

Edinburgh Trams

Report on Progress since Completion of Heads of Terms to 8th April 2011



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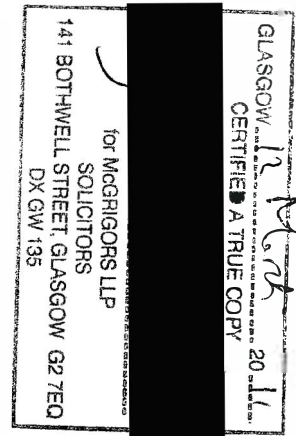
EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix I – Heads of Terms (CEC, BBS, TIE)

Appendix 1

EDINBURGH TRAMS PROJECT
HEADS OF TERMS FOLLOWING MEDIATION – MARCH 2011
AGREED BY
CITY OF EDINBURGH COUNCIL
TIE LIMITED
BILFINGER BERGER CIVIL UK LIMITED AND SIEMENS PLC
(the "parties")



1. **PREAMBLE**

- 1.1 The parties have participated in a mediation with Mr Michael Shane, Mediator, on 8-12 March 2011, in order to resolve disputes and differences arising from the Edinburgh Tram Project. The parties have reached agreement on certain matters which are recorded in these Heads of Terms;
- 1.2 These Heads of Terms reflect the "ETN Mediation - Without Prejudice - Mar Hall Agreed Key Points of Principle" statement signed by the parties, the Mediator and CAF on 10 March 2011 at Mar Hall, Bishopton (the "Mar Hall Principles") which are incorporated herein; and
- 1.3 These Heads of Terms are non-binding and subject to Contract.

2. **DEFINITIONS**

- 2.1 Unless otherwise specified capitalised terms referred to herein have the meaning set out in the contract entered into between tie, Bilfinger Berger Civil UK Limited and Siemens plc dated 14 May 2008 in relation to Edinburgh Tram Network, as amended by Minute of Variation between the parties dated 14 May 2008, the Princes Street Supplemental Agreement entered into between the parties in March 2009 and re-executed on 29 May 2009, a Minute of Variation between the parties dated 3 June 2009 and a Minute of Variation between the parties dated 23 April 2010 (such contract as so amended being referred to herein as the "Infraco Contract").

3. **GENERAL**

- 3.1 The Infraco Contract shall not be amended and shall remain in force save as amended by the minutes of agreement to be entered into between the parties to give effect to these Heads of Terms and the principles herein.
- 3.2 The parties shall agree all amendments to the Infraco Contract, the Tram Supply Agreement and Tram Maintenance Agreement and any other documents which are necessary in order to implement these Heads of Terms on or before 1 July 2011.

4. **PARTIES**

- 4.1 On or before 15 April 2011 the parties will agree: (a) changes to their respective management teams and working practices; and (b) the basis for carrying out the Prioritised Works.

5. **SCOPE**

- 5.1 Infraco shall not be required to carry out further Infraco Works related to the section St Andrew Square to Newhaven except as provided for below.
- 5.2 The Infraco shall complete the integrated Design from Airport to Newhaven (Phase 1A) to meet the Employer's Requirements.
- 5.3 The Infraco will supply to CEC materials and equipment in relation to systems and trackwork for the section St Andrew Square to Newhaven and the parties shall agree a supply and payment schedule.
- 5.4 The Infraco Works from Haymarket to St Andrew Square shall be defined as the On-Street Works and shall be agreed between the parties. tie shall take the risk relating to all utility diversion works required to complete the On-Street Works.
- 5.5 The remaining Infraco Works from the Airport to Haymarket shall be defined as the Off-Street Works including the enabling works to be performed at Lindsay Road Retaining Wall, Lindsay Road lowering and the civil works at Tower Place Bridge including rail installation.
- 5.6 The works at the Depot (including depot access), mini-test track (to be defined by agreement), Haymarket Yards, Princes Street Remedial Works (to be agreed) and any other works agreed by the parties shall be defined as the Prioritised Works and form part of the Off-Street Works.
- 5.7 The Employer's Requirements shall be amended to reflect the revised scope.

6. **PRICE**

- 6.1 The Total Price for the Infraco Works other than the On-Street Works shall be the sum of THREE HUNDRED AND SIXTY TWO MILLION FIVE HUNDRED THOUSAND POUNDS (£362,500,000.00) and shall relate only to the Off-Street Works. The price for the On-Street Works shall be dealt with in accordance with clause 6.3.
- 6.2 An additional price and any programme changes will be agreed in respect of the carrying out of the Edinburgh Gateway Interchange enabling works and added to the Total Price.
- 6.3 The On-Street Works will be paid for on a Target Sum basis. A Target Sum of £39 million is proposed. The mechanism for calculating and amending the Target Sum will be agreed.
- 6.4 A revised, simplified milestone payment schedule shall be agreed.
- 6.5 Infraco shall procure that the current parent company guarantees, performance bonds and retention bonds will be retained at the presently required levels for the Off-Street Works.

7. **FUNDING**

- 7.1 The parties acknowledge that tie will require additional funding for works beyond the Prioritised Works. CEC shall use reasonable endeavours to obtain such additional funding.
- 7.2 Unless CEC confirms to Infraco's reasonable satisfaction that sufficient funding is available to meet its obligations under the Infraco Contract, as amended by these Heads of Terms, the Infraco Contract shall automatically terminate at 5pm on 1 September 2011 (the "Funding Deadline").

7.3 Upon automatic termination, the parties shall have no rights or obligations in respect of future performance save as provided for in clause 94.6 of the Infraco Contract. CEC/tie will make payment to Infraco of the sum to be agreed by 1 July 2011 which shall include a payment in respect of all materials (whether acquired or contracted to be acquired to date) by Infraco. The parties shall agree the position regarding Bonds and Guarantees procured or provided by Infraco and its parent companies.

8. **TIME**

8.1 The programme and Sectional Completion Dates for the On-Street Works and the Off-Street Works shall be agreed between the parties to provide an optimum programme. The intention is to have a single commissioning date for Airport to St Andrew Square. With regard to the key date for commissioning of the mini test track and Depot (including access) and all ancillary works the parties shall use reasonable endeavours to procure that this shall be 15 October 2011.

8.2 The definition of each Section will be amended to remove any conditions associated with the Tram supply.

8.3 The Programme shall be amended to reflect these Heads of Terms.

8.4 Infraco shall commence the Prioritised Works on or before 1 May 2011 subject to (a) all relevant approvals having been given by CEC and other Third parties and (b) a minute of agreement being entered into between the parties in respect of the Prioritised Works on an agreed basis. The parties will enter into an additional minute of agreement in respect of the Off-Street Works (other than the Prioritised Works) and the On-Street Works not later than 1 July 2011. These minutes of agreement will be prepared by the legal advisers to tie/CEC for review and agreement by the legal advisers to Infraco and the Infraco Members. Infraco shall not carry out any works other than the Prioritised Works without tie/CEC agreement prior to Funding Deadline referred to above. In the event that the parties do not enter into these minutes of agreement prior to 1 July 2011 the parties shall discuss project separation.

8.5 tie shall procure that all permits and access are given timeously to permit Infraco to work in accordance with the agreed amended programme.

9. **CLAUSE 80, CLAUSE 65 AND SCHEDULE PART 4**

9.1 The parties shall agree amendments to Clause 65, Clause 80 and Schedule Part 4 to give effect to the principles of these Heads of Terms including the Mar Hall Principles.

10. **CAF**

10.1 The Tram Supply Agreement and Tram Maintenance Agreement shall be novated from Infraco to tie on terms to be agreed. These Heads of Terms are conditional upon (i) heads of terms being entered into between tie and CAF in respect of this novation and (ii) heads of terms being entered into between CAF and Infraco on or before 31 March 2011.

10.2 Liquidated and ascertained damages in respect of the delivery and commissioning of Trams shall be removed from the Infraco Contract.

10.3 The Infraco Contract and ancillary documents shall be amended to remove all rights and obligations relating to the supply and maintenance of trams. Interfaces between Infraco, Infraco Members, tie and CAF in relation to completion, delivery, commissioning and integration of the Trams shall be agreed.

11. **DESIGN AND APPROVALS**

- 11.1 CEC shall procure that CEC Roads Department shall meet with Infraco and its designers in order to agree and resolve all outstanding, Technical Informatives and critical issues with the design within 1 month of the date of execution of the Heads of Terms.
- 11.2 CEC shall procure that CEC Planning Department shall notify Infraco of all outstanding issues which preclude discharge of Planning Informatives within 3 weeks of the date of execution of the Heads of Terms.
- 11.3 Infraco shall "self-certify" the civils and systems technical Design and tie shall have no right or obligation to review and/or approve the civils and systems Design.
- 11.4 Any remaining unresolved issues in respect of Approvals shall be dealt with at a meeting of senior representatives from CEC and Infraco on 7 April 2011.
- 11.5 The parties shall work together to ensure that the statutory approvals for the On-Street Works are obtained before 1 September 2011.

12. **EXISTING REMEDIABLE TERMINATION NOTICES AND UNDERPERFORMANCE WARNING NOTICES**

- 12.1 The parties agree that tie/CEC will not terminate the Infraco Contract on the basis of any Remediable Termination Notices and/or Underperformance Warning Notices served prior to the date of execution of these Heads of Terms and that all existing claims and further claims by Infraco will not be prosecuted subject to parties agreeing amendments to the Infraco Contract in accordance with clause 3.2 before 1 July 2011.
- 12.2 Tie/CEC agree it shall not seek to recover liquidated and ascertained damages in respect of any delay in achieving the Planned Sectional Completion Dates in the Infraco Contract as unamended.

13. **COMMUNICATION**

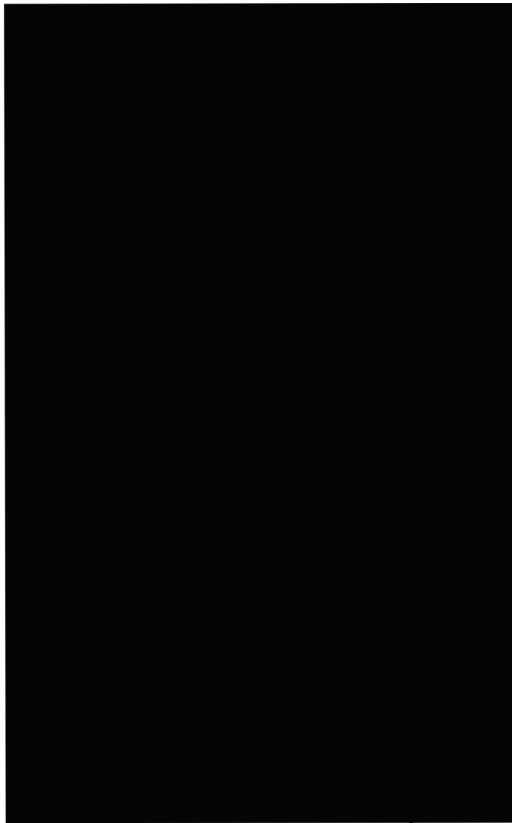
- 13.1 There will be a substantive cultural shift in the behaviour of all parties including interaction, co-location and empowerment.
- 13.2 A Joint Communications Protocol will be established with immediate effect to cover all external communications by the parties in respect of the Edinburgh Tram Project.

14. **OTHERS**

- 14.1 Each of the Infraco Members will be entitled to enter into its own Key Subcontracts. There will be no requirement for all the Infraco Members to be a party to the Key Subcontracts. No restriction shall be placed on the management of Key Sub-Contractors and the replacement of them.
- 14.2 The parties shall agree a variation to the Infraco Contract via the minute of agreement to be entered into on or before 15 April 2011 to address any potential procurement challenge or other challenge to the validity of any agreement entered into by the parties to implement these Heads of Terms pursuant to the Remedies Directive or any other public procurement laws.
- 14.3 The parties shall bear their own professional and other costs and expenses associated with these Heads of Terms.
- 14.4 No announcement (whether internal or external) or press communication or release of information concerning these Heads of Terms shall be made by any Party other than

as agreed between all the parties in accordance with the confidentiality agreement signed by the parties and their representatives at Mar Hall on Tuesday 8 March 2011.

- 14.5 The parties acknowledge that these Heads of Terms reflect their present intentions in relation to the matters set out herein, but except for this paragraph, paragraphs 14.3 and 14.4 above and paragraph 14.6 below, these Heads of Terms shall not be legally binding on the parties.
- 14.6 These Heads of Terms shall be governed and construed in accordance with Scots law. Each Party hereby irrevocably submits to the exclusive jurisdiction of the Court of Session as regards any claim, dispute or matter arising out of or in connection with these Heads of Terms and their implementation and effect.



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15th OCTOBER
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(A)
24th Nov. 2010
+ 4 MONTHS
FOR DEPOT
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9th JULY 2012
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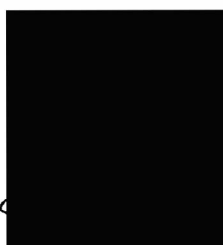
CAF: Richard Garner, Antonio Campos

Tie Ltd: Richard Jeffery, Vic Emery,

Note taker: Ritchie Somerville

1. **Contractual Relationships:** Both parties to instruct lawyers that they want to novate, or similar mechanism, and not renegotiate, the contract.
2. **Date of Novation:** All agreements have to happen simultaneously, on the 1 July or as-agreed, in a tripartite agreement.
3. **Payment mechanics for lump sum payment:** Payment of €5.1M is at signature of novation, 1 July 2011 or date as arises. Additional payments after 15th October due to delay would be paid as per Marr Hall agreement on the basis of a straight line relationship, and would be paid at delivery date of the depot and mini test track and earlier if agreed.
4. **Reliability and performance bond:** Mechanism to be agreed to ensure that trams are always covered by bonds as per contract, and on number of trams to be agreed. Croydon arrangement needs to be subject to separate discussion.
5. **Tram Integration:** CAF obligation is to provide trams to meet the employer's requirements. Siemens have responsibility for integration for the total system. Consortium Exit Agreement to be clear that Siemens take the integration of tram into overall system risk: to be visible to all. CAF/Tie agreement notes that this is a Siemens risk, tie held harmless.
6. **Liquidated Damages:** Agreed. Post Novation, failure to meet the dates in the Novation agreement by CAF would be subject to liquidated damages.
7. **Payment during Commissioning:** Full Vehicle Commissioning Payments will be made upon satisfactory completion of commission to the extent possible on the mini test track.
8. **CEC to guarantee:** agreed
9. **Excess Trams:** Subject to agreement on terms, prior to signature of Minute of Agreement, reasonable costs for modification of Tram, external costs to CAF arising from lease/sale negotiations, are not due on CAF.
10. **EU procurement rules:** Both parties agree to remain silent on this. Item to be removed
11. **Funding:** Both parties agree to remain silent on this. Item to be removed.

Wednesday, 30 March 2011 2:57 PM





EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 2 - Draft Minute of Variation as at 5th April 2011

MINUTE OF VARIATION TO THE INFRACO CONTRACT

among

(1) tie LIMITED

and

(2) BILFINGER BERGER CIVIL UK LIMITED

and

(3) SIEMENS plc

and

(4) CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.

in respect of the PRIORITISED WORKS on the EDINBURGH TRAM NETWORK

MINUTE OF VARIATION

among

- (1) **tie LIMITED** (company number SC230949), whose registered office is at City Chambers, High Street, Edinburgh, Midlothian, EH1 1YJ ("**tie**") which expression shall include its personal representatives, successors, permitted assignees and transferees;
- (2) **BILFINGER BERGER CIVIL UK LIMITED**, a company incorporated in England and Wales under number 02418086 and having its registered office at 3rd Floor Braywick Gate, Braywick Road, Maidenhead, Berkshire SL6 1DA ("**BBUK**") which expression shall include its personal representatives, successors, permitted assignees and transferees;
- (3) **SIEMENS PLC**, a company incorporated in England and Wales under number 00727817 and having its registered office at Faraday House, Sir William Siemens Square, Frimley, Camberley, Surrey, GU16 8QD ("**Siemens**") which expression shall include its personal representatives, successors, permitted assignees and transferees; and
- (4) **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.**, a company registered in Spain and having its registered office at J. M. Iturrioz 26, 20200 Beasain, Spain ("**CAF**") which expression shall include its personal representatives, successors, permitted assignees and transferees,

(2), (3) and (4) together the "**Infraco**".

BACKGROUND

- A tie and Infraco entered into a contract on 14 May 2008 under which Infraco was appointed to carry out and/or manage the design, construction, installation, commissioning, tram procurement, system integration, infrastructure maintenance, tram maintenance and supply of related equipment and materials, trams and related infrastructure in respect of the Edinburgh Tram Network (such contract, amended as detailed below, is herein after referred to as the "**Infraco Contract**").
- B By an agreement in writing dated 13 May 2008 ("**Tram Supply Agreement**") tie appointed CAF to design, manufacture and supply 27 Trams and to supply documentation and associated equipment in connection with the Edinburgh Tram Network.
- C By a Minute of Variation in writing dated 14 May 2008, tie, BBUK, Siemens and CAF agreed that CAF would become a party to the Infraco Contract.
- D By an agreement in writing dated 14 May 2008 ("**Novation of Tram Supply Agreement**") tie and Infraco agreed, with the consent of the Tram Supplier, that Infraco would take over the rights and liabilities of the "Client" (as defined in the Tram Supply Agreement) under the Tram Supply Agreement.
- E The Infraco Contract was amended by the Princes Street Supplemental Agreement entered into between the Parties in March 2009 and re-executed on 29 May 2009, a Minute of Variation between the Parties dated 3 June 2009 and a Minute of Variation between the Parties dated 23 April 2010.
- F Following a mediation between the Parties which took place at Mar Hall between 8 and 12 March 2011, tie and Infraco have agreed to vary the Infraco Contract to the extent specifically set out in this Minute of Variation to give effect to the Prioritised Works.

1 DEFINITIONS AND INTERPRETATION

- 1.1 The definitions given in the recitals to this Minute of Variation apply to this Minute of Variation.
- 1.2 In the context of this Minute of Variation where the Infraco Contract has defined a meaning to any capitalised word or expression used in this Minute of Variation, the same meaning shall be given to it in this Minute of Variation, except as follows:
- "CEC"** means the City of Edinburgh Council;
- "Certificate 1 - First Materials and Equipment and First Mobilisation"** means the certificate to be issued by the Certifier in accordance with Clause 6 (*Certificate 1 - First Materials and Equipment and First Mobilisation*);
- "Certificate 2 - Second Mobilisation"** means the conditional certificate to be issued by the Certifier in accordance with Clause 7 (*Certificate 2 - Second Mobilisation*);
- "Certificate 3 (A, B & C) - Second Materials and Equipment"** means the conditional certificates to be issued by the Certifier in accordance with Clause 8 (*Certificate 3 (A, B & C) - Second Materials and Equipment*);
- "Certifier"** means the person appointed pursuant to the Certifier Agreement;
- "Certifier Agreement"** means the agreement between [], CEC, tie and Infraco for the certification of completion of the Prioritised Works and amounts payable under this Minute of Variation; **[Note: Certifier to be appointed and paid for by CEC. Certifier Agreement to provide that Certifier will be impartial, provide a duty of care to Infraco.]**
- "Communications Protocol"** means the communications protocol set out in Schedule Part 4 (*Communications Protocol*);
- "Heads of Terms"** means the heads of terms signed by tie, CEC, BBUK and Siemens in Glasgow on Saturday 12 March 2011;
- "Infraco Works Recommencement Date"** means 2 September 2011 subject to the Parties entering into an additional Minute of Variation as per the Heads of Terms on or before 1 July 2011.;
- "Materials and Equipment"** means the materials and equipment listed in Schedule Part 2 (*Materials and Equipment*);
- "Off-Street Works"** means that part of the Infraco Works from the Airport to Haymarket (chainage 712,579.5 to 200,000), including the enabling works to be performed at Lindsay Road Retaining Wall (at outbound chainages W1A 100,168 to 100,404; W1B 100,225 to 100,266, W1C 100,387 to 100,412 and W1D 100,467 to 100,478), Lindsay Road lowering (outbound chainage 100,230 to 100,560 and Lindsay Road LOD at east end) and the civil works at Tower Place Bridge (outbound chainage 101,430 to inbound chainage 101,517) including rail installation;
- ["On-Street Works"** means that part of the Infraco Works from Haymarket to York Place (chainage 200,000 to 120,650), other than in respect of any Utilities diversion works;]
- "Fixed Sum Prioritised Works Price"** means the price for carrying out the Fixed Sum Prioritised Works set out in Schedule Part 1 (*Scope, Programme and Pricing of the Prioritised Works*);
- "Fixed Sum Prioritised Works Target Price "** means the price for carrying out the Prioritised Works other than the Fixed Sum Prioritised Works;

"Fixed Sum Prioritised Works" means the Prioritised Works to which a Fixed Sum Prioritised Works Milestone applies;

"Prioritised Works" means that part of the Infraco Works comprising the Depot (excluding any works to the east of the Depot Access Bridge), Depot Access Bridge and Depot Access Road, mini test track, Haymarket Yards, A8 Underpass, Princes Street Remedial Works and any other works agreed by the Parties to comprise the Prioritised Works as more particularly described in the Scope. The Prioritised Works shall comprise part of the Off-Street Works and part of the On-Street Works;

"Prioritised Works Commencement Date" means the later of:

(i) 3 May 2011; and

ii) the date on which all of the following events have occurred:

- (a) Infraco receives the amount payable pursuant to Clause [] (*Certificate 1 - First Materials and Equipment and First Mobilisation*);
- (b) A Mobilisation Certificate has been issued by tie pursuant to Clause [] (*Certificate 2 - Second Mobilisation*);
- (c) All Consents required to start the Prioritised Works have been issued by tie or provided by the relevant Approval Body;
- (d) tie have provided, or procured, possession and/or access to all work areas required to carry out the Prioritised Works [in accordance with the Prioritised Works Programme]

"Fixed Sum Prioritised Works Milestone" means each of the milestones for payment set out in Schedule Part 1 (Scope, Programme and Pricing of Prioritised Works) identified as a Fixed Sum Prioritised Works Milestone;

"Fixed Sum Prioritised Works Target Milestone" means each of the milestones for payment set out in Schedule Part 1 (Scope, Programme and Pricing of Prioritised Works) identified as a Fixed Sum Prioritised Works Target Milestones;

"Prioritised Works Programme" means that part of the New Programme which relates to the Prioritised Works;

"New Programme" means the programme for the Infraco Works set out in Schedule Part 1 (*Scope, Programme and Pricing of Prioritised Works*);

"Schedule" means the Schedule in [] Parts annexed to this Minute of Variation;

"Scope" means the scope of the Prioritised Works set out in Schedule Part 1 (*Scope, Programme and Pricing of Prioritised Works*) identified by means of specific drawing and chainage numbers;

"Total Price" has the meaning given in the Heads of Terms;

"Valuation Certificate" has the meaning given in Clause 9 (*Payment for the Prioritised Works*);

"Valuation Dates" means the dates set out in Schedule Part 3 (*Valuation Dates*), and Valuation Date shall be construed accordingly; and

"Vesting Certificate" means a vesting certificate in a form agreed between the Parties.

