

Network Asset Technical Document

Distribution Pole to Pillar Policy



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Prepared by: Glen Pearce

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Document Control

Endorsement/Approvals

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Record of revisions

This document contains multiple formatting sections. When it is updated please ensure all section headers and footers have also been updated with correct version numbers and dates.

| Revision | Date | DM Version | Revised | Description |
|----------|-------------|------------|----------|---|
| 1 | Jun 2006 | 3081409v1 | G Pearce | Original Issue |
| 2 | Sep 2007 | 3081409v2 | K Brown | Reformatted with company branding |
| 3 | Nov 2007 | 3081409v6 | R Hale | Section 5 – Conditions clarified and updated |
| 4 | August 2011 | 3081409v8 | R Hale | Various amendments including format numbering, revised diagrams, amended pegging requirements, generic P2P subsidised rate information, revised eligibility criteria for lot sizes > 2500m ² and 3&4 lot developments, updated web links and changed to a Standard |

Documents referenced in this document

| DM# | Title of document |
|-------------|--|
| 3384127 v20 | Underground Distribution Schemes Manual |
| 7159802 v2 | Western Australian Distribution Connections Manual |

Other documents that reference this document

| DM# | Title of document |
|-------------|--|
| 3384127 v20 | Underground Distribution Schemes Manual |
| 7159802 v2 | Western Australian Distribution Connections Manual |

Stakeholders

In the process of document update, the following positions were consulted:

| Position/title |
|--|
| Connections and Energisation Manager |
| Customer Network Connections Manager |
| Customer Service Centre Manager |
| Distribution Design Engineering Manager |
| Metering Services Manager |
| Operational Technical Excellence (OTX) Manager |
| Power Training Services Manager |
| Primary Response Manager |



| |
|--|
| Consult Australia (Formerly known as Association of Consulting Engineers Australia). |
| Housing Industry Association |
| Master Builders Association |
| National Electrical Communications Association |
| Western Australian Local Government Association |
| Urban Development Institute of Australia |
| |

Notification list

When this document is updated, the following positions must be notified of any authorised change:

| Position/title |
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| Consult Australia (Formerly known as Association of Consulting Engineers Australia). |
| Housing Industry Association |
| Master Builders Association |
| National Electrical Communications Association |
| Western Australian Local Government Association |
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1 Purpose

This document specifies the conditions under which Western Power will provide a domestic Pole to Pillar underground connection within an overhead electrical distribution network.

2 Application

This policy applies to the electricity distribution network within Western Power's South West Interconnected System (SWIS). The application of this policy and subsequent amendments is not retrospective unless an existing electrical installation or part thereof constitutes a safety issue as determined by an authorised inspector under the Energy Coordination Act 1994.

2.1 References

This policy should be read in conjunction with the following reference documents:

- [Australian Standard AS/NZS 3000](#)
- [Underground Distribution Schemes Manual \(UDS\)](#)
- [Western Australian Distribution Connections Manual \(WADCM\)](#)
- [Western Australian Electrical Requirements \(WAER\)](#)

3 Definitions and references

3.1 General

| | |
|--------------------------|--|
| Consumer mains | Those conductors between the point of supply and the main switchboard. Refer to Clause 1.4.33 of AS/NZS 3000 (2007). |
| MSB | Main Switchboard |
| Overhead area | A location where low voltage (415v three-phase or 240v single-phase) overhead mains exist. |
| Overhead mains | Network wires strung overhead between Western Power's poles to distribute electricity to customers, but excluding overhead services. |
| Overhead service | Western Power's service wire strung overhead between a distribution pole and the customer's point of attachment. |
| Standard dwelling | <p>A dwelling used for domestic residential non-commercial purposes where the electrical load does not exceed standard supply of:</p> <ul style="list-style-type: none"> • 63 amps single-phase or 32 amps three-phase for dwellings located within the metropolitan area, a major regional centre or town as defined by Section 12.2 of the WADCM, or • 32 amps single-phase or 32 amps three-phase for dwellings located outside the metropolitan area, a major regional centre or town as defined by Section 12.2 of the WADCM, and <p>the connection does not require the electrical contractor to notify the Network Operator of the new load details thereby initiating an investigation of the network's capacity</p> |

| | |
|--|--|
| Standard supply | Standard supply defined at 240 volt single phase (+/- 6%) or 415 volt three phase (+/- 6%) as: <ul style="list-style-type: none"> •63 amps single-phase (Perth metropolitan and SWIS major regional centres);or •32 amps single-phase (rural areas);or •32 amps per phase for multi-phase (SWIS); and Maximum size of consumer mains cable shall not exceed 35mm. |
| Survey Plan and Survey Strata Lot | Survey Plan and Survey Strata Lot as defined by the Strata Titles Act. Generally "building strata" will be considered as survey strata for the purposes of this standard. However, for building strata, pillar locations away from side boundaries will be charged full cost. |
| Underground connection | A ground mounted pillar or similar apparatus forming part of Western Power's electricity distribution system, to which the consumer mains of a dwelling are connected, in order to obtain an electricity supply. |

