



Designing near electrical assets.

This brochure provides designers with information that can help ensure building applications comply with electrical asset design requirements, and avoid unwanted delays or failures.

evoenergy

Before work commences.

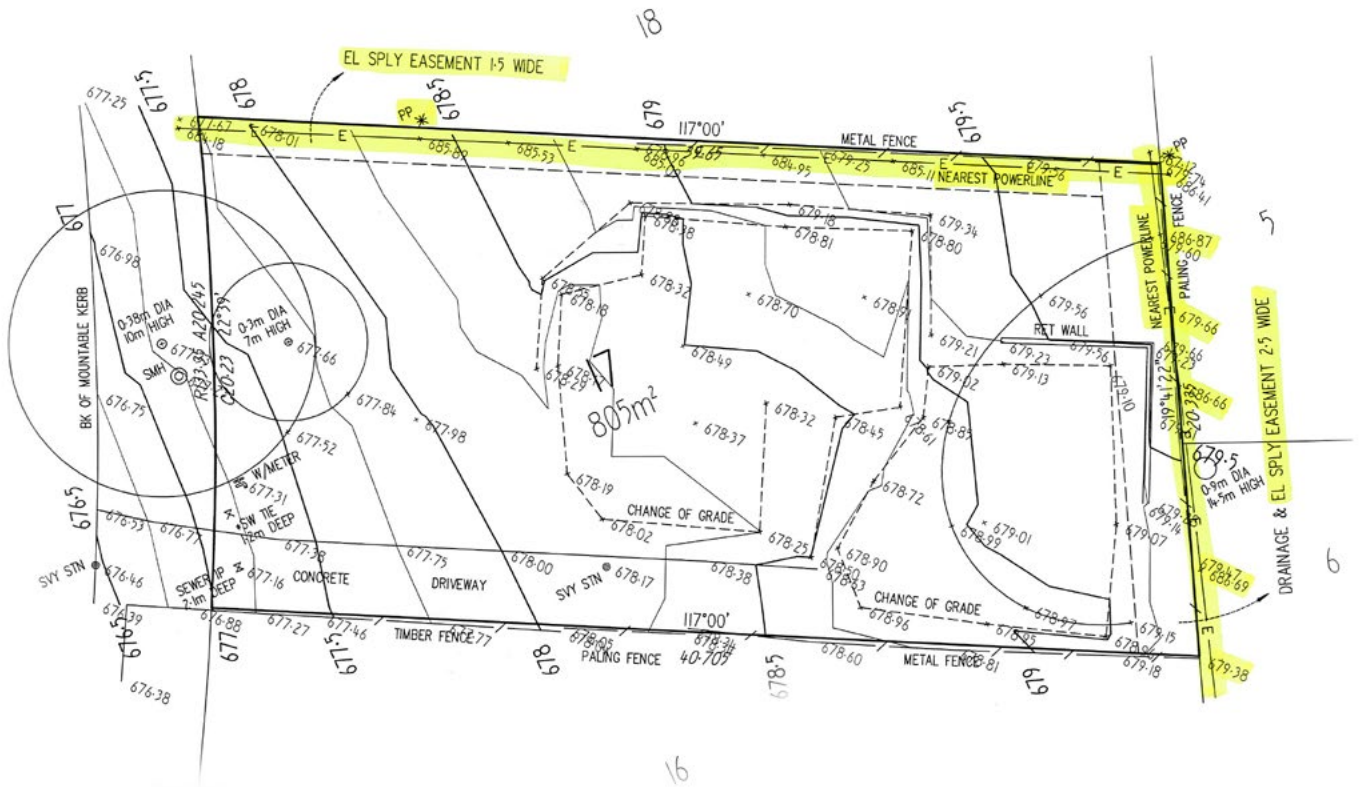
Before starting any design work it is important to know the location of all electrical assets located over, below or adjacent to your proposed construction site. To do this you'll need to submit a Dial Before You Dig enquiry for asset location.

If your proposal is within the vicinity of overhead power lines you will need to carry out a survey to determine the overhead power line locations. Generally high voltage conductors require 4.0m clearance and bare low voltage conductors require 3.0m clearance. Specific clearance requirements can be found on Evoenergy drawing number [3811-004](#).

Electrical asset survey.

If your design proposal appears to be in the proximity of electrical assets such as overhead power lines, you'll need to have these assets surveyed. Overhead power lines must be surveyed at various locations adjacent any proposed development as heights and locations of power lines vary along a span of conductors at any given point.

Below is an example where pole locations and the closest open wire conductor have been surveyed at several points along a side and rear boundary.



Contact Dial Before You Dig.