- 1.3 Clause headings in this Minute of Variation are for the convenience of the Parties only and do not affect its interpretation.
- 1.4 Unless the context otherwise requires:
 - 1.4.1 words importing gender include masculine, feminine and neuter;
 - 1.4.2 the singular includes the plural, and vice versa; and
 - 1.4.3 a reference to any Clause, Sub-Clause or Schedule is, except where it is expressly stated to the contrary, a reference to such clause, sub-clause or schedule to this Minute of Variation and reference in any Schedule to any Part, Paragraph or Sub-Paragraph is, except where it is expressly stated to the contrary, a reference to such part, paragraph or sub-paragraph of that Schedule (as the case may be);

2 AMENDMENT OF THE INFRACO CONTRACT

- 2.1 The Parties hereby agree that the Infraco Contract is amended in accordance with the terms of and as required to implement this Minute of Variation.
- 2.2 The terms and conditions of this Minute of Variation, together with the Schedule, represent the entire agreement between the Parties relating to this variation of the Infraco Contract. Save as amended or dis-applied by this Minute of Variation, all the terms and conditions of the Infraco Contract remain in full force and effect.

3 APPLICATION OF THE INFRACO CONTRACT TO THE PRIORITISED WORKS

- 3.1 From the Prioritised Works Commencement Date the Prioritised Works will be carried out in accordance with the Infraco Contract as amended by the application of this Minute of Variation.
- 3.2 From the Prioritised Works Commencement Date until the Infraco Works Recommencement Date Infraco shall not carry out any Infraco Works other than the Prioritised Works. **[Note: Any ongoing obligations in relation to the supply of trams to be identified. Payments to CAF to be understood. Will there be any payments to CAF during the Priorities Works Period]**
- 3.3 Infraco shall from the date of this Minute of Variation self certify that the civils and systems and trackwork Design is in accordance with the Employer's Requirements. The self certification of the civils and systems and trackwork Design by Infraco:
 - 3.3.1 entitles Infraco to commence the construction of the Prioritised Works to which it relates; and
 - 3.3.2 replaces any requirement for tie's approval or review of the Design in the Infraco Contract.
- 3.4 For the avoidance of doubt, tie shall have no right or obligation to review and/or approve the civils and systems and trackwork Design and the Infraco shall be relieved of its obligations under Clause 10 and Schedule Part 14 of the Infraco Contract insofar as they relate to the civils and systems and trackwork Design by tie.
- 3.5 Infraco is not required to obtain any further Permits to Commence Works for any of the Prioritised Works subject to providing tie with such information as is reasonably required to allow tie to comply with the stakeholder notification requirements for which they are responsible.

4 SOLE ENTITLEMENT OF INFRACO TO PAYMENT, EXTENSIONS OF TIME OR OTHER RELIEF

Notwithstanding the terms of the Infraco Contract, the Parties have agreed that the Infraco's sole entitlement to payment, extension of time or other relief in respect of the Materials and Equipment, Mobilisation, Prioritised Works (including preliminaries in relation thereto) and the impact of the Materials and Equipment and Prioritised Works on the Infraco Works shall be as set out in this Minute of Variation.

5 AMENDMENT TO THE PROGRAMME

- 5.1 The Parties have agreed that from the Prioritised Works Commencement Date:
- 5.1.1 the New Programme shall be the Programme referred to in the Infraco Contract and the Planned Sectional Completion Dates and Planned Service Commencement Dates shall be amended to reflect the programme dates shown for sectional completion and service commencement in the New Programme; and
- 5.1.2 the Prioritised Works shall be carried out in accordance with the Prioritised Works Programme.
- 5.2 Any embargo on working as provided for in Schedule Part 3 (*Code of Construction Practice*) of the Infraco Contract shall not apply to the carrying out of the Prioritised Works to the extent it would be inconsistent with the Prioritised Works Programme.

6 CERTIFICATE 1 – FIRST MATERIALS AND EQUIPMENT AND FIRST MOBILISATION CERTIFICATE

- 6.1 On 8 April 2011 the Certifier issued a certificate to Infraco and tie, entirely conditional upon the entering into of this Minute of Variation by the Parties on [15 April 2011], certifying payment of the agreed sum of £[] (payable as to £ [] in respect of an agreed first mobilisation payment to BBUK and £[] in respect of an agreed first mobilisation payment to Siemens in respect of the transfer to CEC of ownership in and unencumbered title to such Materials and Equipment as the certificate relates. Such payment and transfer shall be made by tie and Infraco respectively on the later of (i) 21 April 2011 and (ii) the date of execution of this Minute of Variation.
- 6.2 On the date that title to Materials and Equipment is transferred by Infraco to CEC pursuant to this Clause 6 or Clause 8 Infraco shall issue Vesting Certificates to CEC in respect of any Materials and Equipment which have not been delivered to the Depot or such other part of the Site where Infraco Works are being carried out.
- 6.3 The Parties acknowledge that the Materials and Equipment, or any part thereof, supplied pursuant to this Clause 6 or Clause 8 may not be incorporated as part of the Infraco Works pursuant to the Infraco Contract.

7 CERTIFICATE 2 - SECOND MOBILISATION CERTIFICATE

On 3 May 2011 tie shall procure that the Certifier shall issue a certificate to Infraco and tie, certifying payment of the agreed sum of £[] (payable as to £[] to BBUK and £[] to Siemens, and payment shall be made by tie on the later of (i) 17 May 2011.

8 CERTIFICATES 3 (A, B & C) – SECOND MATERIALS AND EQUIPMENT

- 8.1 On 15 June 2011 tie shall procure that the Certifier issues a certificate (Certificate 3A) to [Infraco] and tie, certifying payment of the agreed sum of £[] (payable as to £[] to Siemens) in respect of an agreed second payment to Siemens in respect of the transfer to tie of ownership in and unencumbered title to such Materials and Equipment as the certificate relates, such payment and transfer shall be made by tie and Infraco respectively on 29 June 2011.
- 8.2 On 13 July 2011 tie shall procure that the Certifier issues a certificate (Certificate 3B) to [Infraco] and tie, certifying payment of the agreed sum of £[] (payable as to £[] to Siemens) in respect of an agreed third payment to Siemens in respect of the transfer to tie of ownership in and unencumbered title to such Materials and Equipment as the certificate relates, such payment and transfer shall be made by tie and Infraco respectively on 27 July 2011.
- 8.3 On 10 August 2011 tie shall procure that the Certifier issues a certificate (Certificate 3C) to [Infraco] and tie certifying payment of the agreed sum of £[] (payable as to £[] to Siemens) in respect of an agreed fourth payment to Siemens in respect of the transfer to tie of ownership in and unencumbered title to such Materials and Equipment as the certificate relates, such payment and transfer, shall be made by tie and Infraco respectively on 24 August 2011.

9 PAYMENT FOR THE PRIORITISED WORKS

- 9.1 Subject to the terms of this Minute of Variation tie shall pay the Fixed Sum Prioritised Works Price and the Fixed Sum Prioritised Works Target Price for the carrying out and completion of the Prioritised Works.
- 9.2 On each Valuation Date tie shall procure that the Certifier shall certify:
- 9.2.1 the completion of each Fixed Sum Prioritised Works Milestone which has been completed since the last Valuation Date; and
- 9.2.2 the completion of each Fixed Sum Prioritised Works Target Milestone which has been completed since the last Valuation Date

and the Certifier shall issue a certificate ("**Valuation Certificate**") to tie and Infraco certifying the same and the amount payable on completion of the Fixed Sum Prioritised Works Milestone and/or Fixed Sum Prioritised Works Target Milestone as set out in Schedule Part 1.

- 9.3 On receipt of a Valuation Certificate, Infraco shall submit a valid VAT invoice to tie and payment will become due to the Infraco on receipt by tie of such valid VAT invoice (the "**Prioritised Works Payment Due Date**"). The final date for payment by tie to the Infraco of a valid VAT invoice shall be the date occurring 14 calendar days after the Prioritised Works Payment Due Date.
- 9.4 A certificate issued by the Certifier under this Clause 9 shall be final and binding on the Parties except in the case of manifest error or fraud.
- 9.5 All sums expressed or referred to in this Minute of Variation and all sums due under certificates issued by the Certifier pursuant to this Minute of Variation are stated exclusive of Value Added Tax thereon. In addition to payments due under this Minute of Variation and such certificates tie shall in addition pay to the Infraco any Value Added Tax properly chargeable by Infraco thereon.
- 9.6 For the avoidance of doubt, where any Fixed Sum Prioritised Work Milestones are in respect of preliminaries such Fixed Sum Prioritised Work Milestones shall be deemed to

be a time based payment and shall be certified for payment once the relevant time period has elapsed without the need for further valuation or substantiation.

10 TOTAL PRICE

10.1 The Parties agree that the Fixed Sum Prioritised Work Price and all sums payable by tie pursuant to Clause 6, 7, and 8 of this Minute of Variation shall comprise part of the Total Price,

10.2 The Parties agree that the Fixed Sum Prioritised Work Target Milestones shall comprise part of the Target Sum.

10.3 tie acknowledges that to the extent that tie instigates any tie Change to the Prioritised Works or there is a Mandatory tie Change to the Prioritised Works any cost arising will be in addition to the Total Price or Target Sum included at paragraph 6.3 of the Heads of Terms [and that the valuation of any tie Change in these circumstances shall be in accordance with Clause 80.6 of the Infraco Contract.]

11 MAR HALL CONFIDENTIALITY AGREEMENT

The Parties acknowledge and agree to remain bound by the provisions of the Mar Hall Confidentiality Agreement entered into on behalf of each of them on 8 March 2011.

12 COMMUNICATIONS PROTOCOL

By their execution of this Minute of Variation the Parties agree to be bound by the Communications Protocol.

13 MORATORIUM

13.1 The Parties agree that provided amendments to the Infraco Contract to reflect the principles of the Heads of Terms are agreed by the Parties by or before 1 July 2011 that:

13.1.1 tie/CEC will not terminate the Infraco Contract on the basis of any Remediable Termination Notices and/or Underperformance Warning Notices served prior to 12 March 2011 or on any of the same grounds identified therein; and

13.1.2 all existing claims and further claims by Infraco under the Infraco Contract which relate to events which occurred prior to entering into of this Minute of Variation will not be prosecuted; and

13.1.3 tie/CEC shall not seek to recover liquidated and ascertained damages in respect of any delay in achieving the Planned Sectional Completion Dates in the Infraco Contract or the Agreed Tram Commissioning Dates in the Infraco Contract/Tram Supply Agreement.

13.2 tie hereby waives its rights in relation to any claim against Infraco or any of the Infraco Members under the Infraco Contract which would not have arisen but for the entering into and implementation of this Minute of Variation.

13.3 The Parties agree that all existing disputes notified by either Infraco or tie under the Dispute Resolution Procedure set out in Schedule Part 9 to the Infraco Contract shall be effectively stayed or "frozen" until the earlier of (a) 2 September 2011 and (b) 2 July 2011, where the Parties have failed to enter into a subsequent Minute of Variation by that date. At any time after the relevant date either Party shall be entitled to serve notice on the other of its intention to recommence any of the existing disputes, the dispute recommencing 7 calendar days following the service of such notice. Should this occur, the Parties agree that no issue

shall arise in relation to any failure by either Party to comply with the timescales set out in Schedule Part 9 of the Infraco Contract, during the period of suspension and/or as a consequence of this period of suspension provided always that the relevant period of suspension shall run up to the date the dispute recommences in accordance with this Clause 13.3.

14 KEY SUB-CONTRACTORS

14.1 Each Infraco Member may appoint Key Sub-Contractors to carry out part of the Infraco Works. The Parties acknowledge that there shall be no requirement for each Infraco Member to be a party to any sub-contract with any Key Sub-Contractor.

14.2 Each Infraco Member shall be free to choose the form of sub-contract to be entered into with each Key Sub-Contractor and tie/CEC shall have no entitlement to impose any restrictions on the management or replacement of the Key Sub-Contractors.

15 PRESERVATION OF RIGHTS

15.1 Subject to Clause 15.2 each Party preserves its rights and remedies in relation to any existing breach or other claim under the Infraco Contract as amended by this Minute of Variation as at the date of entering into this Minute of Variation (whether known or not at the date of execution of this Minute of Variation). The Parties further acknowledge that save to the extent varied by this Minute of Variation their respective rights and obligations in respect of the Infraco Works to the extent performed to date (other than works which will be remedied by the Princes Street Remedial Works forming part of the Prioritised Works) shall subsist.

15.2 The Parties agree and acknowledge that the New Programme includes all extensions of time to which Infraco is or may have become entitled to under the Infraco Contract in relation to Compensation Events and/or Notified Departures which occurred prior to the signing of the Heads of Terms.

16 DISPUTES

The Parties agree that any dispute, difference or unresolved claim between the Parties in connection with or arising from this Minute of Variation shall be dealt with in accordance with the provisions set out in Schedule Part 9 (*Dispute Resolution Procedure*) of the Infraco Contract.

17 VARIATION

This Minute of Variation is a variation to the Infraco Contract for the purposes of Clause 108 (Variations to be in Writing) of the Infraco Contract.

18 LAW AND JURISDICTION

Clause 117 (*Applicable Law*) of the Infraco Contract applies.

IN WITNESS WHEREOF these presents on this and the preceding [] pages together with the Schedule in [] Parts and Appendix which are annexed and subscribed as relative hereto are executed as follows:

EXECUTED for and on behalf of tie LIMITED

at

on April 2011 by:

Authorised Signatory

.....

Full Name

.....

Witness Signature

.....

Full Name

.....

Address

.....

**EXECUTED for and on behalf of BILFINGER
BERGER CIVIL UK LIMITED**

at

on April 2011 by:

Authorised Signatory

.....

Full Name

.....

Witness Signature

.....

Full Name

.....

Address

.....

EXECUTED for and on behalf of SIEMENS PLC

at

on April 2011 by:

Authorised Signatory

.....

Full Name

.....

Witness Signature

.....

Full Name

.....

Address

.....

**EXECUTED for and on behalf of CONSTRUCCIONES
Y AUXILIAR DE FERROCARRILES S.A.**

at

on April 2011 by:

Authorised Signatory

.....

Full Name

.....

Witness Signature

.....

Full Name

.....

Address

.....

THIS IS THE SCHEDULE REFERRED TO IN THE FOREGOING MINUTE OF VARIATION

PART 1

SCOPE, PROGRAMME AND PRICING OF PRIORITISED WORKS

PART 2
MATERIALS AND EQUIPMENT

PART 3
VALUATION DATES

PART 4
COMMUNICATIONS PROTOCOL



EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 3 - Heads of Terms (Redacted) (CEC, CAF, TIE)

Draft 4 31/03/11

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tie Limited ("tie")

and

Construcciones y Auxiliar de Ferrocarriles S.A. ("CAF")

Draft

HEADS OF TERMS

[] March 2011

INTRODUCTION

- A. The Parties have agreed to procure the novation by BBCUK and Siemens to tie of the Tram Supply Agreement ("TSA") and Tram Maintenance Agreement ("TMA") as amended in terms of these Heads of Terms and to this end the Parties have agreed to enter into such agreements as are necessary to give effect to these heads of terms including the schedule hereto ("Heads of Terms").
- B. these Heads of Terms set out the key commercial principles agreed between the Parties in respect of the novation;
- C. these Heads of Terms are indicative and non-binding only;
- D. save where otherwise defined in these Heads of Terms, defined terms used in these Heads of Terms including the Recitals and Schedule to these Heads of Terms have the meaning set out in the contract entered into between tie, Bilfinger Berger Civil UK Limited and Siemens plc dated 14 May 2008 in relation to the Edinburgh Tram Network, as amended by Minute of Variation between tie, BBCUK, Siemens and CAF dated 14 May 2008, the Princes Street Supplemental Agreement entered into between tie, BBCUK, Siemens and CAF in March 2009 and re-executed on 29 May 2009, a Minute of Variation between tie, BBCUK, Siemens and CAF dated 3 June 2009 and a Minute of Variation between tie, BBCUK, Siemens and CAF dated 23 April 2010 (such contract as so amended being referred to herein as the "Infraco Contract"); and
- E. the following defined terms shall have the meaning given in the TSA: "Employer's Requirements", "Performance Bond", "Reliability Bond" and "Tram Manufacturing and Delivery Programme" **[Drafting Note: We are currently considering whether any other terms need to be defined by reference to the TSATMA rather than the Infraco Contract.]**

PROJECT CONTRACT HEADS OF TERMS	
SUBJECT MATTER	AGREED POSITION
Parties	the Parties to these Heads of Terms;
1. Novation	<p>The Parties agree to use reasonable endeavours to enter into novation agreements, or such other contractual arrangements as may be necessary to achieve effective contractual nexus between CAF and tie, novating and amending the <u>TSA and TMA amending the Infraco Contract</u>, TSA and the TMA and entering into such other agreements to amend related documents to give effect to these Heads of Terms on or before 1 July 2011 or such other date as may be agreed between the Parties.</p> <p>Entry into the novation agreements and other agreements will be conditional upon (i) a variation to the Infraco Contract in terms acceptable to the Parties terminating the existing contractual relationship between tie and the Infraco insofar as it relates to the supply and maintenance of the Trams, and (ii) CAF being removed as a party to the Infraco Contract and related documents, ceasing to be a member of the Infraco consortium and the terms of related discharges, indemnities, performance bonds and other security documents being agreed; and (iii) satisfactory contractual arrangements being entered into amongst CEC, tie, BBCUK and Siemens to amend the Infraco Contract to reflect the Heads of Terms entered into between those parties on 12 March 2011, it being acknowledged that all those agreements and arrangements will be entered into on the same date, are interconditional and are subject to each such agreement and arrangement becoming unconditional.</p>
2 Fees, costs and expenses	The Parties shall each bear their own professional and other costs and expenses associated with these Heads of Terms.
3. Announcements	No announcement (whether internal or external) or press communication or release of information concerning these Heads of Terms shall be made by either Party other than as agreed between the Parties.
4. Binding effect of the Heads of Terms	The Parties acknowledge that these Heads of Terms reflect their present intentions in relation to the matters described at Clause 1 above, but except for Clauses 2 and 3 above, this Clause 4 and Clause 5 below, these Heads of Terms shall not be legally binding on the Parties.
5. Governing Law and Jurisdiction	<p>These Heads of Terms shall be governed and construed in accordance with Scots law.</p> <p>Each Party hereby irrevocably submits to the exclusive jurisdiction of the Court of Session as regards any claim, dispute or matter arising out of or in connection with these Heads of Terms and their implementation and effect.</p>

IN WITNESS WHEREOF these presents on this and the preceding 2 pages together with the Schedule in 1 Part which is annexed and subscribed as relative hereto are executed as follows:

EXECUTED for and on behalf of

tie LIMITED

at

on

March 2011 by:

Authorised signatory

.....

Full Name

.....

Witness Signature

.....

Full Name

.....

Address

.....

.....

EXECUTED for and on behalf of

CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A. (CAF)

Formatted: Spanish (Spain-Traditional Sort)

at

on

March 2011 by:

Authorised signatory

.....

Full Name

.....

Witness Signature

.....

Full Name

.....

Address

.....

.....

SCHEDULE
AGREED KEY COMMERCIAL PRINCIPLES

Novation

1. The Parties will enter into novation agreements, or such other contractual arrangements as may be necessary to achieve contractual nexus between CAF and tie novating the TSA and the TMA from BBCUK and Siemens to tie and amending the Infraco Contract the TSA and the TMA on terms to be agreed on or before 1 July 2011 or such other date as may be agreed between the Parties.

