



• EDINBURGH •  
THE CITY OF EDINBURGH COUNCIL

# EDINBURGH TRAM DESIGN MANUAL



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愛丁堡電車設計手冊

এডিনবরা ট্রাম পরিকল্পনা সম্বন্ধে লিখিত বর্ণনা

ایڈنبرا کیلئے ٹریم کے ڈیزائن کا ہدایت نامہ

دلیل استخدام تصامیم فریق اینبرہ

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CCTV Closed Circuit Television

CEC City of Edinburgh Council

DDA Disability Discrimination Act

LOD Limit of Deviation – Area within which the tram project may be constructed – as defined in the Parliamentary Plans lodged with the Tram Bills

LLAU Limit of Land to be Acquired or Used- Area which can be used temporarily or permanently for specified purposes connected with the tram project (eg temporary construction compounds) but not for the tram tracks – as defined in the Parliamentary Plans lodged with the Bills.

LTS Local Transport Strategy 2004-2007 as approved by the City Council in March 2004

NPV Net Present Value - the value of an investment based on an analysis of all life cycle costs and revenues adjusted to reflect present day prices. A positive net present value demonstrates that the investment will be profitable and the higher the figure, the more profitable it will be.

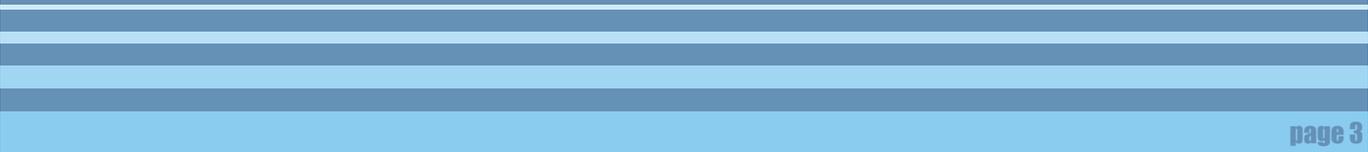
OLE Overhead Line Equipment ie wires and insulators, support poles and fixings to buildings to support wires.

S75 Agreement

A legal agreement under s75 of the Town and Country Planning (Scotland) Act 1997 between a land/property owner and the Planning Authority to restrict the use of land/property or make a contribution of some kind.

tie Transport Initiatives Edinburgh Limited

TSAO Tram System Aspirational Objectives - these are the Council's aspirations for the type of tram system that will be delivered



## Part 1

# Strategic Overview

- 1 Introducing the Tram Design Manual
- 2 Delivery
- 3 Strategic Aspirations
- 4 Strategic Design Principles
  - (a) Tram System
  - (b) Tramway Alignment and Integration

## SECTION 3 – STRATEGIC ASPIRATIONS

### EDINBURGH'S CONTEXT

- 3.1 It is vital that those involved in the design and implementation of the proposed tram system understand the townscape, heritage and environmental context of the city. To be successful, the tram must be seamlessly integrated into the urban fabric. This chapter examines Edinburgh's distinctive context.