It's easy and free to find out where electrical or gas assets may be located. Simply contact Dial Before You Dig and tell them your block location. They will pass these details to the relevant services, who will send the information to you, generally within two working days. There are two ways to lodge your enquiry:

- complete an online form at 1100.com.au, or
- call 1100.

ACTMAPAPI or Google Maps is not an accurate way of determining the location of electricity network assets near your block. Before you start designing, you must contact Dial Before You Dig and conduct a survey (if required) to obtain an accurate location of electricity and gas network assets.

Design to requirements.

The law prohibits a person from interfering with utility assets, for example by blocking access or building too close or on top of assets. Evoenergy requires that poles and pillars have at least 1.5 metres of clearance.

All proposed structures must be designed in accordance with Evoenergy drawings:

[3811-004](#) Minimum Clearances to Insulated and Bare Overhead Conductors

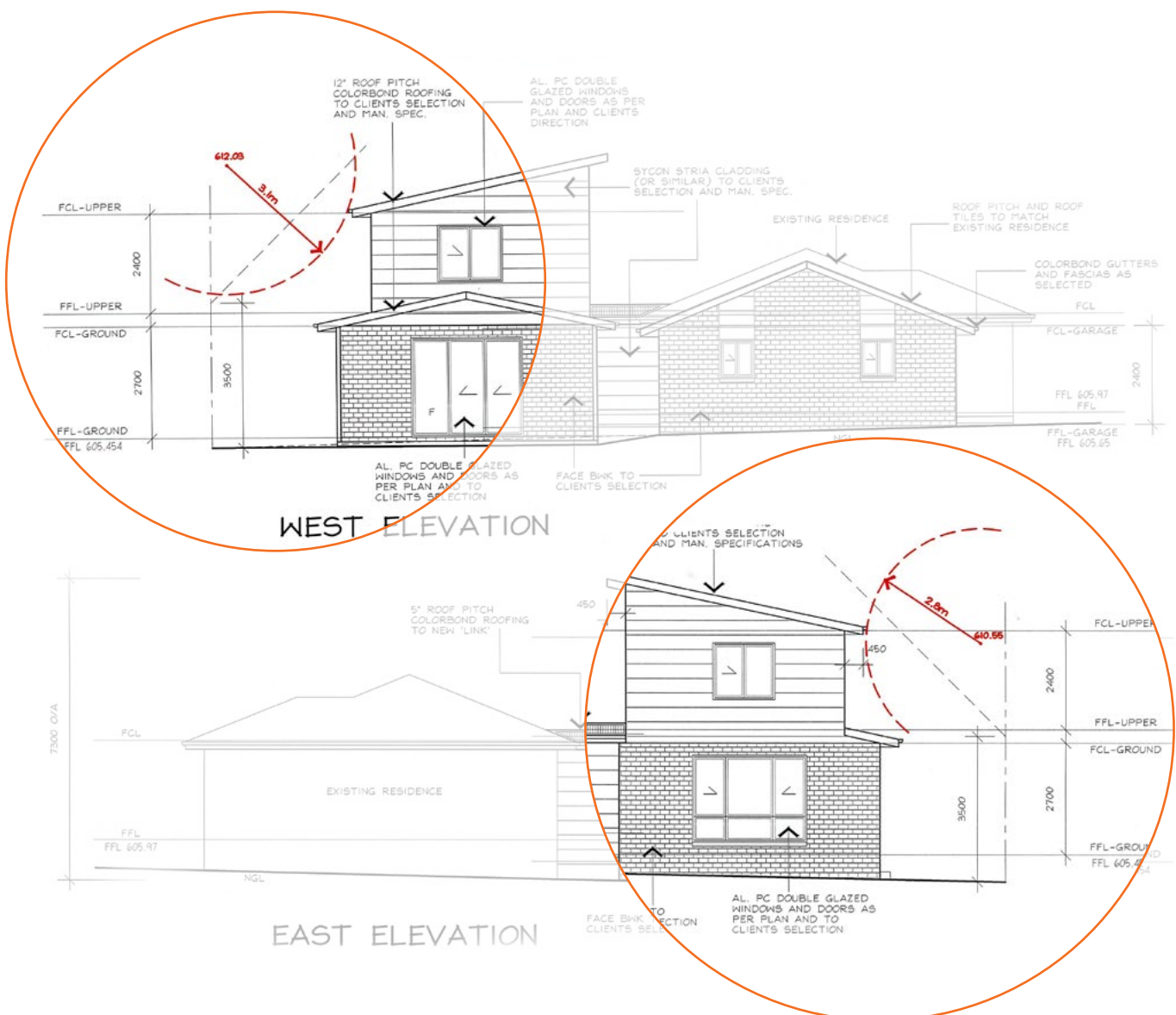
[3832-018](#) Separation and Cover Requirements for Cables and Plant

[3832-020](#) Clearance Requirement for Swimming Pool to Electrical Infrastructure

Designing in proximity to power lines.

