

This results in increased depth and velocity of sheet flows, further increasing scour, erosion, and nuisance flooding.

Thus the development of properties on the low side of the street that do not have the benefit of a drainage easement is very limited due to the potential impact of the stormwater runoff from the increase in the impervious area on adjoining properties.

There are several options for property owners in this situation however Councils will generally not approve stormwater systems which drain against the natural grade of the land, without showing that the an alternative will not be adverse to the surrounding properties.

<u>Easements Explained:</u>

A common misunderstanding is what an easement is. An easement is a registered legal right over a property for a designated purpose such as drainage. It does not imply that a pipe or pit exists or is proposed in the easement. Being the beneficiary of an easement entitles you the rights to the purpose of the easement.

A simple example:

Bob's property falls to the rear, so when it rains the water flows towards his back or side fences. Bob now wants to develop his property. His first step is to check with his solicitor or surveyor to see if an existing easement on his rear neighbours property exists, and that he is a beneficiary to it. He also needs to confirm that the easement reaches a road frontage, stormwater canal or creek. Follow your appropriate Case to see what's next.

<u>Case 1.</u>

<u>Bob's Solicitor/Surveyor don't find any easement on title.</u>

Bob is required to approach his neighbours to negotiate in obtaining an easement over their property, which would commonly be 1m wide along their side boundary. ISC can provide advise on what width of easement may be required, and what if any other issues may need to be addressed.

Bob should take along with him a copy of the above file named "Low Level Properties", so as to inform the rear neighbours the benefits of providing an easement, as opposed to refusing. The neighbour should be made aware that council may insist that Bob take his rear neighbour Court, who under section 88k of the Act, can force a downstream owner to provide an easement provide reasonable compensation is made and no major adversity will occur if the easement is provided.

If the neighbour agrees to provide an easement, Bob should ensure that they sign the appropriate form confirming such, in order to submit his proposal to council. (These forms will shortly be available online, otherwise you can obtain them from your local council).

Bob then approaches his Solicitor and Surveyor to register the easement on their neighbour's property as soon as possible.

When Bob is ready to commence construction, he will need to construct the pipe and pits in the easement, as approved by council, (which ISC has would have gladly designed), by providing sufficient notice to his neighbour and complying with conditions on the easement such as reinstatement of any landscaping.

Bob can now happily complete construction of his property.

<u>Case 2.</u>

<u>Bob's Solicitor/Surveyor find an easement on title, that he is NOT a beneficiary too.</u>

Bob needs to approach his neighbours to explain that he requires to be added as a beneficiary to the easement on their property. Once agreed Bob approaches his Solicitor and Surveyor to register the new 88B on the easement on their neighbour's property as soon as possible. (An 88B instrument is a legal term for a set of conditions that are applicable to an easement, such as who is the beneficiary and what if any limitations exists.)

When Bob is ready to commence construction, he will need to construct the pipe and pits in the easement, as approved by council, (which ISC has would have gladly designed), by providing sufficient notice to his neighbour and complying with conditions on the easement such as reinstatement of any landscaping.

Even if the pipe and pits already exists they will need to be re-assessed to determine their condition and capacity, that they can accommodate the additional flows, and that the life expectancy of the pipe is to council's satisfaction

Bob can now happily complete construction of his property.

Case 3.

Bob's Solicitor/Surveyor find an easement on title, that he is a beneficiary too.

Lucky Bob!!! He can submit his application to council.

When Bob is ready to commence construction, he will need to construct the pipe and pits in the easement, as approved by council, (which ISC has would have gladly designed), by providing sufficient notice to his neighbour and complying with conditions on the easement such as reinstatement of any landscaping.

Even if the pipe and pits already exists they will need to be re-assessed to determine their condition and capacity, that they can accommodate the additional flows, and that the life expectancy of the pipe is to council's satisfaction

Bob can now happily complete construction of his property.

Need further advice?

Want to make it Simple?

Don't hesitate to call our office for all the assistance you need.