

Owner	Planning and Sustainability
Implementation	<Insert Date Here> 2017
Reviewed	Biannual
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PART 1 – POLICY OPERATION

Policy Development

This policy has been prepared under Part 2 (Division 2) of the City of Wanneroo's District Planning Scheme No. 2 Deemed Provisions.

Application and Purpose

The purpose of this Local Planning Policy is to provide clarity and guidance for the development assessment of site works and retaining walls associated with residential development.

This Local Planning Policy has been prepared in addition to State Planning Policy 3.1 – Residential Design Codes (R-Codes), and applies to all lots where the R-Codes apply. This policy expands on what is prescribed in the R-Codes pertaining to site works and retaining; such as providing for additional 'deemed-to-comply' standards as well as clarification on corresponding 'design principles'.

This policy does not apply for earthworks and retaining walls within the City of Wanneroo, undertaken pursuant to a subdivision approval. Such works may be subject to the guidance provided in the City's Local Planning Policy 4.5: Subdivisional Retaining Walls.

Objectives

The objectives of this policy are to:

1. Provide guidance to applicants in applying for site works and retaining walls on residential lots; as well as to provide guidance for the City in the assessment of such applications.
2. Minimise the impact of site works and retaining walls on the natural environment and landscape.
3. Protect the amenity of nearby landowners through greater care in the assessment of site works.
4. Promote site works and retaining walls that complement and are sympathetic to the topography of the surrounding land.
5. Ensure that retaining walls on all street and lot boundaries do not adversely impact on streetscapes, the character of the locality or on landowners of nearby land.

Definitions

In the case of development assessed under this policy, the words and expressions defined in Appendix 1 of the R-Codes apply. Key words and expressions not defined in Appendix 1 of the R-Codes, but are applied through this policy, are defined below:

Building Pad : means a portion of a site where the ground has been prepared through site works to facilitate the establishment of a finished floor for a building (such as a building slab).

Irregular-shaped site : means a site that is:

- Not a 'rectangular site', as defined by this Policy; and
- Shaped in a way that is different to the examples of sites shown in **Figure 1**.

Rectangular site : means either:

- A site that has no less or no more than four boundaries; or
- In the case of a site that has a corner truncation – a site that has no less or no more than one boundary adjoining a truncation and four other boundaries.

Examples of rectangular sites are shown in **Figure 1**.

Retaining wall : means a wall constructed in brick, stone, concrete, limestone or other material required and designed to retain soil, but does not include walls used primarily for aesthetic landscaping purposes (such as planter boxes).

Site plan : means a detailed plan or drawing that shows the location of development or other works proposed on a land parcel.

Terracing : means the creation of one or more raised banks of earth with vertical or sloping sides and flat levels formed across a slope. A demonstration of terracing is depicted in **Figure 4** of this Policy.

PART 2 – GENERAL POLICY PROVISIONS

1.0 Application Submission Requirements

1.1 Applications for site works or retaining on vacant lots should be made concurrently with an application (for a building permit and/or a development approval) for dwellings on a site. Applications to alter site levels or for retaining walls prior to an application for dwellings being made will not be supported by the City.

1.2 Applications for development approval that involve any changes to ground levels and/or retaining should be accompanied by a site plan prepared by a licenced land surveyor or other suitably qualified person. The site plan should include the following detail:

- a) Existing levels on the site to an established datum as:
 - Contours at maximum intervals of 0.5 metres; and
 - Spot levels set apart appropriately, in consideration of the size and landform of the site;

- b) The position and dimensions, setback distances both horizontal and vertical, of existing buildings, retaining walls and other structures on the site;
- c) The location of any easement or services provided on or traversing through the site;
- d) Proposed site area boundaries of any proposed strata lots (if applicable);
- e) Proposed finished site levels;
- f) The position and height of proposed retaining walls. The height of the proposed retaining walls is to be demonstrated by depicting proposed top of wall (TOW) and bottom of wall (BOW) levels; and
- g) Any other information as may be requested by the City.