Delay Costs

2. Payment mechanics for delay costs:

- 2.1. The TSA and TMA will be varied such that a lump sum for delay costs amounting to €5.1million will be payable by tie to CAF on the later of the anticipated date of signing of the contractual arrangements described at Clause 1 of these Heads of Terms being 1 July 2011 (or such other date as maybe agreed between the Parties) and the date that those contractual arrangements become unconditional.
- 2.2. To the extent that the Depot (including Depot access bridge) ~~availability date~~ and/or the mini-test track ~~are completed and become available for delivery and commissioning of the Trams availability date fall~~ after 15 October 2011 then additional payments payable on a monthly basis on the respective delivery dates of the Depot (including Depot access bridge) and the mini-test track (or earlier if agreed) will become due from tie to CAF to be calculated by reference to separate monthly rates for each of the Depot (including Depot access bridge) and the mini-test track payable on a straight line basis, the precise mechanics of which are to be agreed with a ~~maximum~~ sum of €0.466m being payable should the Depot (including Depot access bridge) not be complete and available for available for delivery of the Trams until by 24 March 2012 ~~and~~ the mini-test track not be complete and available for commissioning of the Trams until by 9 July 2012. Should delays extend beyond either of those dates then further delay payments will be calculated in accordance with clause 49 of the TSA a similar manner using the same monthly rates.

3. **Payment of Lump Sum**

CAF and tie will agree the profile for the additional payments referred to at paragraph 2.2 above.

4. **Programme**

CAF and tie will work together to produce a specific version of the Tram Manufacturing and Delivery Programme and the other relevant programmes under the TSA to reflect each of the completion/availability dates set out above and other changes required to reflect the revised programme.

5. **Reliability Bond and Performance Bond**

A mechanism is to be agreed such that the Trams to be operated on the ETN are always covered either by the Performance Bond or the Reliability Bond in accordance with the terms of the TSA and TMA, with the switch to Reliability Bond from Performance Bond to occur upon delivery of a number of Trams (number to be agreed) to be operated on the ETN. The impact of the excess Tram arrangements referred to at paragraph 11 below on the timing of the Performance Bond and Reliability Bond will require to be agreed.

6. Integration

- 6.1. The Parties agree that the responsibility for the integration of the Trams with the Edinburgh Tram Network shall rest with BBCUK and Siemens as Infraco and that tie shall be held harmless. The contractual arrangements between the Parties, BBCUK and Siemens will make this clear;
- 6.2. CAF will interface and cooperate with BBCUK and Siemens as Infraco to the extent reasonably required by tie to facilitate the integration of the Trams with the Edinburgh Tram Network by BBCUK and Siemens as Infraco.
- 6.3. It is acknowledged that the CAF obligation is to provide Trams to meet the Employer's Requirements.

7. Liquidated Damages

CEC/Transport Scotland/TEL/tie shall have no claims against CAF for liquidated damages in respect of any delay under the Infraco Contract, the TSA or the TMA that has occurred or will occur due to progress of manufacture of the Trams or any other acts, omissions, matters or events occurring prior to the date of the novation of the TSA and TMA in respect of which it may be alleged that CAF is not entitled to an extension of time or other relief under the TSA or the TMA and the conclusion of all other agreements to be entered into under these Heads of Terms but after such date of novation CAF will be subject to liquidated damages for its failure to meet the relevant dates under the TSA and/or TMA in respect of any acts, omissions, matters or events occurring after such date of novation for which CAF is not entitled to extension of time or other relief under the TSA or TMA.

8. Number of Trams

Subject to the contractual arrangements described at paragraph 4 above becoming unconditional CEC/Transport Scotland/TEL/tie will accept and pay for all 27 Trams under the TSA and will not be entitled to reject any of them, but without prejudice to CAF's obligations to provide Trams certified by the Tram Inspector in accordance with TSA and any right that may exist under the TSA to reject Trams that do not comply with the Employer's Requirements under the TSA.

9. Payment During Commissioning

Completion of and access to the Depot (including Depot access) and the mini-test track (to be defined by agreement) will allow some but not all commissioning to be carried out. The payment provisions of the TSA will provide for payment of the elements of the sums due under the TSA relating to commissioning following completion of the commissioning that can be carried out at the Depot (including Depot access) and the mini-test track (to be defined by agreement) and notwithstanding that full commissioning has not been completed subject to tie being satisfied that it has sufficient security in place in respect of the remaining tests still required.

10. CEC Guarantee

CEC shall guarantee the obligations of tie under the TSA and the TMA.

11. Excess Trams

The Parties agree to make such changes to the Infraco Contract, the TSA and TMA as may be necessary and to provide such consents and assistance as may be reasonably required to enable tie/CEC, in conjunction with CAF, to sell, lease or otherwise deal with any Trams which are in excess of the current requirements of tie for that part of the Edinburgh Tram Network running from Airport to St Andrew Square subject to agreement between the Parties on terms including the reasonable costs payments (including a margin) to be paid to CAF for modification of the Trams and assistance provided as previously described, with it being acknowledged also that any

external costs to CAF arising from these matters/lease/sale negotiations are not for the account of CAF.

12. Other terms

The Parties agree to negotiate in good faith to make such other amendments to the Infracore Contract, the TSA, the TMA and related documents, as are necessary or appropriate (i) to give effect to the principles agreed between them at the Mar Hall mediation over the period from 7 to 11 March 2011 ~~and~~ (ii) to give effect to these Heads of Terms (iii) to reflect the change in parties to the various documents and the change in contractual structure (iv) as a consequence of delays to the date of implementation of these Heads of Terms (v) to address any other changes to the ETN project that may become apparent that impact on the works and services to be carried out and provided by CAF under the TSA and/or the TMA (vi) as a consequence of the shorter Edinburgh Tram Network and (vii) as a consequence of the need for fewer Trams or the Trams achieving a lower mileage on the shorter Edinburgh Tram Network.



EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 4
Mini Test Track - Operational Readiness Workshop List

Date	To:	CC:
10 December 2009	Meeting to discuss Tram Inspector and Tram Testing with: Martin Foerder, Miguel Berozpe, Kevin Russell, Alejandro Urriza, Steven Bell and Alastair Richards - Slide showing the mini-test track presented by AR.	
7 January 2010	Operational Readiness Meeting with: David Lowe, Elizabeth Parkes; Sinead Scott; Edward Inglis, Clare Norman; Margaret Bayne - Established initial stages of testing including Stage 3 the Mini- test track	Steven Bell; Richard Jeffrey; Mandy Haeburn-Little; Stewart McGarrity; Claire Logan; Susan Clark; Kenneth McLeod
11 February 2010	Operational Readiness Meeting with: David Lowe(C), Elizabeth Parkes; Sinead Scott; Edward Inglis(S), Clare Norman; Margaret Bayne -	Steven Bell; Richard Jeffrey; Mandy Haeburn-Little; Stewart McGarrity; Claire Logan; Susan Clark; Kenneth McLeod
8 March 2010	Operational Readiness Meeting with: David Lowe(C), Elizabeth Parkes; Sinead Scott; Edward Inglis(S); Mathias Hecht(S); Norbert Wunder(S); Margaret Bayne	Steven Bell; Richard Jeffrey; Mandy Haeburn-Little; Stewart McGarrity; Claire Logan; Susan Clark; Kenneth McLeod
12 April 2010	Operational Readiness Meeting with: Edward Inglis(S), David Lowe(C), Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Kevin Keating, Elizabeth Parkes, Sinead Scott, Clare Norman, Margaret Bayne, Andrew Scott	Alastair Richards
10 May 2010	Operational Readiness Meeting with: Edward Inglis(S); DLowe@caf.net ; ' mathias.hecht@siemens.com '; bernd.nieswand@siemens.com ; 'Wunder, Norbert(S)'; Kevin Keating; Elizabeth Parkes; Sinead Scott; Clare Norman; Andrew Scott; alastair.scott@civil.bilfinger.co.uk ; james.cowie@civil.bilfinger.co.uk ; Margaret Bayne - Started to discuss the OHLE arrangements	Alastair Richards; Bob Cummins; Steven Bell; Richard Jeffrey; Susan Clark; Frank McFadden; AUrriza@caf.net ; mberozpe(S)
17 June 2010	Operational Readiness Meeting with: Edward Inglis(S), David Lowe(C), Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Kevin Keating, Elizabeth Parkes, Sinead Scott, Clare Norman, Margaret Bayne, Andrew Scott - Limit constraints of Depot Access Bridge and	Bob Cummins, Steven Bell, Susan Clark, Frank McFadden, Alejandro Urriza(C), Miguel Berrozpe(S)

	Gogarburn tramstop discussed	
6 July 2010	<p>Operational Readiness Meeting with: Inglis, Edward(S); DLowe@caf.net; 'mathias.hecht@siemens.com'; bernd.nieswand@siemens.com; Wilken, Michael(S); 'Wunder, Norbert'; Kevin Keating; Elizabeth Parkes; Sinead Scott; Clare Norman; Andrew Scott; alastair.scott@civil.bilfinger.co.uk; james.cowie@civil.bilfinger.co.uk; Margaret Bayne; Riley, John(S) - Progress Update</p>	Bob Cummins; Steven Bell; Susan Clark; Frank McFadden; AUrriza@caf.net ; Berrozpe, Miguel(S)
4 August 2010	<p>Operational Readiness Meeting with: Inglis, Edward(S); DLowe@caf.net; 'mathias.hecht@siemens.com'; bernd.nieswand@siemens.com; Wilken, Michael(S); 'Wunder, Norbert'(S); Kevin Keating; Elizabeth Parkes; Sinead Scott; Clare Norman; Andrew Scott; alastair.scott@civil.bilfinger.co.uk; james.cowie@civil.bilfinger.co.uk; Margaret Bayne; Riley, John(S) - Progress Update</p>	Bob Cummins; Steven Bell; Susan Clark; Frank McFadden; AUrriza@caf.net (C); Berrozpe, Miguel(S)
13 August 2010	<p>Meeting with: Frank Wenzel(S), Andy Scott and Alastair Richards To discuss the extent of OHLE for the mini-test track and interface with Edinburgh Gateway Project.</p>	
13 September 2010	<p>Operational Readiness Meeting with: Alastair Scott(B), Edward Inglis(S), David Lowe(C), Kevin Keating, Clare Norman, Elizabeth Parks, Sinead Scott, Andrew Scott, Margaret Bayne, Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Michael Wilken(S) - Main focus was OHLE following previous meeting.</p>	
7 October 2010	<p>Operational Readiness Meeting with: Alastair Scott(B), Edward Inglis(S), David Lowe(C), Kevin Keating, Clare Norman, Elizabeth Parks, Sinead Scott, Andrew Scott, Margaret Bayne, Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Michael Wilken(S) - Section B to Airport discussed after mini- test track</p>	Alejando Urriza(C), Miguel Berrozpe(S), Martin Foerder(B)

26 November 2010	Operational Risks During Testing and Commissioning Workshop ' alastair.scott@civil.bilfinger.co.uk '; Inglis, Edward; DLowe@caf.net ; Clare Norman; Andrew Scott; ' mathias.hecht@siemens.com '; Wilken, Michael(S); bernd.nieswand@siemens.com ; Norbert.Wunder@siemens.com ; Riley, John(S); Gary.Roper@Siemens.com ; Sheena Smith; Colin Kerr; Alastair Richards; Kevin Keating; Sinead Scott - Detailed analysis of the risks associated with each stage of testing.	
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EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 5
Hg Minutes from Briefing Meetings on 14th and 18th March 2011



**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ATTENDEES:

Martin Foerder (MF)	Bilfinger Berger UK Limited	martin.foerder@civil.bilfinger.co.uk
Alfred Brandenburger (AB)	Siemens	Alfred.Brandenburger@siemens.com
Colin Smith (CS)	for City of Edinburgh Council	csmith@hg-group.co.uk

DISTRIBUTION:

Attendees plus:		
Dave Anderson	City of Edinburgh Council	Dave.Anderson@edinburgh.gov.uk

ACTION

1.0 INTRODUCTIONS

- | | | |
|-----|--|-----------|
| 1.1 | CS advised that he has been asked by City of Edinburgh Council to assist them with the project to completion. | |
| 1.2 | CS is to provide references on project experience from Schoenstatt, East Dunbartonshire Council and The Millennium Commission (Glasgow Science Centre) | CS |
| 1.3 | CS to review figures on existing funding to BBS to ensure priority works commissioned stay within existing approvals. | CS |

2.0 KEY DATES DISCUSSED

Draft Project Delivery Plan, plus attachments. Draft papers for Principals meeting	31 st March 2011
Principals meeting	7 th April 2011
Minute of Variation for Prioritised Work	15 th April 2011
Target date for site start priority works	3 rd May 2011
Siemens material mobilisation and first mobilisation payment BB and Siemens – payment figure to be agreed (certified 7 th April 2011)	21 st April 2011
Second mobilisation payment for BB and Siemens – payment figure to be agreed (certified 3 rd May 2011)	17 th May 2011
Individual start/finish dates for Priority Works	To be agreed
Minute of Variation of the Off-Street Works (other than Prioritised Works) and On-Street Works on or before	1 st July 2011
Mini test track – Target date	15 th October 2011
Next briefing meeting	18 th March 2011
Commencement of Design, Risk, Programme and Finance meetings on site	22 nd /23 rd March 2011

3.0 PRIORITY WORKS

- 3.1 Programme to be prepared and agreed for each element noted below:
- Depot Access Bridge
 - Depot (Civils and Systems)
 - Mini test track (Civils and Systems)
 - Haymarket yards
 - Princes Street remedial works
- Revised, simplified payment schedule shall be agreed.



**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

	ACTION
3.2 CS proposed that Preliminaries to be detailed per NBS CESMM – CS to provide model document. This may not be possible since both Bilfinger Berger and Siemens have their origin in Germany and this may result that different methods to calculate Preliminaries may apply. Preliminaries will be part of the revised, simplified payment schedule. Both parties to embrace the intention and to consider the methodology to achieve a workable solution.	CS/BBS
3.3 Preliminaries to be valued and paid monthly in accordance with agreed payment schedule. Formal detail to be considered and agreed.	ALL
4.0 SIEMENS MATERIALS	
4.1 Materials available for title transfer to be listed.	AB
4.2 Certificate to be prepared for 7 th April; payment by 21 st April 2011.	CEC
5.0 MANAGEMENT STRUCTURE (SEE DIAGRAM)	
5.1 CS to request that all tie contractual correspondence is passed to him for initialling.	CS
5.2 Dave Anderson, City of Edinburgh Council (“CEC”) Director, to be CEC Project Director.	ALL
5.3 Informal communication links from CEC and to Bilfinger and Siemens offices in Germany to be established.	ALL
5.4 MF and AB advised that Kevin Russell and Axel Eickhorn are their deputies and can be communicated with fully on all matters.	ALL
6.0 MEETINGS MANAGEMENT	
6.1 Meetings to be held on site (Depot site office if possible, if not another site location to be found) on a weekly basis.	
6.2 Meeting to be chaired by CS.	
6.3 Attendees to be agreed by MF, AB and CS.	
6.4 Notes to be taken by CS.	
6.5 Topics to be covered: Risk, Programme, Design/Consents, Finance/Commercial	
7.0 PROGRAMMING	
7.1 Meetings to be held weekly, chaired by CS. Agenda is to be pre-circulated and minutes are to be taken by CS.	ALL/CS
7.2 Programme access and software agreed as Primavera.	NOTE
7.3 Look ahead programmes are to be utilised.	ALL
8.0 CAF MINI TEST TRACK	
8.1 All parties are to consider and use reasonable endeavours to deliver the mini test track by 15 th October 2011, which is a key date for CAF. A mini test track draft programme is to be issued for the first programme meeting on 22 nd March 2011.	MF/AB



**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

	ACTION
9.0 PROGRESS GENERALLY	
9.1 Progress tracker to be prepared and controlled by CS. In the event of failure to meet a deadline once, that item will be red flagged and reported to David Anderson.	ALL
9.2 Design, gatekeeper process established (MF/AB/CS).	ALL
9.3 Schedule of outstanding consent applications to be copied and passed to CS by 18/03/11.	MF
10.0 EDINBURGH GATEWAY	
10.1 Requirement for this to be designed and priced by September 2011.	ALL
11.0 UTILITIES	
11.1 Key dates to be discussed at first programme meeting to consider interface with client utilities package for the On-Street Works.	ALL
12.0 DESIGN	
12.1 Design to be prioritised on the basis of: (1) Priority Works (including Edinburgh Gateway) and remaining Off-Street Works (2) Haymarket to St Andrew Square (3) St Andrew Square to Newhaven	
13.0 CEC STATUTORY CONSENTS	
13.1 CS to invite Roads, Planning, etc. officers on site (through Dave Anderson) for weekly meetings	CS
14.0 COMMUNICATIONS	
14.1 CEC to prepare and instigate any required statement, thereafter to be passed to MF and AB for approval. MF and AB are required to forward to relevant company head quarters for final approval and release.	ALL
14.2 No outside agency required from BSC point of view.	NOTE
15.0 WORKS PACKAGES	
15.1 Haymarket to St Andrew Square (On-Street Works)	
(a) Consideration to be made, though agreed in principle that Preliminaries and work done is to be valued on a progressive basis (monthly), based on unit quantities or equipment pieces, etc. against agreed rates. Consideration to be given on the well developed On-Street Supplemental Agreement (OSSA).	ALL
15.2 Remedial Works – Princes Street	
(a) Construction detail programme and consents to be discussed and agreed on 23/03/11, thereafter a project delivery plan is to be created.	ALL
(b) Consideration of lifting the summer embargo on programme.	CS/CEC



**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

16.0 RISK REGISTER

16.1 Risk register to be jointly managed, populated and valued. Risk review to take place weekly. **ALL**

17.0 LEGAL INPUT

17.1 CS to pass copy of key issues from CEC/CAF agreement for this meeting group to ensure that obligations are met. **CS**

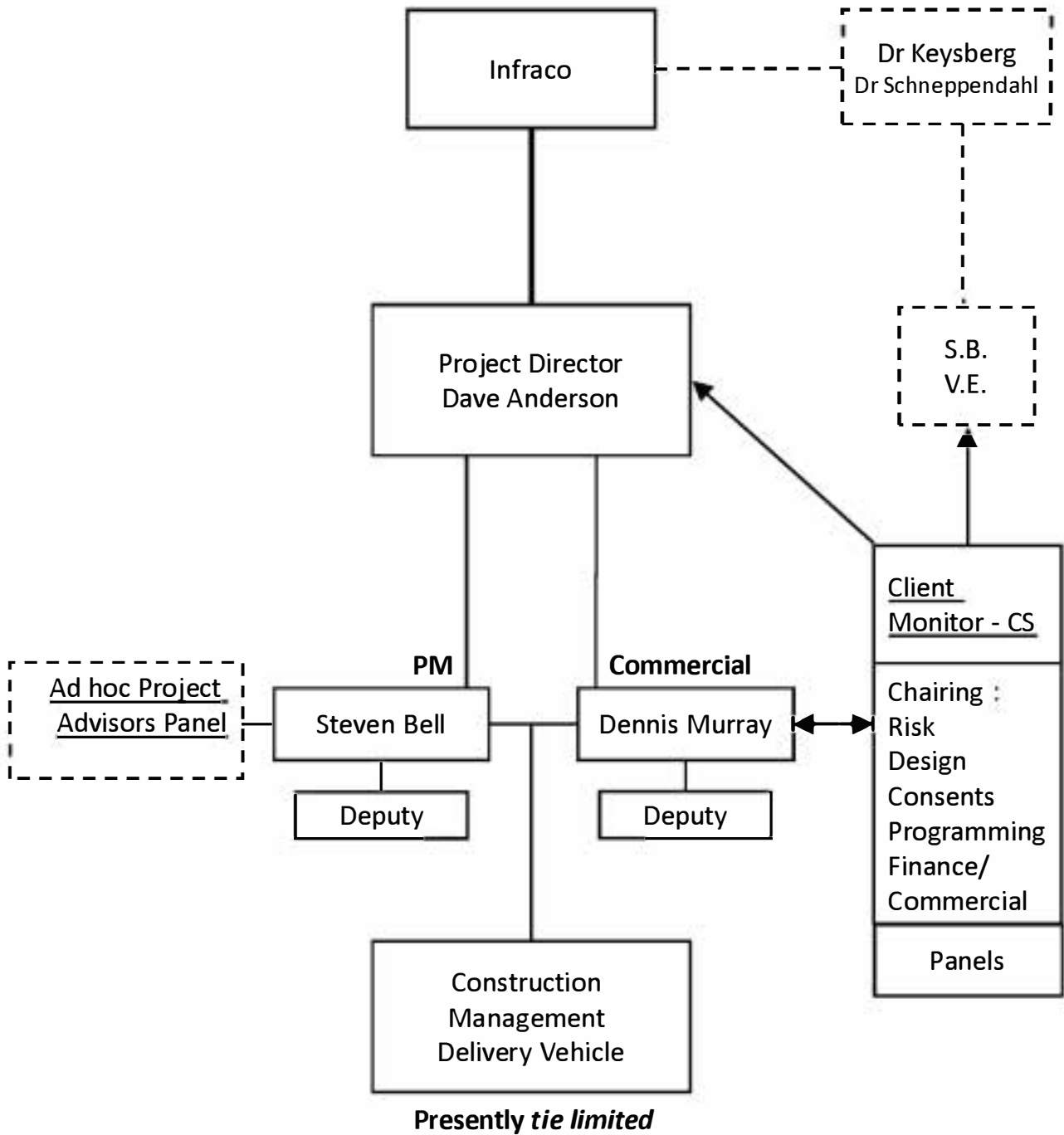
17.2 MF/AB/CS to agree instructions to ensure clear briefing (perhaps joint briefing) of solicitors to avoid duplication/miscommunication. **ALL**

18.0 DATES FOR NEXT MEETING

- 18.1 Friday 18th March 2011, 9.30am – MF/AB/CS
- 18.2 Tuesday 22nd March 2011, 1.00pm – Tie/BSC Office
- 18.3 Tuesday 22nd March/Wednesday 23rd March 2011 – times and order to be agreed

Governance Structure

RGS/11.03.11/v2



**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ATTENDEES:

Martin Foerder (MF)	Bilfinger Berger Civil UK Limited	martin.foerder@civil.bilfinger.co.uk
Kevin Russell (KR)	Bilfinger Berger Civil UK Limited	Kevin.Russell@civil.bilfinger.co.uk
Bob McCafferty (BMcC)	City of Edinburgh Council	Bob.McCafferty@edinburgh.gov.uk
Axel Eickhorn (AE)	Siemens	axel.eickhorn@siemens.com
Colin Smith (CS)	for City of Edinburgh Council	csmith@hg-group.co.uk

DISTRIBUTION:

Attendees plus:		
Dave Anderson (DA)	City of Edinburgh Council	Dave.Anderson@edinburgh.gov.uk
Alfred Brandenburger (AB)	Siemens	Alfred.Brandenburger@siemens.com
Steven Bell (SB)	Tie Limited	Steven.Bell@tie.ltd.uk

ACTION

1.0 NOTES OF THE MEETING HELD ON 14TH MARCH 2011

- 1.1 The notes of the meeting held on 14th March 2011 were adopted.
- 1.2 CS provided references from East Dunbartonshire Council and the Glasgow Science Centre; reference from Schoenstatt to follow **CS**
- 1.3 CS is reviewing figures on existing funding to BBS to ensure priority works commissioned stay within existing approvals. **CS**
- 1.4 CS confirmed that the Governance paper was virtually complete. CS confirmed his advice that CEC should retain an “arms length” development company. **CS**
- 1.5 CS to obtain names of deputies to Steven Bell and Dennis Murray. **CS**

2.0 KEY DATES DISCUSSED

- 2.1 It was noted that the Principals Meeting previously scheduled for 7th April will now be taking place on 8th April.
- 2.2 **Mini Test Track** - Early programming suggesting worst case January 2012. Earlier start (4 April 2011) may improve this to December 2011, however, BBS to be paid from 4 April 2011 (already included in price, but to be paid for during the Prioritised Works period). Further discussion to endeavour to get this as close as possible to October 2011. This matter is to be discussed further at the meeting scheduled for 23rd March. **ALL**
- 2.3 **Depot** – Scottish Water issue around pipe specification. CS to address with CEC to assist to close out objections from SW by next meeting. **CS/ BMcC**

MF suggested that in order to take advantage of available resources, BBS would start Depot works earlier (4 April 2011), however, BBS to be paid from 4 April 2011 (already included in price, but to be paid for during the Prioritised Works period).

