

Legal Plans

WPD's guide to the production
of legal plans



Serving the Midlands, South West and Wales

Legal Plans

Use a scale and paper size that best suits the situation.

Show the rights being secured relative to existing and any new environment to make it easy to locate the site. [Land Registry like plans to detail at least one road name].

Custom and practice is to use the following scales:-

1:500, 1:1250 1:2500

Enlargement/blow-up inserts at any given scale can be used to clarify detail where necessary.

As far as possible produce plans at **A4** and **A3** as plans bigger than this are problematic to handle, store and manage.

Legal Plans

- ❖ North Point

Custom and practice is to orientate plans so that North is to the top of the page and South is to the bottom.

- ❖ Title

This is at your discretion but convention is to use the site address.





- ❖ Drawing Number

Provide a unique reference.

- ❖ Revision Number

Each time a plan is altered the new version should be allocated a revision number or letter. This is to help all concerned make sure they are using the same version.

New Plan Key

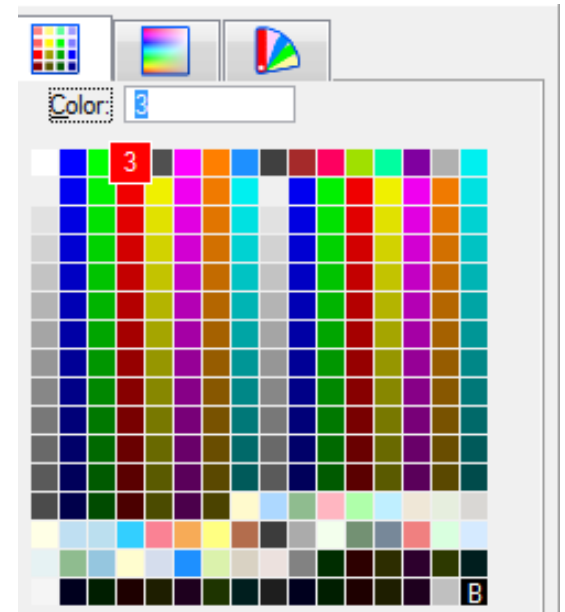
SIGNATURE :			
DATE :			
 		TITLE: ■ _____ ■ _____ ■ _____	
DRAWING NUMBER		■ _____	
REVISION		■ _____	
GRID REFERENCE		■ _____	
DATE ■ _____		SCALE 1: @ A3	
SUBSTATION SITE/THE PROPERTY (SIDE A-B=FRONT UNLESS STATED OTHERWISE)		5	
ACCESSWAY		11	
UNDERGROUND ELECTRIC LINES & ACCESSWAY		98	
PROPERTY TO BE SOLD BY WPD		17	
LICENCED LAND		3	
UNDERGROUND ELECTRIC LINES		118	
OVERHEAD ELECTRIC LINES		20	
OVERHEAD ELECTRIC LINES & ACCESSWAY		13	
OVERHEAD & UNDERGROUND ELECTRIC LINES		30	
OVERHEAD & UNDERGROUND ELECTRIC LINES & ACCESSWAY		7	
PROPERTY BOUNDARY		_____	
TOWER/PYLON POSITION		POLE POSITION	
STAY POSITION	T		
UNDERGROUND CABLE POSITION	-----		
OVERHEAD LINE POSITION	_____ or _____		
REPRODUCED FROM ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF H.M. STATIONERY OFFICE.			
PLEASE NOTE THAT THIS IS A LEGAL PLAN RELATING TO SPECIFIC ASSETS (A LINE MAY INDICATE THE POSITION OF MORE THAN ONE ASSET/CABLE). SYMBOLS (I.E. TOWER/POLE) ARE INDICATIVE AND ARE NOT DRAWN TO SCALE. THIS PLAN IS NOT TO BE USED FOR IDENTIFYING WHERE OUR ASSETS HAVE BEEN INSTALLED OR IN CONNECTION WITH ANY PLANNED WORKS OR EXCAVATIONS. IF YOU REQUIRE A PLAN OF WESTERN POWER DISTRIBUTION'S ASSETS IN PREPARATION FOR SITE WORKS OR EXCAVATIONS, PLEASE REFER TO OUR COMPANY WEBSITE FOR DETAILS. ASSETS SHOWN DEAD OR DISCONNECTED MAY HAVE BEEN RECONNECTED AND SHOULD BE TREATED AS LIVE.			











Provides

Simplified text to correlate with the wording used in legal documents.

One colour for each of the land categories used [no cross hatching].

Reference to EMU colours to be used.

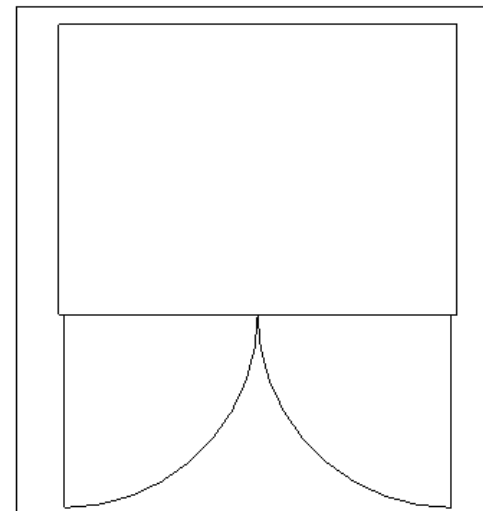
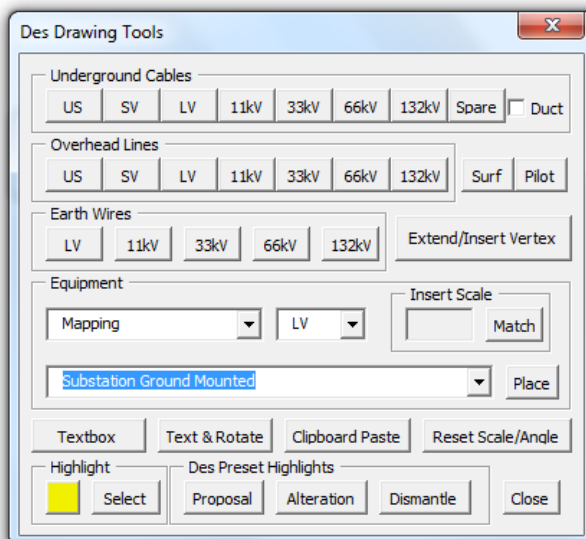


