

Streetlight Guideline for Third-Party Works

TRANSPORT CANBERRA AND CITY SERVICES DIRECTORATE

DATE: JULY 2021



Document Information

Review and Approval

Date approved: July 2021

Approved by: Shelly Fraser, A/g Executive Branch Manager, Roads ACT

Review period: 6 months from date of effect or following a significant change in

the services delivered by the Transport Canberra and City Services

Directorate

Version Control

Version	Issue Date	Author	Details
1.0	15 November 2019	Executive Branch Manager, Roads ACT	Approved
2.0	06 July 2021	a/g Executive Branch Manager, Roads ACT	82
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1.0 Streetlight Guideline for Third-Party Works

I.I Purpose

The Streetlight Guideline for Third-Party Works (**Guideline**) has been prepared to inform any Third-Party applicants who intend to undertake work on the streetlight network of the necessary requirements before making a booking for isolation or energisation. This is an advisory Guideline.

The health and wellbeing of ACT Government employees, Third-Party employees and members of the public is paramount. This Guideline provides guidance for a safe operating environment and ensures a consistent and efficient process is followed.

I.2 Streetlight Network

Transport Canberra and City Services (**TCCS**) operates over 80,000 streetlights and associated infrastructure on residential streets, footpaths, arterial/major roads and in various public parks and other open spaces around the ACT.

The streetlight facility means any part of the infrastructure of a streetlight network and all components are classified as a Network Facility under the *Utilities Act 2000*. Transport Canberra and City Services is a public utility, the entity responsible for the operation of the streetlight network. Only a **TCCS Authorised Officer**¹ with appropriate delegation can interrupt the provision of a Territory service, in this instance through an isolation and energisation.

1.3 Scope

This Guideline applies to any Third-Party applicants undertaking streetlight works in the following areas:

New connection: Any new streetlight columns connected to a streetlight control cubicle ('SLCC') or an existing streetlight circuit.

Alteration or relocation: Any streetlight columns and cables proposed to be altered or relocated.

Removal, disconnection or decommissioning: Any streetlight assets including streetlight columns and cables requiring removal, disconnection or decommissioning.

Works or activities near the streetlight network: Any works such as tree trimming or excavation near the streetlight network that requires isolation.

This Guideline provides guidance to applicants who require a **TCCS Authorised Officer** to undertake an isolation or energisation to carry out the above Third-Party works.

Miscellaneous electrical works include:



Isolation: means disconnected from all possible sources of electricity supply by means which will prevent unintentional re-energisation of the electrical apparatus and which is assessed as a suitable step in the process of making safe for access to the electricity network.

Isolation restoration: means reconnection to source of electricity supply.

Energised work: means all work performed on apparatus energised or capable of becoming energised without implementing the full protective practice of isolating, providing de-energised and earthing at the worksite.

De-energised: means not connected to any source of electrical supply but not necessarily isolated, earthed, discharged or out of commission.

A licenced electrician is not authorised to undertake any streetlight isolation or energisation from any streetlight infrastructure. Under no circumstances does the **TCCS Authorised Officer** undertake or carry out any of the Third-Party activities.

I.4 Streetlight Network Code

TCCS is currently developing a Streetlight Network Code ('Code'). The Code is a requirement under Part 14, Division 14.1 of the *Utilities Act 2000*. The Code will apply to the streetlight network. The Code will also set out the requirements for the streetlight network to design, construct, operate and maintain the network in a safe and reliable manner and in a way that prevents interference with, and damage to, other assets, including other utilities.

Section 229B (2) of the Utilities Act 2000 provides that

"The draft streetlight network code may set out the following:

- (a) arrangements for the interaction between the Territory and another entity in relation to the streetlight network, including the following:
 - (i) the Territory's access to infrastructure owned by the Territory that is installed in a structure not owned by the Territory
 - (ii) an entity's access to infrastructure owned by the entity that is installed in a structure owned by the Territory
 - (iii) resolving disputes in relation to the arrangement
- (b) arrangements in relation to the appointment of a TCCS Authorised Officer for the streetlight network".

