

Memorandum

To All Construction Service Providers, Resource Managers/Coordinators, Network Compliance Auditors

Copy All Customer Project Managers, C Jenkins, J Baker

Date 14 October 05

Subject **Network Compliance – Underground Estates**

This memorandum has been prepared following a number of recent issues and incidents in regard to the tie in of underground estates and the future proposal regarding authorisation of service providers to complete the tie in of their green field work. A number of improvements in the existing process have been considered and are now implemented from the date of this memorandum. The changes cover, testing, reporting, rationalisation of forms/report sheets and the handover of underground projects for tie in.

Details of the changes/updates are included in this memorandum, can also be accessed through the Powercor standards internet site. (from next week)

- **Personnel Safety and Electrical Asset Completion Notice** (Document No PCA4143.D10) has been revised, additional information is now required, including a description of works/assets, verification of 'as built' drawings and check boxes indicating the appropriate test forms included - (*attachment a*)
- **High Voltage Cable Test Report** – the only accepted form is the extract out of Powercor Standard CC10, test items 1,2,3, and 4 (1min reading) must be completed -(*attachment b*)
- **Low Voltage Cable Test Report** – the only accepted form is the Powercor Standard CC091 -(*attachment c*)
- **Public Lighting Polarity Test Report** has been revised to include the Earth Test Report - Powercor Form 03-F570, this is the only form to be used - (*attachment d*)
Note: All public lighting columns must be listed.
- **LV UG Cable ends** - all Low Voltage cables not terminated are now to be insulated sealed as per the Powercor Standard GS351, this also allows for effective testing of cables -(*attachment e*)
- **Cable Location For Future Tie-in** - all underground cables that are not terminated but are prepared for a future tie-in should be identifiable by the installation of a standard service pit located 100mm past the end of the cable on the same offset, the pit should be installed similar to comply with the standard GS201- (*attachment f*)

- **Installation of UG Cables For Tie-in** - all new cables required to be tied in to an existing cable should be installed in a manner that overlaps the existing cable by sufficient length to enable the joint to be completed. The constructor must locate existing cable end, lay the new cable over the top of the cover slab and then back fill the trench, note the pit is to be used for identification of the location of the existing cable end. *-(attachment g)*
Note: The MOC's / No Go Zone processes must be adhered to prior to undertaking any excavation.
- **Labelling of Cables for Tie-in** - all cable ends are to be labelled during construction i.e. cable ends capped and buried in the ground. Suitable cable labelling can include permanent white/yellow paint marker or plastic label attached to the cable by means of cable tie; labels are to indicate the cable circuit details. *-(attachment h)*
- **Distribution Plant Transformers Test Report** – these report forms should be used to record the plant details, continuity and insulation tests, earth tests and a final checks, they are the only accepted forms and are included in the Powercor Standard CB011. Note: All transformers must have a continuity and insulation test completed and recorded.
- **Alterations / Additions to Assets** – the only accepted form is the Powercor Standard 06-F855 *-(attachment i)*
Note: generally for overhead projects

Should you have further queries please contact Les Ferris ph. 53272404 or Graeme Davenport ph. 53272238

Les Ferris
Network Compliance Manager
Ph. 0419 893 082
lferris@powercor.com.au

(attachment a)

Powercor Australia Ltd

(ABN 89 064 651 109)

PERSONNEL SAFETY AND ELECTRICAL ASSET COMPLETION NOTICE
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Further to the request for Tie-in works related to the following project:

Project Name			
Customer's Name			
Powercor Network Number		Powercor Reference	

Description of Works/Assets

I confirm the following details:

Drawing No. 'As Built'		Verified by	
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Date of Tie-in			
Nominated audits undertaken by			
Completed on (date)	NW Staged Compliance Audit		
	Final NW Compliance		

Tick the relevant boxes to indicate report/form attached

- | | |
|--|---|
| <input type="checkbox"/> Low Voltage Test Report –CC091
CC101 | <input type="checkbox"/> High Voltage Test Report (sections 1, 2 3,4) – |
| <input type="checkbox"/> Distribution Plant Transformers Test Report –CB011 | <input type="checkbox"/> Alterations/Additions to Assets - 06-F855 |
| <input type="checkbox"/> Public Lighting Polarity / Earth Test Report –03-F570 | <input type="checkbox"/> Network Staged Audit Checklist –12-F731 |
| <input type="checkbox"/> Final Network Audit Report –12 F-730 | |

I declare and understand that:

- All work excluding the Tie In is complete.
- The project has been designed and built to the approved Powercor/CitiPower standards and specifications
- The installed electrical apparatus must now be treated as alive and that any further work required on this apparatus shall only be carried out by authorised Powercor Australia employees.

Signed		Printed Name	
Position		Company	
Date			

Failure to lodge this form a minimum of five (5) business days prior to the nominated Tie In date will result in planned Tie In works being re-scheduled and an additional Tie In Fee being charged to the Developer.