SUBSTATION SITE/THE PROPERTY (SIDE A-B=FRONT UNLESS STATED OTHERWISE)		5
ACCESSWAY		11
UNDERGROUND ELECTRIC LINES & ACCESSWAY		98
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OVERHEAD ELECTRIC LINES & ACCESSWAY		13
OVERHEAD & UNDERGROUND ELECTRIC LINES		30
OVERHEAD & UNDERGROUND ELECTRIC LINES & ACCESSWAY		7

Use Symbols to clarify

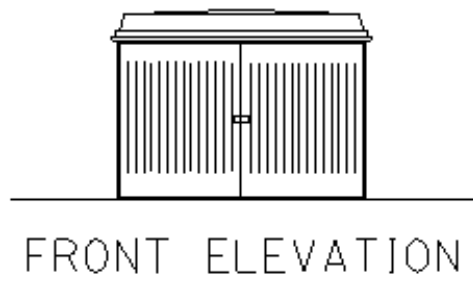
The key advises that they are indicative and not drawn to scale.

PLEASE NOTE THAT THIS IS A LEGAL PLAN RELATING TO SPECIFIC ASSETS (A LINE MAY INDICATE THE POSITION OF MORE THAN ONE ASSET/CABLE). SYMBOLS (I.E. TOWER/POLE) ARE INDICATIVE AND ARE NOT DRAWN TO SCALE. THIS PLAN IS NOT TO BE USED FOR IDENTIFYING WHERE OUR ASSETS HAVE BEEN INSTALLED OR IN CONNECTION WITH ANY PLANNED WORKS OR EXCAVATIONS. IF YOU REQUIRE A PLAN OF WESTERN POWER DISTRIBUTION'S ASSETS IN PREPARATION FOR SITE WORKS OR EXCAVATIONS, PLEASE REFER TO OUR COMPANY WEBSITE FOR DETAILS. ASSETS SHOWN DEAD OR DISCONNECTED MAY HAVE BEEN RECONNECTED AND SHOULD BE TREATED AS LIVE.



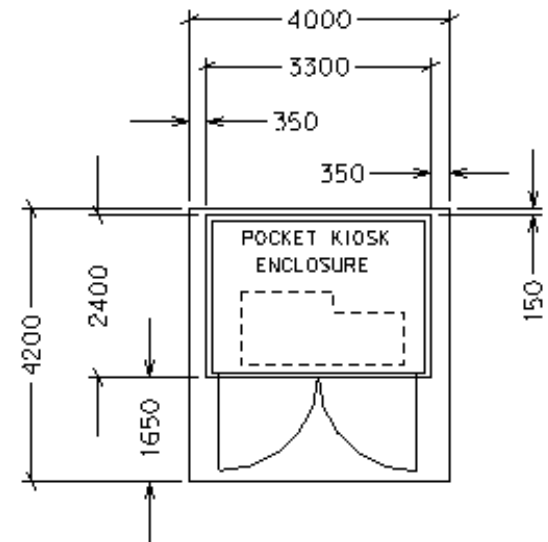
Substation Sites/Property

Confirm the size of the site.



A POCKET KIOSK TYPE SUBSTATION TO BE INSTALLED OF APPROX. DIMENSIONS 3112 x 2264 x 2250 HIGH ON A CONCRETE BASE 3300 x 2400 WITHIN A 4200 x 4000 PAVED SITE AREA FOR OPERATIONAL & MAINTENANCE PURPOSES.

PLANNING :- PERMITTED DEVELOPMENT



PLAN
Scale 1:200

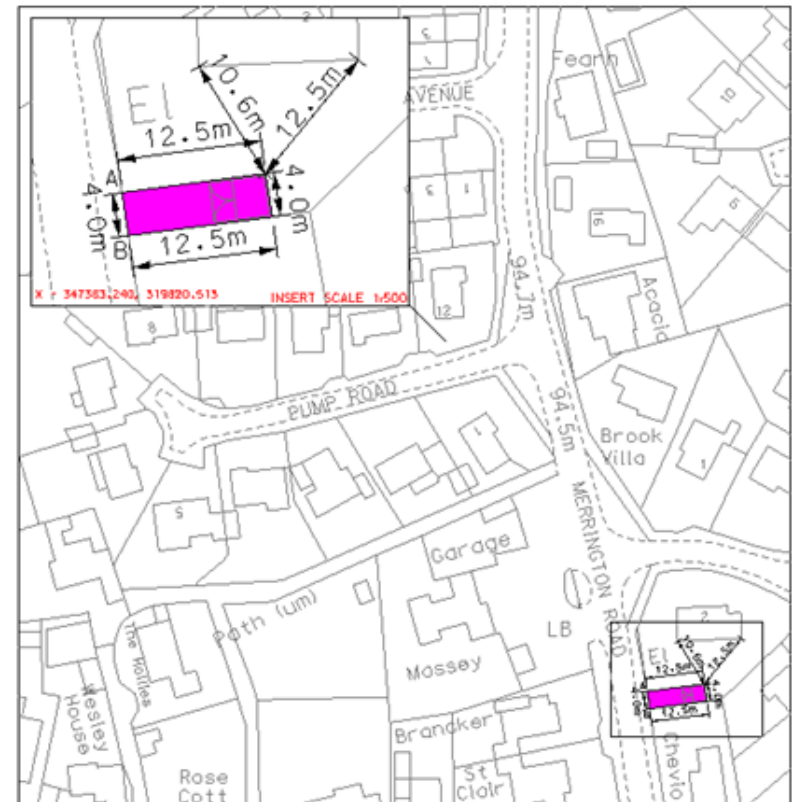
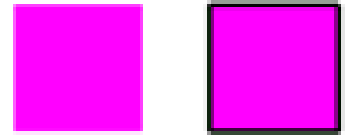
Substation Sites/Property

Property is to be shown.

❖ Coloured pink [EMU colour palette no 5] and may be edged black.

❖ True to scale.