Until the Code is developed, this Guideline and any other direction from ACT Government Officers with appropriate delegation will take precedence.

1.5 Evoenergy Streetlight Supply Connections Approval Procedure

This Guideline does not supersede or take precedence over the *Evoenergy Streetlight Supply Connections Approval Procedure*. The *Evoenergy Streetlight Supply Connections Approval Procedure* is a procedure that applies to additions and circuit augmentations/modifications that



result in additional load exceeding the nominated threshold. Where additions and circuit augmentations/modifications result in additional load that exceed the nominated threshold, the applicant must seek approval from Evoenergy.

Refer to the current revision of the *Evoenergy Streetlight Supply Connections Approval Procedure* for the most up to date advice.



1.6 Training and Competencies

This Guideline outlines the training and competencies for anyone undertaking Third-Party works.

Transport Canberra and City Services reserves the right to request any Third-Party undertaking the works to present the following training competencies prior to undertaking the works and may refuse to undertake isolation and energisation requests if the following competencies are not met.

Training Competencies	Third-Party (2020) Required Competencies	Third-Party (2021 onwards) Required Competencies
Nationally recognised Certificate III in Electrotechnology (Distribution Powerline or Electrotechnology Electrician)	V	٧
Electrical Supply Industry (ESI) rules training (Evoenergy Blue Book) or any ESI that supersedes this training		٧
UETTDRRF06B - Perform rescue from an energised LV panel	٧	٧
UETTDREL16A - Working safely near live electrical apparatus		٧
UETTDRRF10B – Provide First aid in an ESI environment	٧	٧
HLTAID001 - Provide CPR	٧	٧
UETTDREF11A – Testing of Connections to LV electricity networks	٧	٧
10675NAT – Asbestos Awareness	٧	٧
10559 NAT – Working Safely with Asbestos Containing Materials	٧	V
CPCCWHS1001 – Work Safely in the Construction Industry	٧	V

At the time of applying for any Miscellaneous Electrical Works, the **ACT Electrical Licence** number must be provided. This must also be presented on-site.



2.0 Fees and charges

2.1 Infrastructure, Roads and Public Transport Administrative Fees

Transport Canberra and City Services notifies its fees and charges on the website. To view the latest and most up to date information please visit https://www.tccs.act.gov.au/about-us/fees and charges.

Search "streetlight" in section *Infrastructure, Roads and Public Transport Administrative Fees*Fees and charges include the following items:

Streetlight isolation electrical works - disconnection from all possible sources of electricity supply

Streetlight isolation restoration electrical works - reconnection to source of electricity supply

Streetlight energisation - all work performed on apparatus energised or capable of becoming energised without implementing the full protective practice of isolating, providing de-energised and earthing at the worksite

Streetlight isolation/restoration/energisation/decommissioning if work exceeds 1 hour

Streetlight isolation/restoration/energisation/decommissioning if work exceeds 1 hour and occurs after 3pm

Streetlight non-attendance fee

Decommissioning of Streetlight related assets

Asset tags - asset identification tags for newly installed streetlight assets



3.0 Miscellaneous Electrical Works

3.1 New Connections to a SLCC, Alteration/Relocation of Streetlight Columns and Cables or Removal/Disconnection/Decommissioning of Streetlight Process

The following are considered Miscellaneous Electrical Works:

- 1. **New connection:** Any new streetlight columns connected to a streetlight control cubicle ('SLCC') or an existing streetlight circuit.
- 2. **Alteration or relocation:** Any streetlight columns and cables proposed to be altered or relocated.
- 3. **Removal, disconnection or decommissioning:** Any streetlight assets including streetlight columns and cables requiring removal, disconnection or decommissioning.