4 Policy

Western Power offers, subject to the customer fulfilling the conditions as specified in [clause 6](#), a connection via a distribution pillar to a domestic/residential dwelling within an existing overhead distribution network are at a predetermined Pole to Pillar (P2P) scheduled rate.

Connections must be made in accordance with the applicable [Australian Standards](#) including AS/NZS 3000, Western Australian Electrical Requirements ([WAER](#)), Underground Distribution Schemes Manual ([UDS](#)) and the Western Australian Distribution Connections Manual ([WADCM](#)). Examples of acceptable and unacceptable supply arrangements are given in [Appendix 1](#).

4.1 P2P schedule rate

The P2P scheduled rate will be applied in accordance with the requirements of [clause 7](#) and based on the principle that the installed pillar is a shared connection resource supplying multiple domestic dwellings or lots.

Western Power reserves the right to withhold application of the P2P scheduled rate and charge the full cost of the pillar installation at its discretion. This may occur in (but is not limited to) instances where a suitable existing supply arrangement exists but the customer requests an arrangement that requires additional network assets to be installed or a second point of supply in the case of a two lot survey strata development.

4.2 Areas due to be undergrounded

Lots that are within a soon to be undergrounded area, via the State Underground Power Program (SUPP), may be eligible for a reduced rate for the installation of the pillar. When a Pole to Pillar connection is requested, Western Power will determine whether the lot comes within soon to be undergrounded SUPP area.

4.3 Lots larger than 2500 square metres.

Where a lot is larger than 2500m² and provided that all of the conditions as specified in [clause 6](#) excluding 6(ix), are met and the pillar is positioned within Western Power's preferred location then the P2P scheduled rate may be applied. In all other circumstances the installation of the pillar will be charged at the full cost of the installation.

4.4 Existing overhead service connections

Any existing overhead service connection must be converted to underground.

4.5 Three and four lot developments

This policy does not cover three and four lot strata or freehold developments. Such configurations are therefore not eligible for the P2P scheduled rate. Where three or four survey strata lots are created as a part of the development or survey strata plan the customer may either:

- i. Request the installation of a dedicated pillar to service the strata development; or
- ii. Install a site main switchboard so as to ensure that there are not more than two consumer mains connections from the survey strata development or plan to a pillar on the plan or lot, or to a pillar on an adjacent plan or lot.

The connection arrangement or installation of a dedicated pillar must not create a multiple point of supply configuration [WAER clause 3.9](#) without the prior approval of Western Power.

4.6 Application Process

Western Power's preferred method for requesting a P2P connection is via the lodgement of an online application form available from Western Power's Customer Services website. To ensure a timely response it is recommended that a [Domestic Underground Supply Application form](#) is used.

5 Service easement requirements

Where a survey strata lot is created, access to the pillar must be available either through the use of common property or a 136C service easement to facilitate the installation of associated customer's consumer mains. Service easements or common property must be a minimum of one metre wide.

If the establishment of common property prevents the subdivision from proceeding then, at Western Power's sole discretion, an easement may be created in lieu. The customer is responsible for all costs associated with the creation of the easement.

Under Section 136C of the *Transfer of Land Act 1893*, an easement maybe created for survey strata lots and plans, to provide for customer owned services such as electrical and plumbing connections to the requisite utility network. The easement shall contain the following notation:

"This easement is to allow connection of power to adjoining survey strata lots on this survey strata plan. Other services are permitted in this easement provided they do not interfere with the provision of electricity."

If consumer mains exist at the time of subdivision then there will be an implied easement over them. For further information on implied easements for existing services please refer to the Strata Titles Act or Landgate.

In infrequent cases, the location of the existing pillar and the existence of consumer mains may mean that access is not an issue and hence no common property or easement need be established. [Appendix 3](#) gives examples of this.

Note that Western Power recommends common property or an easement is still created in these situations in order to minimise the risk of future customer access disputes.

Refer to Landgate's [Survey and Plan Practice Manual](#) for further information

6 Conditions

The following conditions must be met in order to qualify for the Pole to Pillar (P2P) scheduled rate.