*NEW TOWN: PRINCES STREET*



*PORT OF LEITH*



*GRANTON*



*GREENBELT, GOGAR*



*RAILWAY CORRIDOR, STENHOUSE*



*BALBIRNIE*



*EDINBURGH AIRPORT*



*EDINBURGH PARK*



*GOGAR CHURCH*

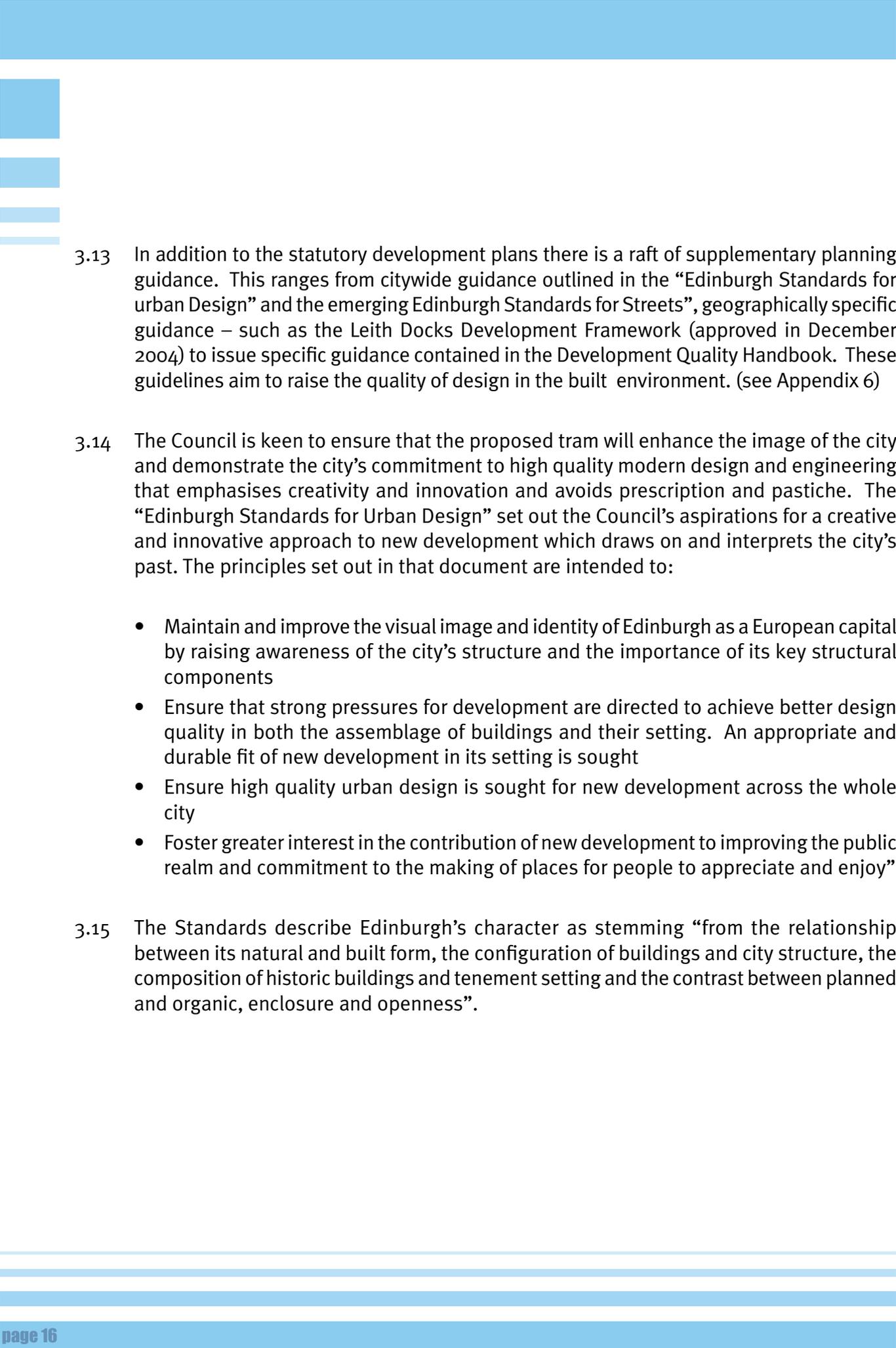


## HERITAGE AND TOWNSCAPE

- 3.2 Edinburgh enjoys an international reputation as one of Europe's most attractive cities. The townscape of the city centre has long been recognised as a work of art in its own right and one of the UK's principal heritage assets. It is a UNESCO designated World Heritage Site, renowned for its unique architectural heritage.
- 3.3 The Georgian New Town “constitutes the most extensive example of a Romantic Classical city in the world. The juxtaposition of the Old and New Towns across a landscaped divide creates a capital city of world renown”.
- 3.4 The value of the city's heritage is reflected in the fact that one third of the city has conservation area status. This is reinforced by the presence of numerous listed buildings, scheduled ancient monuments and designed landscapes.
- 3.5 The proposed tram routes pass through diverse elements of Edinburgh's heritage and townscape, from the medieval street pattern of the Old Town, the structured urban design of the Georgian New Town, both also displayed in the townscape of Leith, the Victorian and Edwardian residential expansions which ring the city centre, and the 20th -century suburban and peripheral developments to the emerging waterfront developments at Newhaven and Granton. The proposed route also encompasses significant areas of rural landscape. This essential character is described in the Conservation Area Character Appraisals, with more specific references presented in the World Heritage Site Management Plan.
- 3.6 The sensitivity and quality of Edinburgh's townscape will therefore present challenges for tram system design.

