



PLANNING & DESIGN STATEMENT



EDINBURGH TRAM YORK PLACE TO NEWHAVEN MCDONALD ROAD TRAM INFRASTRUCTURE SEPTEMBER 2020





\geq

Contents

- 1.0 Introduction
 Structure of Planning and Design Statement
- 2.0 Legislative Context
 Edinburgh Tram Design Manual
 The Application
- 3.0 The Site and Surroundings Planning History
 Background
 - **Pre-Application Discussions**
- 4.0 The Proposed Development
 Design Development and Evolution
 Tram Stop Design Generic Commentary
- 5.0 Assessment SESplanEdinburgh Local Development PlanScottish Planning PolicyEdinburgh Tram Design ManualEdinburgh Street Design Guidance
- 6.0 Conclusion

1.0 Introduction

- 1.1 This Planning and Design Statement is submitted on behalf of City of Edinburgh Council ('the Applicant') and relates to an application for tram infrastructure at McDonald Road, Edinburgh. It sets out the developed design of McDonald Road tram stop and associated infrastructure that forms part of the York Place to Newhaven project. The tram has been granted consent through the Edinburgh Tram (Line 1) Act and the Edinburgh Tram (Line 2) Act ("the Acts"), which received Royal Assent in 2006. The tram line from Edinburgh Airport to York Place was completed in 2014. On 14 March 2019 the City of Edinburgh Council voted to extend the tram from York Place to Newhaven and this application forms part of the works required to implement the approved tram route.
- 1.2 This phase of the project takes the tram stops outline design to the next stage of detail. This chiefly involves preliminary coordination of major elements that converge at tram stops such as OLE poles, TEC cabinets, cabling and ducting trenches and inspection chambers, drainage channels, pipes and inspection chambers.
- 1.3 The Planning and Design Statement is submitted in support of an application for prior approval in relation to the extension of the Edinburgh Tram to Newhaven, for the proposed development described at Section 3. This Statement supplements the submitted drawings and provides the details of the design for major elements at tram stops such as equipment poles footings, furniture, and shelter foundations. The proposal, as presented, has been agreed with CEC at a corporate level, which has required the appearance, configuration and finish to match as closely as possible the elements on the existing tram stops. Furthermore, the entire design and construction process is being supervised, reviewed, and approved by the MDU and CEC with the advice of the Operator of Edinburgh Trams. This approach allows for a coordinated response to the provision of the tramline and all the requirements are included and established in the contract between the CEC and the SFN and cannot be deviated from.
- 1.4 The Applicant has identified trams as the preferred way to ease this traffic congestion and provide a sustainable, high-quality public transport network. The tram system will help to encourage a modal shift from car to public transport, whilst integrating with other private and public transport methods.
- 1.5 This Planning and Design Statement explains the design principles on which the development is based. The design statement illustrates why the selected design solution is the most suitable in the circumstances in terms of the structures and the quality of spaces created.
- 1.6 The following plans and documents are submitted with the prior approval application:
 - Prior Approval Application Form
 - Planning and Design Statement
 - Site Photographs
 - Plans as follows:
 - o Site Location Plan
 - Existing Conditions
 - o Elevations & Sections
 - o General Arrangement
 - o Detailed General Arrangement
 - o Landscaping & Public Realm
 - o Topographical Survey



- o OLE Pole Type
- o OLE Pole Overhead Contact Line
- General Legend

Structure of Planning and Design Statement

- 1.7 The Planning and Design Statement will, following this introduction section, describe the legislative context (Section 2), site and surrounding area including the planning history and pre-application consultation (Section 3), describe the proposed development (Section 4), consider the proposal against the relevant material considerations (Section 5) and reach conclusions in respect of the acceptability of the proposal in the context of the legislation and other material considerations (Section 6).
- 1.8 It should be noted, for the avoidance of doubt, that the keynote on all submitted plans is a generic/standard keynote referring to individual items of tram-related infrastructural that may be associated with the trams works. That it is shown in the key does not necessarily mean that it forms part of the proposal. This Statement also provides some generic information, all for context. It is the detail in the drawings which form the main point of reference and should be assessed in the determination as to whether the Prior Approval is in compliance with the Tram Manual requirements (i.e. some items in the keynote may not appear in the drawings and have intentionally not been included).

2.0 Legislative Context

- 2.1 CEC is defined as the "Authorised Undertaker" in the Edinburgh Tram (Line 1) Act and the Edinburgh Tram (Line 2) Act ("the Acts"), which received Royal Assent in 2006. The Acts give CEC the power to construct and operate the tram system.
- 2.2 Part 1, Section 1 (1) Power to Construct Works of the Act authorises the statutory undertaker to construct the schedule works as specified in Schedule 1. This includes the road tramways identified (e.g. Work No. 3—A road tramway 829 metres in length (double line) extending from its junction with the termination of Work No. 2 and then on Constitution Street to a point north of its junction with Tower Street). Planning permission has effectively been granted by the passage of the Acts. Part 1 of the Act provides the principal works powers and grants the authorised undertaker consent to construct the scheduled works set out in Schedule 1 and allows works within the "Limit of Deviation" (LOD) shown on the approved plans.
- 2.3 Part 1, Section 1 (3) of the Act also grants the authorised undertaker to carry out and maintain various works as necessary or expedient for the purposes of, or in connection with, the scheduled works. This includes the following:
 - (a) stopping places;
 - (b) works required for, or in connection with, the control of any vehicular and pedestrian traffic on the authorised tramway;
 - (c) works required for the strengthening, improvement, repair or reconstruction of any road;
 - (d) works for the strengthening, alteration or demolition of any building or structure;
 - (e) works to alter the position of any road furniture or apparatus, including mains, sewers, drains and cables and lights;
 - (f) works to alter the course of, or otherwise interfere with, rivers, streams or watercourses;
 - (g) landscaping and other works to mitigate any adverse effects of the construction, maintenance or operation of the authorised works; and
 - (h) facilities and works for the benefit or protection of land or premises affected by the authorised works.
- Therefore, no further consent is required in relation to the above works, including any landscaping required.
- 2.5 Section 74 of the Act clarifies the position of the tram in relation to planning. This section of the act confirms that the tram works are to be considered permitted development in accordance with Schedule 1, Part 11 (development under local or private acts or orders). The only works which require prior approval, as confirmed by Section 74 of the Tram Act and Schedule 1, Part 11 of the General Permitted Development Order are as follows:
 - The erection, construction, alteration or extension of any building, bridge, aqueduct, pier or dam (including substations, tramstops, poles and any attachments to buildings) or
 - The formation, laying out of alteration of a means of access to any road used by vehicular traffic.



- 2.6 This means that the buildings and structures, including overhead lines, equipment poles and building fixtures, are 'permitted development', provided that the 'prior approval' of the planning authority is first obtained. The City of Edinburgh Council is the relevant planning authority.
- 2.7 The Act does not confirm what details are required to support an application for prior approval, it only states that "detailed plans" and "specifications" must be provided.
- 2.8 The Act requires no further justification nor explanation of the proposed works as Schedule 1, Part 11, Class 29 (3) of the GDPO confirms prior approval may only be withheld on two conditions:
 - 1) if the development ought to be and could be reasonably carried out elsewhere on the land designated (i.e. within Limits of Deviation), or
 - 2) the design or external appearance of any building or bridge etc, would injure the amenity of the neighbourhood and is reasonably capable of modification to avoid such injury.