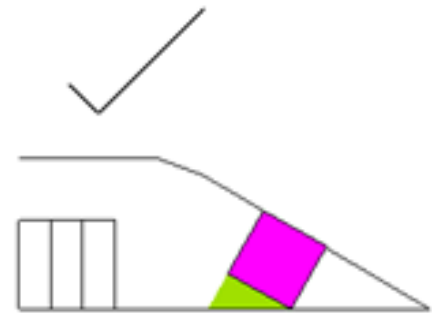
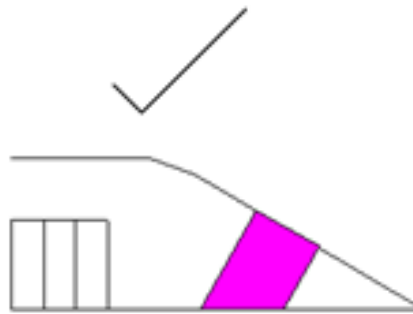
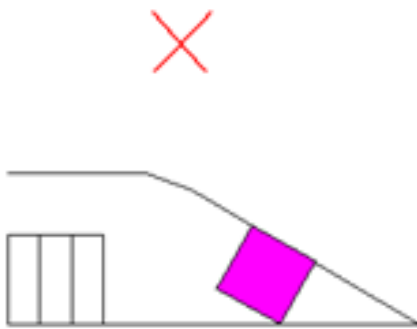
[use inserts if necessary]



Substation Sites/Property

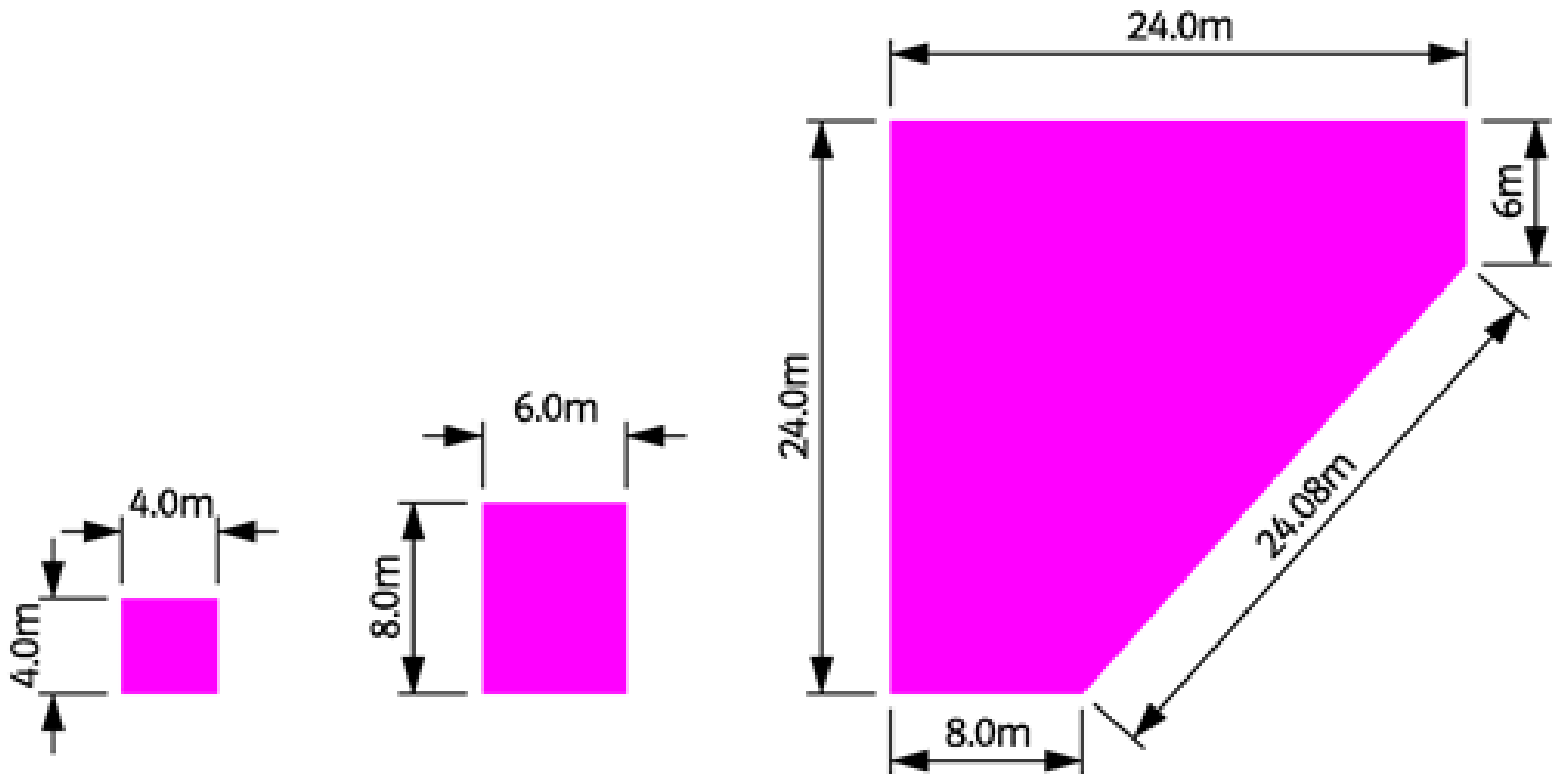
Positioned square to the back edge of the adopted highway.

If this is not possible, either extend the area of the site to be acquired or cover the area between the site and the highway with an access or combined cable and access easement.



Substation Sites/Property

Dimensions should be detailed next to the relevant site boundary.



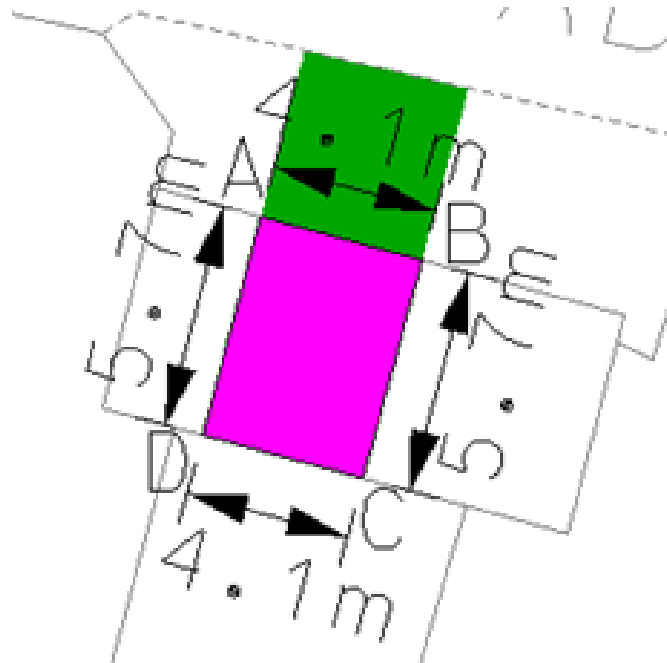
Substation Sites/Property

Annotate corners with letters, with side A-B to be the front of the property with the main site access.