2.0 Alteration of Ground Levels and Establishing Building Pad Levels

2.1 Excavation and Filling on a Development Site

The principles of 'cut and fill' below are to be read as support for the interpretation of the design principles of Clause 5.3.7 (P7.1 and P7.2) or Clause 6.3.6 (P6.1 and P6.2) of the R-Codes.

A 'cut and fill' approach should be taken in considering all applications involving alteration of levels on a site. The principles of 'cut and fill' on a development site is such that:

- a) Equal amounts of cut and fill is generally undertaken to establish finished ground levels; and
- b) Filling and/or retaining to the highest level of a site for the purpose of establishing a building pad level is not appropriate, and therefore should not be supported.

Note: The provision above supports the interpretation of the design principles of the R-Codes, and should not be construed as amendments to the deemed-to-comply provisions of the R-Codes.

2.2 Establishing Building Pad Levels

2.2.1 The provisions in this sub-section (2.2.1) are provided in addition to the deemed-to-comply provisions prescribed in Clause 5.3.7 (C7.2 and C7.3) of the R-Codes.

For Single Houses or Grouped Dwellings on a site which have a natural ground level (NGL) difference of less than 3.0 metres, an appropriate building pad level should be established by following the steps below:

- a) Calculating the average NGL of the site as shown **Figure 2**. Where sites have a NGL difference of at least 0.5 metres within the first 3.0 metres of the front boundary line; the average NGL of the site is instead calculated as shown in **Figure 3**.

b) A building pad should then be established at a level no more than 0.3 metres above the average NGL of the site, as it is calculated in (a) above.

2.2.2 For multiple dwelling developments or for all residential development types on sites that have a NGL difference **of more than** 3.0 metres, building pads should be established in accordance with to the 'deemed-to-comply' provisions prescribed in Clause 5.3.7 (C7.2) or Clause 6.3.6 (C6.2) of the R-Codes as follows:

Excavation or filling within a site and behind a street setback line limited by compliance with building height limits and building setback requirements.

2.2.3 The establishment of building pads should satisfy the design principles prescribed in Clause 5.3.7 (P7.1 and P7.2) or Clause 6.3.6 (P6.1 and P6.2) of the R-Codes in all instances.

Note: The term 'site' in the context of subsections 2.1, 2.2.1 and 2.2.2 above means as follows:

- For Single House or Multiple Dwelling development: the lot on which the Single House or Multiple Dwelling development will stand – except for land that forms part of a battle-axe leg; or
- For a Grouped Dwelling: the area allocated for the exclusive use or benefit of the occupants of that dwelling – except for land that is designated common property or forms part of a battle-axe leg.

2.3 Alteration of Ground Levels between a Front Boundary and Dwelling

2.3.1 This subsection (2.3.1) provides for additional deemed-to-comply requirements to that prescribed in Clause 5.3.7 (C7.1) of the R-Codes.

Excavation and filling within the front setback can be supported if terracing is provided that satisfies the following requirements:

- a) The first terrace level if located within 1.0 metre of the front boundary should not exceed 0.5 metres in height; and
- b) Subsequent terraces should be spaced a minimum of 1.0 metre apart, and retaining wall height for terracing should not exceed 1.0 metre.

Notes:

1. **Figure 4** of this Policy depicts how the provisions above can be practically satisfied.
2. Clause 5.3.7 of the R-Codes relates to the development of all single house and grouped dwelling developments as well as multiple dwelling developments in areas coded less than R40. Section 2.3.1 above does not apply to any development types that are subject to assessment under Part 6 of the R-Codes (e.g. multiple dwellings on sites R40 or greater).

2.3.2 Where excavation and filling in the front setback area cannot satisfy the deemed-to-comply provisions of Clause 5.3.7 (C7.1) of the R-Codes and/or the deemed-to-comply provisions outlined in subsection 2.3.1 above, excavation and filling should satisfy the design principles of the R-Codes.