- i. No more than two dwellings require connection as a result of the subdivision including existing connections;
- ii. No more than two lots are being created as a result of the subdivision;
- iii. The electricity supply to each dwelling does not exceed standard supply;
- iv. The lot(s) or subdivision are located in an existing overhead area;
- v. The proposed pillar position is within Western Power's preferred location. (Locations are selected to optimise the existing and future use of pillars.) The pillar is to be located on the applicant's property at the junction of the front property and common property boundaries unless a pillar already exists on an adjacent property;
- vi. There must be no requirement as prescribed by [Underground Distribution Schemes Manual](#) to remove or relocate an existing distribution or transmission overhead line as a result of the subdivision.
- vii. Suitable low voltage overhead distribution network and mains exist within 60 metres of the lot boundary and the preferred pillar location;
- viii. The route from the existing low voltage overhead mains to the preferred pillar location must be suitable for the installation of low voltage underground cable or low voltage aerial bundled conductor as required;
- ix. The lots must be residential and less than 2500m²; except as specified by [clause 4.3](#);
- x. The same developer/owner must not have submitted a Pole to Pillar application for an adjacent or the same lot within the previous 3 (three) years;
- xi. A company, organisation, person or group of persons must not be progressively seeking Pole to Pillar connections for an area that, should be developed as a standard underground residential subdivision;
- xii. Supply Extension Scheme (SES) charging is not applicable;
- xiii. Where applicable, common property or a 136C easement is created to allow consumer mains to be connected to the pillar or sub-mains to be connected to the site main switchboard. At Western Power's sole discretion, a service easement may be substituted for common property ([Refer clause 5](#));
- xiv. The site must be ready for installation of the pillar.
- xv. Where the property boundaries are not clearly defined by either surveyor pegs, full length fencing, existing definable permanent structures or local government services, the customer is required to confirm the boundaries location by survey pegging prior to the installation of the pillar.
- xvi. The installation must comply with Western Powers requirements and the WAER. For examples of these requirements refer to the provided in the [Appendices](#)

7 Charges

7.1 General requirements

Provided the conditions of this policy are met, the P2P scheduled rate will be applied as prescribed by [clause 7.2](#). Additional charges may apply for the extension or upgrade of Western Power's network.

If this policy's conditions are not met, Western Power will issue a quote for the full cost of supplying a connection in accordance with the applicable policies and procedures including any costs associated with the extension or upgrade of the network.

Where a site is not ready for the pillar installation, a customer may retain their P2P scheduled rate eligibility provided written advice is submitted with the applicant's quotation acceptance response to Western Power nominating an alternative installation date. The customer's alternative installation date must be within 90 calendar days from the date of Western Power's quotation for the works.

Should the customer pay the P2P scheduled rate but subsequently withdraw access to the site so work is delayed, the full cost of the pillar installation may be applied.

Where a pillar has been installed in an overhead area, customers who subsequently seek access to the shared pillar will be required to pay the P2P scheduled rate per dwelling or lot.

7.2 Schedule rate charging policy

The P2P schedule of rates as described in this clause, are based on a single dwelling per lot unless otherwise stated. Three and four lot strata developments are not eligible for the P2P scheduled rate. Refer to [clause 4.5](#) for further information.

Western Power's public website provides full financial details of the [P2P scheduled rate](#).

| Schedule of Rates | | |
|---|-----------------------|-----------|
| Lot Description | WP Preferred Position | |
| | Yes | No |
| Existing dwelling converted from overhead to underground | P2P rate x1 | Full Cost |
| 2 survey strata lot development | P2P rate x2 | Full Cost |
| 3 & 4 lot strata development connected via a dedicated pillar | Full Cost | |
| 3 & 4 lot strata development connected via a site MSB & existing pillar | Full Cost | |
| A single freehold title lot | P2P rate x1 | Full Cost |
| 2 freehold title lots | P2P rate x2 | Full Cost |
| 3 & 4 freehold title lot development | Full Cost | |
| Freehold title lots connected via a site main switchboard (MSB) | Not Permitted | |

7.3 Examples

The following examples have been provided to illustrate the application of the P2P schedule of rates.