Note: Under no circumstances is it the responsibility of the **TCCS Authorised Officer** to undertake the miscellaneous electrical works. All electrical works to be undertaken will be carried out by the Electrical contractor requesting the isolation and ensure that the person/s have obtained the required Training and Competencies.

TCCS have the following time allocations for the **TCCS Authorised Officer** to undertake the following activities:

- 1 hour for an electrician to attend isolation works,
- 1 hour to attend restoration works,
- 1 hour to attend energisation works, or
- 1 hour to attend decommissioning works.

NOTE: If the **TCCS Authorised Officer** is required on site for longer than the stated time allowance, TCCS will charge an additional hourly rate which will be invoiced separately. Please see Infrastructure, Roads and Public Transport Administrative Fees for rates.

Any new connections, alteration, relocation, removal, disconnection or decommissioning to the overhead streetlight network will need to specifically outline this in the application process.



3.2 Planning, Design and Construction Process

Steps	Notes	
	If your development requires Development Application (DA) approval, this Guideline does not supersede the requirements of the DA process.	
 Seek relevant design approval (prior to construction) through the responsible TCCS/Territory Project Officer. The TCCS/Territory Project Officer is the officer responsible for project planning and development, coordination and provision of technical advice against standards/codes/guidelines/policies and management of stakeholder relationships on behalf of the Territory. 	Refer to the following TCCS Reference Documents: Reference Document 06 – Requirements for Design Acceptance Submissions. Reference Document 06A – Requirements for Design Acceptance Submissions for Infill Developments. TCCS as the Utility operator of the streetlight network requires Design Acceptance prior to work being carried out for new connections, alterations, relocations, removal, disconnecting or decommissioning as described at Streetlight Network Section 1.2. If your project requires removal of streetlight columns or temporary relocations to complete your project, a streetlight relocation or removal acceptance is required from the	
It is your responsibility to obtain Dial Before	responsible TCCS/Territory Project Officer as part of the Development Application, Building Application or Design Approval. Refer to Section 5 for more information.	
3. Provide Streetlight Works as Executed (WAE) Documentation, RD4 form for Asset Description and AS/NZS 3000 mandatory testing and verification results including voltage drop and fault loop impedance calculations.	TCCS will review the Works as Executed Drawings as part of the Operational Submission review process in accordance with the TCCS Reference Document 8 – Requirements for works as executed records. WAEs should be submitted through the ProjectWise portal to the TCCS/Territory Project Officer.	



Steps		Notes	
		If your Works as Executed Drawings have been rejected, the TCCS Authorised Officer will be unable to provide any isolations (disconnection/restoration) or energisations.	
		Streetlight isolation electrical works - disconnection from all possible sources of electricity supply:	
		When booking a Streetlight isolation electrical works - disconnection from all possible sources of electricity supply an appropriate design approval is to be submitted through the Smartform.	
4.	Visit Streetlight Payments Smartform https://forms.act.gov.au/smartforms/servlet/S martForm.html?formCode=1416 to register a	Streetlight isolation <u>restoration</u> electrical works or Streetlight <u>Energisation</u> :	
	booking for an isolation (disconnection/restoration) or energisation. The form does not guarantee that your intended day will be immediately booked. However, TCCS will endeavour to accommodate your booking request.	When booking a Streetlight isolation restoration electrical works or Streetlight Energisation, an accepted file format* of the approved Works-As-Executed (WAE) drawings along with an accepted file format* of confirmation of acceptance from the TCCS/Territory Project Officer is to be submitted with the Smartform.	
		*Note the Streetlight Payments Smartform will only upload files in the following formats: jpg, jpeg, gif, png, zip, pdf, doc, docx, xls, xlsx and docx.	
		Email acceptance confirmation will need to be converted to any of the above acceptable file formats before uploading.	
5.	Once approval is received, send Certificate of Electrical Safety (CES) and AS/NZS 3000 mandatory testing and verification results in accordance with the <i>Electrical Safety Act</i> to tccs.rmstreetlightingces@act.gov.au.	TCCS requires the CES form prior to the isolation. You can cc the tccs.rmstreetlightingces@act.gov.au when filling out the form so it will automatically send from Access Canberra Smart Form.	
6.	TCCS will endeavour to confirm the booking within 48 hours of receiving, subject to all the approvals and attachments being provided.	TCCS will reserve the requested booking date if it is available subject to the processes being implemented correctly before confirming the	



