Building Over or Near Relevant Infrastructure

The Queensland Development Code Mandatory Part 1.4 (QDC MP1.4)

The QDC MP1.4 sets out specific requirements to ensure building work for a building or structure on a lot that contains, or is adjacent to a lot that contains, relevant infrastructure (Sewer/ Stormwater/ Water) is carried out so:

- it does not adversely affect the operation of the infrastructure or place any load on it; and
- when completed, it:
  - does not prevent the relevant service provider from gaining access to the infrastructure for the purpose of inspecting, maintaining or replacing the infrastructure; and
  - allows any gas that builds up in the infrastructure to escape in a way that ensures individuals in close proximity to a maintenance cover for the infrastructure are not harmed by the gas.

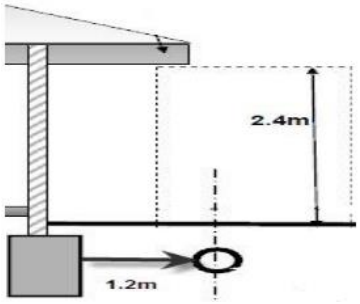

Figure 1: Distance from Underground Infrastructure for height clearance

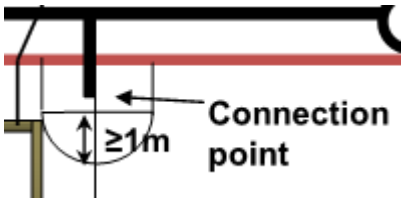

Figure 2: Clearance connection point

Complying with the Code

Where the proposed Building Work cannot comply with the specific provisions of the QDC MP1.4, a Referral (Concurrence) Agency approval is required from Council (under Planning Regulation, Schedule 9). A fee applies for the application.

The applicant must demonstrate how they can comply with the relevant Performance Criteria as set out in the **QDC Mandatory Provision 1.4 – Build over or near relevant infrastructure**. A copy of the QDC documents are available on the Department of Housing and Public Works website http://www.hpw.qld.gov.au > *Construction* > *Building and Plumbing* > *Building* > *Building laws and codes* > *Queensland Development Code* > *Current Parts*.

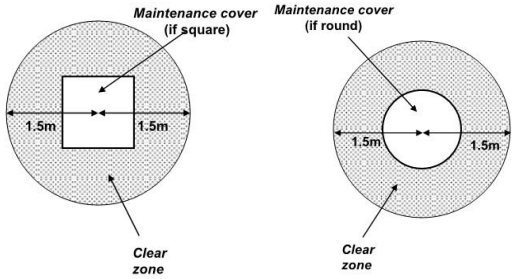

Figure 3: Distance from, centre of manhole

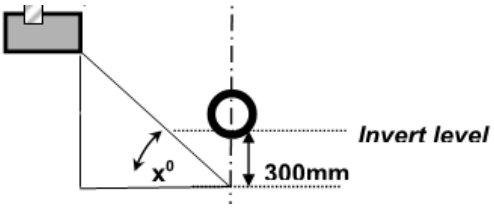

Figure 4: **Zone of influence:** is determined based on the angle of repose (x^0 *in the figure*). The angle of repose is determined based on the type of soil present where the building or structure is located.

Note: *There is no acceptable solution for sewer mains greater than 225mm diameter and stormwater mains greater than 375mm in diameter. In this instance, an application must be submitted for a class 1 or 10 building if it is within 3m of the infrastructure or the infrastructure is not 300mm above the zone of influence of the footings.*

Building Work	Building Over or Near Relevant Infrastructure as per QDC MP 1.4
Dwelling House **Secondary Dwelling** **Pools**	Referral application **NOT** required when structure is: • 1.5m distance from centre of manhole • 1.2m distance from underground infrastructure *(sewer/stormwater/water)* **OR** • 3m distance from underground infrastructure for sewer mains greater than 225mm diameter and stormwater mains greater than 375mm diameter • The invert level of the infrastructure is located 300mm above the point of the zone of the footings • 1m clear of all connection points *(in all directions)* • 2.4m height clearance *(measured from surface level e.g. slab)* If any of the above criteria cannot be met a Concurrence Agency Referral application is required.
Additions *e.g. Patio, Gazebo, Deck etc* **Outbuildings** *e.g. Shed, Garage, Carport etc* **Water Tanks**	Structures can be built over relevant infrastructure and a Referral application is **NOT** required when structure is: • All walls, columns and roofs are constructed from light weight material *(i.e. colorbond/pre-fab type structures)* – must not be concrete or masonry. • Has flat slab with no footings • Is no greater than 10m in length over the underground infrastructure • 1.5m distance from centre of manhole • 1m clear of all connection points *(in all directions)* • 3m distance from underground infrastructure for sewer mains greater than 225mm diameter and stormwater mains greater than 375mm diameter If any of the above criteria cannot be met a Concurrence Agency Referral application is required.
Flag Pole **Communication Structure** *e.g. Satellite dish or Aerial* ***excludes*** *Commercial Telecommunication Facilities*	If structure does not meet the requirements of the 'Minor Building Project' fact sheet or is supported by concrete footings *(regardless of height)* • 1.5m distance from centre of manhole • 1.2m distance from underground infrastructure *(sewer/stormwater/water)* **OR** • 3m distance from underground infrastructure for sewer mains greater than 225mm diameter and stormwater mains greater than 375mm diameter • The invert level of the infrastructure is located 300mm above the point of the zone of the footings • 1m clear of all connection points *(in all directions)* • 2.4m height clearance *(measured from surface level e.g. slab)* If any of the above criteria cannot be met a Concurrence Agency Referral application is required. **Otherwise:** No minimum setbacks
Gatehouse	If Gatehouse is supported by a concrete slab with footings *(regardless of area)* • 1.5m distance from centre of manhole • 1.2m distance from underground infrastructure *(sewer/stormwater/water)* **OR** • 3m distance from underground infrastructure for sewer mains greater than 225mm diameter and stormwater mains greater than 375mm diameter • The invert level of the infrastructure is located 300mm above the point of the zone of the footings • 1m clear of all connection points *(in all directions)* • 2.4m height clearance *(measured from surface level e.g. slab)* If any of the above criteria cannot be met a Concurrence Agency Referral application is required. **Otherwise:** No minimum setbacks
Fence **Retaining Wall**	If the fence is more than 2m high, retaining wall more than 1m high or either structure is supported by continuous concrete footings *(regardless of height)* • 1.5m distance from centre of manhole • 1.2m distance from underground infrastructure *(sewer/stormwater/water)*