- 2.4 CS is to issue a simple Priority Works tracker. **CS**

3.0 MEETINGS

- 3.1 Forthcoming meeting dates and attendees were discussed and agreed. CS is to issue invites. **CS**

**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

3.2 Design / Consents Meeting - Tuesday 22/3/11 at 2.30pm

Venue – BBS Meeting Room 2

Attendees: BBS - SNe / SDe / AEi / KRu
CEC - Bob Mc McCafferty or nominee
Tie - Steven Bell or nominee
Hg - Colin Smith

Maximum of 8 attendees

Agenda:

Agreement on Princes Street remedial work and programme
Review of matters outstanding and prioritisation in line with works programme
AOB

3.3 Programme Meeting - Wednesday 23/3/11 at 10.30am

Venue: Depot Site Office Meeting Room

Attendees BBS - SSh / MHe / ABr / KRu
Tie - Susan Clark
CEC - Ritchie Somerville
Hg - Colin Smith

Maximum of 8 attendees

Agenda:

Prioritisation works
Test Track target date 15th October
Look aheads
AOB

3.4 Risk Meeting - Wednesday 23/3/11 at 12.30pm

Venue: Depot Site Office Meeting Room

Attendees BBS - NHi / MHu / ABr / KRu
Tie - Steven Bell or nominee
Hg - Colin Smith

Maximum of 8 attendees

Agenda:

Creation of Risk register for Priority Works
Risk owners
Risk quantum
Risk mitigation
AOB

3.5 Financial / Commercial Meeting - Wednesday 23/3/11 at 2.30pm

Venue: Depot Site Office Meeting Room

Attendees BBS – DGo / AEi / ABr / KRu
Tie - Dennis Murray
CEC - Alan Coyle
Hg Colin Smith

Maximum of 8 attendees

Agenda:

Certificates 7th April and 3rd May
Prelims
Milestones and build up of same
Rates
AOB

**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

4.0 CORRESPONDENCE

4.1 Contractual matters per Heads of Terms to be in abeyance. CS to issue letter to BBS and Tie.

Post meeting note: A draft letter was circulated at the lawyers meeting on 21st March.

CS

5.0 PRIORITY WORKS

5.1 MF issued a draft programme for Priority Works for review prior to the programme meeting to be held on site on 22/03/11.

5.2 Scope of work to St Andrew Square was discussed. There is a possibility that the most cost effective solution would be to extend the termination point to York Place (as currently designed).

Post Meeting Note: It was agreed between the Parties on 22/03/2011 and confirmed by CEC that the Termination Point shall be at York Place – this needs to be formalised to BBS.

CS

5.3 Consideration is to be given to timing of CEC Public Realm Works at St Andrew Square.

BMcC

6.0 LEGAL MATTERS

6.1 Minute of Variation – MF proposed that the lawyers meet on Monday 21st March to avoid duplication and wasted effort. CS agreed with this. Meeting invites are to be issued by CS; meeting to be held at Hg, 20 Lynedoch Crescent, Glasgow at 10.00am

CS

6.2 Redacted copy of CAF agreement to be forwarded to BBS

CS

7.0 ANCILLARY WORKS TO ASSIST PROGRAMME

7.1 MF/KR suggested matters to be considered (already included in price, but to be paid for during the Prioritised Works period):

- (1) Tree removal
- (2) Murrayfield testing of ground conditions
- (3) CBR testing of On Street

8.0 TRANSPORT SCOTLAND

8.1 MF enquired if Transport Scotland were being advised of progress. CS confirmed that they would be updated regularly.

9.0 SCOTTISH WATER

9.1 Scottish Water consents lapse after six months. It was noted that CS would follow this up on behalf of CEC. Choice of pipe material at depot is an issue with SW. BSC have laid GRP; SW insist on ductile.

CS to check with CEC building control (George Findlay) and Andrew McBride (Transport Development Control) to establish if CEC have a similar policy on this. If not then CS to take up with SW on behalf of CEC.

CS



**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

	ACTION
10.0 PRINCES STREET	
10.1 Lifting of Summer embargo and 28 day notification to Stakeholders to be reviewed by CEC.	BMcC
10.2 BBS to review traffic management on this basis and to considerfull closure or central closure allowing traffic to remain on Princes Street.	BBS
10.3 Consideration is to be given to two other developments (2 cranes) and SGN works at west end of Princes Street (expected completion in October 2011)	BBS
11.0 FORTH PORTS	
11.1 Copy of correspondence passed to CS for client discussion	CS
12.0 TRAM STOP	
12.1 Superimposed letters on roof to be removed. CS to confirm.	CS
13.0 COMMERCIAL	
13.1 MF explained that the balance due to BBS will be the total value agreed at Mar Hall less amounts certified to 31 March 2011. This balance will be distributed into the simplified milestone schedule. CS required transparency into the build up of the amounts to be able to administer the certification of milestones and Preliminaries.	
13.2 Prioritised Works milestones are to be agreed then same principles to be used to establish overall milestone schedule. Details to be discussed at the 23 March Commercial / Financial Meeting.	
13.3 CS tabled NBS / CESH and RICS documents for BBS consideration on Preliminaries.	
13.4 MF advised that Preliminaries will be included in the milestone schedule and the amounts are to be certified on a monthly basis.	ALL
14.0 SIEMENS MATERIALS	
14.1 List of Materials and values to be provided and location to be identified (Broxburn / Leith / other). Details to be discussed at the 23 March Commercial / Financial Meeting.	AE
15.0 EDINBURGH GATEWAY	
15.1 Draft options report to be provided to tie/Network Rail regarding retaining wall and SW pipe. Option 4 is BBS preferred option and this will be discussed in detail at a meeting to be held on 22 March 2011. Once a solution has been identified, the design can be completed and a cost for the construction can be prepared	ALL
16.0 ON-STREET SUPPLEMENTAL AGREEMENT (OSSA)	
16.1 A copy of the OSSA was passed to CS for review.	CS
17.0 STATUTORY CONSENTS	
17.1 A schedule of outstanding consent issues was passed to CS for review.	CS



**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

17.2 Difference in scope and programme for agreement of consents and approvals was noted. Both parties agreed to close out all consents and approvals from Airport to Newhaven by 30 April 2011. Priority will be given to close out between Airport and SAS.

BSC also noted that they would self certify compliance with Employer's Requirements.

ALL

18.0 PUBLIC RELATIONS

18.1 BBS involvement with CEC to Stakeholders

ALL

18.2 MOP (taxi drivers) open day to promote project to be considered

ALL

19.0 DATES FOR NEXT MEETING

19.1 See schedule of meetings under item 3.0.

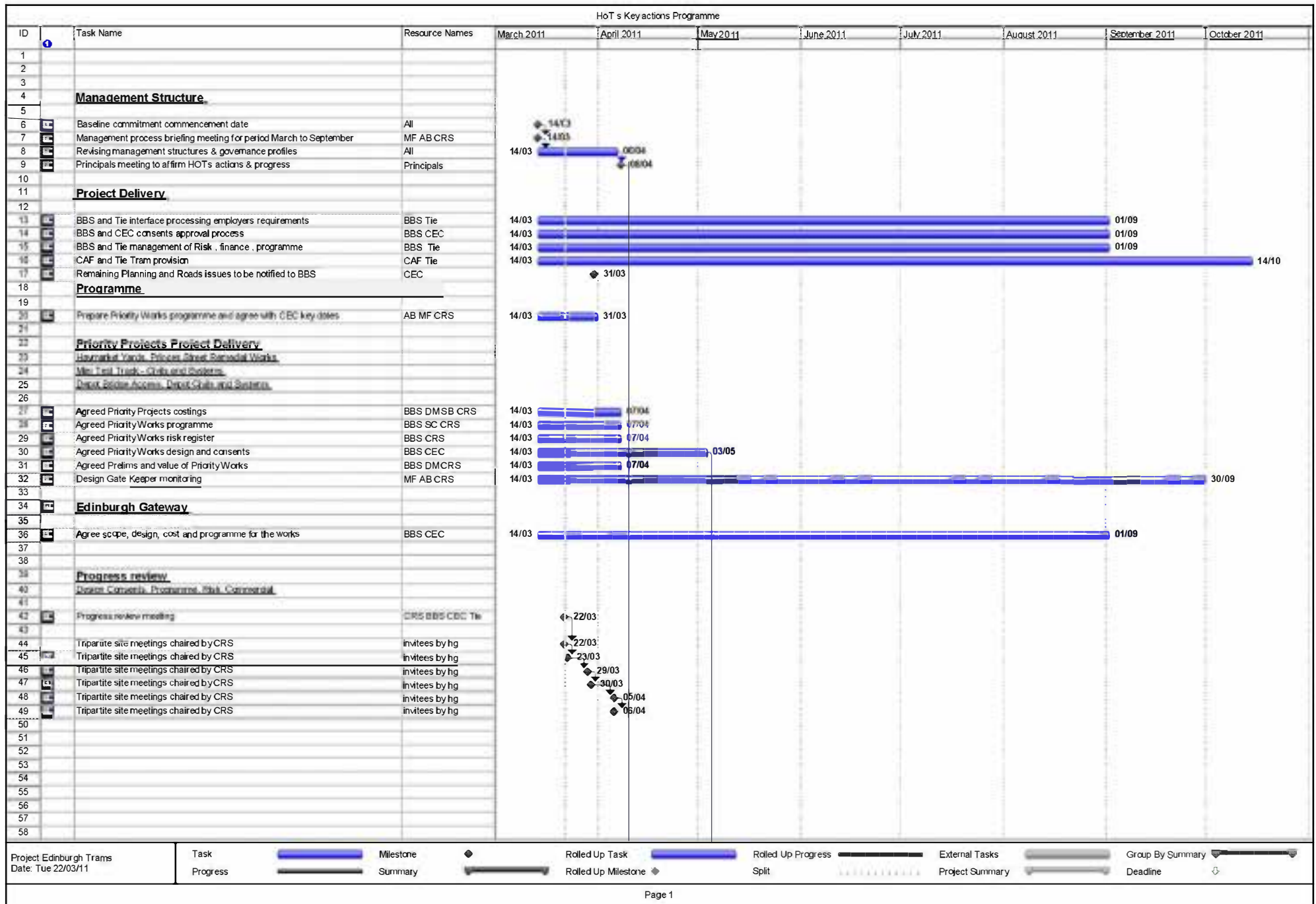
19.2 CS is to attend the Infracore Progress Meeting to be held at 1.00pm on 22nd March 2011.

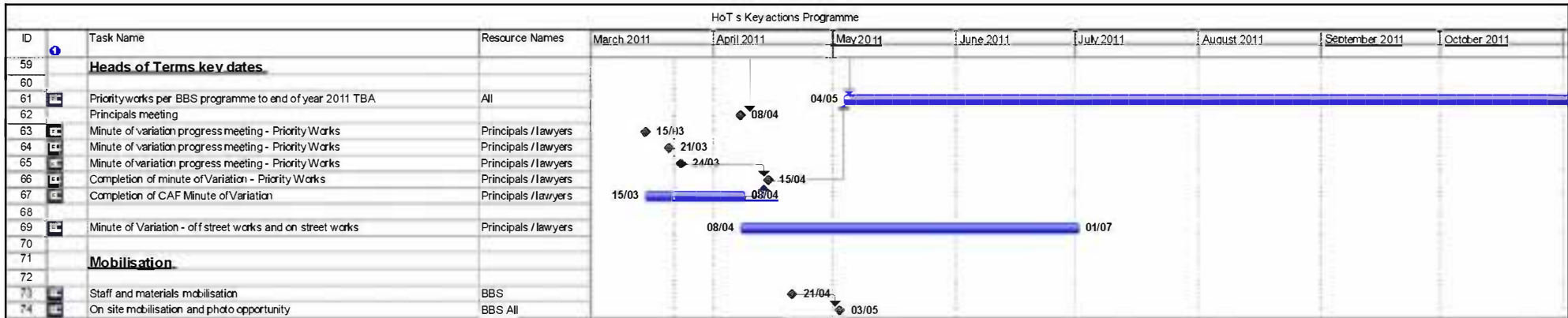


EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 6
Project Delivery Plan from 13th March to 8th April 2011





Project Edinburgh Trams
Date: Tue 22/03/11

Task		Milestone		Rolled Up Task		Rolled Up Progress		External Tasks		Group By Summary	
Progress		Summary		Rolled Up Milestone		Split		Project Summary		Deadline	



EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 7 - Risk Register

ETN Risk Register



31/03/2011

Risk ID No	Discipline	Category	Event/Title	Cause	Further Description and Impact	Owner	Unmitigated Risk					Ranking	Measure	Timescale	Current Status: 31-Mar-2011	Mitigated Impact						
							Probability	Capital Cost	Programme	H&S	Reputation					Environment	Probability	Capital Cost	Programme	H&S	Reputation	Environment
R001	Construction	Safety	Fire in Depot Building	Failure to control fire hazards during construction or commissioning	Fire in depot building causes damage to structure, trams or control room equipment, delaying system operation		2	5	5	3	3	2	(1) Include fire hazard assessment in all Work Package Plans (2) Robust control of material storage and waste disposal (3) Rigorous enforcement of no-smoking rules (4) All temporary and permanent electrical installations to be designed, installed to design and monitored. Adaptation of temporary electrical systems to be rigorously controlled (5) Appropriate permit systems to be used (eg Hot Works)	asap	Open	1	3	3	2	2	1	
R002	Construction	Safety	Death, injury or damage to third parties (people or property) during construction	(1) Failure to supervise works correctly (2) Failure to install or maintain guarding, lighting, signage, TM, temporary roads and paths (3) Failure to inform third parties of works	Construction incidents causing death or injury, damage to works or adjacent infrastructure, delay and/or additional costs, involvement in investigation process, legal penalties or insurance issues, reputation damage.	BBS/lie	2	3	4	4	3	1	14	(1) Operate robust Construction Health & Safety management system (2) Identify risks at Work Package Plan stage and mitigate in method planning and appropriate control measures (3) Ensure works are carried out in compliance with WPP, and that WPP is amended in advance of implementation if works method or change is necessary (4) All temporary and permanent electrical installations to be designed, installed to design and monitored. Adaptation of temporary electrical systems to be rigorously controlled (5) Appropriate permit systems to be used (eg Hot Works)	asap	Open	1	2	2	3	2	1
R003	Construction	Environment	Construction Noise limit exceedences	Construction methodology, including use of plant and equipment on-site, results in CoCP or statutory noise level exceedences	Failure to plan works methodology or plant utilisation to minimise noise impact, or failure to implement mitigation measures, results in noise level exceedences, work stoppage, delay and/or additional costs, penalties, reputation damage.	BBS	3	2	2	3	3	2	12	(1) mitigate noise generation by selection of appropriate methodology, equipment at WWV stage. (2) Use appropriate, well maintained equipment, ensuring equipment is operated correctly and shut down when not in use (3) Implement appropriate mitigation (noise baffles/absorbers, mains power instead of generators)	asap	Open	1	1	2	1	2	1
R004	Construction	Quality	Damage to Utility Apparatus	(1) Failure to locate apparatus prior to excavation (2) Failure to excavate carefully around known apparatus (3) Failure to protect apparatus during works or	(1) Safety hazard to workforce or public (gas release) (2) Interruption to supply - impact on third parties and/or reputation damage (3) Penalties and/or compensation claims	BBS/lie	2	2	2	4	3		14	(1) Robust Permit to Dig procedures (2) Communications in place to call out utility for urgent repairs	asap	Open	2	1	1	2	1	
R005	Construction	Environment	Hydrocarbon Spill during filling/discharging	(1) Spillage from discharge pump during fuelling (2) leakage from storage tanks	Hydrocarbon contamination of the ground, groundwater and watercourses, resulting in ecological damage, penalties, legal action, delay and/or clean-up costs	BBS/lie	2	1	3		3		11	(1) Fuelling of mobile equipment to be carried out in low risk locations, using appropriate equipment (2) comply with Oil Storage Regulations (3) Storage away from sensitive receptors and/or drainage systems (4) Ensure spill kits available for minor spillage (5) Implement an emergency response plan, including specialist response contractor	asap	Open	1	1	1		2	2
R006	Construction	Environment	Death or injury of protected wildlife or damage to plants and/or damage to wildlife habitats	Failure to prevent death or injury of protected birds, amphibians etc and/or excavated material placed on/n watercourse or embankment, destruction of nesting sites, damage to wetland	Failure to identify presence of protected wildlife and take appropriate mitigation measures, or failure to implement/maintain agreed measures for wildlife or ecological protection. Can delay works. Breaches to licence conditions - prosecution if found reckless	BBS	2	2	3		2	4	14	(1) Ensure licence conditions within method statements (2) Check Ecologist who is the licensee for conditions - ensure wildlife survey data is complete and available to site team (3) Training for site team (toolbox talks)	asap	Open	1	1	2		2	3
R007	Engineering	Quality	Failure of Designer to verify works completion in accordance with design	(1) Failure by designer to carry out verification inspections (2) Failure of site team to ensure verification inspections are carried out properly and monitor results	(1) Verification not Assured & Evidence Provided as such, resulting in delay to handover to system contractor or operator. (2) lie or ICP not given suitable level of confirmation that the works have been completed to required standards.	BBS	2	4	4				14	(1) Increased monitoring by Quality team to verify that proper checks are being carried out and records kept - review resource requirement (2) More focus on design support from SDS	asap	Open	2	2			1	
R008	Construction	Environment	Silt pollution of watercourse or drainage	Water runoff from exposed earth/soil	Failure to plan for runoff, or failure to maintain control measures, leads to silt runoff. Breaches to licence conditions - prosecution if found reckless	BBS	2	1	3		3		11	(1) Strict observance of CAR licence conditions (2) Robust planning of work activities, including assessment of pollution risk in WPP development, eg piles of exposed earth should be temporarily stored away from the vicinity of watercourses (3) Installation of straw matting as a control measure where appropriate	asap	Open	2	1	1		1	2
R009	Construction	Environment	Release of pollution from contaminated land	Excavation, piling and digging on contaminated land releases contamination to receptors - land, air, water	Failure to identify contamination, or failure to implement agreed measures procedures for known contamination, results in breach of associated environmental legislations, especially water legislation if released to the water environment, results in work stoppage, delay and/or additional costs, penalties, reputation damage	BBS	2	1	3		3		11	(1) Carry out Phase I and Phase II investigation and then remediation procedure as per agreement with the local authority (2) Establish control procedure for contaminated groundwater (3) Brief workforce on identification of contamination, and reporting requirements	asap	Open	1	1	3		2	2
R010	Proj Mgt	Commercial	Client budget insufficient to complete project	(1) Cost growth due to delay or change (2) Loss of contributions for third parties (3) Politic change	(1) Client unable to fund increased or delayed scope of works (2) Contractor unable to recover entitlement to payment arising from deferred resolution of change/issues etc.	lie/BBS	4	5	5				11	Time impact nominal (post contract) (1) Limit contractor exposure to non-payment due to lack of funds	asap	Open	2	2				
R011	Construction	Quality	Failure of Contractors / Sub-Contractors to self certify completion & closing out of NCRs	(1) Failure by site staff to follow ITPs and relevant quality procedures.	(1) Self Certification of Works not Assured & Evidence Provided as such, resulting in delay to handover to system contractor or operator (2) lie or ICP not given suitable level of confirmation that the works have been completed to required standards.	BBS	2	4	4				14	(1) Increased monitoring by Quality team to verify that proper checks are being carried out and records kept in accordance with ITPs - review resource requirement.	asap	Open	2	2			1	
R012	Engineering	Management	Delay in acceptance of infrastructure by ICP/HMRI	Failure to follow defined procedure of progressive assurance with ICP and/or HMRI, leaving issues unresolved at start-up	Failure to complete ROGS process, including assurance/verification and evidence of risk assessment/mitigation in design/construction/operation/maintenance, results in refusal of permission to open for Passenger service, resulting in delay, rework or documentation costs and possible penalties/LADS	BBS/lie	2	3	4				14	(1) Comply with defined process to achieve progressive assurance in good time (2) Develop verification and required handover documentation in good time	asap	Open	1	2	3			
R013	Construction	Environment	Damage to wildlife habitat	Excavated material placed on/n watercourse or embankment, destruction of nesting sites, damage to wetland areas	Accidental damage to unforeseen wildlife habitat, or failure to prevent damage to known habitat (Otter, Badger, birds, water voles, amphibians). Breaches to licence conditions - prosecution if found reckless	BBS/lie	1	1	3		3		11	(1) Ensure licence conditions within method statements (2) Check Ecologist who is the licensee for conditions - ensure wildlife survey data is complete and available to site team (3) Training for site team (toolbox talks)	asap	Open	1	1	2		2	2
R014	Engineering	Quality	Construction Information Control	Lack of QA control of construction information	Failure to implement rigorous QA control of information for construction leads to avoidable errors, rework, delay and/or cost	BBS	1	3	3		2		11	(1) Establish robust assurance register (drawings and other documents) (2) Establish robust assurance for areas of verification for construction	asap	Open	1	1	1	1	1	1
R015	Construction	Management	Traffic Management scope growth	TM requirements become more extensive or onerous than expected.	Non approval of TM proposals, or impact of changes/programme delay, results in more extensive and costly TM	BBS	2	3	3		2		11	(1) Utilise competent TM staff, working closely with existing TM control process (2) Ensure that any impact of external change is notified to Client and followed up for cost/time entitlement	asap	Open	2	2	3		1	
R016	Engineering	Management	Delay in Design Approval	(1) Late or incomplete design submission (2) Failure to design to requirements (3) Extended design approval periods	(1) Failure by SDS to make competent design submissions (2) Failure by BSC to ensure design submissions are competent (3) Failure by approvers to meet approval/response programme (4) Failure by Tiel to ensure approval responses timescales are achieved	BBS	2	3	3				11	(1) and (2) Robust design management by BSC (3 and 4) Detailed monitoring of approval process by BSC	asap	Open	2	3	3			11