## POLICY CONTEXT

- 3.7 These contextual factors as well as those relating to the demographic, cultural and economic context of the city are recognised in various Council policies. Of particular relevance are policies contained within the Development Plan and the Local Transport Strategy.
- 3.8 The current Structure Plan, for instance (Structure Plan for Edinburgh and the Lothians 2015) contains a vision for Edinburgh referring to “the attractive environment of Edinburgh and the Lothians and the landscape setting of the capital city will be retained and enhanced. The unique blend of a world class city, a growing city region and an outstanding natural and built environment will characterise Edinburgh and the Lothians in the 21<sup>st</sup> Century.” The Plan is founded on strategic aims seeking
- To maintain and enhance economic competitiveness
  - To promote a more inclusive society
  - To protect and enhance the natural and built environment
  - To integrate land use and transport
- 3.9 All within an overarching aim “to provide in full for the development needs of Edinburgh and the Lothians in accordance with the principle of sustainable development, whilst maintaining and enhancing the environmental heritage that underpins the area’s quality of life.”
- 3.10 Trams are a key component of the strategy for public transport investment in Edinburgh and this is recognised within the Structure Plan.
- 3.11 The other element of the Development Plan – local plans – also include numerous policies relating to protection of the environment, the need for quality design, and commitment to delivery of high quality public transport and streetscape. The route of the tram runs through various local plan areas – Central Edinburgh, East Edinburgh, West Edinburgh, North West Edinburgh and Rural West Edinburgh. The up-to-date position regarding local plans can be viewed on the Council’s web site at:  
<http://www.edinburgh.gov.uk> (on Planning and Building Control page).
- 3.12 On the 26<sup>th</sup> May 2005 Planning Committee approved General Planning Provisions for New Development on or Near Safeguarded Tram Routes. This is contained in Appendix 4.

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- 3.13 In addition to the statutory development plans there is a raft of supplementary planning guidance. This ranges from citywide guidance outlined in the “Edinburgh Standards for urban Design” and the emerging Edinburgh Standards for Streets”, geographically specific guidance – such as the Leith Docks Development Framework (approved in December 2004) to issue specific guidance contained in the Development Quality Handbook. These guidelines aim to raise the quality of design in the built environment. (see Appendix 6)
- 3.14 The Council is keen to ensure that the proposed tram will enhance the image of the city and demonstrate the city’s commitment to high quality modern design and engineering that emphasises creativity and innovation and avoids prescription and pastiche. The “Edinburgh Standards for Urban Design” set out the Council’s aspirations for a creative and innovative approach to new development which draws on and interprets the city’s past. The principles set out in that document are intended to:
- Maintain and improve the visual image and identity of Edinburgh as a European capital by raising awareness of the city’s structure and the importance of its key structural components
  - Ensure that strong pressures for development are directed to achieve better design quality in both the assemblage of buildings and their setting. An appropriate and durable fit of new development in its setting is sought
  - Ensure high quality urban design is sought for new development across the whole city
  - Foster greater interest in the contribution of new development to improving the public realm and commitment to the making of places for people to appreciate and enjoy”
- 3.15 The Standards describe Edinburgh’s character as stemming “from the relationship between its natural and built form, the configuration of buildings and city structure, the composition of historic buildings and tenement setting and the contrast between planned and organic, enclosure and openness”.



3.16 The emerging “Edinburgh Standards for Streets” will be a key reference document with regard to ongoing tram design work. This is currently at a draft stage and subject to a city wide consultation. The final document is expected in 2006.

- 3.17 The key ‘principles’ set out in the Edinburgh Standards for Streets are:
1. Preservation of the historic fabric and grain of the City, particularly the World Heritage Site
  2. Respecting and enhancing local character
  3. Facilitating the process of placemaking
  4. New Streets to contribute to formation of a recognisable urban grain
  5. Experimentation- a willingness to see what works
  6. Achieving an aesthetic quality
    - reduction of clutter
    - high quality materials
    - minimum palette of materials
    - simple, clean designs
  7. Co-ordination of design and colour
  8. Inclusive access for all road users
  9. Maintaining and managing the existing and improved environment
  10. Delivery through process and protocols

The Standards bring together the city’s aspirations for the public realm of Edinburgh’s Streets.

3.18 The Management Plan for the World Heritage Site states, “ *the city must strive for the standard which reflects the Site, both in the maintenance and in the enhancement of the public realm*” and seeks “*to support actions and initiatives that mitigate the negative impacts of vehicular traffic*”.

