

Obligations

For

Working on or Near the Tramway



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1. Introduction

This document:

- Provides the necessary information about the procedures that need to be followed in order to obtain authorisation to undertake works on or near the Edinburgh Tram System and to provide advice on protection of the tram infrastructure.
- Defines the process to be followed by external and internal parties to ensure the safety of their employees and that the structural integrity of the tram infrastructure is protected and maintained.
- Applies to all sections of track. The applicant should note that an application may require to be deferred to avoid interference and or disruption to the Edinburgh Tram operation.
- Should be read in conjunction with other guidance available on the City of Edinburgh Council (CEC) website relating to applications for consent to excavate the road, construct footway dropped crossings, road occupation, scaffolding, tower cranes, hoists, mobile cranes, cherry pickers and hi-abs.

In order to ensure that work on or near the tramway is carried out safely, it is necessary to obtain authorisation from Edinburgh Trams and agree a safe system of work <u>before</u> the work starts. Application for Authority to Work (AtW) must be accompanied with a documented safe system of work including Method Statement, Risk Assessment and where applicable Traffic/Pedestrian Management Plan.

The safe system of work must recognise and take cognisance that the contractors have considered the impacts of working on or near the tram lines and live power cables. Failure to do so may mean the work will be suspended.

Unauthorised work can be dangerous and is contrary to the Edinburgh Tram Byelaws, New Roads and Street Works Act (Scotland) 1991 Section 152, and the Health and Safety at Work Act and may be subject to a penalty fine under Byelaw 10 of the Edinburgh Tram Bylaws.

It is the relevant parties' responsibility, to ensure that they have in place, adequate and appropriate safe systems and processes to identify and manage any associated risks, plan and control their works on or near the tramway, in line with this document and current Health and Safety legislation.

Any employee, contractor, subcontractor or persons under their control must be aware of the risks and hazards identified within or adjacent to the worksite and must comply with the agreed safe system of work and the obligations identified within this document.

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2. Purpose

The purpose of this document is to ensure that for any work carried out adjacent to the tramline taking full cognisance of:-

- the risk of injury to the public, contractors, Edinburgh Trams' staff and others caused by moving trams, live overhead line equipment, structural weakening and the work itself is adequately controlled while work is being carried out on or near the tramline
- the risk of damage to trams, the Edinburgh Tram Network and third party property caused by the method of working and the equipment associated with the work and the worksite is adequately controlled
- the structural integrity of the Edinburgh Tram Network is not compromised
- the disruption to the tram service caused by works on or near the tramline is minimised
- there are no undue delays or restrictions to work being carried out on or near the tramline caused by Edinburgh Trams' processes, particularly if the works are associated with an emergency, and
- adequate advice and assistance is readily available from Edinburgh Trams to those wanting to work on or near the tramline

3. Scope

The scope of this document covers all work (including emergency works) that might have an effect on the operation or infrastructure of the Edinburgh Tram Network; such work includes work carried out by, or on behalf of third parties and their contractors, CEC, utility companies, Edinburgh Trams and occupiers of properties adjacent to the tramline. It details how work must be planned, co-ordinated and authorised.

4. Definitions and Abbreviations

4.1 Definitions

Term	Definitions
Work	Activity involving mental or physical effort done in order to achieve a result OR as a means of earning income through employment
Operator	Edinburgh Trams (ET), who are responsible for the management of the Edinburgh Tram Network
CEC	City of Edinburgh Council
Duty Holder	'Duty holder' means the person responsible for carrying out a particular duty under the The Railways and Other Guided Transport Systems (Safety) Regulations (ROGS)