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ETN Risk Register

31/03/2011

Risk ID No	Discipline	Category	Event/Title	Cause	Further Description and Impact	Owner	Unmitigated Impact					Ranking	Measure	Timescale	Current Status: 31-Mar-2011	Mitigated Impact						
							Probability	Capital Cost	Programme	H&S	Reputation					Probability	Capital Cost	Programme	H&S	Reputation	Environmental	Ranking
R017	Construction	Commercial	Client/third parties require use of additional or premium hoarding/fencing	External pressure to provide additional or more costly hoarding fencing than is necessary for construction safety	Client/public perception of Herastype fencing is poor and could lead to pressure to provide premium fencing (eg Princes Street, or Edinburgh Park) for project image reasons, resulting in extra cost.	BBS	2	2	1	1	1	11	(1) Ensure use of appropriate hoarding/fencing is based on robust risk assessment and economical construction, to establish contract requirement (2) Assess any requirement for alternatives on basis of contract requirement and determine a change instruction is required	asap	Open	2	2	1	1	1	1	
R018	Proj Mgt	Safety	Security Incident	Terrorism, Vandalism, Trespass, Arson	Delay to works due to time lost or damage caused as a result of a security incident. Environmental impact and adverse publicity	BBS/tie	3	3	2	2		12	(1) Appropriate site security to be in place, based on security hazard assessment (2) Vulnerable materials or works to be protected (3) Effective call-out and emergency response plan to be in place and rehearsed	asap	Open	1	2	2				
R019	Construction	Environment	Archaeological or Human Remains	Discovery of unforeseen archaeological or human remains during excavation	(1) Delay to works during action by authorities	tie	1	3	3				(2) Pre planning for weather mitigation (fleece covers, lighting, water spray/dust suppression, provision of drinking water/sun cream, pumps) (3) Plan using suitable weather forecast information for high risk activities (eg wind susceptible crane lifts)	asap	Open	1	2	3				
R020	Proj Mgt	Management	Exceptional adverse weather	Extreme weather outwith normal weather pattern	(1) Delay to work due to access restrictions or reduced outputs (eg concrete placing in prolonged cold weather) (2) Damage to work in progress - rework	BBS/tie	3	2	2				(1) Effective workforce communication/consultation, using existing safety/welfare consulting process (2) Use of reputable sub-contractors and labour suppliers (3) Adequate site stocks of vulnerable materials and identify alternative suppliers	asap	Open	1	1	2				
R021	Construction	Management	Industrial Action	Strikes in site labour force or suppliers affect works progress or delivery	Lost time due to strikes or delivery delays	BBS	1	2	2				Close programme mgmt./ control; FAI witnessing audits planned	asap	Open							
R022	Tram Supply		Delayed delivery of key components	Material Scheduling issue	Free issue equipment (tie)	tie	1	1	1	1	1	1	close programme mgmt./ control;	asap	Open							
R023	Tram Supply	Management	Delay due to off-site test track not available	Scheduling issue	Fully booked test tracks, dynamic test issues	CAF	1	3	2	1			close programme mgmt./ control; Integration with main programme	asap	Open							
R024	Tram Supply	Management	Power not available to re-commission first tram	Scheduling issue		BBS	4	4	5	3	1	1	close programme mgmt./ control; Integration with Siemens for systems and depot equipment being closely monitored.	asap	Open							
R025	Tram Supply	Management	Delay due to interface problems discovered	Design issue	TPDS, radio, paragraph, wheel interface - faulty, unavailable, signals, free issue equipment not ready (tie)	tie/BBS/CAF	3	4	1	1			close programme mgmt./ control;	asap	Open							
R026	Tram Supply	Production	Delay due to tram production rate inconsistent	Manufacturing	Strike, materials, delivery schedule impact	CAF	1	3	2	1			close programme mgmt./ control;	asap	Open							
R028	Construction	Design & Installation	Reduced system envelope of TRW system (less than 1200mm) on street	Height available for BBS system and its substructure is less than 1,200 mm due to crossing of utilities or other underground obstacles	Indication of numerous locations with system envelope less than 1,200 mm in the in street alignment. Problem: MUDFA as-built drawings are not yet available. Currently there are 3 (three) locations in focus and under discussion. These locations are: Leith Walk Railway Bridge; 276 kV cable Leith Walk; Scottish Power Tunnel at Leith Walk. This leads to necessity of special Trackform solutions.	BBS/tie	3	3	3			12	Create special trackform solutions (e.g. reinforced Rheda slab to 'span' such areas of reduced system height) MUDFA to be instructed to mitigate such obstacles as far as reasonable possible, tie have to produce accurate as built information.	asap	Open	2	2	2				
R029	Tram Supply	Management	Tram Storage	Delay of Depot	Lack of available/suitable storage	CAF	5	4		3			Source additional storage areas	asap	Open							
R031	Tram Supply	Environment	Delay to delivery of tram 2 to 20 due to shipping problem	Scheduling issue	Bad weather, availability of shipping containers	CAF	1	3	3	1			close programme mgmt./ control;	asap	Open	1						
R032	Construction	Management	Utilities works	MUDFA utilities not diverted by tie	Mudfa works not complete. Mudfa works obstructing access to work areas	tie	4	3	5				tie to manage Mudfa to meet BBS programme	asap	Open							
R034	Installation	Management	Delayed NR approvals as applicable	Lack of early applications/discussions with NWR	Delayed start of works. Disruptions to off street works	BBS	2	4	3	1	1	1	comply with Contract requirements to obtain NWR approvals and comply with environmental requirements	asap	Open							



EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 8 - Prioritised Works Programme and Narrative

NARRATIVE TO ACCOMPANY THE PROGRAMME PREPARED FOLLOWING THE MEDIATION ON 8 to 12 MARCH 2011 Revision 2.

Prioritised Works

All works to commence on 3 May 2011 following the signing of the MOV for the Prioritised Works by 15 April 2011, with the exception of the mini test track and the Depot external works which are programmed to recommence on 4 April 2011.

Princes Street

There is no allowance in the programme for dealing with utility works or delay resulting there from.

Scope

1. Princes Street Road/Rail Joint – Enhanced Design

The works involve the removal and replacement of bituminous surfacing on Princes Street to accommodate a concrete shoulder running strip adjacent to the rails. The concrete/surfacing works are limited to the tram lanes only. All road markings, road studs and areas of Antiskid/Coloured Surfacing within the areas that are affected by the works will be replaced / reinstated. The length of the works is as detailed below.

Inbound Track (East Bound Carriageway)

- Section 1C Chainage 121,370 - Chainage 121,976
- Section 1D Chainage 130,000 - Chainage 130,380

Outbound Track (West Bound Carriageway)

- Section 1C Chainage 121,374 - Chainage 121,980
- Section 1D Chainage 130,000 - Chainage 130,380

The Programme is based on the programme assumption that the whole of Princes Street shall be available and that there will be no interruption of a summer Embargo, i.e. Full Closure of Princes Street from 3 May 2011 until end November 2011.

2. OLE Works & Street Lighting

OLE Foundations within the section from Hanover Street to Waverley Junction (7 nr) and South Charlotte Street to Lothian Road (4 nr) will be completed. Note there are utility/basement/design conflicts associated with these foundations that require resolution. All OLE poles will be erected and street lighting installed.

3. Tram Stop

The tramstop finishes will be completed but no furniture including the shelter, PID, bins etc will be installed.

4. Scottish Water

Completion of works from the original phase of construction works and includes provision of additional crossing due to OLE conflict. The pipework is in place and only the connection has to be completed. Notifications and SW requirements may affect the actual start date.

5. BT

BT remedial works in the area of South St David Street will be completed.

6. Chambers

The remedial works will commence on 3 May 2011 and be completed.

7. Finishes

All outstanding works to footways, pedestrian barrier, signs and track drainage will be completed.

Haymarket Viaduct

The Track is to be constructed from the tangent point at the end of the straight section of track at the eastern end of Haymarket Viaduct to the tangent point at inbound track Chainage 200,260 and the tangent point at outbound track Chainage 200,207 and the road fully reinstated. Prioritised Works to Haymarket Viaduct is restricted to that necessary to lay the tracks including the concrete infill of the Rheda City track construction. (N.B. construction work on track curves must start and finish at tangent points).

Although the track bed is constructed in the second phase of traffic management, a third phase of traffic management is required (that can only take place after phases 1 & 2) to complete the outbound track (Chainage 200,207 to 200,260) that runs in Haymarket Yards. This third phase is not part of the Prioritised Works.

Depot Access Bridge

Construction continues and is anticipated to be complete in April 2011.

The Depot

Internal work on the Depot Building continues. External works are programmed to recommence on 4 April 2011. The Depot Building will be available to take delivery of up to the first five trams from 15 October 2011 following the issue by tie of a partial completion certificate in respect of the Depot Building. The trams will be unloaded on track 15 and stabled inside the Depot Building. The unloading and shunting activities of each tram into the Depot Building shall be limited to the hours between 18h00 on the delivery date and 07h00 on the following day. The Programme assumes that tram delivery will not interfere with the Prioritised Works.

The works in the Depot area to the east of the Depot Access Bridge that become redundant once the Edinburgh Gateway is instructed have been deleted from the Programme and hence "Section A" needs to be redefined. The Depot (excluding area east of Depot Access Bridge) will be available to take delivery of any further trams from 16 December 2011 following the issue by tie of a completion certificate in respect of Section A. Note warrantee period commences with the issue of the completion certificate. This will involve handover of Depot and commencement of handover procedures with the Operator.

To create a Programme that represents a complete scope of works, provisional activities have been added to represent what may require construction under the

Edinburgh Gateway. The duration and logic applied to these activities is provisional only. The actual impact of the Edinburgh Gateway on the Programme can only be determined once the works are instructed and the appropriate IFC drawings are available.

Mini Test Track

To achieve the shortest programme period the mini test track constitutes a single track on the inbound track from chainage 531,230 to 531,800. These locations are determined by the OHLE design. This track will be connected to the depot via the depot west entrance switch. A temporary Overhead Catenary System will be installed using the final back stay at chainage 531,749 at the west end and a new back stay to be installed around chainage 531,260 in the east end of the mini test track. This will result in an energised and usable track of about 400m. The period reflected in the programme includes a 2 week period for energisation tests. A temporary Overhead Catenary System will be designed and implemented on the east side of the Depot Access Bridge to enable all tracks within the Depot to be energised. The additional costs associated with implementing this temporary Overhead Catenary System to accommodate energisation of the mini test track will need to be agreed. This temporary Overhead Catenary System will be replaced at a later time with the permanent Overhead Catenary System when the Edinburgh Gateway has been designed and constructed.

The Edinburgh Gateway works also prevent the installation of the final radio mast in time to be available for the operation of the mini test track.

The programme considers that for all works adjacent to the mini test track and the final works on the mini test track area will be executed under normal construction conditions, without any restrictions. Therefore this track cannot be permanently used for testing purposes until the final installation is completed.

A8 Underpass

Phases 1, 2 and 4 are programmed to recommence on 3 May 2011.

Auxiliary Items

The Programme includes for the following auxiliary items:

- Additional Testing in Murrayfield Corridor
- Water of Leith Sewer Lining Works
- Demolition of Plots 97/102
- Testing of Contamination
- Advanced Site investigation Works in Section 1C/1D

Remaining Off Street Works

The remaining off street works are programmed to commence on or about 2 September 2011 following the signing of a MOV by 01 July 2011.

The CAF works no longer form part of the programme however periods have been allowed for their works as previously advised by CAF to allow calculation of the dates for Section Completion A and Section Completion B.

General

The data date of the programme is 31 March 2011. For work activities currently under construction their anticipated actual progress at 31 March 2011 has been taken as the start point of the programme.

The programme for the works recognises the allowed working hours stated in the Code of Construction Practice of 0700 to 1900 Monday to Friday and 0800 to 1300 on a Saturday. However a 40 hour effective working week has been used to calculate the duration of activities to take account of rest breaks, un-exceptional weather delays and travel between work sites. Construction work will be required outside the hours stated in the Code of Construction Practice for Rail Possessions, work on busy road junctions, stringing catenary cables etc. The necessary approvals will be sought in advance for such works in accordance with the tender documents and the programme assumes that such approval will be granted as necessary to maintain the programme.

Assumptions and factual statements upon which the programme has been prepared are as set out in this document. General assumptions are as follows.

The programme assumes that all outstanding drawings have been issued at IFC status by the 31 March 2011 (excluding "Roseburn Viaduct" [the structures at Roseburn Street] (20 June 2011) and the redesign of S21B, C and D (16 May 2011))

The programme assumes that all Third Party approvals / licenses will be in place for these works to commence and proceed as shown.

Detailed programmes are available for all structures. The programme shows summaries of these programmes.

The construction works in general are subject to Network Rail approval. An eleven week period has been assumed for all Network Rail WPP and form C approvals, which includes a three week "cooling off period" for the WPP. The Programme generally shows the latest dates for these approvals.

**Programme following Mediation
on 8 - 12 March 2011 (110331)**

**EDINBURGH TRAM
NETWORK**



31-Mar-11 16:40

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Programme following Mediation 8-12 March 2011 rev 2					
KEY DATES					
1060	Sign MOV for carrying out the Prioritised Works	692	31-Mar-11	25-Jan-14	0
1070	Re - mobilisation - Prioritised Works	0	15-Apr-11*	15-Apr-11*	0
1000	Sign MOV in Respect of Off Street Works (Other than Prioritised Works) and the On Street Works	10	15-Apr-11	03-May-11	66
1050	Re - mobilisation	0	01-Jul-11*	01-Jul-11*	0
313	Section Completion A	44	01-Jul-11	02-Sep-11	0
1100	Deliver/handover of all remaining Siemens material to tie	0	16-Dec-11*	16-Dec-11*	0
314	Section Completion B	0	10-Jan-12*	10-Jan-12*	0
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0	07-Feb-13*	07-Feb-13*	0
315	Section Completion C	0	29-Jul-13	29-Jul-13	0
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0	27-Oct-13	27-Oct-13	0
325	Section Completion D	0	25-Jan-14	25-Jan-14	0
COMMISSIONING PHASE EDINBURGH AIRPORT TO HAYMA					
300	System Integration Test; Phase 1a Edinburgh Airport to Haymarket	117	29-Jul-13	25-Jan-14	0
301	Test Running and Driver Familiarisation; Phase 1a Edinburgh Airport to Haymarket	30	29-Jul-13	28-Aug-13	0
302	T1 Post Commissioning Test completed; Phase 1a Edinburgh Airport to Haymarket	0	28-Aug-13	27-Sep-13	0
302.1	Test Running and Driver familiarisation performance ramp up 1a Airport to Haymarket	30	27-Sep-13	27-Oct-13	0
302.2	T2 Performance Test completed; Phase 1a Edinburgh Airport to Haymarket	0	27-Oct-13	27-Oct-13	0
302.3	Approval of HMRI; Phase 1a Edinburgh Airport to Haymarket	0	27-Oct-13	27-Oct-13	0
302.4	Shadow running; Phase 1a Edinburgh Airport to Haymarket	90	27-Oct-13	25-Jan-14	0
302.5	T3 Pre-Operations Test Completed; Phase 1a Edinburgh Airport to Haymarket	0	25-Jan-14	25-Jan-14	0
TRAM DELIVERY & COMMISSIONING					
CAF-01	Deliver & Commission First Five Trams	319	14-Oct-11	07-Feb-13	2
CAF-10	Certificate of Partial Completion & Depot ready for delivery of first tram	319	14-Oct-11	07-Feb-13	2
CAF-02	Commissioning of first five Trams	0	14-Oct-11	07-Feb-13	254
CAF-11	Test track available for Tram Commissioning 1st, 2nd, 3rd, 4th & 5th Tram Commissioned	65	24-Oct-12	07-Feb-13	2
A20000	Tamping Ballast 6A	0	07-Nov-12	07-Feb-13	2
A20005	Tamping Ballast section 7A	0	07-Nov-12	07-Feb-13	2
A20007	Tamping Ballast section 5B	15	02-Oct-12	23-Oct-12	165
A20010	Finishing	30	05-Mar-13	17-Apr-13	18
A20006	Tamping Ballast section 5A	15	05-Mar-13	26-Mar-13	0
A20020	Prestressing	25	17-Apr-13	23-May-13	18
A20030	Grinding	30	23-May-13	05-Jul-13	18
TESTING					
1C-15/16-12/10	On Street Geo - technical testing	86	03-May-11	02-Sep-11	0
		86	03-May-11	02-Sep-11	0

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█ Remaining Level of Effort █ Critical Remaining Work
█ Actual Work ◆ Milestone
█ Remaining Work ▶ Summary