Note: Clause 5.3.7 of the R-Codes and Section 2.3.1 relates only to the development of all single house and grouped dwelling developments as well as multiple dwelling developments in areas coded less than R40. Section 2.3.2 cannot be applied for development assessed under Part 6 of the R-Codes.

- 2.3.3 Where residential development is subject to assessment under Part 6 of the R-Codes, the principles of terracing as outlined in subsection 2.3.1 above (and **Figure 4**) can be considered as meeting the design principles prescribed in Clause 6.3.6 of the R-Codes.

Note: Section 2.3.3 prescribes a way in which design principles of the R-Codes can be met, and should not be construed as an amendment or replacement to any of the deemed-to-comply provisions of the R-Codes.

- 2.3.4 Terracing retaining walls adjoining side boundaries should satisfy the deemed-to-comply provisions of Clause 5.3.8 or Clause 6.3.7 of the R-Codes. If the deemed-to-comply provisions cannot be satisfied, the proposal should then be considered against the relevant design principles of the R-Codes pursuant to Section 2.4 below.

- 2.3.5 The principles of terracing in this policy only apply where the levels of a subject site rise from its front boundary (as it is shown in **Figure 4**). The terracing provisions of this policy do not apply where site levels decrease from a front boundary.

2.4 Retaining Walls within 1.0 metre of Side and Rear Boundaries

- 2.4.1 Retaining walls within 1.0 metre of lot boundaries should satisfy the deemed-to-comply provisions of Clause 5.3.8 (C8.1 and C8.2) or Clause 6.3.7 (C7) of the R-Codes.

- 2.4.2 In instances that a retaining wall proposed within 1.0 metre of a lot boundary does not satisfy the deemed-to-comply provisions as prescribed in sub-section 2.4.1 above, the proposal must then:

- a) Be considered against the relevant design principles of the R-Codes; and
- b) Be subject to consultation with affected landowners and/or occupants if the proposed retaining wall height is in excess of 0.5 metres.

3.0 **Consultation with Affected Landowners and Occupiers**

- 3.1 Proposals for changes to ground levels and/or retaining that do not comply with the deemed-to-comply provisions of the R-Codes and this policy may be referred to affected landowners and occupiers for comment. The requirement and procedure for consultation with affected landowners and occupiers is prescribed in Part 4 of the R-Codes, or as agreed by Council.
- 3.2 Proposals for changes to ground levels and/or retaining that do not satisfy the provisions or principles of this policy and/or the R-Codes may be refused by the City without consultation with affected landowners and occupiers.

POLICY FIGURES

Figure 1:

Examples of Rectangular Sites

(Refer to definition of 'rectangular sites' and 'irregular-shaped sites' in Part 1 of this Policy)