Term	Definitions			
Edinburgh Tram Network	All elements of the tram infrastructure including trams, track, structures, tram stops, the depot and ticketing systems.			
Hazard Zone	The area within which there is the potential for coming into contact with the tramway infrastructure.			
Overhead Line Equipment (OLE)	The arrangement of electrical conductors, supporting poles and cables suppling electrical power to the trams.			
The Applicant	The person responsible for planning the work and who is in a position to ensure that the safe system of work agreed with Edinburgh Trams is adhered to by those carrying out the work.			
Control Room	The place in Gogar Depot from where the operation of the Edinburgh Tram Network is managed.			
Scottish Roadworks Register (SRWR)	The register of works by statutory undertakings that is maintained by the Scottish Roadworks Commissioner.			
Authority to Work (AtW)	The electronic permit issued by Edinburgh Trams to give a person permission to carry out work on or near the tramway.			
Permit+	AtW application web platform.			
CEC Permit	A consent issued by CEC giving permission for scaffold erection, skip placement, road occupation, road excavation etc.			
Routine Works	Works which are non-intrusive and have minimum impact on the network			
Intrusive Works	Works which will have a significant effect on the operation of the tramway by delays or cessation of service or an effect on the structural integrity of the infrastructure			
Emergency Works	Works that need to be carried out to control an immediate risk of death, injury or significant property damage (e.g. a major gas leak, a dangerous building, a significant loss of supply etc.)			
Hot Work Permit	Hot Work Permits are required when any hot work, that is any activity or process that generates a flame, heat or an incendive spark and introduces (or presents) a foreseeable risk of fire or explosion through a source of ignition by means of tools or equipment either: • Intentionally arising from working methods (with or without the use of a naked flame) such as welding, flame-cutting, soldering, brazing; or • The unintentional generation of heat or sparks, by the use of power/hand tools e.g. grinding and the use of disccutters.			



Term		Definitions				
		The intention of the Hot Work Permit is to check that certain action and precautions are in place to reduce the risk of a fire occurring a result of a hot process.				
HSE		The Health and Safety Executive (HSE) is the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare in Great Britain				
ROGS		The Railways and Other Guided Transport Systems (Safety) Regulations (ROGS) provide the regulatory regime for rail safety, including the mainline railway, metros (including London Underground), Tramways, Light Rail and Heritage Railways.				
Building Agreement	Fixings	A legal agreement between CEC and building owners, giving consent for OLE apparatus to be permanently attached to buildings adjacent to the tram line.				

5. Responsibilities

5.1 Edinburgh Tram (ET)

ET is the Duty Holder for the Edinburgh Tram Network, as defined in ROGS, Edinburgh Trams is responsible for ensuring that risks to the tram infrastructure, Edinburgh Tram Network's operation or injury to persons thereon as a result of works taking place on or in the vicinity of the tramway, are adequately mitigated.

5.2 The Applicant

The applicant must, when planning any works on or near the Edinburgh Tram Network provide the following;

- Give adequate details of the intended works and allow sufficient time for Edinburgh
 Trams to coordinate the work and ensure all potential safety and operational issues
 have been considered. A minimum of 21 working days' notice prior to work
 commencement is normally required.
- Requests for an AtW for planned works should be made via the online *Permit+* portal, at least 21 calendar days before work is planned to start so adequate time is available to coordinate the work and ensure all potential safety and operational issues have been considered.
- Obtain all necessary CEC permits and other third party permissions.
- Supply supporting information for all AtW requests.
- Cooperate with Edinburgh Trams to plan and coordinate AtW requests.
- Call Edinburgh Trams control room (0131 622 8910) prior to starting works on site, to sign on to the AtW. This is a recorded line for auditing purposes.



6. Procedure

6.1 Principles

The Edinburgh Trams' AtW, and the requirements of the processes associated with it, is additional to any requirements (e.g. Health and Safety, NRSWA, CEC Permits, SRWR) that someone wanting to carry out work would have to meet if there was no tramline in the vicinity.

The AtW is the document that indicates that the person carrying out the work has the permission of Edinburgh Trams to carry out specified works at a particular location and time. The Request, Safety Assessment and Access Authorisation elements of the form provide a record of discussions which will have taken place between Edinburgh Trams Engineering team, the applicant and any other relevant parties, prior to the forms being completed.

Where Edinburgh Trams need to authorise works on or near the tramway, [See Figure 1] the scrutiny of the request and the restrictions placed on the works will be commensurate with the risk to, or caused by, the Edinburgh Tram Network as a result of the works taking place. The approach will not be unnecessarily bureaucratic but will be sufficient to ensure that adequate mitigation of the risks is in place. Minor routine works (e.g. emptying of litter bins) may be authorised to be carried out as and when required for up to a year, while intrusive (e.g. adjacent lane occupations), or non-repetitive works (e.g. scaffold erection) will need to be authorised on a case by case basis.

For all work that requires an authorisation, the AtW must be issued prior to any work starting. For non-repetitive works, and works involving isolation of the overhead line, the AtW must be given up when the work is completed.

A hot works permit will also be required to be completed when said works are within 10m of the depot building, substation, tram or any tramstop. Hot works within 10m of a tram is only permitted if the tram cannot be moved or the works are on board the tram itself.