3.19 Clear strategic objectives have also been set out in CEC’s Local Transport Strategy (LTS). These are addressed in more detail in the later part of this section relating to “Tram System Aspirational Objectives”. (See Appendix 1)

## THE IMPORTANCE OF GOOD DESIGN

- 3.20 The objective is to provide a high quality tram system for Edinburgh that embraces the best practice demonstrated in other European cities, and is of a standard appropriate to the city's world-renowned status.
- 3.21 The use of a holistic approach to design will ensure that the proposed tram system reflects and integrates positively with the quality of Edinburgh's world-renowned townscape. Contextual analysis through townscape assessments will inform the alignment of the tram route as well as establish how stop and structure locations and their designs are defined.
- 3.22 It is also important to establish an ordering principle for considering the relative importance of streets and spaces throughout the tram system. A new tram system presents an opportunity for greater integration within the city, linking old and new communities, linking areas of affluence and poverty. It can help to provide access for all across the city, including visitors and tourists. It has the potential both to create a new type of urban space for Edinburgh, a type not dominated by the car, and to civilise the city.
- 3.23 Perceptions of Scotland are framed in large part by the capital city; in turn the key areas and features of the City Centre influence perceptions of the capital city. There is an important opportunity for Edinburgh's tram system to become not only an icon for the city, but one that is of national relevance. The design approach to be followed needs to take account of the following.
- ▶ **GOOD ENOUGH IS NOT ENOUGH**
  - ▶ **DESIGN TO CONTEXT**
  - ▶ **ADOPT AN ORDERING PRINCIPLE**
  - ▶ **CONSISTENT APPROACH**
  - ▶ **INSTANTLY RECOGNISABLE TRAM SYSTEM**

## **GOOD ENOUGH IS NOT ENOUGH**

- 3.24 The tram system will be highly visible and attention to its design is essential in ensuring a visual and cultural fit into Edinburgh's townscape. Boldness, simplicity, style and elegance are fundamental characteristics of the design philosophy but should not seek to challenge the fundamental character of the city.
- 3.25 Edinburgh's World Heritage Site status dictates that a solution of the highest quality is required if the new tram system is to be successfully implemented. A quality approach to design at each stage of the design and implementation processes, including quality of decision-making, along with an appropriate timescale in which to realise such a quality approach are prerequisites of the desired solution.
- 3.26 Merely "good enough" is "not enough" and would neither allow the realisation of quality design that is commensurate with the world-renowned city of Edinburgh nor satisfy the council's aspirations set out in Guidance and Policy documents.
- 3.27 Design and the design process is key to delivering the necessary urban design and townscape solutions required.

## **DESIGN TO CONTEXT**

The proposed tram routes pass through a significant number of urban and rural areas, each with its unique and distinctive character, as explained in the previous section. The tram system should integrate with its context, or rather, contexts, as the routes proposed pass through many townscape and landscape character areas each with unique and distinctive qualities. These range from the World Heritage Site and Conservation Areas, waterfront areas (both conservation areas and major new development areas), areas of more rural character, and areas of regeneration.

## **ADOPT AN ORDERING PRINCIPLE**

- 3.29 It is not intended that a rigidly defined hierarchy be applied to the tram routes. However it is important to establish an ordering principle for considering the relative importance of streets and spaces along the route. Through systematic reasoning the most important streets and spaces can be identified for higher levels of investment.

### CONSISTENT DESIGN APPROACH

- 3.30 Despite the need to take account of context, a consistency of approach is also required in relation to design details throughout the tram's entire route. This will reinforce the principle of being recognisable where this is considered appropriate.

### AN INSTANTLY RECOGNISABLE TRAM SYSTEM

- 3.31 The visual perception of the tram is extremely important and all aspects of the tram system, from engineering infrastructure to associated literature, must reflect this. The entire tram system requires a recognisable and cohesive identity.