		Steps	Notes
			booking.
-	7:30am	oking time will generally be between and 2:00pm on Monday to Friday ing public holidays).	Note actual booking times will be subject to availability of the TCCS Authorised Officer/s.
i (8. Compliant temporary lighting is required to be installed to compensate where permanent compliant lighting is not able to be provided. It is up to the applicant to factor this contingency. TCCS reserves the right to cancel the booking request if temporary lighting measures are not factored into a project.		Temporary lighting plans require acceptance from the TCCS/Territory Project Officer.
		day of isolation (disconnection), the uthorised Officer will:	
	a.	Meet with the licenced electrician on site to confirm the streetlight columns and Streetlight Control Cubicle (SLCC) to be worked on.	
	b.	Isolate control point/s with lock and/or Danger tags.	
	C.	Notify the electrician that the isolation is complete, request to see the electrician's licence (ACT registered) and issue the electrician with an Isolation Permit.	
	d.	Notify the electrician that the network is available to be worked on.	
Electrician to ensure streetlight works have been constructed to all relevant Standards, design drawings and specifications, including but not limited to:		onstructed to all relevant Standards, drawings and specifications, including	
	a. AS/NZS 3000.		
	b.	AS 1158.	
	C.	ACT Government standards and specifications namely: <i>Municipal Infrastructure Standards Part 14 Public Lighting</i> ; <i>Municipal Infrastructure</i>	



Steps	Notes
Technical Specification Part 12 Public Lighting; or any TCCS standard that may apply.	
11. Electrician must attach asset tags prior to the isolation restoration or energisation booking with the TCCS Authorised Officer.	
12. Electrician must provide the TCCS Authorised Officer with a returned Isolation Permit prior to the isolation restoration and/or energisation. The electrician will need to be on site when the TCCS Authorised Officer returns.	
13. The TCCS Authorised Officer has the right to reference the submitted Certificate of Electrical Safety (CES) to ensure details are correct and ensure the correct connection has been undertaken and appropriate dead tests performed.	All electricians who make a declaration on the Certificate of Electrical Safety declare that they "hereby notify that the installation work described in this certificate has been tested in accordance with AS/NZS 3017 and that the work complies with AS/NZS 3000, SAA Wiring Rules; and that I will send a copy of the Certificate of Electrical Safety to the customer within fourteen days as required by the Electricity Safety Act 1971."
14. The TCCS Authorised Officer will energise the Streetlight Control Cubicle (SLCC) for the electrician to undertake live mandatory testing such as Polarity, Phasing and Fault loop impedance in accordance with Section 8 of AS/NZS 3000. Refer to Testing and Verification	If the electrician is not present for the booking, TCCS will not energise the SLCC and liability will be with the electrician. The incident may be reported in the TCCS Safety Management System which is maintained by TCCS in accordance with the <i>Territory Records Act</i> .
15. All works and testing must be completed by 2pm. The electrician will need to arrange a time with the TCCS Authorised Officer that will allow the electrician sufficient time to undertake their own testing.	Unless prior alternative arrangements have been made.
16. Once TCCS is satisfied with the testing undertaken, the SLCC will be returned to normal operation and is not to be accessed by the electrician unless otherwise directed by TCCS Authorised Officer.	



Steps	Notes
17. TCCS may issue a letter regarding non- conformance to mandatory testing. TCCS reserves the right to refuse or cancel any future bookings if a company fails to adhere to the relevant Australian Standards.	