Edinburgh Tram Design Manual

- 2.9 The Tram Design Manual (TDM) was adopted on 1 December 2005 and amended 12 January 2006. It is a material consideration in determining this application for prior approval. Appendix 3 of the TDM states the manual has three keys roles:
 - Outline aspirations and set design objectives to influence the design process;
 - Act as a form of supplementary planning guidance the key document to be used by the planning authority in assessing design details at the prior approval stage;
 - Constitute an important tool in the procurement process to check that the detailed design and implementation meet the standard required to deliver a quality tram system.
- 2.10 Appendix 2 and 3 of the Tram Design Manual provides additional information on the prior approval process and the elements which require consent. Table 1 on the following page confirms the elements of the tram that require consent and those which do not.
- 2.11 The TDM confirms there is a 2 month period should for determination as there is no period set down in statutory instruments.

The Application

- 2.12 The proposed development is located inside the LOD (as defined by the red line, and annotated as such on the location plans) and therefore, in accordance with the Acts, prior approval is sought from the City of Edinburgh Council. The application site is not within a Conservation Area is within the vicinity of Listed Buildings.
- 2.13 This submission is for prior approval from the planning authority for the detailed elements of the tram system described in Section 3 following. As stated above, the tram line itself has consent through Section 1 and Schedule 1 of the Edinburgh Tram (Line 1) Act and does not require prior approval.



Table 1: Extract from Appendix 2 of Tram Design Manual

| Table 1: Extract from Appendix 2 of Tram Design Manual | |
|---|--|
| Element | Type of Approval Required |
| Access Roads | Prior approval |
| Advertisements on tram stops or | Express Consent for commercial advertising. Directional |
| buildings/structures | signs and information notices have deemed consent |
| Advertisement on trams (inside and out) | No consent required |
| Bridges (including extension to existing) | Prior approval |
| Buildings (new or extension to existing) | Prior approval |
| CCTV within LOD | May require prior approval or Listed Building Consent. |
| CCTV outside LOD | None usually. Consent required in Conservation Areas or |
| | on Listed Buildings. |
| Construction compounds within LOD or | None |
| adjacent to LOD | |
| Demolition of buildings/structures within | Conservation Area Consent |
| Conservation Area | |
| Fences | None within LOD. Planning permission required in |
| | Conservation Area (outside LOD) or if over 1m in height |
| | anywhere else |
| Footbridges | Prior approval |
| Embankments | Prior approval |
| Landscaping | None |
| Lighting | May require Prior Approval if attached to a building or |
| | placed on a pole. Listed Building Consent may be |
| | required. |
| Listed Building Alterations | Prior approval. Listed Building Consent (check Schedule |
| Listed Ballaling Alterations | 10 of Trams Bill) |
| OLE | Prior Approval |
| Overhead line fixings to listed buildings | Prior approval. Listed Building Consent (check Schedule |
| Overhead line lixings to listed buildings | 10 of Trams Bill) |
| Overhead line fivings to pen listed buildings | · · · · · · · · · · · · · · · · · · · |
| Overhead line fixings to non-listed buildings | Prior Approval |
| Park and Ride at Ingliston | None |
| Park and Ride – other sites | Full planning permission |
| Retaining walls | Prior approval (unless solely a means of enclosure) |
| Scheduled Ancient Monument (SAM) | Schedules Monument Consent for Victoria Swing Bridge |
| Signs | Traffic and functional signs have deemed consent |
| 01 111 | provided any illumination if for warning |
| Signalling | Prior approval if attached to a building or pole. |
| Sound barriers | Prior Approval |
| Street Lighting | None usually but consent may be needed in Conservation |
| | I A |
| | Area |
| Substation | Prior approval within LOD |
| Substation Trackside equipment | Prior approval within LOD None (plant and equipment is exempt from definition of |
| Trackside equipment | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) |
| | Prior approval within LOD None (plant and equipment is exempt from definition of |
| Trackside equipment | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) |
| Trackside equipment Trams Tram tracks & associated surfacing within | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None |
| Trackside equipment Trams Tram tracks & associated surfacing within | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in |
| Trams Tram tracks & associated surfacing within existing roads Tram stops & associated equipment | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in context |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads Tram stops & associated equipment Tree – removal of or works to | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in context None |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads Tram stops & associated equipment Tree – removal of or works to Vehicle access to road used by vehicular | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in context |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads Tram stops & associated equipment Tree – removal of or works to Vehicle access to road used by vehicular traffic (formation of or alteration to) | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in context None Prior Approval |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads Tram stops & associated equipment Tree – removal of or works to Vehicle access to road used by vehicular traffic (formation of or alteration to) Viaducts (erection or alteration) | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in context None Prior Approval Prior Approval |
| Trackside equipment Trams Tram tracks & associated surfacing within existing roads Tram stops & associated equipment Tree – removal of or works to Vehicle access to road used by vehicular traffic (formation of or alteration to) | Prior approval within LOD None (plant and equipment is exempt from definition of building in GDPO) None None Prior approval for parts defined as a building. While not all parts of the tram stop require prior approval, it is tie's intention to lodge applications for tram stops as a whole so that those parts which need approval can be judged in context None Prior Approval |



3.0 The Site and Surroundings

- 3.1 The application site comprises an area of land at McDonald Road, Edinburgh. All the land is within the Limit of Deviation (which corresponds to the location plan red line).
- 3.2 McDonald Road tram stop is located close to the junction of McDonald Road with Leith Walk. It is an island tram stop and follows the gradient of the road at this point. The tram stop will occupy the central reservation of the street.
- 3.3 The site is on the boundary of the New Town Conservation Area.

Planning History

- 3.4 The site is located near McDonald Road, Edinburgh. Prior approval (reference 08/00602/PA) was granted on 25/04/2008 for the following description of development relating to the McDonald Road tram stop and surrounding area:
- 3.5 "Prior approval for erection of tramstop, including tramstop shelter, overhead line equipment (OLE) street lighting, hard landscaping, and relocation of bus shelters for Edinburgh Tram Network."
- 3.6 Figure 1 includes an extract of the consented prior approval drawing for information. Prior approvals, unlike normal planning applications, do not expire. Therefore, the original prior approval remains extant and can be implemented.



Figure 1: McDonald Road Extant Prior Approval 08/00602/PA

3.7 The proposed tram stop is in a different position from this previously approved application. This is a material change and therefore a new prior approval is sought from CEC.