Combined fence and retaining wall	**OR** • 3m distance from underground infrastructure for sewer mains greater than 225mm diameter and stormwater mains greater than 375mm diameter • The invert level of the infrastructure is located 300mm above the point of the zone of the footings • 1m clear of all connection points *(in all directions)* • 2.4m height clearance *(measured from surface level e.g. slab)* If any of the above criteria cannot be met a Concurrence Agency Referral application is required. **Otherwise:** No minimum setbacks

OTHER APPROVALS CHECKLIST

It is the owner/applicant's responsibility to work through the following checklist to determine if other approvals may be required from Council:

Planning – You may need planning approval, depending on the proposed building work.

To determine the property's zones and overlays:

- Refer www.redland.qld.gov.au > Red-e-Map > select Redland City Plan
- Search for property by address by selecting 'Find' in toolbar Click on the blue hyperlink (*land number*) to locate property
- Select 'Report' in toolbar to generate a 'Property Report' which outlines the zones and overlays.

☐ Side, Rear and Front boundary Setbacks and Site Coverage meet QDC *(Domestic Structures Only)* – **Refer QDC Fact Sheet**

☐ Building and Plumbing – You may require Building and/or Plumbing applications depending on the details of your proposal

☐ Not located over or within an Easement or Covenanted area – consent from the registered holder of the easement/covenant required.

☐ Not located outside a designated Building/Development Envelope *(if applicable).*

☐ Non-sewered property (if applicable) – Council recommends the following setbacks from disposal area for all building works:

- Minimum 2m for level land and downhill slopes (i.e. where trenching is downhill from structure)
- Minimum 4m for up slopes (i.e. where trenching is uphill from the structure)
- If a reduced setback required – no approvals required, however, Council recommends footings be designed/approved by an engineer to protect stability of the structure

If any of the above criteria cannot be met, please contact Council on the below number or visit a Customer Service Centre to discuss the application requirements.

Minimum Application Submission Requirements

The below lists outline the minimum requirements which must be submitted to Council for assessment against the QDC MP1.4. These lists are in addition to the forms and fees required for the assessment.

LIGHTWEIGHT STRUCTURE PROPOSED OVER OR NEAR A SEWER

Demonstrate compliance with the QDC MP1.4 P1 and P2 by providing the below material for assessment.

1. Provide certification from a qualified professional that the proposed structure complies with the lightweight structure requirements set out in the QDC MP1.4, or provide suitably qualified Registered Professional Engineer of Queensland (RPEQ) certification that the lightweight structure complies with P1 of the QDC MP1.4.

NON LIGHTWEIGHT STRUCTURE PROPOSED OVER OR NEAR A SEWER

Demonstrate compliance with the QDC MP1.4 P1 and P2 by providing the below material for assessment.

1. A Form 15 signed by an RPEQ which certifies that the proposed design complies with the QDC MP1.4 P1 and P2 and does not impose any loading on the sewer.
    a. If the proposal is for a lightweight structure (in accordance with the QDC MP1.4) RPEQ certification that this complies with the lightweight structure requirements is to be provided.
2. A plan view drawing certified by an RPEQ (not an architectural or planning drawing) which depicts the following:
    a. Proposed structure/s
    b. Proposed footings set out clearly identifying any footings which do not comply with the QDC MP1.4 A1 and A2
    c. Property boundaries
    d. Existing sewer main (including dimensions depicting the alignment from boundaries)
    e. Existing sewer connection
    f. Existing structures
    g. All relevant dimensions, such as proposed and existing structures to boundaries, structure dimensions, dimensions of sewer main to proposed structures, dimensions of the sewer connection point to proposed structures (where <1m)
    h. Any easements on the property
    i. Any other infrastructure assets (private of public) which will be impacted by the design.
3. A sectional view drawing certified by an RPEQ which depicts the following:
    a. Existing surface level
    b. Proposed surface level (if applicable)
    c. Sewer main
    d. Sewer as constructed invert level (to be plotted from RCC records)
    e. Proposed structure/s
    f. Proposed slabs
    g. Proposed footings including footing type
    h. Proposed footing depths – this MUST include the proposed final footing depth. This drawing must be able to be used for construction purposes and cannot require further calculation or investigation by others
    i. Horizontal and vertical dimensions between footings and sewer main
    j. Where multiple footings are proposed which are assessable under the QDC MP1.4 and require different depths or types, a separate drawing/detail is required for each
        - **Note 1:** Standardised details and designs will not be accepted by RCC for assessment
        - **Note 2:** Nominal dimensions will not be accepted by RCC for assessment. This assessment requires precise and calculated design drawings in order for Council to be confident that no loading will be exerted on the sewer main.