7.3.1 Single freehold lot connection

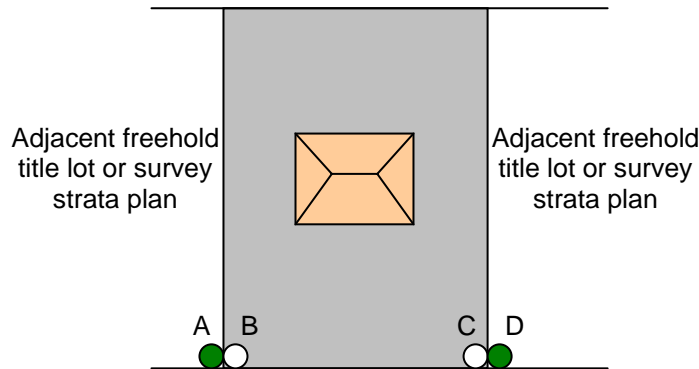


Figure 1

Case 1 - There is an existing pillar at A or D

- Charge – P2P scheduled rate x1
- Connections - one*
- Common property or service easement - not required.

Case 2 - There is no pillar at A or D, and a new pillar is required at B or C

- Charge – P2P scheduled rate x1
- Connections - one*
- Common property or service easement - not required

Case 3 - A new pillar is requested at B or C and a suitable pillar exists at A or D

- Charge - Full cost.
- Connections - one*
- Common property or service easement - not required.

***Note:** 'Connections- one' means only one connection to the existing dwelling. Adjacent properties may connect to the pillar subject to payment of the applicable fee.

7.3.2 Two survey strata lots created in a survey strata plan

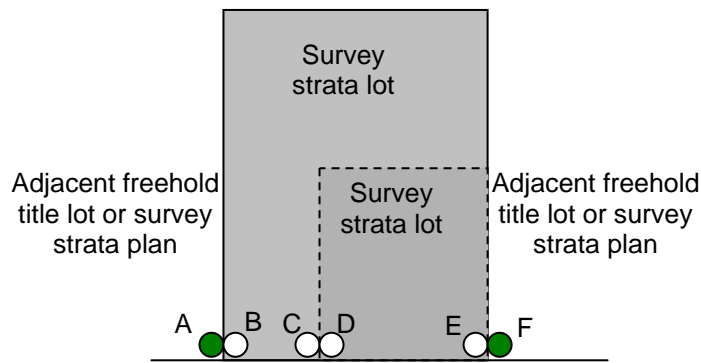


Figure 2

Case 1 - There is an existing pillar at A or F

- Charge – P2P scheduled rate x2
- Connections – two, one for each survey strata lot
- Common property or service easement – is required.

Case 2 - A new pillar is required at A, B, C, D, E or F (no existing pillar)

- Charge – P2P scheduled rate x2
- Connections – two, one for each survey strata lot
- Common property or service easement – is required (except for C or D).

Case 3 - A new pillar is requested at C or D and an suitable pillar exists at A or F

- Charge – Full cost
- Connections – two, one for each survey strata lot
- Common property or service easement – not required.

Case 4 - New pillar is requested at B or E with an suitable existing pillar at A or F

- Charge – Full cost.
- Connections – two, one for each survey strata lot
- Common property or service easement – is required.

Case 5 - A second point of supply (Pillar) is requested in accordance with WAER clause 3.9

- Charge – Full cost.
- Connections – two, one for each survey strata lot
- Common property or service easement – may be required.

Note: WAER permits, subject to specific conditions and the network operator's approval the installation of a second point of supply. Consultation with Western Power and all affected parties is required together with the application and placement of applicable notices and labels in accordance with those requirements.

7.3.3 Three survey strata lots created in a survey strata plan

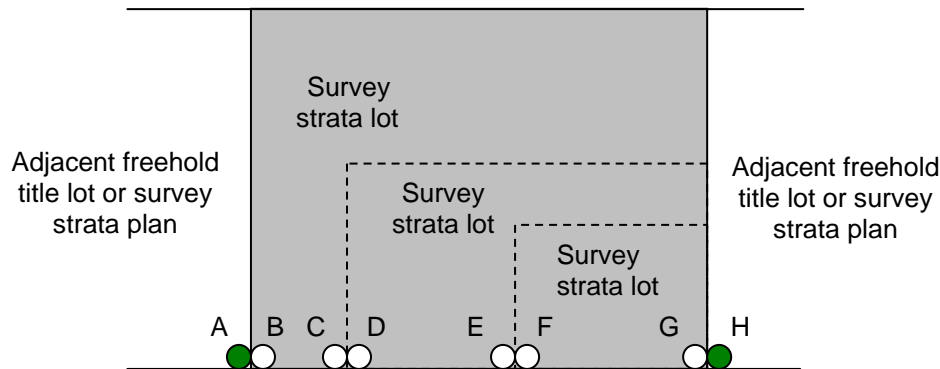


Figure 3

Case 1 - There is a suitable existing pillar at A or H

- Charge – Full cost
- Connections – one, MSB required with sub-mains to each survey strata lot.
- Common property or service easement – is required

Case 2 - A new pillar is required at B or G and no pillar exists at A or H

- Charge – Full cost
- Connections – one, MSB required with sub-mains to each survey strata lot.
- Common property or service easement – is required

Case 3 - A new pillar is requested at B, C, D, E, F or G and a suitable pillar exists at A or H.