Background

- 3.8 The application for prior approval for McDonald Road tram stop is one of a series of applications in connection with the extension of the tram from York Place to Newhaven. Figures 2 and 3 include the full route of the tram extension and all tram stops. In total, eight tram stops are proposed including:
 - Picardy Place Island and side platform (replaces York Place temporary stop).
 - McDonald Road Island platform
 - Balfour Street Island platform
 - Foot of the Walk Side platform
 - Bernard Street Island platform
 - Port of Leith Island platform
 - Ocean Terminal Island platform
 - Newhaven (terminus) Side platform

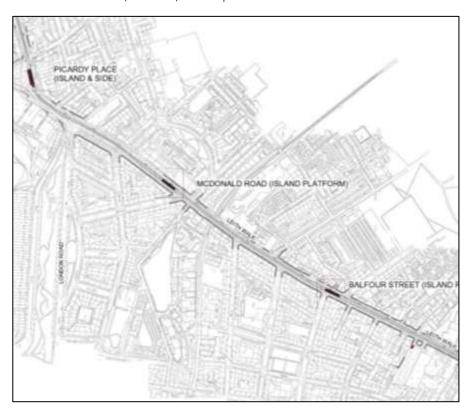


Figure 2: Tram Extension Route and Tram Stops



Figure 3: Tram Extension Route and Tram Stops

Pre-Application Discussions

- 3.9 The Applicant has engaged in pre-application discussions with CEC from 7th May 2020 to July 2020 and has engaged in bimonthly meetings with the CEC planning officer to discuss the proposals and draft plans. The meetings were re-established in late August 2020.
- 3.10 As a result of the early pre-application engagement, a checklist was agreed with the CEC planning officers which sets out the information requirements for the prior approval application. This includes the following:
 - General description of named land in question: Council's intake and registration team will assign address and description of land once submission is formally lodged.
 - Scope of Works: The scope of works and all elements requiring approval to be agreed with the Planning Authority in advance of submission
 - Site Location plans based around Trams LOD, unless otherwise agreed "(Solid red LOD, development area in red, any other land owned by the Applicant in blue) should be of a scale 1:1250, with north arrow and scale bar. For consistency extents should reflect those of previous submission batches."
 - Existing and Proposed relevant Sections and Elevations as appropriate Should show relationship to adjacent buildings, frontages and public realm as applicable. Existing elevations not required for Prior Approvals. Proposed elevations will be required for tram stops and structures, with contextual information as appropriate. A range of sectional drawings will also be required to illustrate the proposed arrangement, these to be agreed with the Planning Authority.

- Supporting photographs of the application site and/or street Good context as part of drawing package, e.g. Site location plans, general arrangement drawings.
- General arrangement plans should clearly present the Tram Stop (or other) in context with the proposed street environment, adjacent buildings, frontages, street layout and public realm as it relates to the full extents of the LOD- To be presented at 1:500 scale, in colour;
- Detail should include OLE/Street Lighting positions, kerblines, traffic/cycle lanes, pedestrian crossings, track and surface finishes also indicating general extents of upgrading (details of proposed material type, specification and photos), bus shelters, trees (to be removed/retained and landscaping, photos of the general context."
- Detailed General Arrangement Plans Tram Stops and immediate context To be
 presented at 1:100 scale, in colour. Details should include all for the Tram Stop and its
 immediate context including tie-in's. Should be supported by a Schedule containing
 details of all tram stop equipment (supplier, specification, material/colour finishes with
 visualisations) and surface treatments, e.g. paving, kerbing, track and carriageway finishes
 (supplier, type/specification) as applicable.
- Detailed General Arrangement Plans Landscaping and Public Realm, Architectural detail "To be presented at 1:100, 1:50, 1:25 as applicable.
- Additional details will be required for some Prior Approval batches, e.g. Elm Row/Picardy Place, Ocean Terminal, Newhaven Public Realm. These requirements will be identified as part of the pre-submission review process. This may include further details of surface treatments, tree planting and tree pits, soft landscaping, kerb upstands, public artwork, railings, boundary treatments."
- Topographical Survey Up to date topographical survey information which reflects the current site levels must be presented. In most instances, levels have been subject to change since 2008. Proposed levels should be indicated on general arrangement drawings where applicable. Refer to topographical information presented as part of previous submissions.
- Landscaping Plan Full details of surface or landscape treatments for context paving specification, track finish, trees, soft landscaping.
- Planning and Design Statement.
- 3.11 Information was submitted with the pre-application information to this level of detail, but, following meeting relating to other Prior Approvals, further information is submitted with the Prior Approval for Balfour Street.
- 3.12 As confirmed by CEC at the meeting on 10 September 2020, no further information is required on the location plan, other than clarification of the site / LOD, further information is provided regarding the reason for the proposed siting sand design (see Design Development and Evolution below, section 4).



4.0 The Proposed Development

- 4.1 The proposed development is for the tram stop and associated infrastructure at McDonald Road. The elements of work for this stop include:
 - Tram stop
 - o Passenger help / passenger emergency call points (PHP/PECP) incorporated in the shelter
 - o CCTV cameras generally mounted on posts.
 - o Passenger Information Display (PID) generally mounted on posts.
 - o Public Address system (PA) generally mounted on posts.
 - o Ticket Vending Machine (TVM) floor mounted.
 - o Ticket Validators– generally mounted on posts.
 - OLE
 - Street Lighting
 - CCTV
 - Traffic Signals
 - Landscaping and public realm
 - Line of Route and road layout
 - Cabinets
- 4.2 Not all elements shown require prior approval but are shown for context. For example, landscaping and tram tracks do not require prior approval and are permitted through the Act and GDPO. This is also confirmed at Appendix 2 of the Tram Design Manual, as discussed in the previous section.

Design Development and Evolution

- 4.3 The works proposed for the tram stop at McDonald Road form part of the wider tram network, including that already in place between Edinburgh Airport and York Street, the works currently being completed, and the line as it continues to Newhaven, with capability for extension and new lines beyond. It is imperative that the works proposal as part of this Prior Approval fit in with the existing and proposed works and are not considered in isolation. Many aspects of the proposed works which require Prior Approval are dictated by the works which do not require and / or are already permitted. Section 2 identifies the legislative context to the proposal, and the Tram Design Guidance which provides clear direction of the detail to which the Prior Approvals have to meet. On this basis, the potential for variation to the works to which the Prior Approval relates is relatively limited, and has been based on the following:
 - The tram stop positions have been modelled to understand the tram journey times required from York place to Newhaven. The detailed output was utilised to inform the strategic business case.

- Every tram stop will include a pedestrian crossing point either side of the stop, as included on the existing system, for ease of pedestrian access and safe movement to and from the stop.
- The scheme has been prepared following significant consultation with all relevant stakeholders, including other departments of the City of Edinburgh Council, technical experts, and the local community. The location, siting and design of the works as proposed meet the requirements of all parties. The location of the tram stop adjacent to the New Town Conservation Area has been taken into consideration.
- 4.5 Within this context, the design has developed taking into account the following interface and design constraints:
 - Track Alignment: The track alignment will define the geometry of the platforms. Track alignment provides the setting out point for the tram stop, the elevation (Z) and gradient. The track geometry will also constrain the platform setting out in compliance with:
 - o Kinetic envelope and construction tolerances
 - Stepping distance from the platform edge to the tram vehicle based on latest CAF documentation and UK tram guidance / Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010.
 - Public Realm landscaping design: tie-in with proposed public realm design, pedestrian crossings, footpaths, cycle lands, kerbs etc.
 - Geotechnics: The geotechnical conditions will govern the foundation design of the tram stops shelters as well as footings for lighting and similar posts. A profile of the ground conditions beneath proposed tram stops and associated lighting columns will be provided along with allowable bearing capacities and expected settlement behaviour at each location.
 - The paving design at tram stops also assumes a certain bearing capacity which will need to be confirmed in situ during construction.
 - OLE: The OLE pole setting out has been coordinated with the tram stop layout, typically locating two OLE poles symmetrically on the platform. The OLE pole footings are currently designed to be superficial, but an interface will therefore exist with any duct banks and drainage infrastructure located below the platform.
 - Duct banks: The duct banks will need to coordinate with OLE, shelter and equipment footings on the platform. It will also need to coordinate with platform drainage. Duct banks and inspection chambers are set out in accordance with needs of tram stop equipment.
 - Tram stop lighting: lighting design will influence the requirement for cable ducting and manholes. Tram stop lighting is to be integrated in OLE poles and shelter design to reduce platform clutter. Platform lighting is being developed as part of the street lighting design. Shelter lighting is to be developed at detail design. Ducting has been provided for tram stop lighting.
 - Systems: equipment designed and installed by the Systems Subcontractor on the tram stop conditions the position of equipment mounting posts, ducts and manholes.