If the plan is cluttered it is acceptable to just use letter A and B to confirm which side is the front.

SUBSTATION SITE/THE PROPERTY (SIDE A-B=FRONT UNLESS STATED OTHERWISE)

5



Substation Sites/Property

If appropriate show offset distances.



Site Access

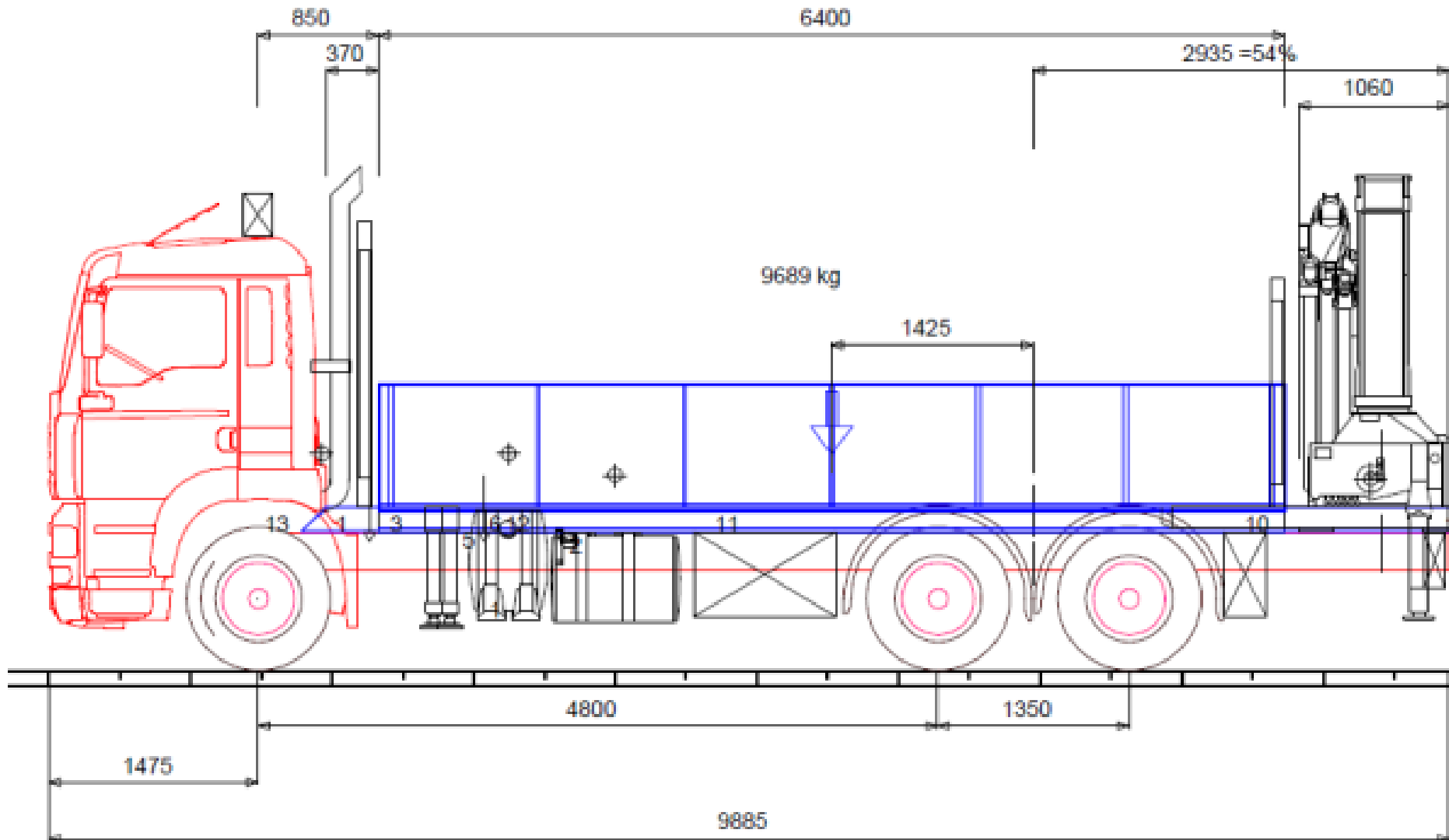
Confirm the access requirements.

Accesses should:-

- ❖ Be physically possible, that is of sufficient **width and height** to accommodate a vehicle and its load.
- ❖ Extend uninterrupted from the property to the currently adopted highway.
- ❖ Cover both sides of the road to allow access to the site and back to the highway.
- ❖ Allow room for a vehicle to be parked next to the site.
- ❖ If necessary allow a vehicle to be turned around.
- ❖ Take into consideration one way systems.
- ❖ Allow an area for unloading.

Site Access

We use Lorries of up to 26 tonnes to transport secondary network plant to site [dimensions in mm].



Site Access

In simple terms they are 9.9m long.

In terms of width they are approximately:-

- ❖ 3m Mirror to Mirror.
- ❖ 2.5m side to side [load bed].
- ❖ 6m when the stabiliser legs are fully extended.

In terms of height they are:-

- ❖ 3.81m tall.
- ❖ 1.37m from ground level to the top of the load bed [consider the size of what might be delivered to site].

Site Access

The standard for access to distribution sub stations is specified within Standard technique NCIV/2] and states that access should:-

- ❖ be a minimum of 3m wide.
- ❖ have a minimum unloading area by the substation of 3m x 3m.
- ❖ Access only easements/access-ways are to be shown using light green [EMU colour palette number 11].



Site Access

Accesses to primary sites may need to accommodate very large vehicles and weight is likely to be a consideration. Details of our requirements can be found in the Engineering Design Manual but the basics are:-

- ❖ 4.5m wide.
- ❖ Minimum internal radius of 6.0m and minimum external radius of 13.5m on corners.