- Charge – Full cost,
- Connections may be made direct to the new dedicated pillar or via a MSB with sub-mains to each survey strata lot
- Common property or service easement – is required

Case 4 - A new pillar requested at C, D, E or F and pillar exists at B or G

- Subject to WAER multiple points of supply requirements.

7.3.4 Two freehold title lots created

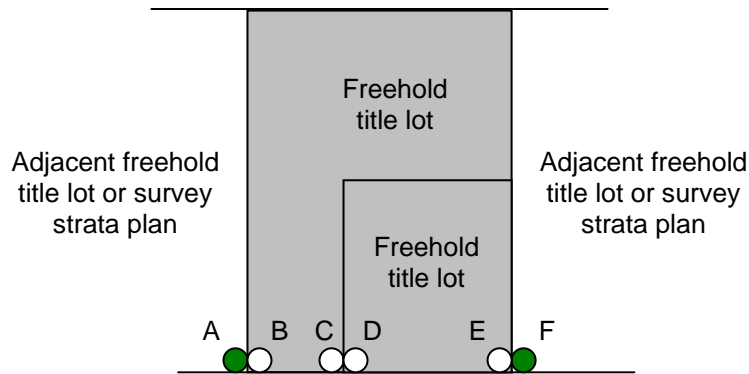


Figure 4

Case 1 - There is an existing pillar at A and F and no new pillar is required.

- Charge – P2P scheduled rate x2
- Connections – two, one for each lot
- Common property or service easement – not required.

Case 2 - A new pillar is required at A, B, C, D, E and F (no pillar exists at A, B, C, D, E or F).

- Charge – P2P scheduled rate x2
- Connections – two, one for each lot
- Common property or service easement – not required.

Case 3 - There is an existing pillar at A and F and new pillar is required at B or E.

- Charge – Full cost, P2P scheduled rate does not apply
- Connections – two, one for each lot
- Common property or service easement – not required.

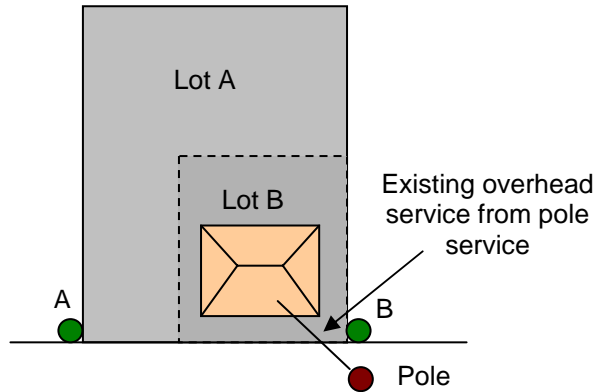
Case 4 - There is an existing pillar at A but not at F and new pillar is required at C, D or E.

- Charge – P2P scheduled rate x2
- Connections – two, one for each lot
- Common property or service easement – not required.

Appendix 1: WA Electrical Requirement examples

Case 1

An existing freehold title lot is subdivided into a survey strata plan with two survey strata lots. There is one dwelling with existing overhead supply.