• Tram stop equipment, including Parkeon related equipment (TVMs, validators) have been coordinated to schematic design level. They have been modelled in 3D for initial spatial coordination.

Constraints:

- o Maximum distance from platform edge to tram door entry is 75mm (horizontal) and 50mm (vertical)
- o Threshold levels of access to existing properties that are to be maintained. Minimum slope away from the properties for drainage.
- o Platform ends and rear are to tie into public realm landscaping design.

Tram Stop Design – Generic Commentary

Position, Layout and Geometry

- 4.6 Tram stops are set out on plan by matching the central axis of the proposed tram stops as they appear on the client's Permanent Works drawings.
- 4.7 Platforms are to be 42m long (40m plus 2m overrun) and a minimum 4.0m wide for island platforms and 3.0m wide for side platforms. The actual width of island platforms is determined by the track geometry and the distance from the track axis to the platform edge.
- 4.8 Platforms are to be provided with ramps at each end (maximum 5% slope). Ramps taper on plan, being approximately 400mm narrower on each side at the bottom of the ramp. At this stage of the design, integration with the proposed public realm design assumes that 4m ramps at maximum slope will be sufficient to achieve the level required at platform crossings. This is to be confirmed at the next design stage when integration with the proposed public realm design will be complete. If necessary, ramps can be extended in order to reach lower proposed levels.
- 4.9 The platforms are provided with a gradient along their length that matches the adjacent track geometry. Platforms slope down towards the north (a maximum of 2.5%). Platform surfaces are also provided with a transversal gradient of 2.5% away from the platform edge, i.e. towards the centre of island platforms and towards the rear of side platforms. The platform edge coping itself is 600mm wide and is not given a transversal gradient.
- 4.10 The layout of elements on the platform is according to the following basic criteria: shelters are placed on the central axis. Equipment and furniture (each according to their own requirements as described below) are positioned at various distances from the centre of the platform. On Island platforms, each half is symmetrical about the central axis. Side platforms vary according to specific requirements at each location.
- 4.11 The height from top of rail to the platform edge is to comply with the recommendations of UK Tram guidance, Point 5 Tram stops, Platform Clearances. This guidance makes reference to the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010. The regulations state that no ramp or lift is required "where the gap between the edge of the door sill of the wheelchair-compatible doorway and the platform, or stop, is not more than 75 millimetres measured horizontally and not more than 50 millimetres measured vertically."
- 4.12 Although the regulation only stipulates for the wheelchair compatible doorway, it has been considered prudent to apply to all tram doors stepping distances.
- 4.13 The typical composition of the tram stop is included in Figure 4 below.



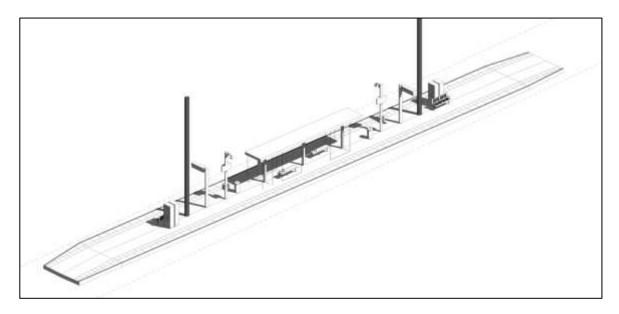


Figure 4: Typical composition of island tram stops (axonometric)

Platform Construction and Materials

- 4.14 Tram stop paving finish materials are determined by the client's tram stop specification and is particular to each location. Details of the McDonald Road specifications are provided on the attached plans. Bedding materials for each paving has also been stipulated by the cited specification. Sub base and sub grade materials are proposed as follows.
 - Sub base and sub grade layers are to conform to Specification for Highways Works (SHW)
 CD239 Footway and cycleway pavement design. Sub grade material shall have a
 minimum California Bearing Ratio (CBR) of 2.5%. Where sub grade does not comply with
 this, ground improvement must be carried out. Sub grade shall be compacted to clause
 802 paragraph 5 of the SWH.
 - Sub grade shall be either Type 1 or Type 3 as specified in clauses 803 and 805 of the SHW, respectively. Sub base layers shall be compacted in compliance with clause 802.
 - All material within 450mm of the surface shall be non-frost susceptible as defined in clause
 801 of the SHW.
- 4.15 The typical details for platform paving are shown in Figure 5. The main paving build-up and platform edge coping details for all tram stops are with prefabricated concrete paving (i.e. McDonald, Balfour, Port of Leith, Ocean Terminal, Newhaven). All tram stops are to be paved with natural stone in accordance with the tram stops performance specification. Coping edge detail in shown in Figure 6.