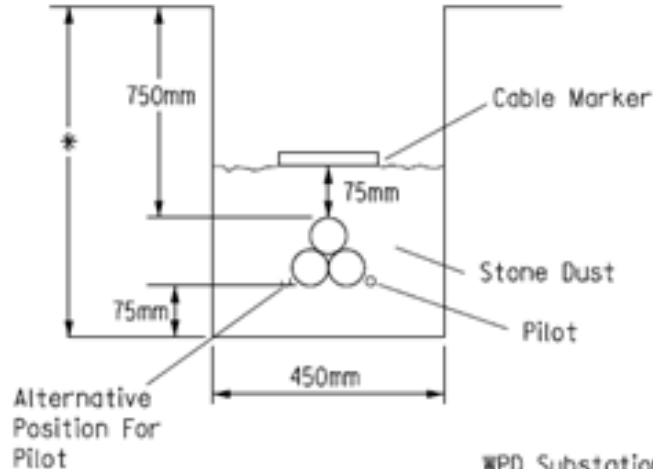


Cable Easements

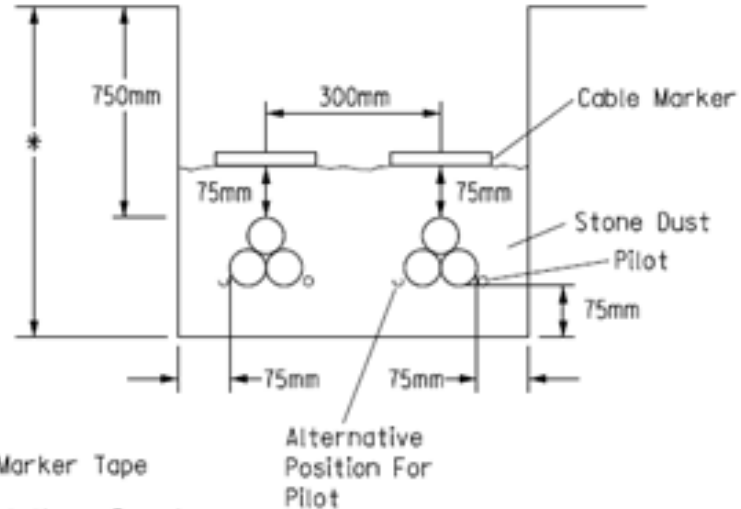
Confirm the size of the easement.

Have due regard to Standard Technique CA6A/4 relating to the installation of underground cables and the width of the cable trench.

33kV 1xCCT



33kV 2xCCT's



WPD Substation - Marker Tape

Non - WPD Land - Polythene Board

75mm Cover To Marker Tape

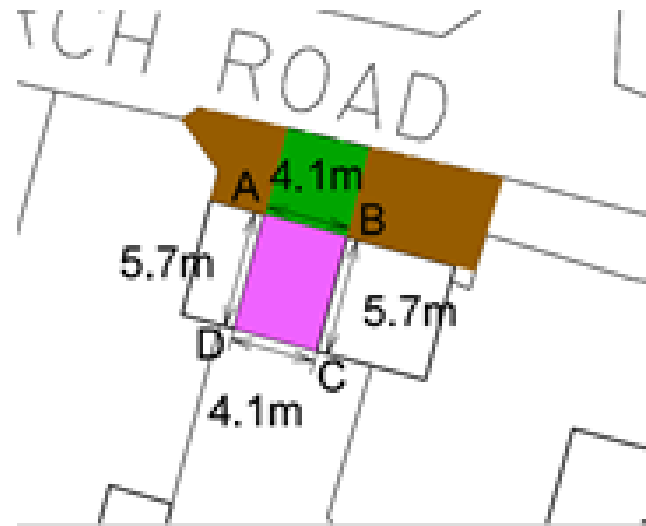
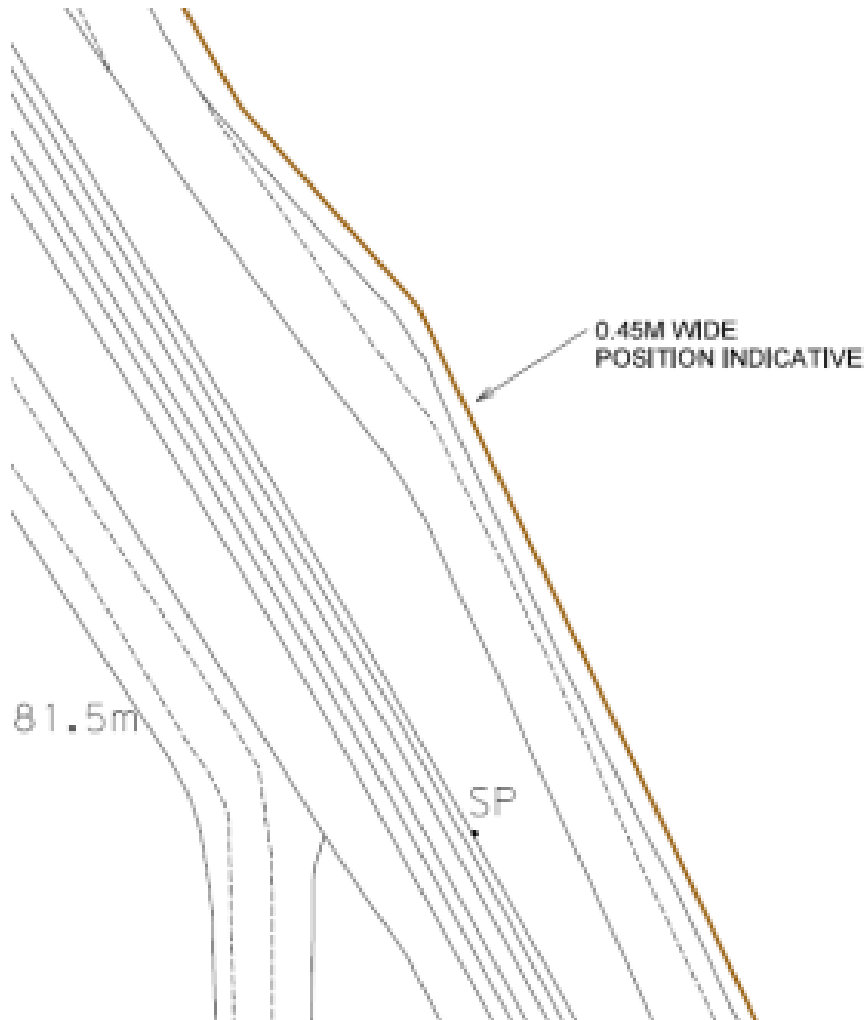
75mm 3mm To Dust, Limestone Or Granite Fine Stone Dust Bedding & Blinding

Cable Easements

Our cable rights are currently made up of two component parts:-

- ❖ A right to lay cables in the area/along the route of the line shown coloured brown EMU Colour palette number 118].
- ❖ A zone of protection to include the area shown coloured brown and “x” metres either side of it.
 - ❖ LV to 33kV, 2.0m either side of the area coloured brown.
 - ❖ 66kV to 132kV, 3.0m either side of the area shown coloured brown.