(attachment b)

Please refer to CC101 Accessible from our Technical Standard

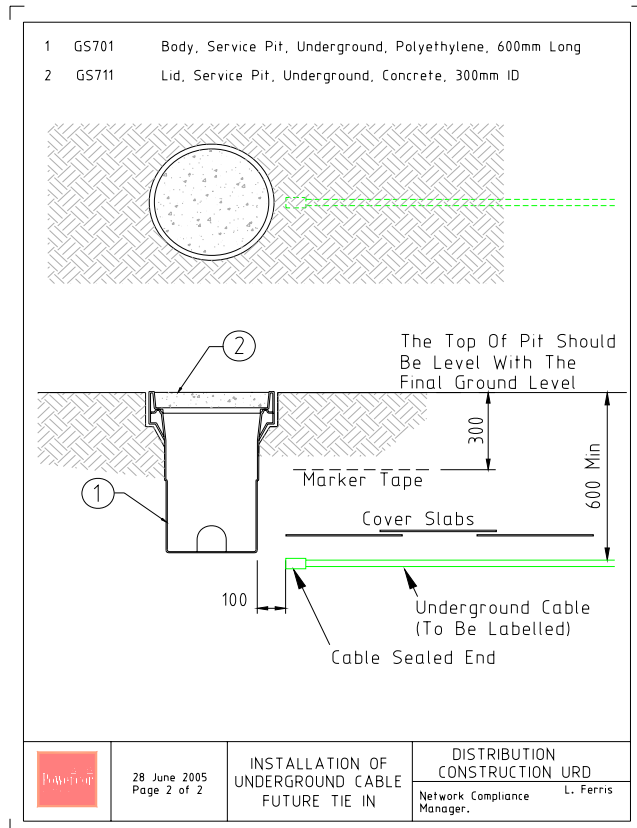
(attachment c)

Please refer to CC091 Accessible from our Technical Standard

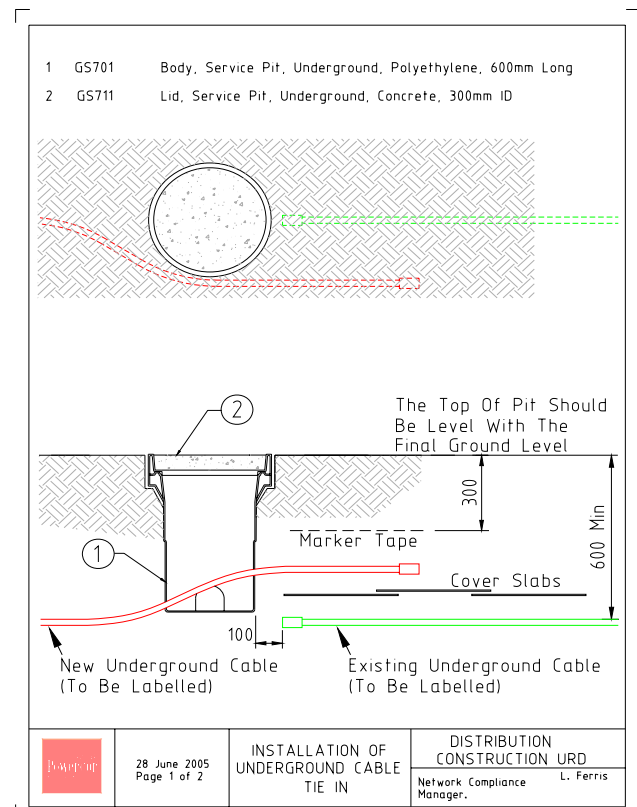
(attachment c)

Please refer to GS351 Accessible from our Technical Standard

(attachment f)



(attachment g)



(attachment h)

Labelling Options for Underground Cables

options - White Marker (Pentel Item # 100) or Plastic Label





Alterations / Additions to Assets

PROJECT TITLE					PM ORDER							
Pole					<i>As Built Details</i>				<i>As Built Details</i>			
	Lis Number											
	Spur Name Pole No											
	Size Strength				m kN				m kN			
Material Species				Conc Steel BB SG				Conc Steel BB SG				
X-arm 1	Voltage				66 22 12.7 11 LV				66 22 12.7 11 LV			
	Material				Steel Wood				Steel Wood			
	Location				Pol e	X-arm	Type Stru	N/She d	Pol e	X-arm	Type Stru	N/She d
	Insulator 1											
	Insulator 2											
	Insulator 3											
X-arm 2	Voltage				66 22 12.7 11 LV				66 22 12.7 11 LV			
	Material				Steel Wood				Steel Wood			
	Location				Pol e	X-arm	Type Stru	N/She d	Pol e	X-arm	Type Stru	N/She d
	Insulator 1											
	Insulator 2											
	Insulator 3											
X-arm 3	Voltage				66 22 12.7 11 LV				66 22 12.7 11 LV			
	Material				Steel Wood				Steel Wood			
	Location				Pol e	X-arm	Type Stru	N/She d	Pol e	X-arm	Type Stru	N/She d
	Insulator 1											
	Insulator 2											
	Insulator 3											
Misc	OFC Cable T.V. Fault In											
	Bird Covers etc											
Transformer	Make Serial Number											
	Rating Tap											
	Phasing				RW WB RB RWB				RW WB RB RWB			
	Earthing Type				Common Bonded Separate				Common Bonded Separate			
	HV LV Earth Read				HV LV Ohms				HV LV Ohms			
HV Switch / Fuses	Make / Number of											
	Fuse unit				PF EDO BA F-Tam				PF EDO BA F-Tam			
	Fuse Rating											
	Element Type				K E T				K E T			
LV Switch / Fuses	Make / Number of											
	Fuse unit											
	Fuse Rating											
	Element Type											
Surge Diverter's	Make											
	Number of											
	Class				A (Fire) C (non-fire)				A (Fire) C (non-fire)			
Stays	Size Angle				5 8 45 60				5 8 45 60			
	Voltage				66 22 LV				66 22 LV			
	Sidewalk Strut Size				1.8 2.4 3.0				1.8 2.4 3.0			