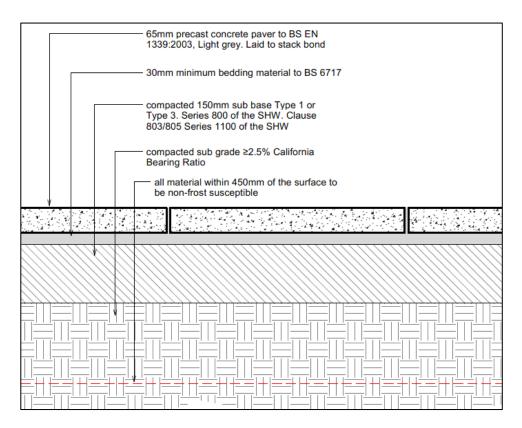


Figure 5: Main platform paving, typical build up

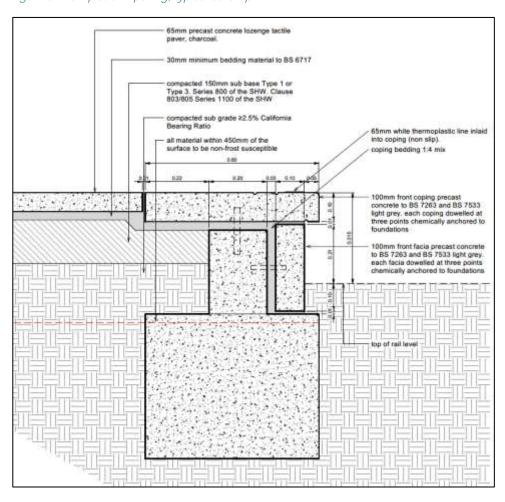


Figure 6: Platform edge coping typical detail

Platform Structures and Footing

- 4.16 For the structures of the shelters and poles located at the tram stops steel members are designed. The poles are hollow circular cross-section elements with defined heights. On the other hand, the shelters columns and the central beam are built of tubular cross-section profiles. The rest of structural elements of shelter are steel open cross-section profiles: cantilevers members joined to central beam with variable depth where continuous beams are supported along the roof shelter.
- 4.17 For foundations, concrete footings are designed. Some of the elements have reinforced concrete foundations class C35/45 and with reinforcing steel meshes of steel grade B500B in accordance with BS 4449 and BS EN 1992-1-1. The rest of the foundations are built with C25/30 mass concrete stablished in BS EN 1992-1-1. The different foundations are the following:
 - Double shelter: the double shelter footing is a 9500x1800x300mm reinforced concrete slab over a minimum of 75mm thick blinding concrete ST1. The foundation is reinforced with a top mesh of Ø10/200mm and a bottom mesh of Ø12/100mm. The steel columns are joined to foundation with a 425x425x10mm baseplate of steel grade S235 with 4xM16 HILTI HIT-HY 200-A + HIT-Z with 200mm of embedment depth.
 - Bin: the bin footing is a 700x700x350mm mass concrete element with a square plinth of 400x400mm below bin infilled up to finished floor level. The bin is joined to foundation with 4xM12 HILTI HIT-HY 200-A + HIT-Z with 150mm of embedment depth in foundation (below the plinth).
 - Passenger Information Display (PID): the PID footing is a 800x800x800mm mass concrete element. The PID column is joined to foundation a 425x425x10mm baseplate of steel grade S235 with 4xM16 HILTI HIT-HY 200-A + HIT-Z with 200mm of embedment depth in foundation.
 - Ticket Vending Machine (TVM): the TVM footing is a 900x700x300mm reinforced concrete slab over a minimum of 75mm thick blinding concrete ST1. The foundation is reinforced with a top mesh of Ø10/200mm and a bottom mesh of Ø12/100mm. The TVM is joined to foundation with 4xM16 HILTI HIT-HY 200-A + HIT-OZ with 170mm of embedment depth.
 - Platform bench: the platform bench footing is a 2000x800x300mm reinforced concrete slab over a minimum of 75mm thick blinding concrete ST1. The foundation is reinforced with a top mesh of Ø10/200mm and a bottom mesh of Ø12/100mm. The steel columns are joined to foundation with a 250x250x10mm baseplate of steel grade S235 with 4xM12 HILTI HIT-HY 200-A + HIT-0Z with 150mm of embedment depth.
 - Integrated bench: the foundation of the integrated bench is the same that shelter foundation. This bench is joined to foundation with a 250x250x10mm baseplate of steel grade S235 with 4xM12 HILTI HIT-HY 200-A + HIT-0Z with 150mm of embedment depth.
 - CCTV, Public Address, Tram stop Sign and Validators Pole: the pole footing is a 800x800x800mm mass concrete element. The pole column is directly embedded to foundation with concrete sleeve cast into base and later sleeve is filled with compacted sand.



- Platform edge coping: the platform edge coping footing is a 500x500mm mass concrete linear element with a concrete wall of 200mm of thick and variable height up to precast coping.
- Tram stop Equipment Cabinet (TEC): the TEC footing is a 2200x850x350mm reinforced concrete slab over a 2400x1030x225mm compacted hard core (blinding with sand). The foundation is reinforced with a top mesh of Ø10/200mm and a bottom mesh of Ø12/100mm. The TEC is joined to foundation with 6xM16 fixing bolts with 225mm of embedment depth with 50mm above concrete surfaces using "Kemfix" chemical adhesive.

Crossings

4.18 Platform crossings are to be provided at all tram stops. Typically, they are immediately adjacent to the foot of the platform ramps. Crossings are part of the public realm design and therefore form an interface with tram stops. At DD stage, crossings have been shown indicatively. Final design and coordination with tram stops, especially regarding levels, will be completed at detailed design stage.

Shelters

4.19 The double bay shelter contains two benches and are to be installed on island platforms (five tram stops with this configuration). Shelter design is to match as closely as possible the existing shelters on phase one. See Figure 7 and 8. This is a contractual requirement and the shelters will be built to match existing.



Figure 7: Existing Shelter at Princes Street Tram Stop



Figure 8: Existing Shelter at Princes Street Tram Stop

- 4.20 The shelter is composed of steel columns and roof structure, clad in satin finish stainless steel, curved panels. To be confirmed at detailed design stage, the cladding is expected to be for marine environments Grade 1.4401 satin polished as defined in EN 10088-4 (this is equivalent to AISI 316). The walls are constructed in stainless steel framed glazing. The glazed walls are to provide clear field of view of incoming trams for passengers waiting within the shelter. Shelters incorporate a number of elements that require a degree of coordination. These are listed below:
 - Shelter drainage: pending detail design, rainwater is proposed to be collected from the roof surface via a downpipe encased in the column cladding. A minimum of two downpipes will be provided in order to reduce the risk of blockage from leaves or litter. From this point the rainwater is proposed to drain directly to the platform drain.
 - Shelter lighting (see Figure 9): the shelter roof is to incorporate a number of downlights in order to comply with the levels of illumination required (50 lux). Detailed design of the lighting and its integration in the shelter roof is to be developed at detailed design stage. At this stage, platform ducting and chambers has taken account of this requirement.
 - Public Address speakers: as can be seen in the figure above, the roof structure also incorporates PA speakers. The Systems team shall provide the shelter designers with spatial requirements in order to coordinate these items at detail design stage.
 - Passenger Help Point: combined passenger help points, and passenger emergency call
 points are designed and installed by the Systems team. Detailed spatial and conduit
 requirements will be provided by the Systems team in order to coordinate this item with
 the detailed shelter design. The PHP/PECP is recessed into the end column cladding at
 all shelters. The proposed position of this element has been indicated on the DD tram
 stop drawings. This location is required to be within the field of vision of at least one CCTV
 camera.
 - Feedback from the Systems team suggests that phase one PHP/PECPs have suffered a
 degree of failure due to ingress of rainwater. This is thought to be caused by the design
 of the speaker and/or microphone cover rather than how the element is integrated in the
 shelter column. The Systems team will propose mitigation for this known design issue.
 The DD tram stop design incorporates platform ducting, chambers and conduits for this
 element.
 - Information Panel: 1,119mm x 717mm weatherproof information panels shall be installed within the shelter in lo Induction loop: an induction loop is to be embedded in the paving at shelters, located within the bedding layer (TBC). A schematic layout is provided for this in the DD tram stop plans as well as inspection chamber and connection to the TEC.

Feedback from the Systems Team suggests that existing phase one induction loops might
not be effective due to the location of metallic elements within the shelter. As the design
moves to detailed stage, any mitigating measures proposed by the Systems team shall
be incorporated into the design locations that match the exiting network.



Figure 9: Shelter Lighting (existing design)

Other Equipment

- 4.21 Apart from equipment integrated in the shelter as described in the previous section (PA speakers, PHP/PECP, Induction loop), the following equipment is to be integrated at each tram stop:
 - Passenger Information Display. These are located towards the end of each platform (towards the rear of a stationary tram vehicle). The PID is to be within the field of vision of a CCTV camera mounted on the platform. The current DD design has proposed positions of all PIDs as well as connection to platform duct banks.
 - Ticket Vending Machines: these are located at platform ends in the number stipulated by the performance specification. They are orientated such that queuing passengers do not block the platform. Tramway Principles & Guidance, First Edition, January 2018, stipulates that "Platform width should give adequate unobstructed space for passengers boarding and alighting and should consider pedestrian movements along the platform and the likely accumulations of waiting passengers. Consideration should be given to congestion likely to be caused adjacent to ticket vending machines and beneath shelters.
 - "The minimum width between the tramway edge of the platform and any structure on the platform, except for the roofs of shelters, should not be less than 1500 mm."
 - TVMs are typically grouped in twos. The base is to incorporate conduits for the necessary cable connections. This is to be coordinated with Parkeon.
 - CCTV: cameras are typically pole mounted and are positioned in order to provide field of view to the TVMs, the PID and the PHP. The systems team are concurrently carrying out an analysis of FoV of each camera as proposed in this DD. A check will need to be made that the shelters, OLE, lighting or any other element do not impede coverage of the CCTV. The current design has proposed duct banks and inspection chambers for connection of these devices.