Cable Easements



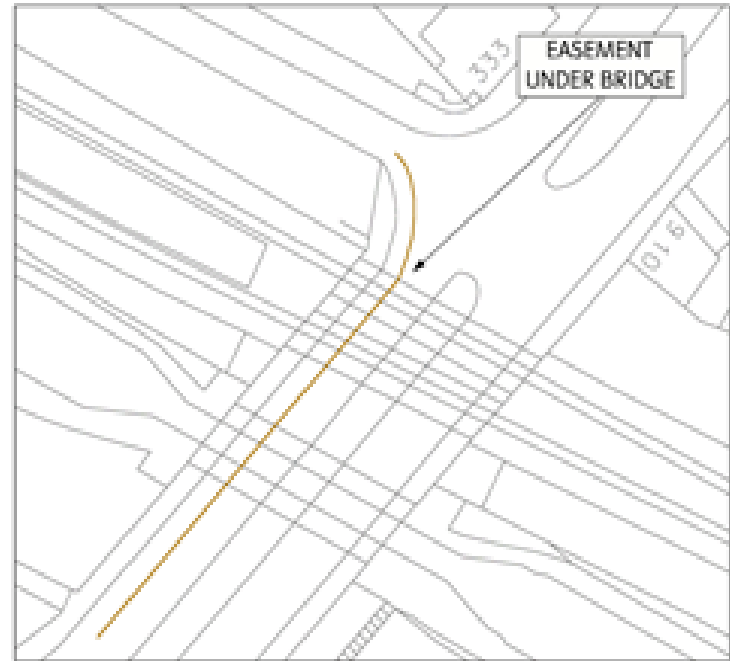
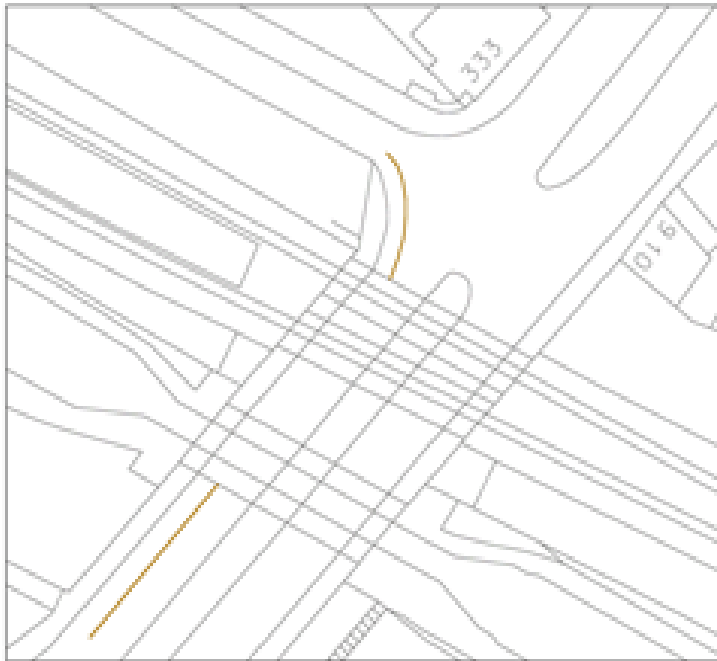
Cable easements can be drawn true to scale [ie when multiple cables are associated with a substation] or using an indicative line. [ie long linear runs of network]

When appropriate it is best to annotate both with dimension detail especially if they are not defined by physical features.

Try not to mix true to scale detail with indicative detail as it can get a little confusing.

Cable Easements

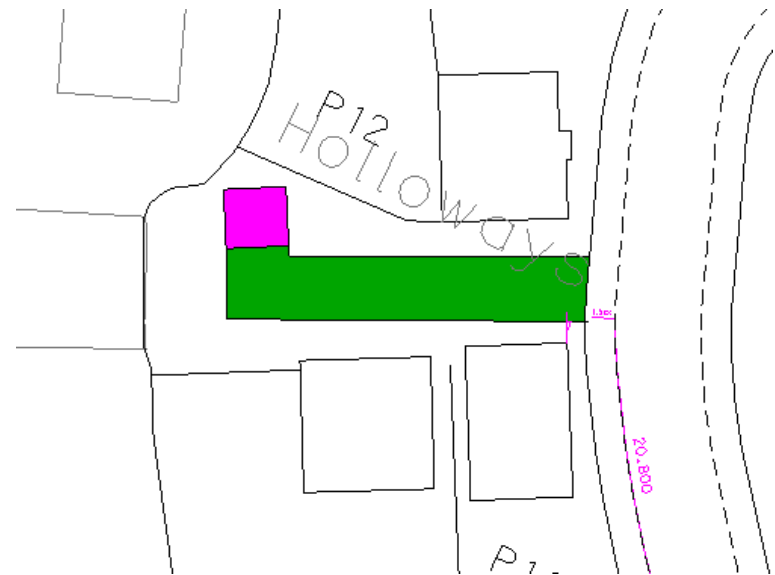
When cable easements run over and or cross under a bridge or an archway the easements should be drawn as if the arch or bridge were not in situ but in such a way that it is still visible and annotated to state whether the easement runs over or under the bridge/archway to clarify the situation.