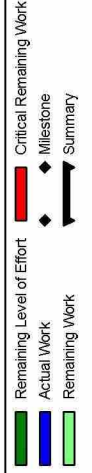
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014
5A-11-S21B/1D-19	Geo-technical testing at Murrayfield	10	03-May-11	17-May-11	66	Mar	Apr	May	Jun
25/7-15/16-1220	Off street testing for contamination	43	04-Jul-11	02-Sep-11	0	Jul	Aug	Sep	Oct
SECTION 01 NEWHAVEN ROAD TO HAYMARKET									
01A Newhaven Road to Foot of the Walk		205	02-Sep-11	05-Jul-12	222	Sep	Oct	Nov	Dec
Newhaven to Ocean Terminal		205	02-Sep-11	05-Jul-12	222	Sep	Oct	Nov	Dec
Section Wide Off TTM		70	02-Sep-11	12-Dec-11	357	Sep	Oct	Nov	Dec
Lindsay Road Retaining Wall W1A - Panels A3 to A6		70	02-Sep-11	12-Dec-11	357	Sep	Oct	Nov	Dec
Preliminary Works & excavation		3	02-Sep-11	07-Sep-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-110 Excavation		35	07-Sep-11	26-Oct-11	357	Sep	Oct	Nov	Dec
RW Structure		10	07-Sep-11	21-Sep-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-120 RW Foundation		13	23-Sep-11	12-Oct-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-130 RC Wall		8	14-Oct-11	26-Oct-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-140 Coping		28	01-Nov-11	12-Dec-11	357	Sep	Oct	Nov	Dec
RW Finishing Works and Backfilling		2	01-Nov-11	03-Nov-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-150 Waterproofing		3	03-Nov-11	08-Nov-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-160 Brickwork		2	08-Nov-11	10-Nov-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-170 Drainage		3	14-Nov-11	17-Nov-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-180 Stone drainage trench		11	22-Nov-11	08-Dec-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-180 Backfill and compact (inc demo. of exist. r.w.)		2	08-Dec-11	12-Dec-11	357	Sep	Oct	Nov	Dec
1A-24/W1A-200 Vehicle Parapets		15	02-Sep-11	23-Sep-11	225	Sep	Oct	Nov	Dec
Lindsay Road Retaining Wall W1D		15	02-Sep-11	23-Sep-11	225	Sep	Oct	Nov	Dec
RW Finishing Works and Backfilling		1	02-Sep-11	06-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1D-140 Waterproofing		1	05-Sep-11	06-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1D-150 Drainage		1	06-Sep-11	07-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1D-160 Stone drainage trench		1	06-Sep-11	07-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1D-180 Brickwork		1	06-Sep-11	07-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1D-170 Backfill and compact		1	07-Sep-11	08-Sep-11	225	Sep	Oct	Nov	Dec
1A-24-5A-W1D-190 Vehicle Parapets + Crash Barrier		1	08-Sep-11	09-Sep-11	235	Sep	Oct	Nov	Dec
1A-24-5A-W1D-200 Kerbing		10	09-Sep-11	23-Sep-11	225	Sep	Oct	Nov	Dec
1A-24-5A-W1D-210 Footway and Road Surfacing		17	05-Sep-11	23-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1D-220 LINDSAY ROAD RW W1D COMPLETE		17	05-Sep-11	23-Sep-11	222	Sep	Oct	Nov	Dec
Lindsay Road Retaining Wall W1C		1	05-Sep-11	06-Sep-11	222	Sep	Oct	Nov	Dec
RW Finishing Works and Backfilling		1	05-Sep-11	06-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-150 Waterproofing		3	07-Sep-11	12-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-160 Drainage		3	07-Sep-11	12-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-170 Stone drainage trench		3	07-Sep-11	12-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-190 Brickwork		1	12-Sep-11	13-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-180 Backfill and compact		1	13-Sep-11	14-Sep-11	232	Sep	Oct	Nov	Dec
1A-24-5A-W1C-200 Vehicle Parapets + Crash Barrier		1	13-Sep-11	14-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-210 Kerbing		10	14-Sep-11	28-Sep-11	222	Sep	Oct	Nov	Dec
1A-24-5A-W1C-220 Footway and Road Surfacing		0	02-Sep-11	16-Feb-12	319	Sep	Oct	Nov	Dec
1A-24-5A-W1C-230 LINDSAY ROAD RW W1C COMPLETE		108	02-Sep-11	16-Feb-12	228	Sep	Oct	Nov	Dec
TTM PHASE 5A (LINDSAY ROAD EAST BOUND)		0	02-Sep-11	16-Feb-12	228	Sep	Oct	Nov	Dec
1A-24-TTM-05A-1000 TTM - PHASE 5A - Lindsay Road WB closed		0	02-Sep-11	16-Feb-12	222	Sep	Oct	Nov	Dec
1A-24-TTM-05A-1010 TTM PHASE 5A COMPLETE		12	02-Sep-11	20-Sep-11	228	Sep	Oct	Nov	Dec
TEMPORARY AND PRELIMINARY WORKS		1	02-Sep-11	05-Sep-11	228	Sep	Oct	Nov	Dec
1A-24-5A-1000 Establish temporary traffic management									

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Programme following Mediation
on 8 - 12 March 2011 (110331)

EDINBURGH TRAM NETWORK

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014										
						Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1A-24-7-W/A-180	Backfill and compact (incl. demolition of exist. RW)	46	23-Sep-11	28-Nov-11	358														
1A-24-7-W/A-200	Vehicle Parapets	8	28-Nov-11	08-Dec-11	358														
1A-24-7-W/A-210	LINDSAY ROAD RW/W/A COMPLETE	0	08-Dec-11	08-Dec-11	358														
Ocean Terminal to Port of Leith																			
1A-1-S17-1000	TOWER PLACE BRIDGE (S17) STRUCTURE COMPLETE	142	02-Sep-11	04-Apr-12	285														
1A-1-S17-1000	TOWER PLACE BRIDGE (S17) STRUCTURE COMPLETE	142	02-Sep-11	04-Apr-12	285														
1A-1-S17-1000	Demolition of North cope and deck	19	02-Sep-11	29-Sep-11	285														
1A-1-S17-1670	Move pontoons to North side of Bridge	1	02-Sep-11	05-Sep-11	285														
1A-1-S17-1675	Remove Existing Barriers	1	05-Sep-11	06-Sep-11	285														
1A-1-S17-1680	Cut and remove existing parapet cope by diamond wire saw	7	06-Sep-11	15-Sep-11	285														
1A-1-S17-1690	Remove existing deck section by robotlion	10	15-Sep-11	29-Sep-11	285														
Concrete works to North Deck section																			
1A-1-S17-1700	Install formwork to deck slab extension	47	07-Oct-11	14-Dec-11	286														
1A-1-S17-1710	Install reinforcement to deck slab	20	07-Oct-11	04-Nov-11	285														
1A-1-S17-1720	Pour concrete to deck slab	24	13-Oct-11	16-Nov-11	285														
1A-1-S17-1730	Install formwork for deck cope	20	20-Oct-11	17-Nov-11	285														
1A-1-S17-1740	Pour concrete to deck cope	20	24-Oct-11	21-Nov-11	285														
1A-1-S17-1750	Strip cope formwork	20	26-Oct-11	23-Nov-11	285														
1A-1-S17-1760	Waterproofing to deck concrete	2	23-Nov-11	25-Nov-11	285														
1A-1-S17-1770	Strip formwork to underside of deck section	4	08-Dec-11	14-Dec-11	286														
North verge works																			
1A-1-S17-1820	Install tram ducting & sleeves & SS hangers	59	23-Sep-11	22-Dec-11	285														
1A-1-S17-1760	Install pedestrian/cycleway barrier to cope	6	29-Sep-11	07-Oct-11	285														
1A-1-S17-1790	Install kerbs & service ducting to North verge	2	29-Nov-11	02-Dec-11	293														
1A-1-S17-1800	Install in-fill concrete	10	29-Nov-11	14-Dec-11	285														
1A-1-S17-1810	Install in-fill concrete	1	14-Dec-11	15-Dec-11	285														
1A-1-S17-1810	Install ducting suspended from underside of soffit	5	15-Dec-11	22-Dec-11	285														
South access ramps																			
1A-1-S17-1830	Excavate area for south West ramp	30	02-Sep-11	14-Oct-11	367														
1A-1-S17-1840	Blinding for precast units	3	02-Sep-11	07-Sep-11	365														
1A-1-S17-1850	Place precast ramp units	2	07-Sep-11	09-Sep-11	365														
1A-1-S17-1860	In situ ramp sections	2	09-Sep-11	13-Sep-11	365														
1A-1-S17-1870	Bitumen paint to concrete	12	13-Sep-11	29-Sep-11	365														
1A-1-S17-1880	Backfill paving area	2	29-Sep-11	03-Oct-11	365														
1A-1-S17-1890	Install paving to footway	3	03-Oct-11	06-Oct-11	365														
1A-1-S17-1900	Install pedestrian/cycleway barrier	4	06-Oct-11	12-Oct-11	365														
1A-1-S17-1910	WEST RAMP COMPLETE	2	12-Oct-11	14-Oct-11	365														
East ramp																			
1A-1-S17-1920	Excavate area for South East ramp	32	14-Oct-11	29-Nov-11	365														
1A-1-S17-1930	Excavate area for retaining wall	3	14-Oct-11	19-Oct-11	365														
1A-1-S17-1940	Construct retaining wall	2	19-Oct-11	21-Oct-11	365														
1A-1-S17-1950	Blinding for units	10	21-Oct-11	04-Nov-11	365														
1A-1-S17-1960	Place precast ramp units	2	04-Nov-11	06-Nov-11	365														
1A-1-S17-1970	Bitumen paint to concrete	2	08-Nov-11	10-Nov-11	365														
1A-1-S17-1980	Install trieff kerbs	3	10-Nov-11	14-Nov-11	365														
1A-1-S17-1990	Install Aco channel	3	14-Nov-11	17-Nov-11	365														
1A-1-S17-2000	Install deterrent paving	2	17-Nov-11	21-Nov-11	365														
1A-1-S17-2000	Install deterrent paving	2	21-Nov-11	23-Nov-11	365														



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31-Mar-11	Revision 2	SCS/MHE	BSC

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
2A-13-SIGN-80	Finishes	15	10-Aug-11	30-Aug-11	209
2A-13-S-19-90(3)	Crew Relief Facility	60	31-Aug-11	22-Nov-11	315
Trackwork (1135m)					
		333	03-May-11	13-Nov-12	197
Network Rail Submissions & Approval					
2A-13-TRCK-13	Installation of Track Slab (WPP)	192	20-Sep-11	04-Jul-12	193
2A-13-TRCK-14	OLE Poles and Cabling (WPP)	20	20-Sep-11	18-Oct-11	189
		20	06-Jun-12	04-Jul-12	193
Construction					
		383	03-May-11	13-Nov-12	197
2A-13-SIGN-70	point machine mechanical set up	30	05-Apr-12	21-May-12	323
2A-13-SIGN-60	wayside preparation for loops(17) and boxes(12)	23	17-Apr-12	21-May-12	323
Haymarket Yards					
		173	03-May-11	18-Jan-12	340
Phase 1 Ch 80 to 125					
		58	09-Aug-11	27-Oct-11	398
2A-13B-TRCK-140	Establish Traffic Management	1	09-Aug-11	09-Aug-11	209
2A-13B-TRCK-150	Site Clearance	1	10-Aug-11	10-Aug-11	215
2A-13B-TRCK-160	Plane Out Surfacing	1	11-Aug-11	11-Aug-11	215
2A-13B-TRCK-170	Tram Ducts	3	12-Aug-11	16-Aug-11	218
2A-13B-TRCK-180	Excavate	1	12-Aug-11	12-Aug-11	220
2A-13B-TRCK-190	OLE Bases	6	12-Aug-11	19-Aug-11	215
2A-13B-TRCK-200	Drainage	2	12-Aug-11	15-Aug-11	219
2A-13B-TRCK-210	Improvement Slab	1	22-Aug-11	22-Aug-11	215
2A-13C-TRCK-701	Track Laying 3 (Haymarket Voaduct + Phase 1)	15	31-Aug-11	20-Sep-11	209
2A-13B-SIGN-80	wayside preparation for loops(1) and boxes(2)	2	19-Sep-11	20-Sep-11	425
2A-13B-TRCK-230	Concrete Track	3	21-Sep-11	23-Sep-11	209
2A-13B-TRCK-240	Pavement Construction Between Rail	4	03-Oct-11	06-Oct-11	212
2A-13B-TRCK-250	Pavement Construction Outside Rails	7	03-Oct-11	11-Oct-11	209
2A-13B-TRCK-500	Pavement Jct. Haymarket Terrace Haymarket Yards.	12	12-Oct-11	27-Oct-11	209
Phase 2 Ch 125 to 260 (Inbound) Ch 125 to 207 (Outbound)					
		81	03-May-11	26-Aug-11	442
2A-13B-TRCK-260	Establish Traffic Management	1	04-May-11	04-May-11	209
2A-13B-TRCK-270	Site Clearance	1	04-May-11	05-May-11	209
2A-13B-TRCK-280	Plane Out Surfacing	1	05-May-11	06-May-11	209
2A-13B-TRCK-290	Tram Ducts	14	06-May-11	26-May-11	213
2A-13B-TRCK-300	Excavate	4	06-May-11	12-May-11	223
2A-13B-TRCK-310	OLE Bases	18	06-May-11	02-Jun-11	209
2A-13B-TRCK-320	Drainage	16	06-May-11	31-May-11	211
2A-13B-TRCK-330	Improvement Slab	11	02-Jun-11	17-Jun-11	209
2A-13B-TRCK-340	Set Track	9	01-Jul-11	13-Jul-11	209
2A-13B-TRCK-350	Concrete Track	9	06-Jul-11	18-Jul-11	209
2A-13B-SIGN-100	wayside preparation for loops(2) and boxes(8)	6	06-Jul-11	13-Jul-11	473
2A-13B-TRCK-360	Pavement Construction Outside Rails	25	22-Jul-11	26-Aug-11	209
2A-13B-TRCK-370	Pavement Construction Between Rail	7	26-Jul-11	04-Aug-11	211
Phase 3 Ch 207 to 260 (Outbound)					
		46	28-Oct-11	18-Jan-12	340
2A-13B-TRCK-380	Establish Traffic Management	1	28-Oct-11	28-Oct-11	209
2A-13B-TRCK-390	Site Clearance	1	31-Oct-11	31-Oct-11	209
2A-13B-TRCK-400	Plane Out Surfacing	1	01-Nov-11	01-Nov-11	209
2A-13B-TRCK-410	Tram Ducts	5	02-Nov-11	08-Nov-11	212
2A-13B-TRCK-420	Excavate	1	02-Nov-11	02-Nov-11	216
2A-13B-TRCK-430	OLE Bases	8	02-Nov-11	11-Nov-11	209
2A-13B-TRCK-440	Drainage	2	02-Nov-11	03-Nov-11	215
2A-13B-TRCK-450	Improvement Slab	4	14-Nov-11	17-Nov-11	209



■ Remaining Level of Effort ■ Critical Remaining Work
■ Actual Work ◆ Milestone
■ Remaining Work ↔ Summary

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**Programme following Mediation
on 8 - 12 March 2011 (110331)**

**EDINBURGH TRAM
NETWORK**



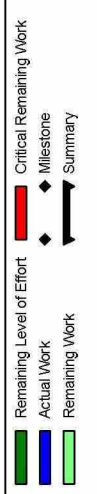
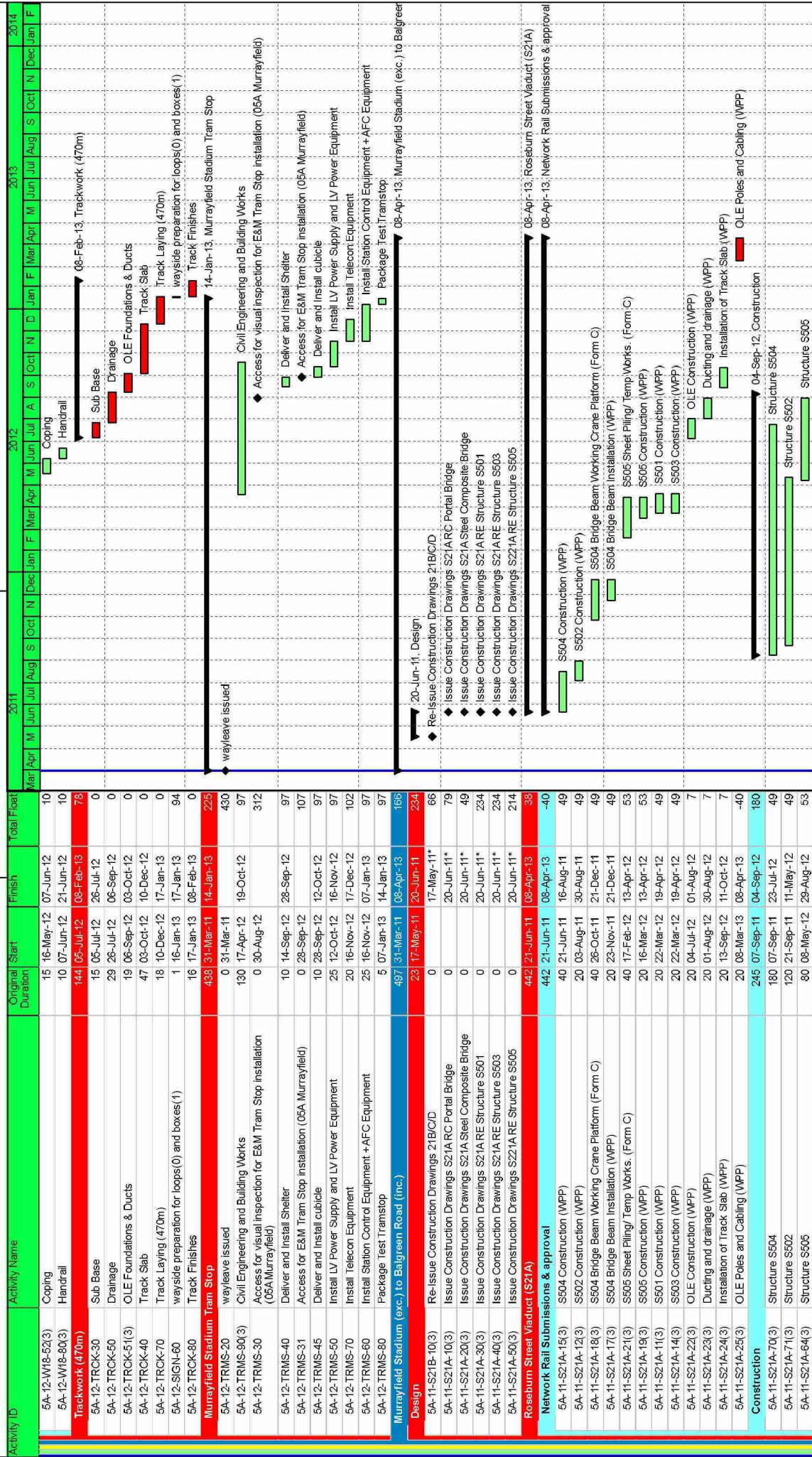
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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014									
						Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2A-13B-TRCK-460	Set Track	4	12-Dec-11	16-Dec-11	189													
2A-13B-TRCK-470	Concrete Track	2	15-Dec-11	19-Dec-11	340													
2A-13B-TRCK-490	Pavement Construction Between Rails	4	09-Jan-12	13-Jan-12	343													
2A-13B-TRCK-480	Pavement Construction Outside Rails	7	09-Jan-12	18-Jan-12	340													
Off Street																		
2A-13-TRCK-30	Bulk Excavation - Sub Base	242	02-Sep-11	28-Aug-12	189													
2A-13-TRCK-50	Drainage	18	02-Sep-11	28-Sep-11	189													
2A-13-TRCK-50(3)	OLE Foundations & Ducts	15	28-Sep-11	19-Oct-11	189													
2A-13-TRCK-40	Concrete Track Slab	14	19-Oct-11	08-Nov-11	189													
2A-13A-TRCK-70	Track Laying 1 (Offstreet)	23	08-Nov-11	12-Dec-11	189													
2A-13-TRCK-80	Track Finishes	20	05-Apr-12	04-May-12	189													
2A-13-TRCK-80(3)	Concrete Channel Drain	38	04-May-12	29-Jun-12	189													
2A-13-TRCK-81	Fencing	18	25-Jun-12	25-Jul-12	189													
Roseburn Junction																		
2A-13-TRCK-60	Bulk Excavation - Sub Base	127	16-May-12	13-Nov-12	132													
2A-13-TRCK-90	Drainage	10	16-May-12	31-May-12	132													
2A-13-TRCK-51	OLE Foundations & Ducts	5	31-May-12	07-Jun-12	132													
2A-13-TRCK-70	Concrete Track Slab	10	14-Jun-12	28-Jun-12	132													
2A-13D-TRCK-80	Track Laying 4 (Roseburn Delta)	10	02-Oct-12	16-Oct-12	132													
2A-13-TRCK-100	Track Finishes	10	16-Oct-12	30-Oct-12	132													
2A-13-TRCK-82	Concrete Channel Drain	5	30-Oct-12	06-Nov-12	132													
2A-13-TRCK-91	Fencing	5	06-Nov-12	13-Nov-12	132													
Road Works																		
2A-13B-JNCS-60	Installation of traffic light control - Junction 90	14	14-Sep-11	03-Oct-11	416													
2A-13B-JNCS-70	Installation of traffic light control - Junction 91	7	14-Sep-11	22-Sep-11	416													
Haymarket Terrace Substation																		
2A-13-SUBS-110	wayleave granted (substation area)	348	31-Mar-11	27-Aug-12	315													
2A-13-SUBS-120	meter issue for power supply clarified	0	0	31-Mar-11	381													
2A-13-SUBS-90	Civil Engineering and Building Works	65	31-Aug-11	29-Nov-11	268													
2A-13-SUBS-30	Access for visual inspection for E&M Substation installation (02A Haymarket Terrace)	0	31-Oct-11		268													
2A-13-SUBS-100	cable duct for Power Infeed	5	31-Oct-11	07-Nov-11	268													
2A-13-SUBS-130	Installation HV cable	30	07-Nov-11	20-Dec-11	268													
2A-13-SUBS-31	Access for E&M Substation installation (02A Haymarket Terr)	0	01-Dec-11		268													
2A-13-SUBS-40	Power Infeed from Public Net available inc HV cable	0	20-Dec-11		268													
2A-13-SUBS-45	Install HV Power Supply and Equipment (SP)	20	12-Apr-12	11-May-12	187													
2A-13-SUBS-50	Install LV Power Supply and LV Power Equipment	15	11-May-12	04-Jun-12	187													
2A-13-SUBS-55	Energisation Scottish Power	0	25-May-12		379													
2A-13-SUBS-70	Install Telecom and Scada	15	04-Jun-12	25-Jun-12	187													
2A-13-SUBS-60	Installation of TPS Equipment	30	25-Jun-12	07-Aug-12	187													
2A-13-SUBS-80	Testing and Commissioning	14	07-Aug-12	27-Aug-12	187													
Haymarket Station Tram Stop																		
2A-13-TRMS-20	wayleave issued	243	31-Mar-11	26-Mar-12	420													
2A-13-TRMS-90	Civil Engineering and Building Works	65	21-Sep-11	21-Dec-11	410													
2A-13-TRMS-30	Access for visual inspection for E&M Tram Stop installation (02A Haymarket Station)	0	31-Oct-11		525													
2A-13-TRMS-40	Deliver and Install Shelter	10	16-Nov-11	29-Nov-11	290													
2A-13-TRMS-31	Access for E&M Tram Stop installation (02A Haymarket Stati	0	01-Dec-11		320													