- Public Address and Stop Sign: Public address speakers are integrated into the tram stop sign. These elements are mounted on the same poles as the CCTV camera.
- Duct banks and inspection chamber have been provided at this stage for connection of these device to the TEC.
- Validators: ticket validators are located on CCTV poles in the quantities prescribed by the
 performance specification. Validators are orientated perpendicular to the track direction
 thus avoiding blockage of the platform by queuing passengers.
- Duct banks and chamber have been provided on the platform for connecting these devices to the TEC. This equipment will be coordinated for final detailing with Parkeon.
- 4.22 Figures 10 to 16 on the following page include photographs of the existing infrastructure at an existing tram stop. The proposed elements will be built to match the existing, this is a contractual requirement and cannot be deviated from.



Figure 10: PHP/PECP integrated in shelter



Figure 11: Information Panel integrated in shelter



Figure 12: PID



Figure 13: CCTV





Figure 14: PA speakers integrated in tram stop sign





Figure 15: Validators



Figure 16: TVM

Furniture

- 4.23 Seating: freestanding benches are located along the platform and within the shelters. Benches are to match a closely as possible those of phase one and are be anchored to concrete footings constructed below the platform. Benches are fabricated in stainless steel. Pending confirmation at detailed design stage, this is expected to be grade 1.4401 as defined in EN 10088-4, satin polished stainless steel.
- 4.24 Benches within shelters have no back rests.
- 4.25 Bins: litter bins are located along the platform in the quantity prescribed by the performance specification. The design of the litter bins is to match as closely as possible those installed on phase one. The bins are to be fabricated in satin polished stainless-steel grade 1.4301 EN 10088-4. Bins are to be anchored to concrete footings constructed below the platform.

Ducting, Inspection Chambers and TEC

- 4.26 Developed design stage tram stops indicate a schematic layout for platform ducting and related inspection chambers. At each tram stop, the position and orientation of the TEC has been proposed. This is required to be located away from the platform but within 90m (cable run) of the equipment that is furthest away.
- 4.27 As a general design criteria, the TECs are placed in the central reservation of the street, immediately following the platform crossing. The placement of the TEC, considering the cabinet doors sweep, does not impede the flow of pedestrians or generate risk for those persons carrying out maintenance tasks on the cabinet.
- 4.28 The TEC is to be mounted on a concrete plinth provided with conduits for connection with the UTX or "turning chamber."

Lighting

4.29 Lighting at tram stops is to comply with the minimum illumination levels as indicated in the tram stop specification. This is being developed in conjunction with street lighting design. Where

- additional platform lighting is required (i.e. where street lighting does not already comply with the minimum lux) luminaires are expected to be placed on the OLE poles.
- 4.30 At shelters, downlights are to be integrated into the roof. Details for integration of these elements in the shelter design is to be finalised at detailed design stage.

OLE

- 4.31 OLE poles are located all tram stops. As a general criteria, at island tram stops two OLE poles are located symmetrically to the platform centreline. The span between poles has been defined by this discipline.
- 4.32 Pole footings are currently designed as superficial foundations. This permits other infrastructure to be located below this level, such as primary duct banks.
- 4.33 The furniture, TEC, OLE and lighting are shown in Figures 17 to 20 on the following page.





Figure 17: Benches







Figure 19: OLE pole



Figure 20: TEC cabinet

Equipment, Signage and Furniture Schedule

- 4.34 The equipment, signage and furniture schedule for the McDonald Road tram stop is provided below. The location of the following can be found on Detailed Arrangement Plan:
 - Double tram shelter
 - Passenger help / passenger emergency call points incorporated in the shelter and wall mounted.
 - CCTV cameras
 - Passenger Information Display
 - Public Address system
 - Ticket Vending Machine
 - Ticket Validators
 - Street Lighting
 - OLE
 - Cabinets

Finishing schedule

- 4.35 The finishing schedule and materials for the Mcdonald Road tram stop is provided below. Details of the following can be found on the Landscape & Public Realm Plans submitted in support of this Prior Approval Application.
 - Front coping Light colour precast concrete to BS 7263 and BS 7533
 - Rear coping Scoutmoor sandstone sawn to BS 7533
 - Main paving Caithness granite sawn flamed finish to BS EN 1341
 - Visible strip 65mm wide, white line of anti-slip material.
- 4.36 A slot drainage system will be provided.

5.0 Assessment

- 5.1 This application for prior approval must be assessed within the confines of the Act and the GPDO as explained in section 2. The proposed development involves the construction of a tram stop and associated infrastructure within the McDonald Road / Leith Walk area to facilitate the development of the Edinburgh tram network.
- 5.2 Due to the passage of the Acts, planning permission has been granted for the proposed development. Prior approval can only with refused if the development ought to be and could be located elsewhere within the Limit of Deviation or if the design or external appearance of any component would injure the amenity of the neighbourhood and is reasonably capable of modification.
- 5.3 This assessment considers the proposal against the relevant material considerations assessing the proposal against the two criteria set out in the legislation in relation to the location and impacts on design and external appearance.

SESplan

SESplan provides overarching, strategic, policy to guide development in the south east of Scotland. SESplan identifies Phase 1A of the tram network as the route from Edinburgh Airport to Newhaven. The plan states that the tram network will provide sustainable transport links in the Regional Core, while minimising emissions and traffic congestion. Policy 8 of SESplan supports the development of a sustainable transport network. The proposed development will enable the development of Phase 1A of the tram network and is therefore in accordance with SESplan.

Edinburgh Local Development Plan

- 5.5 Policy Des 1: Design Quality and Context is applicable to the proposed development. This Policy supports proposals which demonstrate a high standard of design which will contribute towards a sense of place. The proposed development will utilise high-quality materials, as indicated in the Design Statement submitted in support of this application. The proposed design has been developed to be very similar to the existing tram stops in Edinburgh, contributing towards a sense of place, maintaining neighbourhood amenity. The proposed design has been developed to be very similar to the existing tram stops in Edinburgh, contributing towards a sense of place, maintaining neighbourhood amenity. It is clear, therefore, that the form, type, material and design of the tram stops is acceptable for the location, in light of the similarities with, but less sensitivities to, other tram stop locations in the city centre.
- The proposal, as presented, has been agreed with CEC at a corporate level, which requires the appearance, configuration and finish shall match as closely as possible the elements on the existing tram stops. Furthermore, the entire design and construction process is being supervised, reviewed and approved by the MDU and CEC with the advice of the Operator of Edinburgh Trams, providing a consistent approach to the tram works as a whole. All these requirements are included and established in the contract between the CEC and the SFN and cannot be deviated from. The proposed development is therefore in accordance with Policy Des 1 of the ELDP. The proposed development is therefore in accordance with Policy Des 1 of the ELDP.
- 5.7 Policy Env 3: Listed Buildings Setting is applicable to the proposed development due to its location adjacent to the A Listed McDonald Road Library and A Listed Buildings at Haddington Place. This Policy states that development within the curtilage or affecting the setting of a listed building will be permitted only if not detrimental to the architectural character, appearance, or



historic interest of the building, or to its setting. The proposed appearance, configuration and materials of the proposed development follows closely the design of existing tram stops elsewhere in Edinburgh, many of which are close to listed buildings. The form of development is very similar to that which has previously been found acceptable by CEC. The proposed works are set away form the listed buildings and clearly form part of the transport infrastructure. It can therefore be considered that the proposed tram stop will not have a detrimental impact on the listed buildings or their setting. In addition, the proposal, as presented, has been agreed with CEC at a corporate level. The proposed development is therefore in accordance with Policy Env 3 of the ELDP.