3.3 Cancellations or failure to attend site

- 1. If for any reason the isolation restoration, isolation disconnection or energisation booking requires cancellation, at least 2 business days notification is required. Failure to notify may result in another booking and associated fees.
- 2. If an isolation restoration, isolation disconnection or energisation booking is cancelled outside of this timeframe, TCCS may withhold a late cancellation fee from the refund.
- 3. If the electrician fails to attend a booking, this may result in TCCS withholding a late cancellation fee from the refund.
- 4. Inclement weather will apply to bookings and TCCS will endeavour to rebook at a suitable time. This includes Total Fire Ban days.
- 5. Temporary Traffic Management (TTM) plans may be applicable to your works. This is subject to a separate approval process and should be planned at the beginning of your project. TCCS reserves the right to confirm approved TTM plans are in place prior to providing any isolation.

3.4 Lost Isolations Permits

- 1. Under no circumstances will TCCS energise a circuit if the isolation permit cannot be presented.
- 2. Where an isolation permit is lost, this may result in the incident being reported in the TCCS Safety Management System for future reference.
- 3. TCCS reserves the right to refuse or cancel any future bookings where there is a lost permit without reasonable explanation.



4.0 Streetlight Column Asset Tags

4.1 Planning

Streetlight asset tag applications are to be undertaken by filling in the Streetlight Payments Smartform (note the same Smartform is used for streetlight isolations and asset tags allocation): https://forms.act.gov.au/smartforms/servlet/SmartForm.html?formCode=1416

- 1. At **Design Stage** the streetlight asset tag application is to be submitted. Asset tags will be allocated by TCCS.
 - a. Note: Asset tag applications should be undertaken at the design stage, energisations cannot occur until asset tags are installed on streetlight columns and SLCCs.
- 2. Each streetlight column (regardless of the number of light fittings) and each streetlight control cubicle (SLCC) requires an individual streetlight asset tag.
 - a. **Note:** For example, if there are 200 x new streetlight columns and 2 x SLCCs, then 202 asset tags are required.
- 3. Asset tags are allocated in a per suburb block. Where a project spans over two suburbs and streetlights are installed on both sides of a road, i.e. Tillyard Drive where streetlights are installed in both Flynn and Charnwood, this needs to be noted on the drawings. The designer will need to request asset tag quantities per suburb for the same project (e.g. 50 asset tags for Flynn and 20 asset tags for Charnwood).
- 4. It is not TCCS' responsibility to read through the plans to determine the asset tag numbers and quantity. You must specify this at the time of lodging the application. The requirement for new asset tags resulting from failure to distinguish between suburbs may attract new fees.



5.0 Dial Before You Dig

5.1 Overview

Dial Before You Dig (DBYD) provides a service to anyone planning to excavate. The DBYD system provides information on the general location of electricity, gas, water and telecommunications infrastructure. Once an enquiry is lodged, details including the location, date and type of work being carried out are then sent to all listed infrastructure owners with assets in the vicinity of the project. The asset owners will then respond directly to the person enquiring with information on the location of their infrastructure assets. This information is normally provided in the form of plans and is required to be on site to ensure the right information is available before the excavation commences.

Streetlight underground and overhead information is provided under the DBYD service. The following disclaimer on the general location is provided and accurate at the date of publication of this Guideline:

General location only

- The approximate location of Street Light Network assets (the Assets) in the nominated area are shown on the attached maps (the Asset Plan).
- The Asset locations provided with this response are based on the information available at the time and are only an indication of the presence of Assets within the nominated location. If the nominated area is not what you require, please resubmit another inquiry.
- The Asset Plans provided do not show the presence of any other assets, including private property assets.
- Please be aware that the location of the Assets may change to those indicated on the Asset Plan. The Asset locations shown on the attached Asset Plan are indicative only. Due to changes in surface levels and surrounding infrastructure, and works undertaken by other parties, Asset location may differ to those shown on the Asset Plan.
- It is your responsibility to verify the location of the Assets shown on the Asset Plan through positive identification process.
- A new Asset Plan should be obtained every 28 days to ensure currency and accuracy. It is your responsibility to obtain a new Asset Plan if required.
- While every endeavour has been made to provide information that is accurate and reliable, complete accuracy cannot be guaranteed. Electrix-Omexom or the Territory does not represent or warrant that you or any user of the Asset Plan will achieve any particular objective or guarantee any outcome.