*GRENOBLE*



*ST. ANDREW SQUARE*



*MONTPELLIER*

## STRATEGIC PRINCIPLES

- 3.32 The Council aspires to provide Edinburgh with a modern and efficient tram system, which forms the backbone of an integrated public transport system that is accessible to all and which will become a first choice mode of travel. The following strategic principles will apply to the tram system.
- 3.33 Achieving an appropriate design solution that respects the integrity of Edinburgh's townscape is of critical importance. In order to set the appropriate standards of quality, the Design Manual sets the benchmarks for the minimum quality of design that will be acceptable in Edinburgh. Furthermore, Edinburgh's World Heritage status presents a very specific set of challenges that must be addressed if the tram project is to be successfully delivered.
- 3.34 The following Strategic Principles will apply to the tram system:
1. Only a high quality tram system, in keeping with Edinburgh's outstanding cultural status and environment, shall be developed. The tram should become a symbol of the City's aspirations for its future image.
  2. The tram system must provide rapid, reliable journeys and be attractive to passengers. The success of the system will depend on the number of people who use it.
  3. The public realm along the tram corridor should be considered and, where desirable and feasible, upgraded as a whole, wall to wall, and designed to be appropriate to its context, recognising the tram acting as a catalyst for additional investment.
  4. The tram system should be designed to facilitate access by all groups living, working and visiting the City.
  5. The tram system should be designed to meet the Council's sustainability objectives, providing this does not impact on the quality of the system.
  6. While the aspiration is for a wire free system, in whole or in part, this has been demonstrated to be not currently practicable. An alternative sensitive design based on overhead wires shall therefore be pursued.
  7. The infrastructure associated with the tram and all other street furniture should be co-ordinated to minimise the impact of clutter on the street scene.

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8. **Tram stop locations and their design should serve travellers effectively, should complement established urban form, have cognisance of the setting of listed buildings and should act as a catalyst to regenerate areas.**
  9. **The tram system should be designed to maximise integration opportunities with other forms of public transport, in order to facilitate ease of modal interchange.**

2.35 These Strategic Principles, other Council strategies and planning guidance will apply to the tram system. The final design proposals will be evaluated against the requirements of this document. In particular, the Council's current Local Transport Strategy 2004-2007 (LTS), dated March 2004, contains objectives that will be used as the overall transportation objectives for developing the tram proposals. The current aims of the Local Transport Strategy that are considered particularly relevant to the tram system are:

- To reduce the environmental impacts of all travel
- To support the local economy
- To improve safety for all road and transport users
- To promote better health and fitness
- To reduce social exclusion
- To maximise the role of streets as the focal point of local communities, where people can meet, shop, and, in appropriate circumstances, children can play.

2.36 These aims lead to the following objectives in the LTS:

- To make it easier to live without the car, or use the car less
- To reduce the amount of car use
- To encourage and facilitate walking cycling and public transport use
- To reduce the adverse effects of travel including road accidents, environmental damage, particularly for those worst affected by these impacts
- To enhance streets as civic spaces where priority is given to people rather than cars
- To improve the ability of people with low incomes or mobility impairments to use the transport system, especially by public transport, as pedestrians or by bicycle

2.37 More detailed "Tram System Aspirational Objectives" (TSAOs) are also considered necessary and these are contained in Appendix 1.

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遠設計手冊解說要在愛丁堡電車計劃中遠致優質設計所需要具備的內容、要求及結構。愛丁堡市議會作為「規劃當局」在評估建議書時，會以此為參照，同時，設計手冊在採購過程中是重要的部份。欲查詢本文件的翻譯資料，請致電愛丁堡市議會傳譯及翻譯服務部(ITS)，電話0131 242 8181並說明檔案編號06060。

یہ ڈیزائن مینیل (ہدایت نامہ) ایڈ میرا کے ٹرم کے پراجیکٹ کے میڈیٹا برائیں کے حصول کیلئے اس کے مضمون، مطالبات اور طریق عمل کی مجموعی پیش کرتا ہے۔ یہ ایک ریفرنس پوائنٹ کی طرح کام کرتا ہے جس کے تحت سنی آف ایڈ میرا ٹولس کو بحیثیت پائلٹ قدرتی اجازت کی کمی تجاویز کا جائزہ لیا جائے گا۔ اس کے علاوہ حصول کے طریقہ کار میں کلیہ کی کردار ادا کرتا ہے۔ اپنی کیونٹی میں ہول ہائے وائی ڈائن میں اس دستہ کے ترقی کے حلقہ معنوںات کیلئے برائے مہربانی ایئر پرائیوٹیشن ایڈز ٹرانسپیشن سروس (ITS) کو 0131 242 8181 پر ٹیلیفون کریں اور ریفرنس نمبر 06060 کا حوالہ دیں۔

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