- 5.8 Policy Env 6: Conservation Areas – Development is applicable to the proposed development due to its location adjacent to the New Town Conservation Area. This Policy states that development must preserve or enhance the conservation area, in addition to demonstrating a high standard of design. The proposed development will preserve the appearance of the conservation area, presenting a modern addition which will aid in a modal shift towards sustainable transport options, to the benefit of Edinburgh as a whole. As stated above, the proposals will utilise high quality design and materials, as indicated on the submitted drawings. The proposed design has been developed to be very similar to the existing tram stops in Edinburgh (including New Town Conservation Area at York Place and the World Heritage Site), and as previously approved. This will contribute towards a sense of place and maintain neighbourhood amenity. The previously approved Prior Approval is extant and can be implemented at any time, so the principle of the tram stop in this location should be considered acceptable as it has been previously approved by CEC. The proposals as presented have been agreed with CEC at a corporate level. It should be considered therefore that the proposed development will preserve the New Town Conservation Area and are in accordance with Policy Env 6 of the ELDP.
- 5.9 Policy Tra 7: Public Transport Proposals and Safeguards is applicable to the proposed development. The proposals will enable the development of the safeguarded Edinburgh tram network, contributing towards sustainable development targets outlined in SESplan and the ELDP, in accordance with the Acts. The proposed development is therefore in accordance with Tra 7.

Scottish Planning Policy

- 5.10 Scottish Planning Policy (SPP) was issued in its revised form in June 2014 and introduces, as a first Principal Policy, a presumption in favour of sustainable development. SPP states that decisions on prior approvals should be guided by a number of principles (at paragraph 29) including economic benefit, supporting good design and the six qualities of successful places, making efficient use of existing land and supporting regeneration priorities.
- 5.11 The proposed development is in accordance with the first Principle Policy of SPP. The proposals will provide economic benefit by enabling the operation of the Edinburgh Tram Network and utilises design in keeping with the surroundings, in accordance with the six qualities of successful place. The proposed infrastructure has been designed to be in keeping with the principles set out in the Tram Design Manual and therefore will ensure the design does not injure the amenity of the neighbourhood. This is discussed in the "Tram Design Manual" section of the report.
- 5.12 The fourth Subject Policy relates to Promoting Sustainable Transport and Active Travel. SPP states (at paragraph 269) that the economy relies on efficient transport connections, within Scotland and to international markets. Planning can play an important role in improving connectivity and promoting more sustainable patterns of transport and travel as part of the transition to a low carbon economy.



5.13 The proposed development will facilitate the training of drivers required to facilitate the Edinburgh Tram extension to Newhaven, supporting a highly sustainable transport method which will support the economy across Edinburgh. The Edinburgh Tram Act received Royal Assent on 27 April 2006 and the proposed development will support the operation of this nationally supported infrastructure. The proposed development is therefore in accordance with the fourth Subject Policy of SPP.

Edinburgh Tram Design Manual

- 5.14 The Tram Design Manual, adopted 1 December 2005 and amended 12 January 2006, is a material consideration in determining this application for prior approval. It is to be treated as Supplementary Guidance. The design principles for the tram are set out at section 4. A key aspiration of the Edinburgh Standards for Streets is to ensure that the choice of materials and new street features enables Edinburgh to maintain the streets as they were designed to be, avoiding their erosion over time and ensure that new street developments form a coherent extension to existing streets.
- 5.15 This document identifies the key issues for tram stops as:
 - Integrating stops with their context,
 - Providing a secure and comfortable space for users,
 - Ensuring a consistent suite of details.
- 5.16 The design principles for tram stops are as follows:
 - To protect the integrity of important spaces and of important axial views
 - To design tram stops to fit within the context and function of a space, being visible but avoiding visual intrusion
 - Tram stop elements should complement the alignment along the street
 - Unnecessary clutter should be avoided by providing only those facilities which are necessary to meet users' needs
 - Develop the tram system identity through a consistent suite of details for all stop elements. The suite of details should comprise
 - o a co-ordinated family of elements, and
 - a lightweight, transparent system of components that are capable of providing a solid and robust design.
 - Apply a consistent suite of details at each stop using a limited palette of materials to allow identity to be maintained whilst permitting change from tram stop to tram stop as necessary to reflect the specific context
 - The comfort and safety of users shall be addressed and the design should
 - meet all safety criteria,
 - o ensure ease of access for all users,
 - o maximise the sense of security through appropriate visibility and natural surveillance



- 5.17 The proposed development will be fully integrated with the surrounding context, utilising high-quality design and materials. The natural surveillance provided by the site location, combined with the proposed CCTV, will ensure the site feels secure and safe. The benches provided will aid in providing a comfortable environment for users. The tram stop has been designed to match the existing tram stops throughout the city, as required by CEC. The infrastructure at each tram stop will be consistent. Clutter is reduced through, for example, colocation of various elements e.g. street lighting and OLE.
- 5.18 For track side equipment (such as lighting, CCTV, equipment cabinets etc) the key principles are to avoid clutter through rationalising and sharing of facilities, concealing or integrating equipment within new buildings wherever possible. Equipment should also be designed to be unobtrusive and colour controlled. The TDM recognises that the provision of trackside equipment is required for the safe and effective operation and maintenance of the tram system. It should be designed to achieve a balance between efficient operational use and reducing the impact on the setting of buildings and the open character of spaces, particularly well-used or sensitive places.
- 5.19 The McDonald Road site is not within the World Heritage Site, is on the boundary of New Town Conservation Area and is near listed buildings. Whilst sensitive, it is an area which has been subject to change recently. It is clear that it can accommodate a tram stop as the general location already has the benefit of a tram stop Prior Approval. The changes to that approval are not so significant to warrant any revision to the proposed works. The tram is a safeguarded route in the Local Development Plan and therefore any development within the vicinity of the tram would have considered the tram route during the application stage and prior to consent being granted. The proposal has been designed to ensure clutter is minimised at all tam stops through rationalising and sharing facilities.
- 5.20 Design principles for OLE are:
 - 'wire free' operational system is preferred within the World Heritage Site and other sensitive locations (the site is not within the WHS).
 - Where poles are required the opportunity to rationalise through shared use with other street utilities such as street lighting and road signs should be considered.
 - The visual impact must be assessed both at a strategic level (entire volume of space within a street or other public area) and a detailed level (individual buildings).
 - New support structures must be positioned and styled to relate positively to key views, landmarks and historic buildings.
 - The colour of poles must be carefully considered
- 5.21 The design of the tram infrastructure at McDonald Road has taken these principles into consideration and the OLE has been designed to match the extant prior approval as much as possible.
- 5.22 The tram track and alignment have been designed to match the extant set of prior approvals as closely as possible. Although the legislation and TDM Appendix 2 confirm the tram track does not require prior approval as it consented through the Act and GDPO, the design principles for the tram alignment and integration have been considered in the design. These are as follows:
 - Minimise the visual impact of tram alignment and tram lines in an existing space.
 - Contributing to a comprehensive approach to the public realm