The hot works form will be completed by the applicant and countersigned by Edinburgh Trams staff depending on the time and location.



7. When Authorisation is required for Planned Work

7.1 ETN Hazard Zone

The Hazard Zone defines the area within which there is the potential for coming into contact with the tramway infrastructure and is defined in the drawing below.

Authorisation is required for all work carried out within the Red Hazard Zone and other situations as described in points (a) to (i) below. Authorisation may be required for work carried out in the Amber Hazard Zone. If authorisation is required then the relevant party must obtain an Authorisation to Work from Edinburgh Trams.

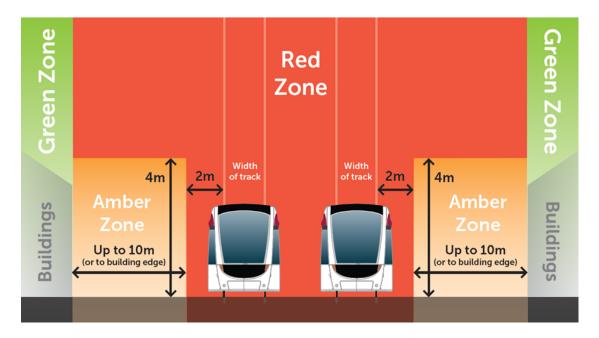


Figure 1 – ETN Hazard Zone

Red Zone:

Work within this zone **will require prior authorisation** and will interface with the tram network. Work may require isolation of the network.

Amber Zone:

Work within this zone **may require prior authorisation** and may interface with the ET network or pose a risk of injury or fatality to persons.

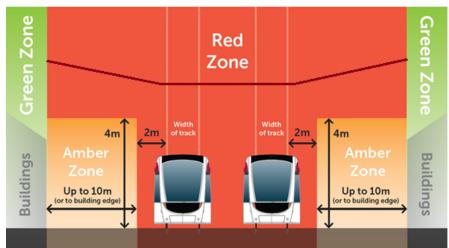
Green Zone: Work within this zone will not normally require prior authorisation.

The Overhead Line Equipment (OLE) supplies power to trams at 750v D.C.
 It must be assumed that any overhead line equipment is live at all times.
 Cables attached to these structures must be considered to be live as well

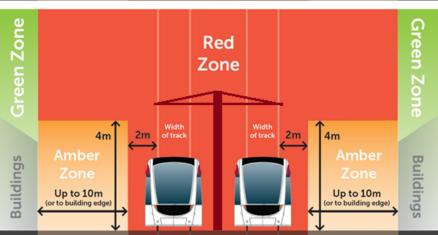
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NOTE: Metallic structures (temporary or permanent) including HERAS or similar fencing, scaffolding, welfare cabins may require an earth connection to prevent risk of induced voltages or in case of OLE failure.



Overhead Line Supported by Span Wire Attached to Adjacent Building Fixings



NOTE: The height of the OLE is not constant and can vary throughout the Route of the tram

Overhead Line Supported by Central Pole











Authorisation is needed for any of these activities:

- a) Any work where any part of the site, any tools or materials, any machine, suspended load, or any person, could come within the ETN Hazard Zone.
 - NOTE: This could include deliveries to and from a site, although the site itself is out with the Hazard Zone.
- b) Any work involving use of a ladder or window cleaning poles, where any part of the equipment could come within the space 2m measured horizontally to a point vertically above the nearest tramway rail.
- c) Any work which will force traffic or pedestrians to be diverted onto a tram line (because of road or footway occupation).
- d) Piling or excavation over 2m deep with a risk of rendering the roadway or the tramway unstable.
- e) Any excavation within 3m of any tramway structure including poles and spanning wires supporting overhead wires.
- f) Erecting and dismantling scaffolding or use of a crane, within 5m of the nearest tram rail or overhead wires including spanning wires.
- g) Any work where any structure or equipment will be placed above the overhead line.
- h) Even if the site itself is outside the 2m distance from the nearest tram rail, authorisation will still be required if vehicles fitted with cranes, tipping bodies or skip loaders could come within this distance when this equipment is in use.
- i) Authorisation is also required if abnormal vehicle loading or static loading is placed on the track.



- j) Work that have an effect on traffic flow through a signalised junction used by the trams.
- k) Work at or near Edinburgh Airport.