Overlapping Cable And Access Easements

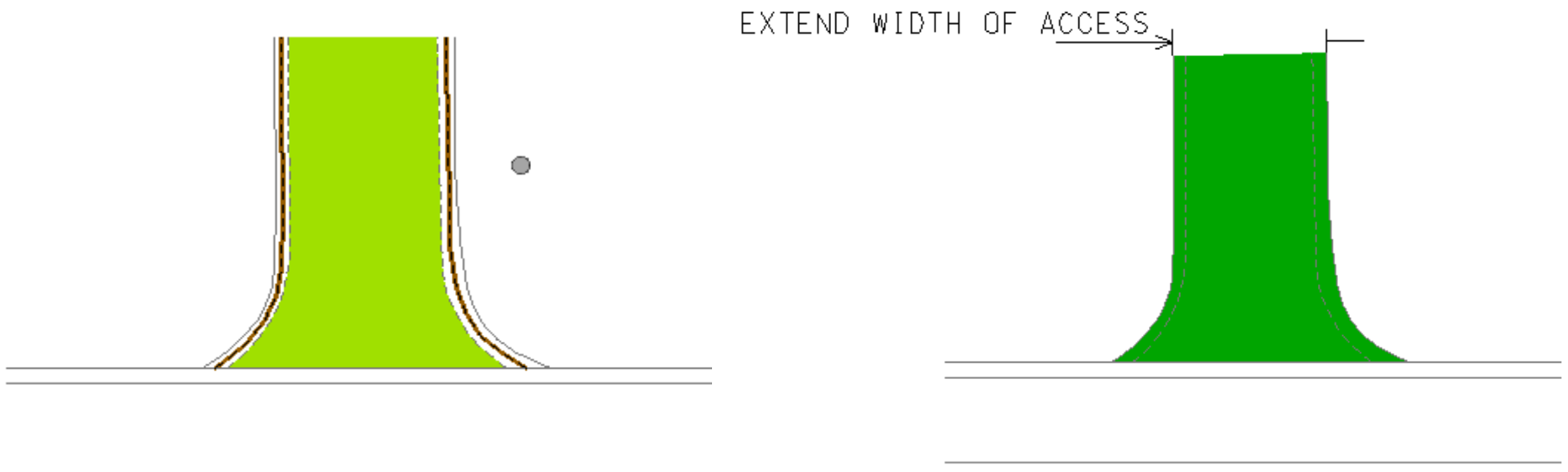
If a Cable Easement is to cross an Access Easement combine them as a dark green [EMU colour palette number 98] Cable and Access Easement.

A combined cable and access easement provides greater flexibility.



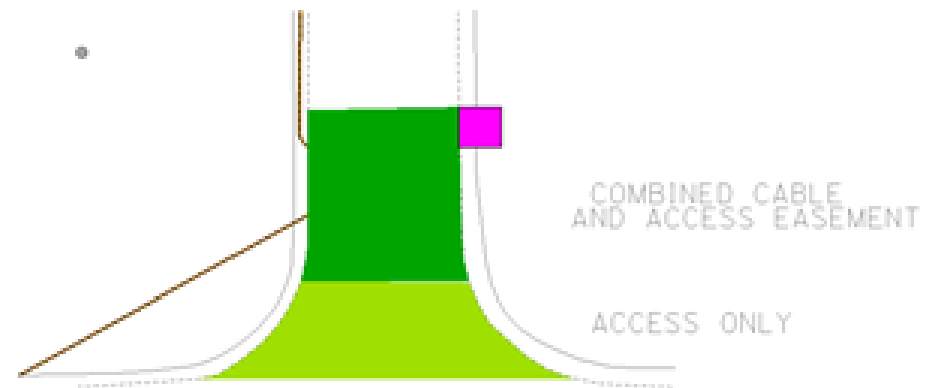
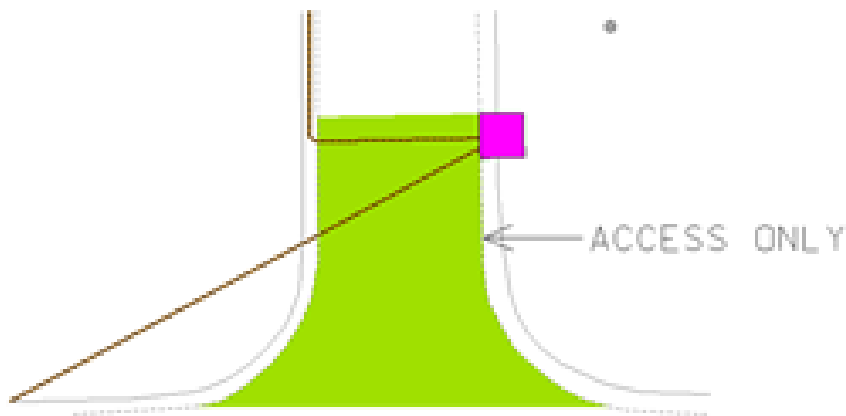
Combined Cable And Access Easements

Similarly if we require an access easement along a road and a cable only easement within a footway that runs parallel to the road covering both with a cable and access easement is simpler and provides a greater flexibility.