- Protect the integrity of important spaces and axial views.
- Design curves to minimise any additional visual intrusions and to relate well to existing buildings and enhance affected spaces.
- Maximise opportunities for development or regeneration through an integrated design approach.
- Ensure a good relationship of the tram system with other modes of transport, including pedestrians, cyclists, buses, taxis and private vehicles.
- Safety shall be designed in rather than mitigated against.
- Maximise accessibility for all users.
- There is a need to take account of the desire to achieve minimum journey time and optimum ride quality.
- 5.23 Again, although the legislation and TDM Appendix 2 confirm the tram track and associated surfacing does not require prior approval, the design principles for the these elements have been considered in the design. These are as follows:
 - Response to Context: The tramway surfacing will be influenced by its environment/context. The final palette of materials selected must be capable of satisfying equally aesthetic and technical requirements and conform with the "Edinburgh Standards for Streets".
 - Technical Requirements: Material changes/interfaces that should be addressed by simple and robust design.
 - Safety: Where certain types of materials or changes in levels (such as those designed to deter cars and pedestrians) are required the design and choice of materials should be appropriate to the location.
 - Noise: Consideration must be given to the potential noise generated by road vehicles
 when they cross tram tracks and so it may be necessary to use different surface materials
 for the tram route at such locations. However, the number of such material differences
 should be kept to a minimum.
 - Definition of Tramway Path: The Tramway path of the tram system requires some form of delineation. The design of this feature and choice of materials must take account of the specific location context. The opportunity to rationalise with other features, e.g. curving and road markings shall be regarded as paramount.
 - Maintenance: The materials chosen must be consistent with the Council's standards for this purpose.
- 5.24 Design principles for access are:
 - The choice of tram and design of infrastructure must ensure maximum access and ease of use by all sectors of the population, including persons with young children, the elderly and those with sensory or physical disabilities.
 - Ensure an inclusive approach that strives to fulfil the needs of each user group as closely as possible. If compromise is necessary, no single group should be discriminated against.



- Use the tram as a catalyst to improve and expand public access throughout the city.
- Address safety requirements for all user groups.
- 5.25 The design of the tram infrastructure at McDonald Road has taken these principles into consideration. The track design and platform geometry has been designed to take into account the stepping distance from the platform edge to the tram vehicle based on latest CAF documentation and UK tram guidance / Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010, The Department for Transport Inclusive Mobility Guide to Best Practice on Access on Pedestrian and Transport Infrastructure and The Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010.
- 5.26 Design principles for Pedestrians and cyclists are:
 - Respect existing routes and desire lines
 - Improve and extend pedestrian and cycle routes and, wherever practicable, give greater priority of space to pedestrians
 - Maximise integration of pedestrians and cyclists with the tram system
 - Provide appropriate cycle parking facilities at tram stops
 - Increase and improve the quality of the public realm by reassessing the distribution of space between different user groups and create a public realm that people wish to inhabit.
- 5.27 The design of the tram infrastructure at McDonald Road has taken these principles into consideration. The proposal has been designed to tie-in with proposed public realm design, pedestrian crossings, footpaths, cycle lands, kerbs etc. Trackside equipment and tram infrastructure has been designed to ensure it does impede the flow of pedestrians The tram stop design has given consideration to the Tramway Principles & Guidance, First Edition, January 2018 which stipulates that "Platform width should give adequate unobstructed space for passengers boarding and alighting and should consider pedestrian movements along the platform and the likely accumulations of waiting passengers. Consideration has been given to congestion likely to be caused adjacent to ticket vending machines and beneath shelters.
- 5.28 The tram infrastructure and tram stop at McDonald Road have been designed as far as possible in keeping with the extant prior approval, although the location of the tram stop has subsequently changed. The contractor has been in place since July 2019 and the tram design has been provided and agreed by CEC at a corporate level. The benefit of having the contractor involved at early stages is that the requirements and design principles agreed in the Tram Design Manual (TDM) have been incorporated as much as possible to the contract for construction.
- 5.29 The proposal, as presented, has been agreed with CEC at a corporate level. The appearance, configuration and finish shall match as closely as possible the elements on the existing tram stops all in accordance with the TDM.
- 5.30 Furthermore, the entire design and construction process is being supervised, reviewed and approved by the MDU and CEC with the advice of the Operator of Edinburgh Trams. All these requirements are included and established in the contract between the CEC and the SFN and cannot be deviated from.
- 5.31 The proposed development is therefore considered to be in accordance with the design principles set out in the Tram Design Manual.



Edinburgh Street Design Guidance

- 5.32 The Edinburgh Street Design Guidance, adopted in January 2015, provides guiding principles for the development of streets in Edinburgh and is therefore a material consideration. This guidance aims to provide streets which:
 - Are welcoming, inclusive and easy to navigate,
 - Are attractive and distinctive while respecting key views,
 - Give priority to sustainable travel,
 - Respond to environmental factors,
 - Are cost effective and have a positive impact on the environment.
- 5.33 The proposed development is in accordance with the Edinburgh Street Design Guidance as it will provide a welcoming and accessible tram stop, which is easy to navigate. The tram stop is attractive and in keeping with the existing tram stops in Edinburgh. Environmental factors are respected with appropriate shelter and drainage included in the proposals. The development will be cost effective with a positive impact on the environment. Priority is given to this highly sustainable transport development. The proposals are therefore in accordance with the Edinburgh Street Design Guidance.
- Following the above assessment, the proposed development should be considered acceptable in relation to the location of the proposed tram infrastructure and the design and amenity impacts on the neighbourhood. Therefore, prior approval cannot be withheld in accordance with the legislation.



6.0 Conclusion

- 6.1 This Planning and Design Statement supports an application for prior approval for the tram stop and all associated tram infrastructure within the vicinity of McDonald Road, Edinburgh. The legislation, as described at section 2, clearly sets out the elements of the tram which are consented through the Act and those elements which require prior approval. This application includes elements, for example landscaping, which do not require consent but are provided for context.
- The proposed design is now finalised and agreed with CEC at a corporate level, subject to technical consents, which are separate from the prior approval process. The prior approval of the proposed tram infrastructure can only be refused if the infrastructure should and could be provided elsewhere within the Limit of Deviation or the design or external appearance would injure the amenity of the neighbourhood. Neither test applies in this case. The design principles within the Tram Design Manual have been taken into consideration within the design and many of these principles have been incorporated into the contractor's contract. The benefit of having the contractor on board at an early stage is that the design is developed and agreed and changes to the external appearance of the tram infrastructure are not anticipated.
- 6.3 In conclusion, the proposed construction of McDonald Road Tram Stop should be granted prior approval as the proposals are in accordance with the requirements set out in the legislation, having regard to the material considerations identified in section 5 of the report. The development will not negatively impact the neighbourhood amenity, will preserve the Conservation Area and will provide a high standard of development. The proposal is considered to be in accordance with the Edinburgh Street Design Guidance and the Tram Design Manual. This proposal will enable the delivery of Edinburgh's Tram Network, as supported by the Scottish Government. Prior approval should therefore be granted.