7.2 Building Fixings

The overhead wires within the city centre are attached directly to buildings rather than to separate poles. These fixings and the supporting wires MUST not be disturbed without prior agreement.

Individual fixings are covered by Building Fixings Agreements between The CEC and the individual building owners and should be referred to if planned works will interfere with the fixings.

7.3 Authority to Work Request

To apply for authorisation for any works in proximity of the Hazard Zone, an AtW request must be submitted via the online portal, 21 days prior to the works in the first instance saying when and where the work will be carried out, and describing the work to be done.

https://edinburghtrams.permitplus.app/login

Further information in regard to working in proximity to power lines and cables can be obtained from the HSE, Guidance Note GS6 'Avoiding Danger from Overhead Power Lines'.

An AtW request must be submitted by the applicant to Edinburgh Trams via https://edinburghtrams.permitplus.app/login

This will set out the planned work activities and this must detail the measures to be taken to avoid damage to the infrastructure, secure safety of staff operatives and other persons by minimising interference with tram operations and include supporting documentation such as method statements, risk assessments and traffic management plans.

Edinburgh Trams may wish to contact the Applicant to discuss the submission or to arrange a site meeting, a £75 charge applies to site meetings requested by the applicant. This will automatically be the case if the works appear to Edinburgh Trams to require an isolation of the overhead line equipment. This meeting will be arranged by the relevant Edinburgh Trams AtW Manager and will be attended by a competent person appointed by the applicant. The purpose of a site meeting will be to discuss and agree the safe system of work prior to authorisation being given.

If as a result of this meeting, the Applicant has to meet any specific requirements, they must ensure that they have understood the precautions they agree to take.

The application should be submitted in advance of any work being scheduled unless it is defined as emergency works under the New Roads and Street Works Act (Scotland) 1991

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(NRSWA) in which case contact should be made as soon as possible with the Roads Authority and also Edinburgh Trams Control Room - **0131 622 8910.**

For non-emergency schedules works under the New Roads and Street Works Act (Scotland) 1991, the relevant Statutory Utility Company should follow the process to obtain authorisation to work on or near the tramway as set out in this guidance.

When a safe working method has been agreed, Edinburgh Trams will issue an AtW.

The applicant may also require additional permits as prescribed in the Roads (Scotland) Act 1984 for road occupation. Should the Roads Authority permit be refused for the dates applied then the Applicant will be required to contact the Edinburgh Trams to review and re-schedule the dates when they will carry out the works.

The Roads Authority permit will be conditional on receipt of an AtW issued by Edinburgh Trams. The applicant should; therefore, be familiar with other timescales associated with Roads Authority permits for occupation of road or footway.

Applicants should note that all works on or near the tram lines is dependent on ensuring there is minimal impact on the tram operation. Any intrusive works that may impact on the tram operation by a third party may be refused or deferred.

To request an AtW, the applicant is required to complete the online AtW process in line with the guidance given in Appendix A. Once complete, the request should be submitted to Edinburgh Trams via the web AtW portal with any relevant supporting documentation (such as method statements, risk assessments, site plans, traffic management plans) should be submitted on the portal at the same time.

NOTE: Applications via the previous application form or by email will not be processed.

On receipt, Edinburgh Trams' AtW Manager or Engineering Representative will review the request and decide how the request should be dealt with. Examples of types of work and how they might be dealt with are given in Appendix C.

Requests for an AtW for planned works should be made at least 21 calendar days before work is planned to start so adequate time is available to coordinate the work and ensure all potential safety and operational issues have been considered.

On agreement of an AtW, the permit will be issued electronically. If an Isolation is required, the applicant will be required to confirm with Edinburgh Trams control room that the overhead line has been isolated prior to starting works on site.



7.4 Works requiring Isolation and Earthing of the Overhead Line

Where work requires isolation and earthing of the overhead line, the isolation and earthing will be carried out in accordance with the requirements of Edinburgh Trams isolation procedure.

7.5 Emergency Works

By their nature, Emergency Works need to be executed in a manner which does not usually allow for the strict scrutiny normally expected prior to works starting. The work must still be carried out with minimum risk to those carrying out the work, the general public, vehicles and infrastructure.

For Emergency Works on or near the Tramway, the Applicant will contact ET Control Room; as soon as possible, and complete an online application (which attracts an additional costs due to the additional resources). An AtW must be completed and authorised prior to works starting on site.

7.6 Damage to ET Infrastructure

Anyone working on or near the tramway that causes unintentional contact with any tramway infrastructure must advise Edinburgh Trams immediately.