5.2 What to do with your information?

The DBYD supplied maps and plans should only be used as a guide and are indicative only. Streetlight cables can be direct buried or in conduit(s). The determination of the assets status needs to be made by the Third-Party undertaking the works on site.

All electricity cables and conductors identified on the Asset Plans, including those marked as 'abandoned' must be treated as live until such time they are tested and proven to be de-energised. TCCS requires cables identified as 'abandoned' that may be impacted, severed, damaged and/or removed by excavation works be proven deenergised before commencing full-scale excavation.

Potholing or other non-destructive techniques must be utilised until the underground assets are located. When located, excavation may commence provided the persons carrying out the excavation follow the appropriate specifications regarding minimum safe working distances when excavating within the vicinity of the respective utility network assets.

TCCS recommends a site inspection is conducted before commencing any works near utility network assets. TCCS does not provide asset location marking services. This is Electrician's responsibility.



6.0 Isolation Checklist

Stage	Isolation Checklist	Have you:
	1. Request for Design Acceptance submitted as per TCCS Reference Document 06/06A to the responsible	Y/N
	TCCS/Territory Project Officer. Visit https://www.cityservices.act.gov.au/plan-and-build for further	-
	information.	
Planning and Docign	2. Request streetlight relocation or removal acceptance from the responsible TCCS/Territory Project	
Planning and Design	Officer. If your request is for relocation or removal only, proceed to booking following acceptance.	
	Include evidence of acceptance with your booking.	
	3. If your project cannot reinstate streetlighting on the same day, temporary compliant lighting shall be	
	installed to compensate. Start planning for this now. TCCS will request to see this information.	
Construction and	1. Submit WAE, RD4 Form and AS/NZS 3000 mandatory testing and verification results for projects that	Y/N
Handover	require Operational Acceptance.	
	Submit a booking request through the Streetlight Payments Smartform	Y/N
	https://forms.act.gov.au/smartforms/servlet/SmartForm.html?formCode=1416	
Booking	2. Attach all relevant proof of acceptance and documentation to the Smartform in compatible file formats.	
	3. Once booking confirmation is received, send Certificate of Electrical Safety (CES) to	
	tccs.rmstreetlightingces@act.gov.au	
Prior to Isolation	 Contact <u>TCCS.streetlighting@act.gov.au</u> or call (02) 6207 6222 to confirm your booking. 	Y/N
Daviellaslation	1. Meet with the TCCS Authorised Officer to confirm which streetlight columns and streetlight control	Y/N
Day of Isolation (disconnection)	cubicles will be isolated (disconnection).	,
(disconnection)	2. The TCCS Authorised Officer will issue the licensed electrician with an isolation permit.	
Day of Indiation	1. Electrician to prepare for the Isolation restoration and/or Energisation process. This includes	Y/N
Day of Isolation	undertaking AS/NZS 3000 mandatory testing and verification.	
(restoration) and/or Energisation	2. All works and testing must be completed by 2pm the same day.	
Lifergisation	Isolation permits to be handed back to the TCCS Authorised Officer.	



7.0 Testing and Verification

Relevant Standards, Guidelines and Specifications

- AS/NZS 3000 Electrical Installations Wiring Rules
- AS/NZS 3017 Electrical Installation Verification Guidelines
- Territory Design Standards and Specifications
- Guidance, Notes and Fact Sheets published by Access Canberra Electrical Inspectorate.