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█ Remaining Level of Effort █ Critical Remaining Work
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Programme following Mediation

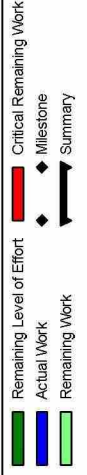
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EDINBURGH TRAM NETWORK

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Activity ID	Activity Name	Original Start Duration	Finish	Total Float	2011	2012	2013	2014
5A-11-S21D-13(3)20	OLE Poles and Cabling (WPP)	20 26-Feb-13	26-Mar-13	-28				
5A-11-S21D-30(3)	OLE Poles and Cabling (WPP)	129 07-Oct-11	23-Apr-12	89				
5A-11-S21D-61(3)	Site Clearance / Testing / Design Check	13 07-Oct-11	26-Oct-11	33				
5A-11-S21D-62(3)	Sheet Piling	10 26-Oct-11	09-Nov-11	33				
5A-11-S21D-62(3)10	Bulk Excavation	29 09-Nov-11	21-Dec-11	33				
5A-11-S21D-80	Green Slope	67 21-Dec-11	09-Apr-12	68				
5A-11-S21D-80	Parapet	10 09-Apr-12	23-Apr-12	69				
Water of Leith Bridge (S21E)		258 04-Jul-11	20-Jul-12	7				
Network Rail Form C Submission & Approval		141 05-Aug-11	06-Mar-12	7				
5A-11-S21E-13(3)	Mobile crane working platform to construct bridge (Form C)	5 05-Aug-11	12-Aug-11	7				
5A-11-S21E-14(3)	Installation of sheet piling to centre pier (WPP)	5 05-Aug-11	12-Aug-11	7				
5A-11-S21E-15(3)	Installation of bored piling to centre pier (WPP)	5 05-Aug-11	12-Aug-11	7				
5A-11-S21E-16(3)	Construction of centre pier (WPP)	5 05-Aug-11	12-Aug-11	7				
5A-11-S21E-11(3)	Sheet piling working platform to centre pier (Form C)	5 05-Aug-11	12-Aug-11	7				
5A-11-S21E-12(3)	Bored piling working platform to centre pier (Form C)	5 05-Aug-11	12-Aug-11	7				
5A-11-S21E-17(3)	Construction of abutments (WPP)	5 12-Oct-11	19-Oct-11	7				
5A-11-S21E-18(3)	Construction of deck (WPP)	20 07-Feb-12	06-Mar-12	7				
5A-11-S21E-19(3)	Steel Work Carried out by Maybe Construction	20 07-Feb-12	06-Mar-12	7				
Enabling Works		20 04-Jul-11	02-Aug-11	30				
5A-11-S21E-35(3)	Sewer Enabling Works	20 04-Jul-11	02-Aug-11	30				
East Abutment		194 02-Sep-11	20-Jun-12	29				
5A-11-S21E-45(3)	Formation to East Abutment (Murrayfield)	48 02-Sep-11	09-Nov-11	33				
5A-11-S21E-46(3)	Bankseat	25 09-Nov-11	15-Dec-11	70				
5A-11-S21E-47(3)	Phase 2	11 05-Jun-12	20-Jun-12	29				
Centre Pier		136 02-Sep-11	27-Mar-12	7				
5A-11-S21E-51	Leaf Pier	136 02-Sep-11	27-Mar-12	7				
West Abutment		89 02-Sep-11	13-Jun-12	34				
5A-11-S21E-52	Formation to West Abutment (Baird Drive)	17 20-Jan-12	14-Feb-12	37				
5A-11-S21E-53	Bankseat	26 04-May-12	13-Jun-12	34				
5A-11-S21E-63	Phase 2	80 27-Mar-12	20-Jul-12	7				
Superstructure		80 27-Mar-12	20-Jul-12	7				
5A-11-S21E-60	Bridge Deck & Finishes	80 27-Mar-12	20-Jul-12	7				
Baird Drive Retaining Walls (WB)		436 16-Jun-11	26-Mar-13	-28				
Network Rail Submissions & Approvals		436 16-Jun-11	26-Mar-13	-28				
5A-11-W8-11(3)	Sheet piling to eastern end (WOL) (Form C)	40 16-Jun-11	12-Aug-11	37				
5A-11-W8-12(3)	Sheet piling working platform to eastern end (WOL) (Form C)	40 16-Jun-11	12-Aug-11	37				
5A-11-W8-13(3)	Sheet piling to western end (Balgreen) (Form C)	40 14-Jul-11	09-Sep-11	112				
5A-11-W8-14(3)	Sheet piling working platform to western end (Balgreen) (Form C)	40 14-Jul-11	09-Sep-11	112				
5A-11-W8-16(3)	Installation of sheet piling to eastern end (WOL) (WPP)	20 14-Jul-11	12-Aug-11	37				
5A-11-W8-18(3)	Installation of sheet piling to western end (Balgreen) (WPP)	20 12-Aug-11	09-Sep-11	112				
5A-11-W8-19(3)	Construction of mod block wall to western end (Balgreen) (WPP)	20 13-Feb-12	12-Mar-12	56				
5A-11-W8-17(3)	Construction of mod block wall to eastern end (WOL) (WPP)	20 15-Mar-12	13-Apr-12	34				
5A-11-W8-20(3)	Construction of NwR Access Road (WPP)	20 01-Jun-12	29-Jun-12	7				
5A-11-W8-23(3)	Installation of Lower Ballast (WPP)	20 01-Jun-12	29-Jun-12	7				
5A-11-W8-21(3)	OLE Construction (WPP)	20 04-Jul-12	01-Aug-12	7				
5A-11-W8-22(3)	Ducting and drainage (WPP)	20 01-Aug-12	30-Aug-12	7				

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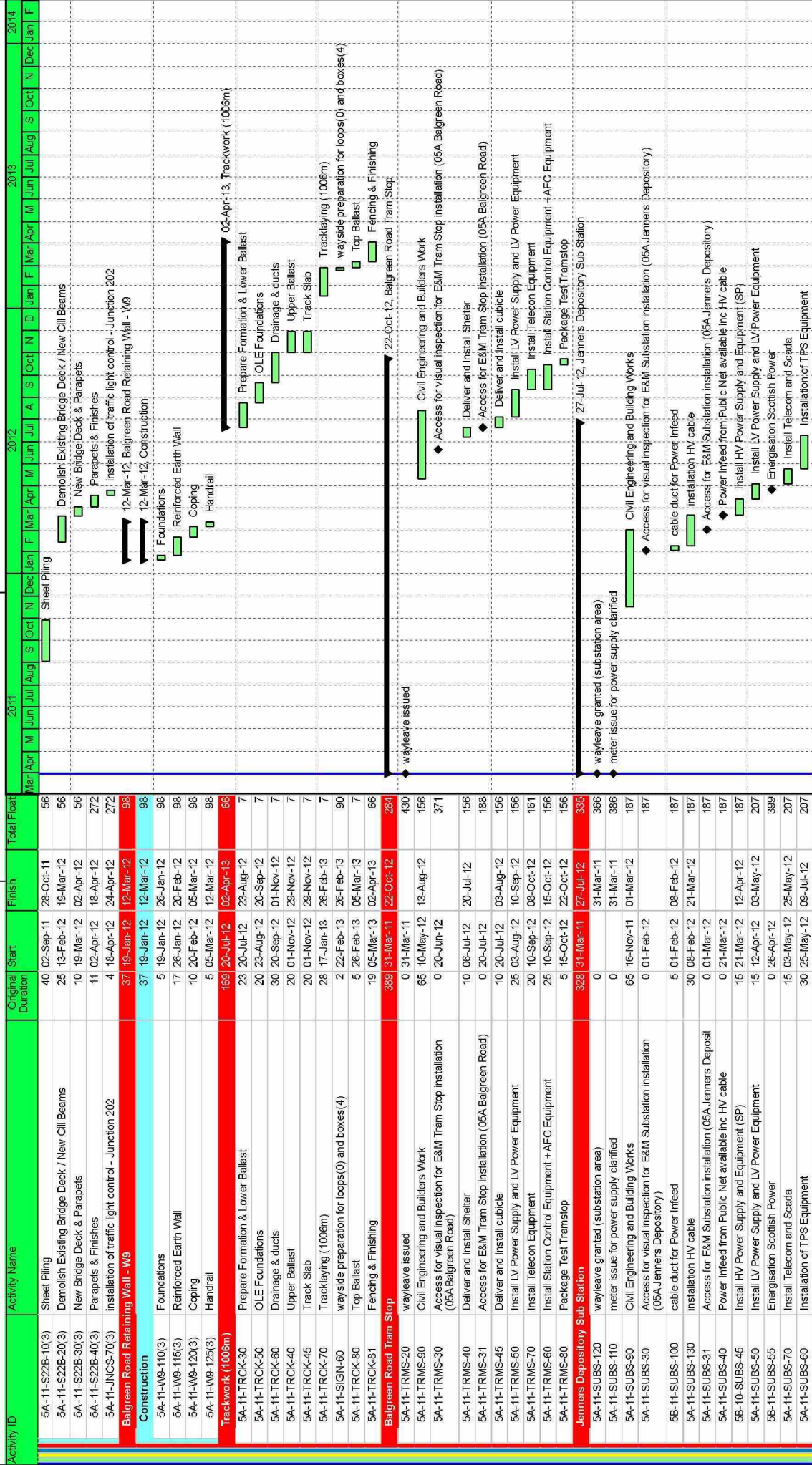
Date	Revision	Checked	Approved
17-Mar-11	Revision 0	SCS/MHE	BSC
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**Programme following Mediation
on 8 - 12 March 2011 (110331)**

**EDINBURGH TRAM
NETWORK**



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█ Remaining Level of Effort █ Critical Remaining Work
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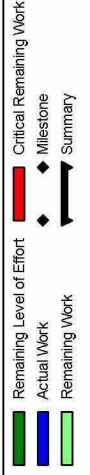
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EDINBURGH TRAM NETWORK

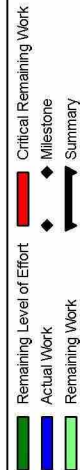
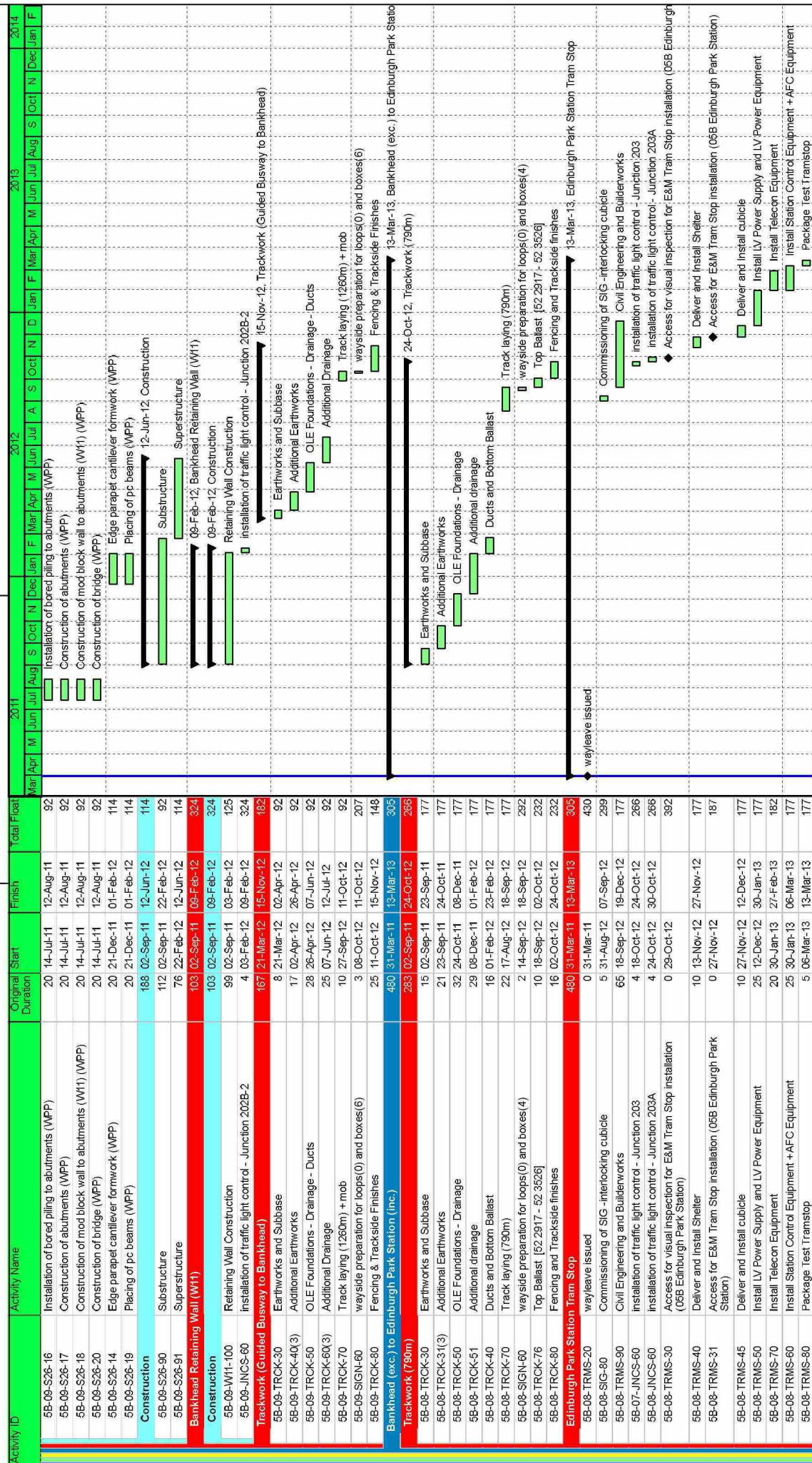


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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014										
5B-08/09-OHLE-60	Overhead Catenary Line -15 (52 1827 - 52 3273)	24	10-Jan-13	13-Feb-13	148	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	S	Oct	N	Dec	Jan	F
5B-10/11-TELC-60	Install Fibre Optic Cables MUS - BAL - SGT	12	05-Mar-13	21-Mar-13	73														
Balgreen Road (exc.) to Saughton Road North (Inc.)																			
300	31-Mar-11	18-Jun-12	363																
Carrickknowe Bridge (\$23)																			
192	02-Sep-11	18-Jun-12	235																
Carrick Knowe disruptive possessions																			
192	02-Sep-11	18-Jun-12	235																
Network Rail Submission & Approval																			
188	08-Sep-11	18-Jun-12	215																
5B-10-S23-10(3)	Steel Pedestrian Parapet WPP	20	03-Sep-11	06-Oct-11	383														
5B-10-S23-11(3)	OLE Poles and Cabling WPP	20	21-May-12	18-Jun-12	184														
South Abutment																			
39	02-Sep-11	27-Oct-11	211																
Wing Walls																			
4	21-Oct-11	27-Oct-11	211																
5B-10-S23-76S	Parapet Beams	4	21-Oct-11	27-Oct-11	211														
Abutment Wall																			
16	02-Sep-11	26-Sep-11	211																
5B-10-S23-56S(3)	Bearing Gallery	16	02-Sep-11	26-Sep-11	211														
Superstructure																			
40	26-Sep-11	21-Nov-11	371																
Reinforced Concrete Deck																			
19	26-Sep-11	21-Oct-11	211																
5B-10-S23-76S10	South Diaphragm	19	26-Sep-11	21-Oct-11	211														
Deck Finishes																			
17	27-Oct-11	21-Nov-11	371																
5B-10-S23-82	Waterproofing (inc. deck curing)	3	27-Oct-11*	01-Nov-11	211														
5B-10-S23-81	Parapet Rails	5	27-Oct-11	03-Nov-11	383														
5B-10-S23-80	Expansion Joints	2	01-Nov-11	03-Nov-11	211														
5B-10-S23-83	Walkway Construction	12	03-Nov-11*	21-Nov-11	211														
Run On Run Off Slabs																			
6	26-Sep-11	04-Oct-11	228																
5B-10-S23-71	Backfill and cast slab south	6	26-Sep-11	04-Oct-11	228														
Tracklaying																			
114	03-Nov-11	27-Apr-12	210																
5B-10B-S23-84	Containment Slabs	20	03-Nov-11*	02-Dec-11	295														
5B-10-S23-85	Drainage	15	21-Nov-11	13-Dec-11	288														
5B-10B-TRCK-70	Fix Rails	9	16-Apr-12	27-Apr-12	210														
5B-10C-SIGN-600	wayside preparation for loops(0) and boxes(2)	1	26-Apr-12	27-Apr-12	210														
Trackwork (1690m)																			
166	02-Sep-11	10-May-12	236																
Concrete Slab Track (Carrick Knowe to Guided Busway)																			
161	02-Sep-11	02-May-12	286																
5B-10C-W600-10	Retaining Wall W600	60	02-Sep-11	25-Nov-11	207														
5B-10C-TRCK-30	Earthworks - Subbase	34	25-Nov-11	27-Jan-12	207														
5B-10C-TRCK-40	OLE Foundations - Drainage - Ducts	24	27-Jan-12	01-Mar-12	207														
5B-10C-TRCK-41(3)	Additional Drainage	21	01-Mar-12	30-Mar-12	207														
5B-10C-TRCK-70	Track laying	10	30-Mar-12	16-Apr-12	207														
5B-10C-SIGN-60	wayside preparation for loops(0) and boxes(3)	2	12-Apr-12	16-Apr-12	278														
5B-10C-TRCK-80	Fencing & Finishes	12	16-Apr-12	02-May-12	207														
Ballasted Track (Balgreen Rd to Carrick Knowe)																			
166	02-Sep-11	10-May-12	271																
5B-10A-TRCK-30	Earthworks - Subbase	20	02-Sep-11	30-Sep-11	156														
5B-10A-TRCK-31(3)	Additional Earthworks	10	30-Sep-11	14-Oct-11	156														
5B-10A-TRCK-50	OLE Foundations - Drainage	23	14-Oct-11	16-Nov-11	156														
5B-10A-TRCK-60	Additional Drainage	20	16-Nov-11	15-Dec-11	156														
5B-10A-TRCK-40	Bottom Ballast - Ducts	23	15-Dec-11	31-Jan-12	156														
5B-10A-TRCK-70	Track laying (1160m)	22	14-Feb-12	15-Mar-12	156														
5B-10A-SIGN-60	wayside preparation for loops(0) and boxes(\$)	2	13-Mar-12	15-Mar-12	309														
5B-10A-TRCK-76	Top Ballast	15	15-Mar-12	05-Apr-12	156														
5B-10A-TRCK-80	Fencing & Trackside Finishes	23	05-Apr-12	10-May-12	156														