If a proposed structure is adjacent power lines, you must show a dimensioned clearance from the closest open wire conductor to the closest point of that proposed structure on the relevant elevations.

Below is an example of a dimensioned clearance on elevations utilising surveyed location of power lines.



If clearance to existing conductors cannot be met in accordance with Evoenergy drawing requirement 3811-004 to the low voltage network, it may be possible to convert these open wire conductors to insulated bundled conductors at the developer's expense. For more information on this contact network.connectionadvice@evoenergy.com.au

Remember, as a designer, it is your responsibility to document what is being proposed and how it will be compliant to the electrical network design requirements before it is submitted for assessment.

Designing in proximity to power poles.

In your design, you must ensure there is clear, unobstructed 1.5m wide and minimum 2.4m high machinery access to any pole located on your block and this access must be documented on the site plan.

Machinery access should be clear of water tanks, porches/decks, air conditioning units, garden sheds, vegetation, retaining walls or any other obstructions.

Where these requirements cannot be met, or if a retaining wall near a power pole is proposed, access can be maintained via a ramp with a minimum width of 1.5m. Natural ground level must not be altered within 1.5m of any pole and all proposed and existing retaining walls must be shown on site plan.

Access to a pole can be through a garage or carport provided minimum 1.5m width and 2.4m height headroom is maintained. If gates are to be installed minimum 1.5m wide opening must be noted on the site plan. For unit developments, access must be provided through a maximum of one set of gates that cannot be removable fence panels.

No structures are permitted within 1.5m of any pole including any eaves overhang.

Excavation.

All site excavations must comply with Clause 16 – Excavating located within the Utility Networks (Public Safety) Regulation 2001.

During excavation, a minimum 1.5m wide natural ground level must be maintained over underground electricity or gas network assets located on any block. In some instances, depending on the configuration of the network, this may need to be increased.

A site excavation of maximum 250mm will be permitted adjacent poles during construction of a development on the provision the finished ground level will be re-established to match the natural ground level around a pole prior to construction.

Poles on neighbouring blocks must also be considered and are subject to the same terms and conditions for excavation even if the pole is not located on the block proposed for construction.

It may be possible to relocate Evoenergy assets at developer's expense to accommodate site excavations or developments. For more information contact network.connectionadvice@evoenergy.com.au

Designing safely.

As a designer it is your legal responsibility to ensure your proposed development is safe and compliant and must be designed in accordance with [Safe Design of Structures – Code of Practice – July 2012](#).

You must ensure that not only the finished product is compliant with Evoenergy's design requirements, but that the proposed design can be constructed safely.

This includes assessing and addressing the potential design issues that may lead construction equipment and techniques that breach minimum clearance requirements around assets, such as:

the set up and use of cranes

concrete placement booms

mobile elevated work platforms and scaffolding

tip trucks, excavators and builder's hoists

trenching and directional boring machines and so on.

For more information, see the [Scaffolding Work near Overhead Electric Lines SM1211](#) and Australian Standards 2550 series on the safe use of cranes, hoists and winches.

Where it is not clear any proposed development can be constructed safely, Evoenergy may fail the application or request a safety report be completed by the designer and lodged with your application. Designers must complete the safety report in conjunction with those who will be carrying out the proposed works to document how safety risks will be mitigated.

Submitting plans for approval.

For DA/BA applications, Evoenergy generally only requires a demolition plan (if applicable), site plan, floor plan, elevations and section when lodging plans for consideration of approval. However, if there is anything else relevant to your application this must also be submitted with your application.

Site plans should include proposed and existing structures and clear dimensions for proposed construction/additions to side and rear boundaries where applicable. This is a mandatory requirement for swimming pool applications. All proposed or existing retaining walls must be also be documented on the site plan.

Plans must be clear, legible and submitted in PDF format. Attachments must be no more than 2MB per file and in the correct format. Plans not in the correct format or with corrupt files will require the applicant to resubmit the application in the correct format.

Applications can be submitted to Evoenergy by anyone for consideration of approval and can be submitted using [Utility Compliance Application form](#) on the Evoenergy website.

If you need an agency code, email devapp@evoenergy.com.au and provide your contact name, business name (if applicable), email address and telephone number.

Applications are assessed by Evoenergy within 15 business days of submission, and will be sent back to the applicant via email. In some instances there may be conditions of approval specified which could include a Request for Service Marking which is design and quote for any Evoenergy required works as part of a DA/BA application. The applicant must forward this information onto relevant parties associated with the DA/BA application including Builders and Electrical Contractors.



More information.

For more information, see the [Evoenergy Electrical Safety Rules](#), [Evoenergy Service and Installation Rules](#), or contact Evoenergy on 13 23 86.

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