7.7 Trackside high risk areas

Appendix D identifies the higher risk areas when working trackside, and these should be considered when developing site specific risk assessments and method statements.

7.8 Hot Works

Hot Work Permits are required when any hot work, that is any activity or process that generates a flame, heat or an incendive spark and introduces (or presents) a foreseeable risk of fire or explosion through a source of ignition by means of tools or equipment either:

- Intentionally arising from working methods (with or without the use of a naked flame)
 such as welding, flame-cutting, soldering, brazing; or
- The unintentional generation of heat or sparks, by the use of power/hand tools e.g. grinding and the use of disc-cutters.

The intention of the Hot Work Permit is to check that certain actions and precautions are in place to reduce the risk of a fire occurring as a result of a hot process.

Any hot works should be identified on the application form and detailed in the attached method statement and risk assessment.

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Appendix A Guidance on completing AtW web platform (Permit+) application



Appendix A Part 1 – Website Registration / Login

All applicants must create an account on the website and update their contact information. This will include an email address verification. To create new or view existing applications, applicants will need to sign into the website.

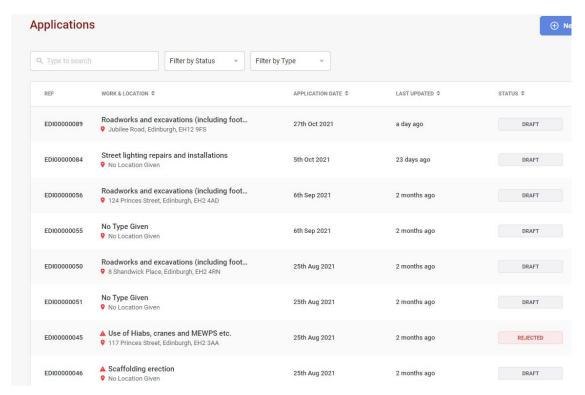
The email address will be used to notify the applicant of changes to the status of the application - i.e. submitted for review, successful review by Edinburgh Trams.

Note:

If the AtW includes an isolation of the overhead line, or a hot works permit, then the PIC will be required to visit the tram depot to sign on to the isolation certificate.

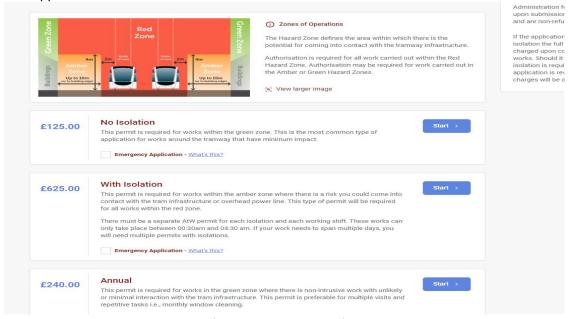
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Appendix A Part 2 – List of Previous Applicants and New Applicants

The homepage will show all applications made to date, along with the option to create a new application.

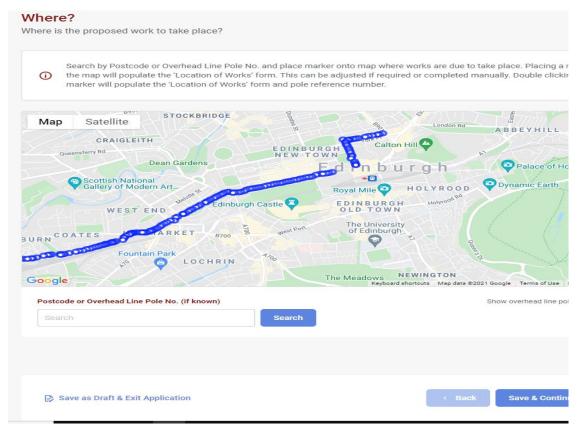


Appendix A Part 3 –New Applications

The new application page explains each type of permit available and also explains the costs involved.