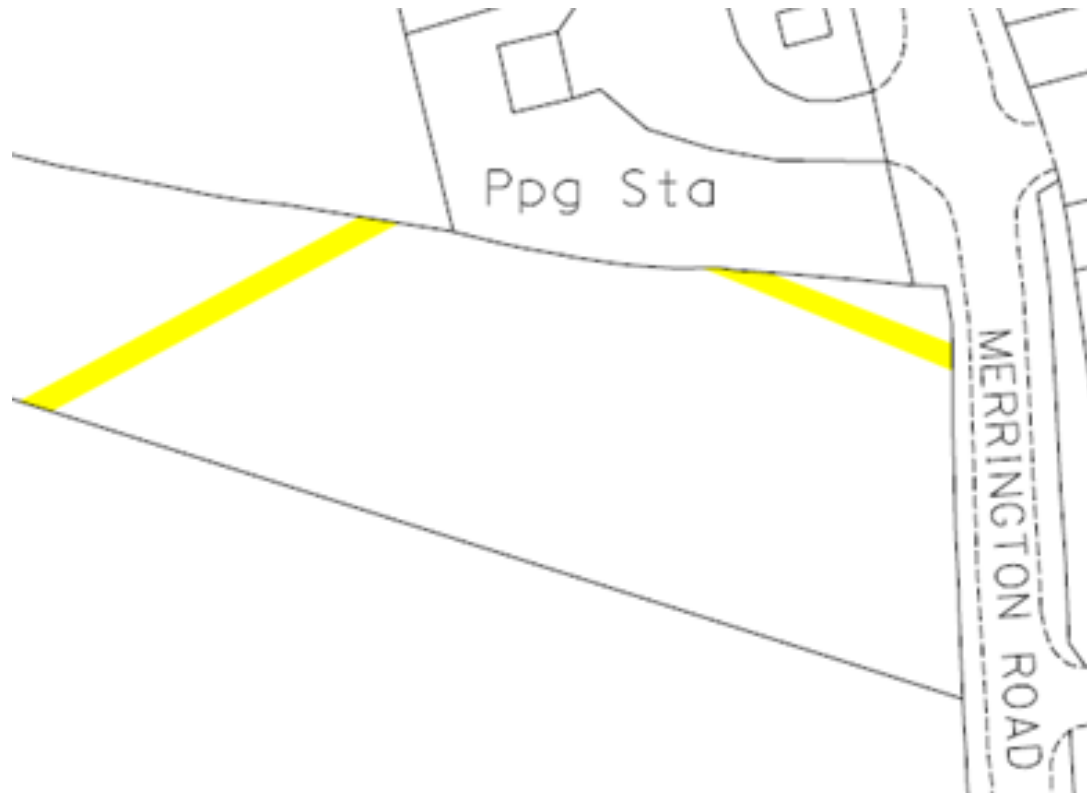
Combined Cable And Access Easements

It is accepted that it may be necessary to cover only that part of the access, which is crossed by cables, with a combined cable and access easement.



Overhead Line Easements

Our deeds give us the right to place and maintain overhead lines in the position shown by an indicative yellow line [EMU colour palette number 20] It is not necessary to detail pole, stay and or tower positions.

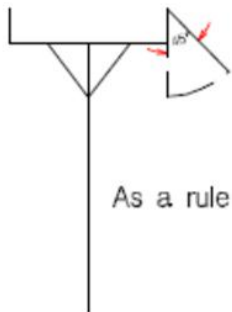
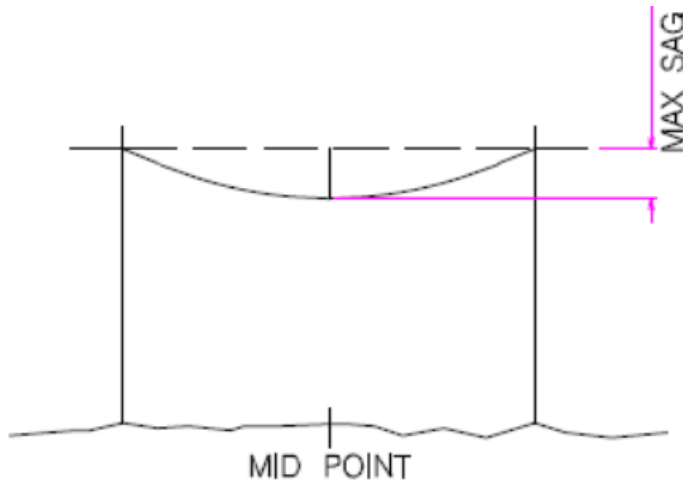


Overhead Line Easements

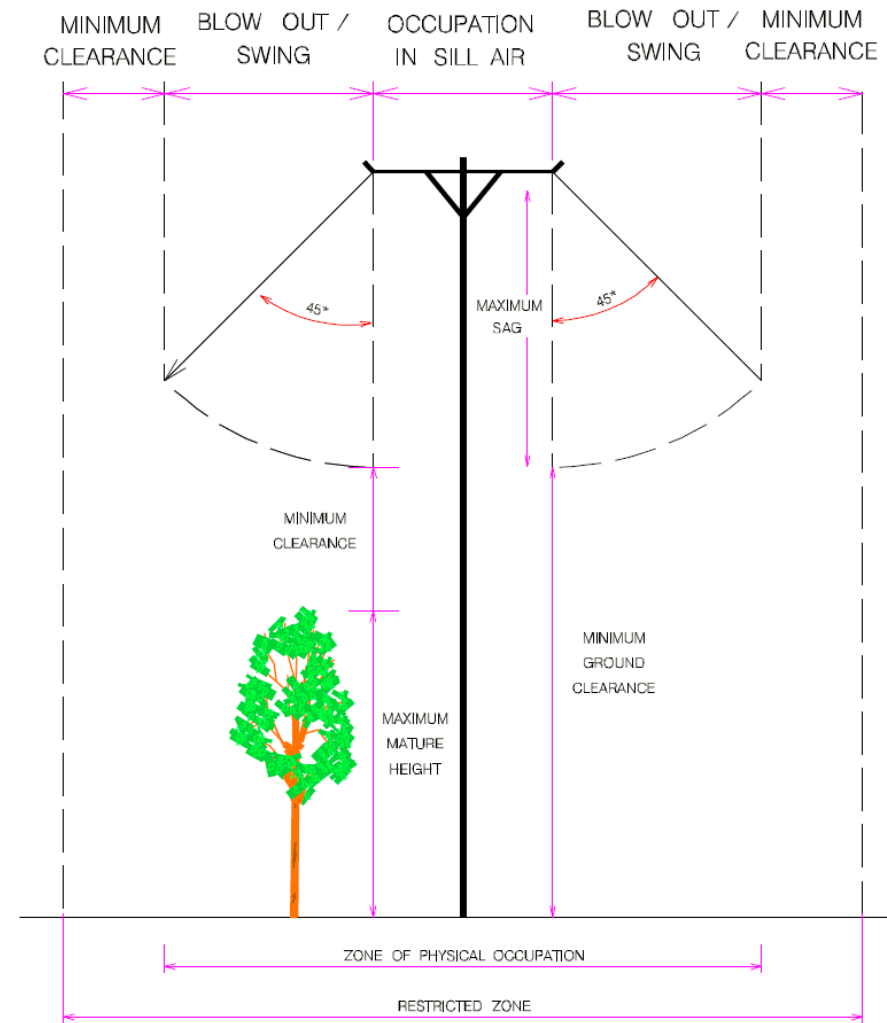
Easements are indicative and out of necessity based on a still air position as overhead electric lines sag / stretch and contract and swing / blow out [move up and down and side to side], with the amount of movement affected by:-

- ❖ Construction tensions.
- ❖ The type and size of conductor.
- ❖ Where the line is relative to the adjacent supports.
- ❖ Ambient and operating temperatures.
- ❖ Ice loading.
- ❖ Wind strength and direction.

Overhead Line Spatial Requirements - Lines Occupy A 3D Corridor



As a rule of thumb, maximum sideways swing = 75% of sag.
(71% is a more accurate measure)



For details of minimum clearances see Standard Technique OH1A3.

Property Boundaries

Boundaries should:-

- ❖ Only be detailed if absolutely necessary.
- ❖ Be shown as a red solid line.
- ❖ Not contradict any boundary detail held by Land Registry.