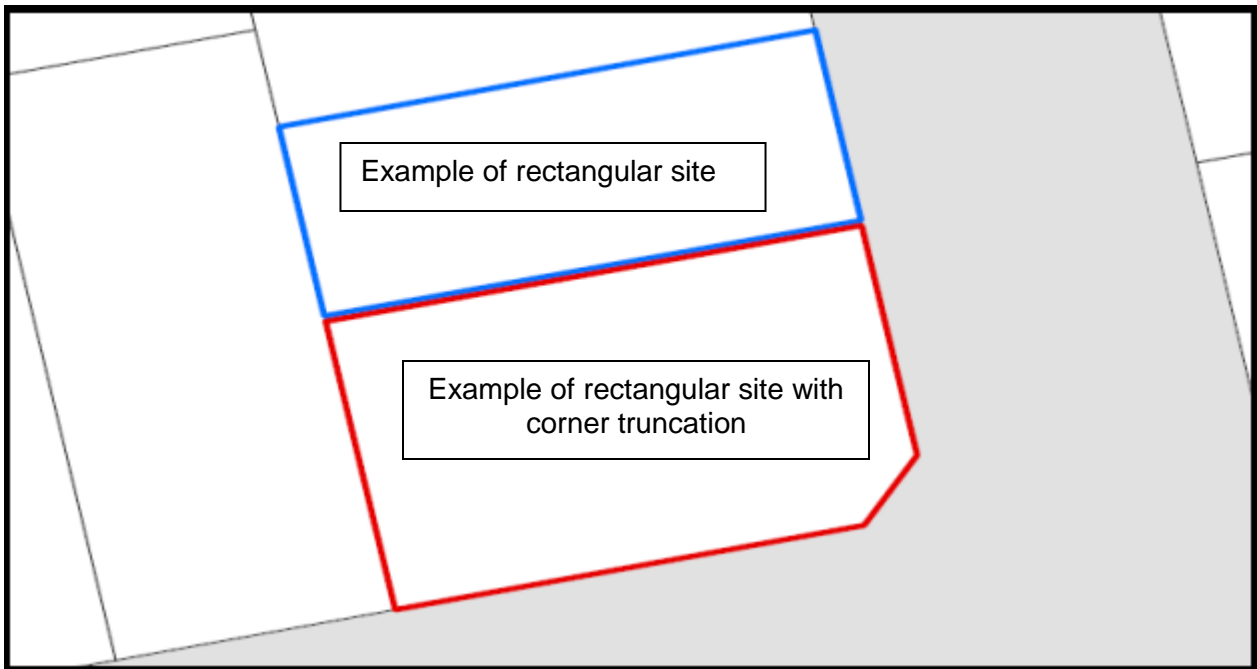
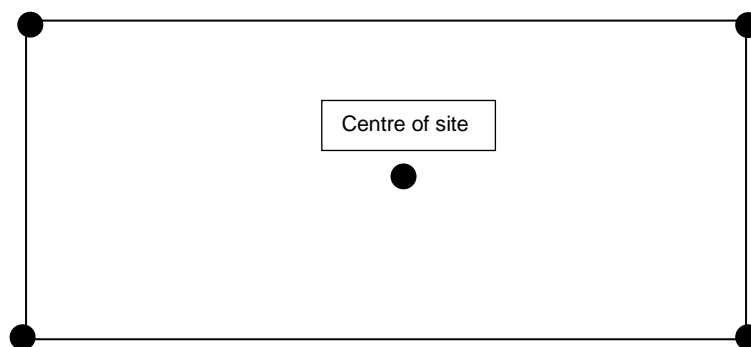


Figure 2:

Calculation of average natural ground level of a site and determination of appropriate building pad height.

Not to Scale



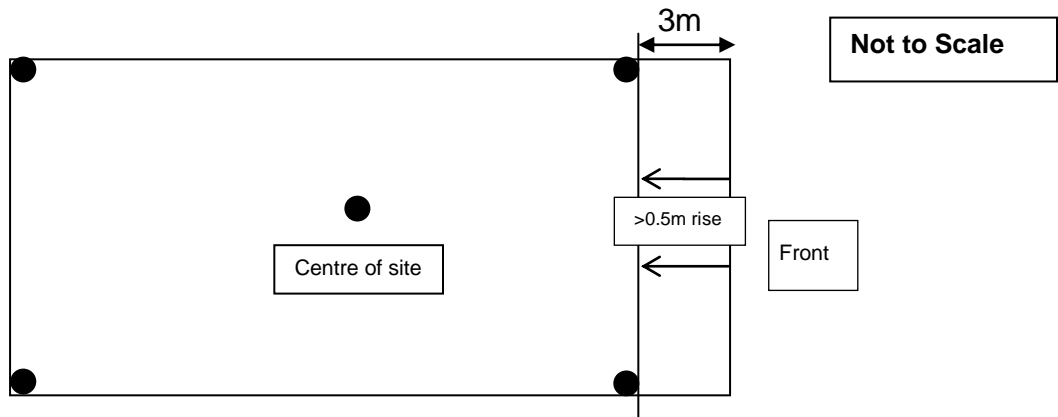
Average Natural Ground Level of Site (a) = $\frac{\text{Sum of the natural ground levels at the 5 points}}{5}$