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Appendix A Part 4 – Where will the works take place

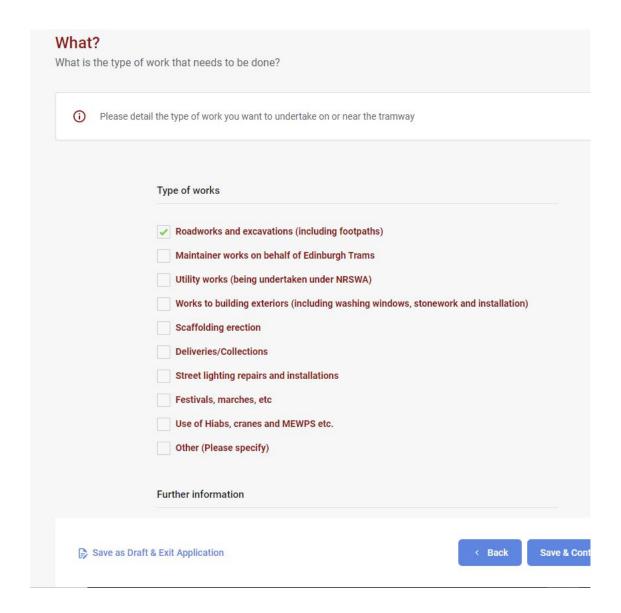
The applicant is then required to choose a location using either pole reference or postal address.

Note:

The applicant cannot proceed unless location of works is confirmed.

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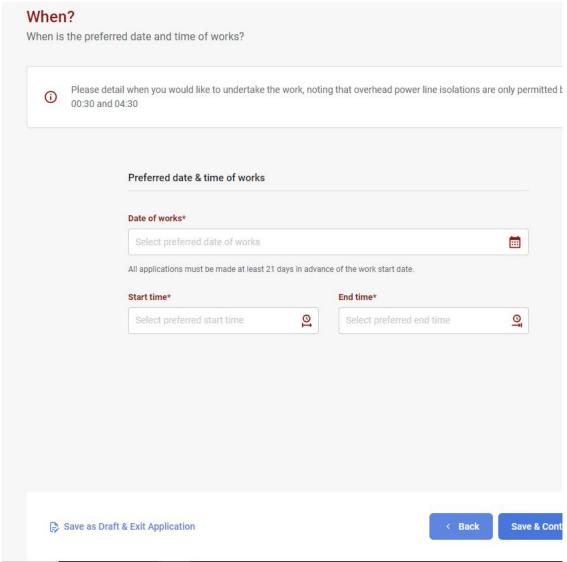
Appendix A Part 5 – Description of works

Applicants must select the type of work to be carried out using the list, if the type of work is not listed it can be manually entered.

Note:

The applicant cannot proceed unless type of work is confirmed.





Appendix A Part 6 –When will the works take place

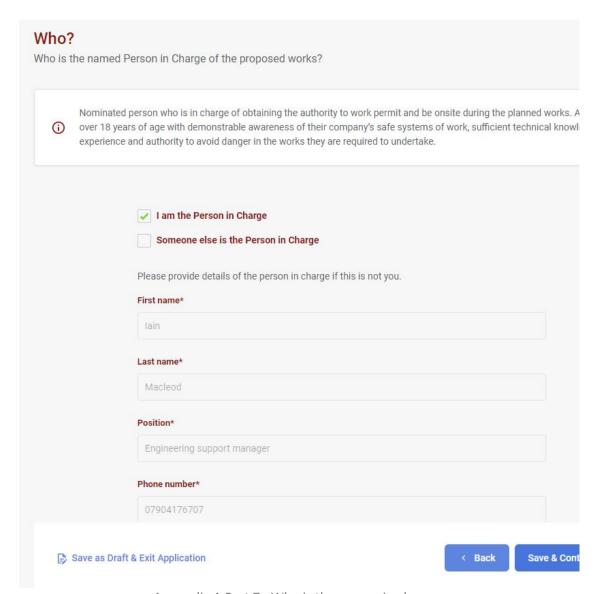
Applicants must request the time and date they would like the works to start and finish.

Note:

The applicant cannot proceed unless the start date and start time of works are confirmed.

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Appendix A Part 7 – Who is the person in charge