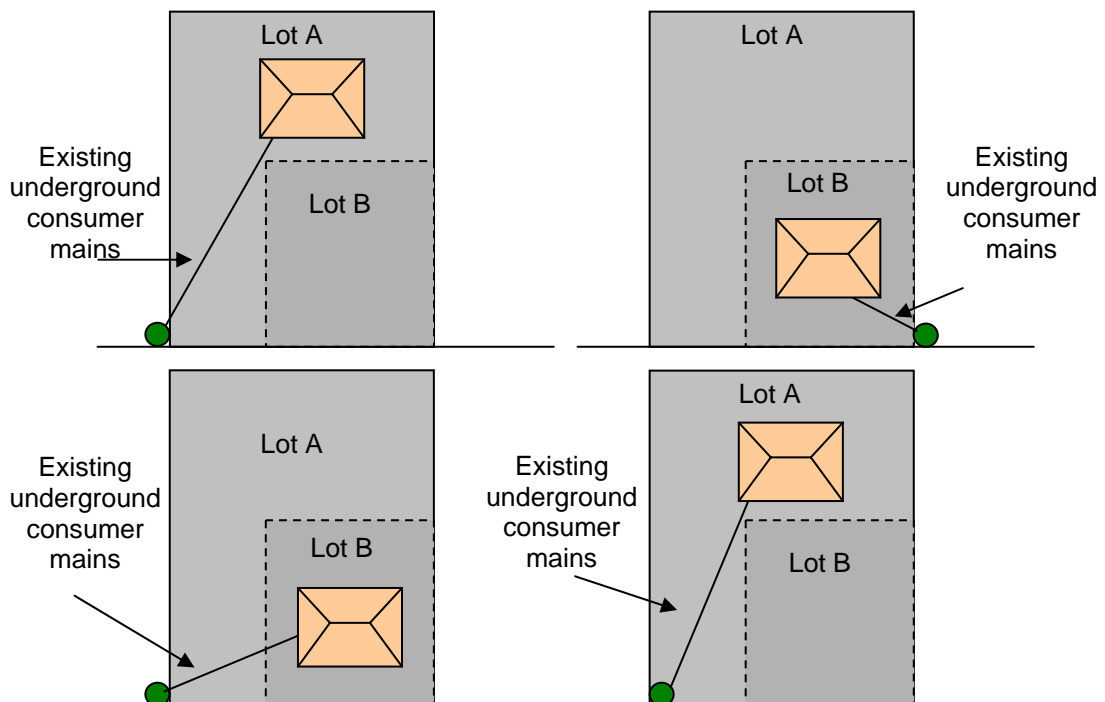


The pillar installation on survey strata Lot A **or** Lot B requires the existing overhead service to Lot B to be removed and the dwelling on Lot B to be connected to same pillar as Lot A.

The connection of Lot A to pillar A or pillar B requires the existing overhead service to Lot B to be removed and the dwelling on Lot B to be connected to same pillar as Lot A.

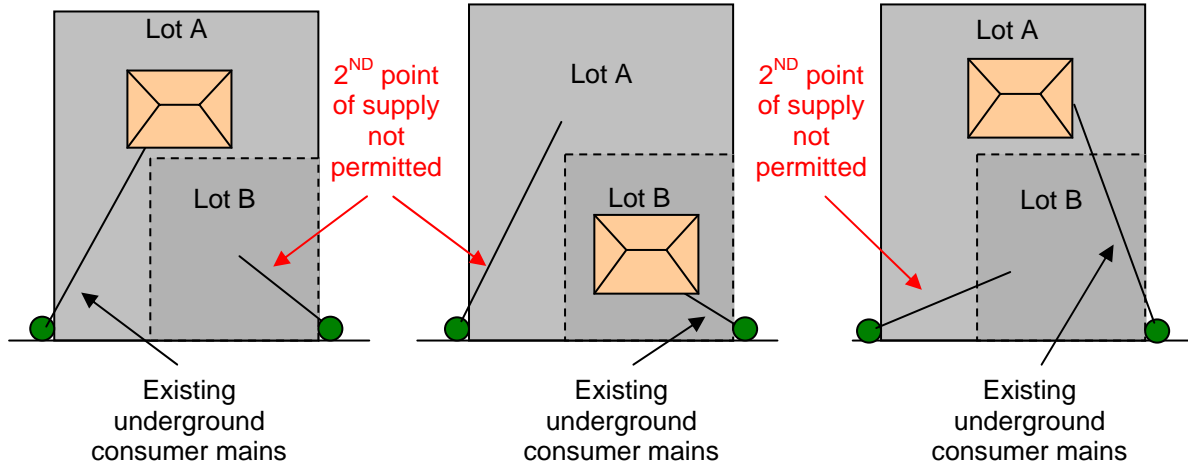
Case 2

An existing freehold title lot is subdivided into a survey strata plan with two survey strata lots. There is one dwelling with an existing underground supply. These sample examples show situations where an additional pillar **cannot** be installed on the new strata lots unless Western Power approval has been granted to install a second point of supply.