Maximum Appropriate Building Pad Height = the result of (a) + up to 0.3 metres

NOTE: In performing the calculation above for an irregular-shaped site, the City may identify:

- Two ground levels on the front boundary and two on the site boundaries toward the rear of the site, with the four points forming a rectangular shape generally as shown on the figure above; as well as
- A fifth point in the approximate centre of the lot.

Figure 3: Calculation of average natural ground level and determination of appropriate building pad height, where the site rises above 0.5m from the front boundary.



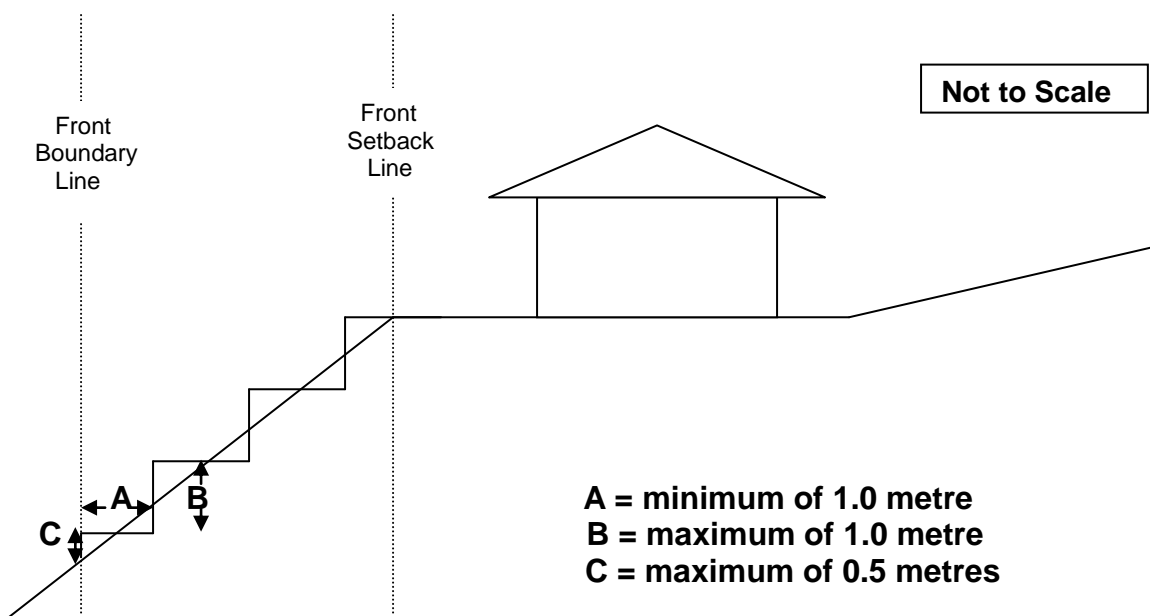
Average Natural Ground Level of Site (**a**) = $\frac{\text{Sum of the natural ground levels at the 5 points}}{5}$

Maximum Appropriate Building Pad Height = the result of (a) + up to 0.3 metres

NOTE: In performing the calculation above for an irregular-shaped site, the City may identify:

- Two ground levels setback 3.0 metres from the front boundary and two on the site boundaries toward the rear of the site, with the four points forming a rectangular shape generally as shown on the figure above; as well as
- A fifth point in the approximate centre of the lot.

Figure 4: Principles of Terracing



- A = minimum of 1.0 metre**
- B = maximum of 1.0 metre**
- C = maximum of 0.5 metres**