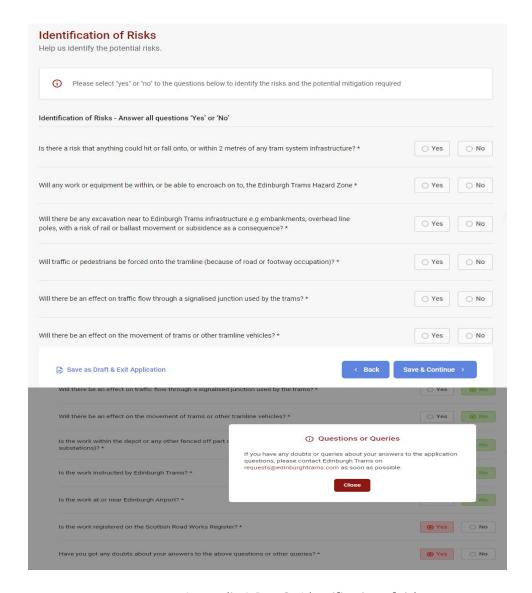
The applicant must confirm if they are the Person in Charge, if not they must provide details of the Person in Charge, the Person in Charge must be over 18 years of age with demonstrable awareness of their company's safe systems of work, sufficient technical knowledge, experience and authority to avoid danger in the works they are required to undertake.

Note:

The applicant cannot proceed unless the Person in Charge of the works is confirmed.

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Appendix A Part 8 – Identification of risks

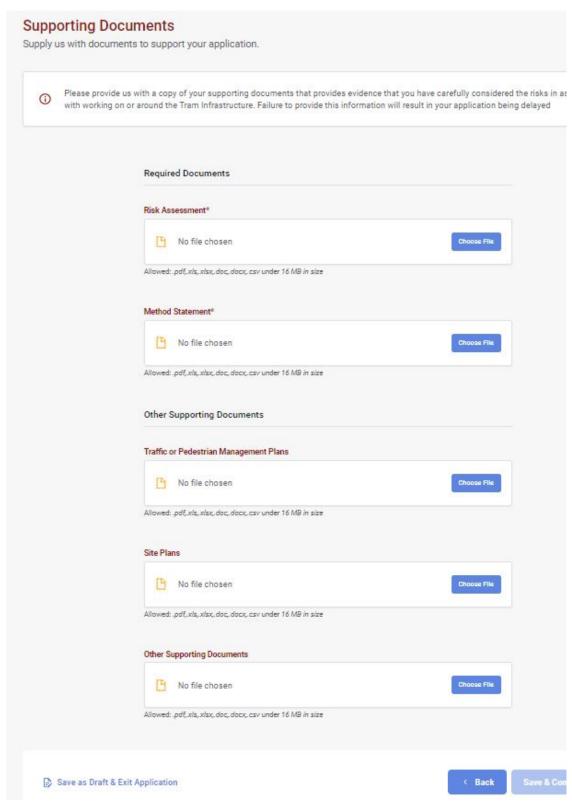
The applicant will help identify the risks by selecting yes or no from the list, if yes is selected for question eleven the applicant is prompted to contact Edinburgh trams Engineering.

Note:

The applicant cannot proceed unless all the questions are answered.

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Appendix A Part 9 – Supporting Documents

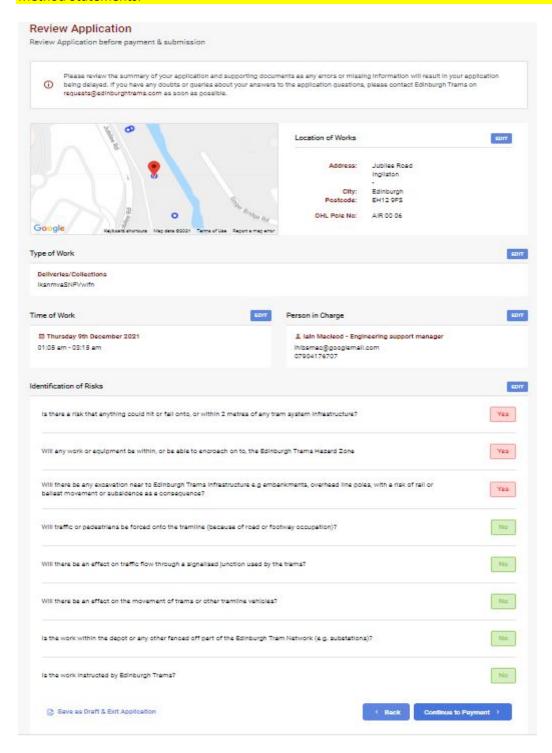
The applicant will upload relevant supporting documents.

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Note:

The applicant cannot proceed unless they have submitted their Risk Assessment and Method Statements.