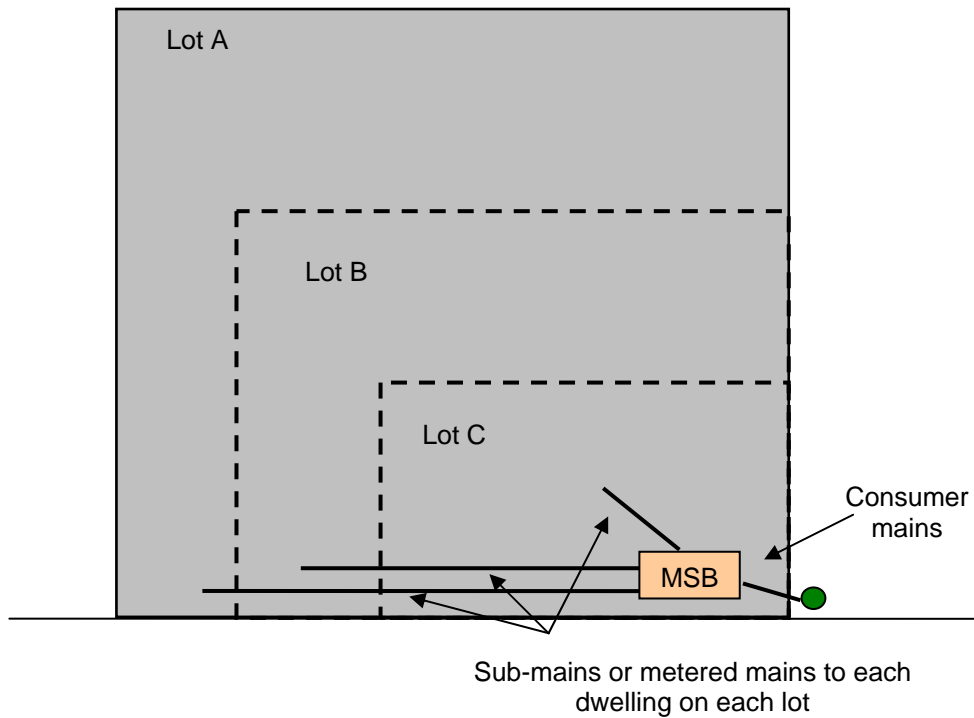
Case 3

An existing freehold title lot is subdivided into a survey strata plan with two survey strata lots. There is one dwelling with an existing underground supply. These sample examples show where new connections **cannot** be made to an adjacent freehold title lot or adjacent survey strata plan



Case 4

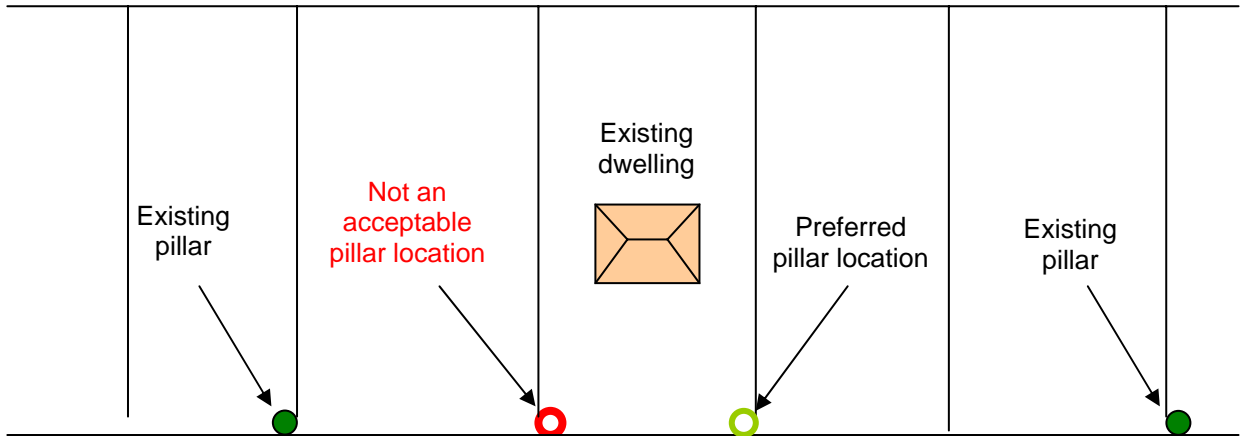
An existing freehold title lot is subdivided into survey strata plan with three or more survey strata lots. A main switchboard (MSB) is required in order to prevent more than two consumer mains being connected to the pillar from any one survey strata plan or any one freehold title lot. Alternatively a dedicated pillar may be installed in place of the MSB.