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Appendix A Part 10 – Review of application

The applicant can now review their application before proceeding to the payment page. Make Payment and Submit Application Authority to Work Permit Secure Payment Please enter your payment details below: Application Type Fee **Card Details** With Isolation £625.00 Payment for creating With Isolation application MM / YY CVC Card number Sub-total £625.00 Name on Card VAT £0.00 Name on Card TOTAL £625.00 Pay & Submit Application

Appendix A Part 11 - Payment page

The applicant pays for the permit and the application is submitted for review by Edinburgh Trams Engineering.



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Appendix B Contact Details

Edinburgh Trams

General Enquiries 07702 900611 (recorded line)

Tram.control@edinburghtrams.com

Emergency 07702 911609 (recorded line)

Engineering AtW Enquiries 07917 721626

requests@edinburghtrams.com

City of Edinburgh Council

Permits Desk 0131 529 3900

roadpermits@edinburgh.gov.uk

Webportal

https://edinburghtrams.permitplus.app/login

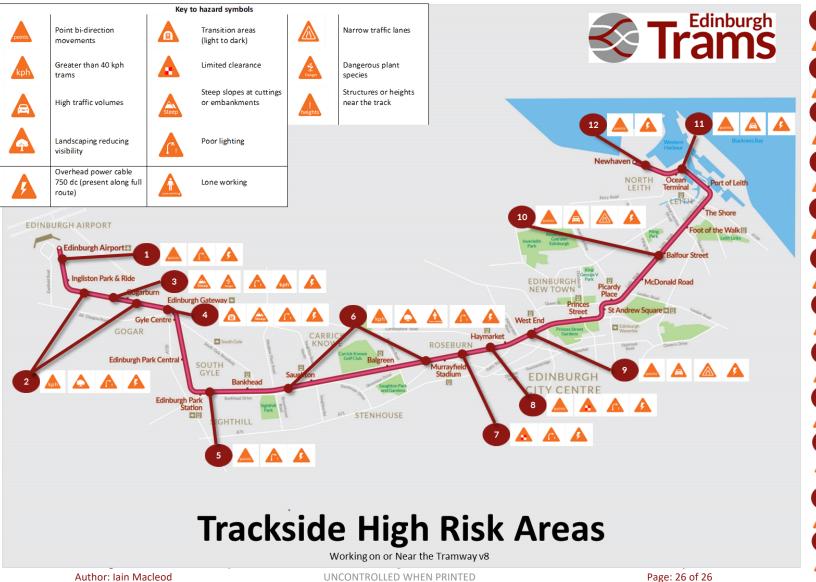


Appendix C Examples

Task	Means of requesting AtW	Safety Assessment	Other considerations	(AtW)	Contact ET Control Room before starting work
Street cleaning/Bin Emptying	e-mail completed form	No		One (AtW) issued for repetitive works to cover all areas near the tramway	No
Window cleaning where operation can be carried out non-intrusively (e.g. Routine Works)	e-mail completed form	Yes	Site survey of all properties in applicant's contracts	One (AtW) issued for repetitive works to cover all properties cleaned by the applicant's organisation for a period of up to a year	No
Repair to workshop doors at Gogar Depot	e-mail completed form	Yes		(AtW) issued for duration of works	Yes
Scaffolding erection	e-mail completed form	Yes	Site meeting to discuss where vehicles will be parked and how scaffolding will be delivered and erected.		Yes
Emergency water leak	Phone ET Control Room	As soon as practical; can be done by Duty Manager		Authority Number issued before work starts; (AtW) issued as soon as practical after work has started	Yes



Owner: Head of Engineering



Edinburgh Airport

Trams operating to both platforms through points.

Gogarburn to Ingliston Park & Ride

Trams at higher speeds, with reduced visibility due to vegetation and no lighting.

3 Gogarburn

Trams at higher speeds, dangerous plants, steep embankments and no lighting.

A8 underpass

Light transitions from light to dark at tunnel, no lighting and steep cutting.

Edinburgh Park Station turnback

Trams turning during degraded operations with no lighting.

Saughton to Balgreen

Trams at higher speeds, reduced visibility due to trees. Lone working not preferred.

Scotrail Depot

No lighting with reduced clearance at Scotrail depot.

Haymarket Yards

Trams operating in both directions at sidings during degraded operations.

West End turnback

Trams carrying out turnbacks, busy traffic area with narrow lanes.

10 Balfour Street turnback

> Trams carrying out turnbacks, busy traffic area with narrow lanes from Pilrig Street to Foot of the Walk.

Ocean Terminal turnback

Trams carrying out turnbacks in busy traffic area.

12 Newhaven

> Trams operating to both platforms through points.