Appendix 2 - Western Power examples of preferred pillar locations

Case 1

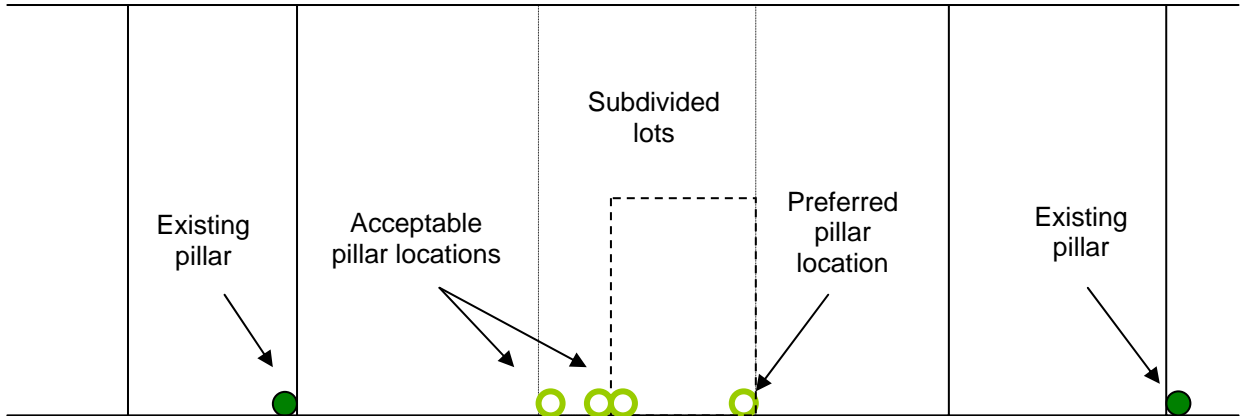
A single existing dwelling is converting to underground



Pillars are located at every second lot boundary in order to minimise network costs by having at least two connections per pillar

Case 2

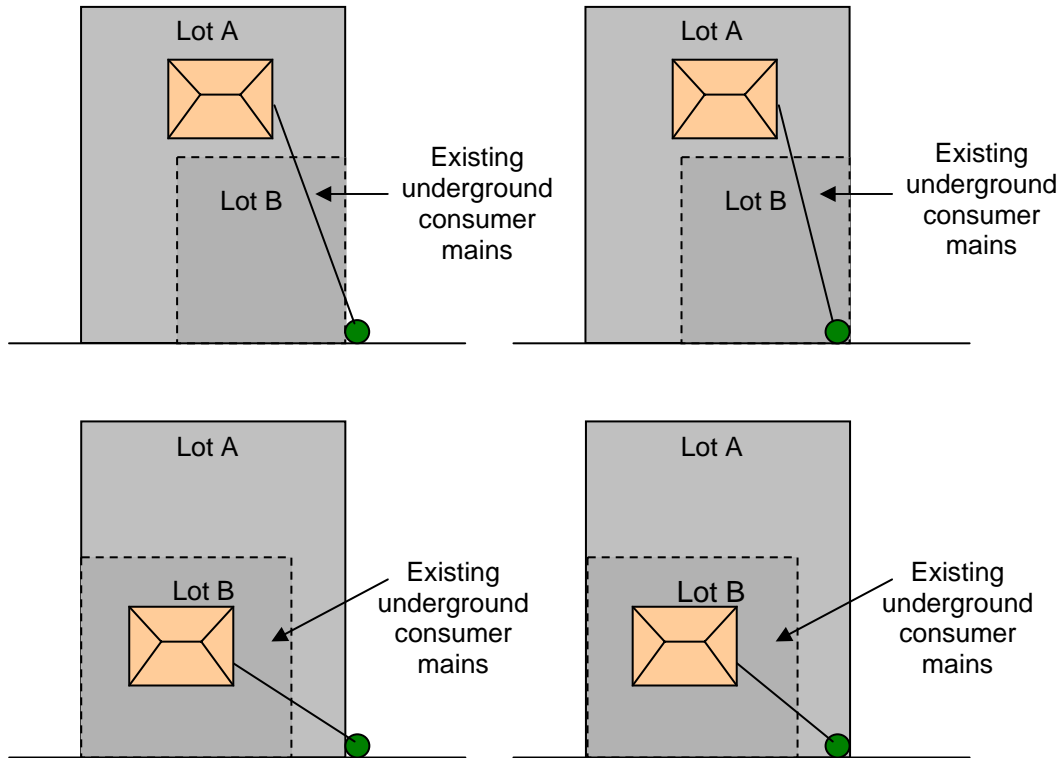
Two new survey strata lots are created in existing freehold title lot



The preferred pillar location maximises the opportunity to minimise costs and maintain the P2P scheduled rate as low as possible. However the acceptable locations allow the minimum requirement of two connections per pillar.

Appendix 3 – Examples of situations where common property or a 136c easement are not required

As stated in [clause 5](#) “Service easement requirements”, common property or an easement must be established across survey strata lots to ensure all lots have access to the pillar with their consumer mains. In some instances the location of the existing pillar and the existence of consumer mains may mean that access is not required for the new lot and hence no common property need be established. The Strata Title Act provides implied easements for the existing consumer mains in these situations. The following drawings provide examples of such instances.



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