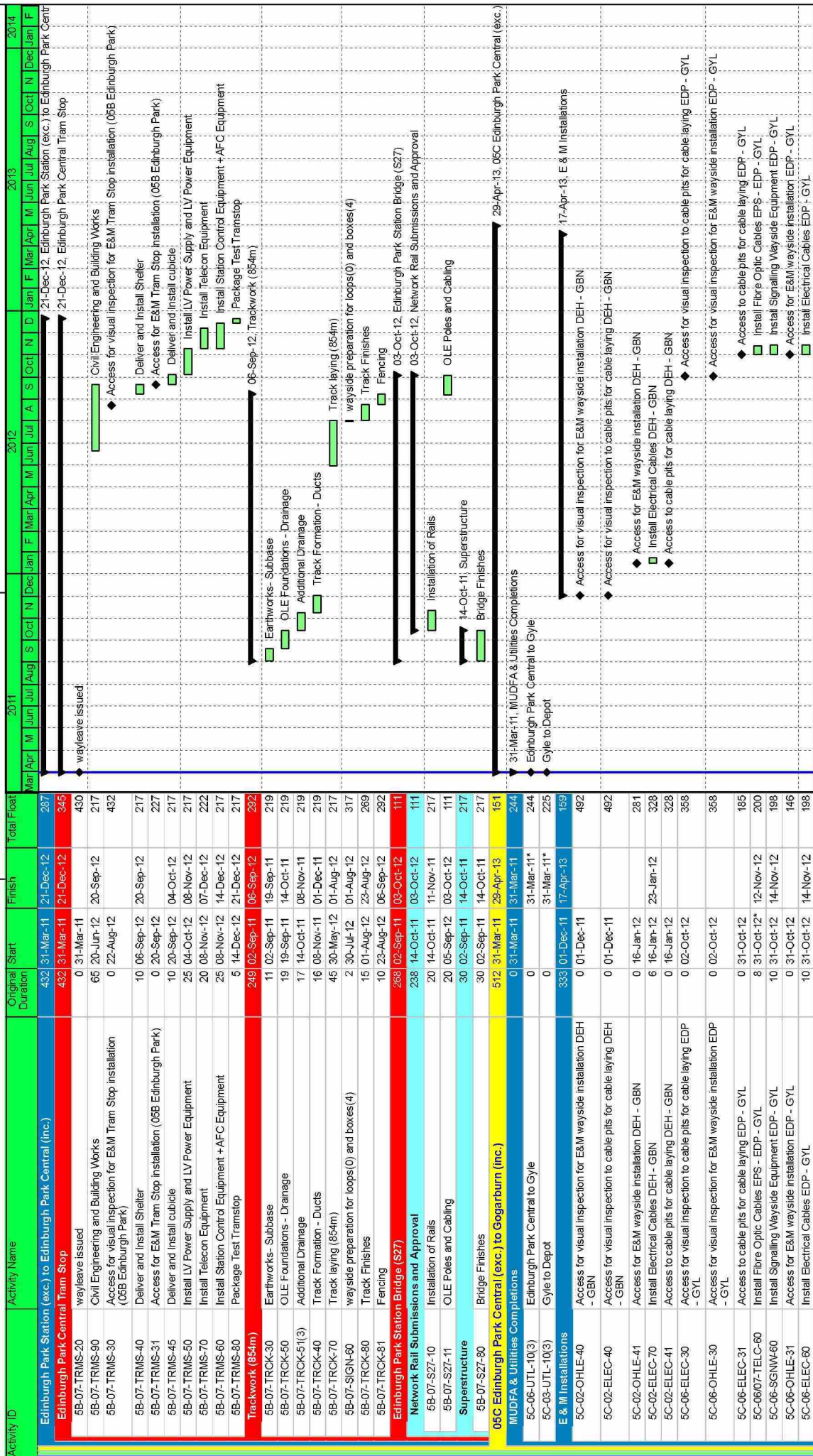
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EDINBURGH TRAM NETWORK

Programme following Mediation on 8 - 12 March 2011 (110331)



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Edinburgh Park Station (exc.) to Edinburgh Park Central (inc.)					
5B-07-TRMS-20	way/leave issued	432	31-Mar-11	21-Dec-12	287
5B-07-TRMS-90	Civil Engineering and Building Works	432	31-Mar-11	21-Dec-12	345
5B-07-TRMS-30	Access for visual inspection for E&M Tram Stop installation (05B Edinburgh Park)	65	20-Jun-12	20-Sep-12	217
5B-07-TRMS-40	Deliver and install Shelter	0	22-Aug-12	04-Oct-12	432
5B-07-TRMS-31	Access for E&M Tram Stop installation (05B Edinburgh Park)	10	06-Sep-12	20-Sep-12	217
5B-07-TRMS-45	Deliver and install cubicle	10	20-Sep-12	04-Oct-12	227
5B-07-TRMS-50	Install LV Power Supply and LV Power Equipment	25	04-Oct-12	08-Nov-12	217
5B-07-TRMS-70	Install Telecom Equipment	20	08-Nov-12	07-Dec-12	222
5B-07-TRMS-60	Install Station Control Equipment + AFC Equipment	25	08-Nov-12	14-Dec-12	217
5B-07-TRMS-80	Package Test Tramstop	5	14-Dec-12	21-Dec-12	217
Trackwork (854m)					
5B-07-TRCK-30	Earthworks-Subbase	249	02-Sep-11	08-Sep-12	292
5B-07-TRCK-50	OLE Foundations - Drainage	11	02-Sep-11	19-Sep-11	219
5B-07-TRCK-51(3)	Additional Drainage	19	19-Sep-11	14-Oct-11	219
5B-07-TRCK-40	Track Formation - Ducts	17	14-Oct-11	08-Nov-11	219
5B-07-TRCK-70	Track laying (854m)	16	08-Nov-11	01-Dec-11	219
5B-07-SIGN-60	wayside preparation for loops(0) and boxes(4)	45	30-May-12	01-Aug-12	317
5B-07-TRCK-80	Track Finishes	15	01-Aug-12	23-Aug-12	289
5B-07-TRCK-81	Fencing	10	23-Aug-12	06-Sep-12	292
Edinburgh Park Station Bridge (S27)					
5B-07-S27-10	Installation of Rails	268	02-Sep-11	03-Oct-12	111
5B-07-S27-11	OLE Poles and Cabling	238	14-Oct-11	03-Oct-12	111
Superstructure					
5B-07-S27-80	Bridge Finishes	20	14-Oct-11	11-Nov-11	217
05C Edinburgh Park Central (exc.) to Gogarburn (inc.)		30	02-Sep-11	03-Oct-12	111
5C-06-UTL-10(3)	Edinburgh Park Central to Gyle	30	02-Sep-11	14-Oct-11	217
5C-03-UTL-10(3)	Gyle to Depot	512	31-Mar-11	29-Apr-13	151
E & M Installations					
5C-02-OHLE-40	Access for visual inspection for E&M wayside installation DEH - GBN	0	31-Mar-11	31-Mar-11*	244
5C-02-ELEC-40	Access for visual inspection to cable pits for cable laying DEH - GBN	0	01-Dec-11	17-Apr-13	225
5C-02-OHLE-41	Access for E&M wayside installation DEH - GBN	333	01-Dec-11	17-Apr-13	159
5C-02-ELEC-41	Install Electrical Cables DEH - GBN	0	01-Dec-11	17-Apr-13	492
5C-02-ELEC-40	Access for visual inspection to cable pits for cable laying DEH - GBN	0	01-Dec-11	17-Apr-13	492
5C-02-ELEC-41	Access for E&M wayside installation DEH - GBN	0	16-Jan-12	23-Jan-12	281
5C-02-ELEC-70	Install Electrical Cables DEH - GBN	6	16-Jan-12	23-Jan-12	328
5C-02-ELEC-41	Access to cable pits for cable laying DEH - GBN	0	16-Jan-12	02-Oct-12	358
5C-06-ELEC-30	Access for visual inspection for E&M wayside installation EDP - GYL	0	02-Oct-12	02-Oct-12	358
5C-06-OHLE-30	Access for visual inspection for E&M wayside installation EDP - GYL	0	02-Oct-12	02-Oct-12	358
5C-06-ELEC-31	Access to cable pits for cable laying EDP - GYL	0	31-Oct-12	12-Nov-12	185
5C-0607-TELC-60	Install Fibre Optic Cables EPS - EDP - GYL	8	31-Oct-12*	12-Nov-12	200
5C-06-SGNM-60	Install Signalling Wayside Equipment EDP - GYL	10	31-Oct-12	14-Nov-12	198
5C-06-OHLE-31	Access for E&M wayside installation EDP - GYL	0	03-Oct-12	03-Oct-12	146
5C-06-ELEC-60	Install Electrical Cables EDP - GYL	10	31-Oct-12	14-Nov-12	198

█ Remaining Level of Effort
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EDINBURGH TRAM NETWORK



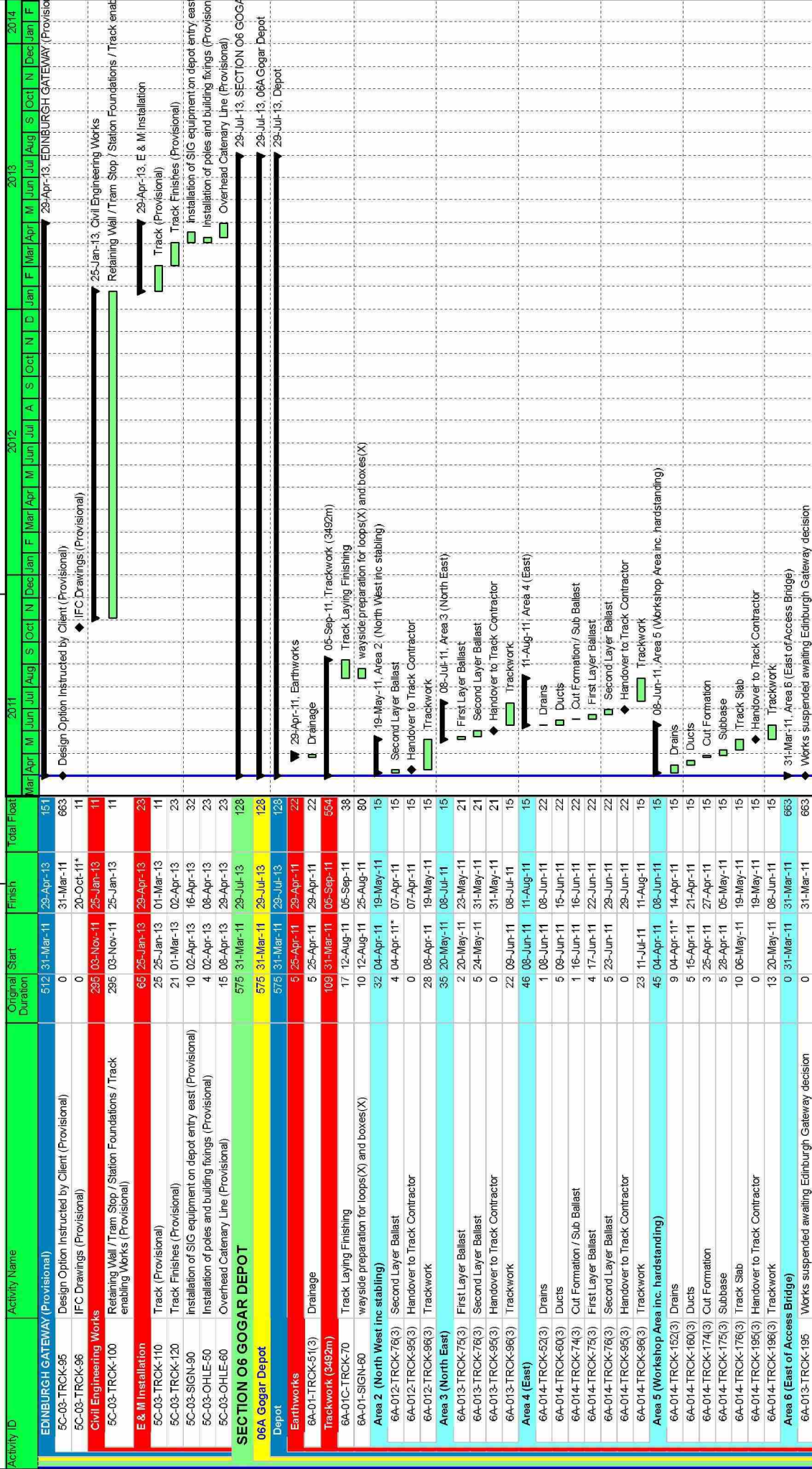
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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
5C-02-TRCK-90	Track Laying direct fix incl 3 switches (Inb. Ch. 1230 - 1588; outb Ch. 1415 - 1511)	35	09-Sep-11	27-Oct-11	281
5C-02-SIGN-70	point machine mechanical set up	15	23-Sep-11	13-Oct-11	388
5C-02-SIGN-60	wayside preparation for loops(4) and boxes(1)	3	25-Oct-11	27-Oct-11	388
5C-02-TRCK-80	Track Finishes	15	28-Oct-11	17-Nov-11	281
5C-02-TRCK-101	Temporary catenary inbound Ch1257 to 1720	10	04-Nov-11	17-Nov-11	363
5C-02-TRCK-111	OCS testing and commissioning Mini Test Track	10	18-Nov-11	02-Dec-11	363
5C-02-TRCK-121	Mini Test Track Available	0		02-Dec-11	363
Trackwork Ch 1588 to 1840					
5C-02-TRCK-50	Drainage 2.009 to 2.005	149	05-May-11	02-Dec-11	284
5C-02-TRCK-40	Ducts	14	05-May-11*	24-May-11	193
5C-02-TRCK-60	Reinstatements	8	25-May-11	06-Jun-11	193
5C-02-TRCK-91	Track Foundations	5	07-Jun-11	13-Jun-11	193
5C-02-TRCK-92	Gogar Castle Road Works	18	14-Jun-11	07-Jul-11	193
5C-02-TRCK-81	Fencing and Reinstatements	15	01-Jul-11	21-Jul-11	193
Trackwork Ch 1230 to 1588					
5C-02-TRCK-15	Trim & Soil Batter/Bulk Earthworks / Improvement Layer	170	04-Apr-11	02-Dec-11	363
5C-02-TRCK-25	Pre Earthworks Drainage 1.016 to 1.014	15	04-Apr-11*	25-Apr-11	26
5C-02-TRCK-105	Pre Earthworks Drainage 1.013 to 1.012 to 1.011 to 1.004	6	26-Apr-11	04-May-11	193
5C-02-TRCK-95	Pre Earthworks Drainage 5.002 to 5.000	25	05-May-11	09-Jun-11	284
5C-02-TRCK-125	Pre Earthworks Drainage 7.002 to 7.000	10	10-May-11	23-May-11	22
5C-02-TRCK-135	Excavation / Fill (sub base foundation to track slab)	10	24-May-11	07-Jun-11	22
5C-02-TRCK-35	OLE Foundations	15	08-Jun-11	28-Jun-11	281
5C-02-TRCK-45	Drainage & Ducting	10	23-Jun-11	12-Jul-11	281
5C-02-TRCK-65	Reinstatement & Blinding	9	13-Jul-11	25-Jul-11	281
5C-02-TRCK-75	Track Slab	15	26-Jul-11	16-Aug-11	281
5C-02-TRCK-85	Track Slab Upstands	30	12-Aug-11	22-Sep-11	281
5C-02-TRCK-115	Fencing & Reinstatements	12	16-Nov-11	02-Dec-11	363
Design					
5C-02-TRMS-10	Issue Construction Drawings Gogarburn Tram Stop	0	31-Mar-11	31-Mar-11	236
Trackwork					
5C-02-TRCK-70-1	Track Laying outbound	40	18-Nov-11	27-Jan-12	333
5C-02-SIGN-60-1	wayside preparation for loops(4) and boxes(1)	20	18-Nov-11	16-Dec-11	281
5C-02-TRCK-80-1	Track Finishes	3	14-Dec-11	16-Dec-11	363
5C-02-TRCK-81-1	Fencing and Reinstatements	10	19-Dec-11	13-Jan-12	281
Gogarburn Tram Stop					
5C-02-TRMS-20	wayleave issued	365	31-Mar-11	18-Sep-12	288
5C-02-TRMS-90	Civil Engineering and Building Works (05C Gogarburn)	0	31-Mar-11		430
5C-02-TRMS-30	Access for visual inspection for E&M Tram Stop installation	65	04-Apr-12	09-Jul-12	6
5C-02-TRMS-40	Deliver and Install Shelter	0	17-May-12		385
5C-02-TRMS-35	Access for E&M Tram Stop installation (05C Gogarburn)	10	04-Jun-12	18-Jun-12	170
5C-02-TRMS-45	Deliver and Install cubicle	0	18-Jun-12	02-Jul-12	180
5C-02-TRMS-50	Install LV Power Supply and LV Power Equipment	25	02-Jul-12	07-Aug-12	170
5C-02-TRMS-70	Install Telecon Equipment	20	07-Aug-12	04-Sep-12	180
5C-02-TRMS-60	Install Station Control Equipment + AFC Equipment	25	07-Aug-12	11-Sep-12	170
5C-02-TRMS-80	Package Test Tramstop	5	11-Sep-12	18-Sep-12	170

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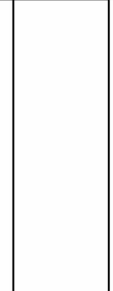
█ Remaining Level of Effort ◆ Critical Remaining Work
█ Actual Work ◆ Milestone
█ Remaining Work ▶ Summary

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014
Depot Building									
E & M Workshop Equipment Installation		140	31-Mar-11	18-Oct-11	42				
6A-01-BLDS-72	Installation of workshop equipment	120	31-Mar-11	20-Sep-11	42				
Inspection & Handover									
6A-01-BLDS-81	Inspection and Testing	20	21-Sep-11	18-Oct-11	42				
Access Roads									
6A-01-ROAD-90(3)	Carpark	64	04-Apr-11	05-Jul-11	116				
6A-01-ROAD-91(3)	Hardstanding	6	04-Apr-11	11-Apr-11	116				
6A-01-ROAD-94(3)	Access Road	40	04-Apr-11	01-Jun-11	140				
6A-01-ROAD-95(3)	Complete Access Road & Finishes	22	12-Apr-11	13-May-11	116				
6A-01-JNCS-60	Installation of traffic light control - Junction 208	30	16-May-11	27-Jun-11	116				
E & M Installations									
6A-01-ELEC-40	Access for visual inspection to cable pits for cable laying (Depot)	173	13-Apr-11	16-Dec-11	481				
6A-01-OHLE-40	Access for visual inspection for E&M Depot installation	0	13-Apr-11		654				
6A-01-SGNW-70	Install Signalling Wayside Equipment (Depot)	12	20-May-11	07-Jun-11	136				
6A-01-OHLE-50(3)	Installation of poles and building fixings (Depot)	12	20-May-11	07-Jun-11	60				
6A-01-OHLE-41	Access for E&M Depot installation	0	20-May-11		60				
6A-01-ELEC-41	Access to cable pits for cable laying (Depot)	0	20-May-11		108				
6A-01-ELEC-70	Install Electrical Cables Depot	25	20-May-11	24-Jun-11	123				
6A-01-SIGN-40	Installation of 2 SIG-interlocking cubicles depot entries	25	06-Jun-11	08-Jul-11	108				
5C-02-SIGN-90	Installation of SIG equipment on depot entry west	10	20-Jun-11	01-Jul-11	108				
6A-01-SIGN-80	Commissioning of 2 SIG-interlocking cubicles depot entries	10	04-Jul-11	15-Jul-11	108				
6A-01-OHLE-60(3)	Overhead Catenary Line (Depot)	61	31-Aug-11	24-Nov-11	0				
6A-01-TRCK-80	Points machine mechanical set up	20	29-Sep-11	27-Oct-11	35				
6A-01-OHLE-60(3)10	OCS Testing & Commissioning	15	24-Nov-11	16-Dec-11	0				
Operation Control Center (OCC)									
6A-01-SIGN-150	equipment floor fit out SIG/COM/SCADA/Radio	5/5	31-Mar-11	29-Jul-13	0				
6A-01-SIGN-110	operating floor fit out	25	31-Mar-11	06-May-11	132				
6A-01-SIGN-200	testing and commissioning OCC equipment AIR - HAY	25	09-May-11	13-Jun-11	132				
SECTION 07 GOGAR TO EDINBURGH AIRPORT									
07A Gogarburn (exc.) to Edinburgh Airport (inc.)		440	31-Mar-11	16-Jan-13	223				
E & M Installations									
7A-04-OHLE-30	Access for visual inspection for E&M wayside installation GBN - IPR	185	17-Feb-12	07-Nov-12	264				
7A-04-OHLE-31	Access for E&M wayside installation GBN - IPR	0	17-Feb-12		447				
7A-04-ELEC-30	Access for visual inspection to cable pits for cable laying GBN - IPR	0	19-Mar-12		125				
7A-04-ELEC-31	Access to cable pits for cable laying GBN - IPR	0	23-May-12		381				
7A-04-ELEC-60	Install Electrical Cables GBN - IPR	13	22-Jun-12	11-Jul-12	132				
7A-01/02/04-TELC-60	Install Fibre Optic Cables DEH - GBN - IPR + DEP	15	22-Jun-12	13-Jul-12	137				
7A-04-SGNW-60	Install Signalling Wayside Equipment GBN - IPR	13	22-Jun-12	11-Jul-12	132				
7A-04-OHLE-50	Installation of poles and building fixings -20 (71 0681 - 71 135)	4	25-Jun-12	28-Jun-12	137				
7A-02/04-OHLE-50	Installation of poles and building fixings -19 (53 1666 - 71 078)	7	29-Jun-12	09-Jul-12	61				
7A-05-OHLE-30	Access for visual inspection for E&M wayside installation IPR - AIR	0	30-Jul-12		334				
7A-05-ELEC-30	Access for visual inspection to cable pits for cable laying IPR - AIR	0	23-Aug-12		317				

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Remaining Level of Effort	Critical Remaining Work
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Remaining Work	Summary



Programme following Mediation

on 8 - 12 March 2011 (110331)

EDINBURGH TRAM NETWORK

Activity ID, Activity Name, Original Duration, Start, Finish, Total Float, Gogar Landfill Site (Gogarburn Tram Stop to Bridge Ch 0 to 400), Gogarburn Bridge to Ingliston Tram Stop Ch 400 to 800, Gogarburn Bridge to Ingliston Tram Stop Ch 800 to 1750. Includes columns for months 2011-2014 and a legend for Remaining Level of Effort, Actual Work, Remaining Work, Critical Remaining Work, Milestone, Summary.

Revision table with columns: Date, Revision, SCS/MHE, Checked, Approved. Revisions 0, 1, and 2 are listed.

**Programme following Mediation
on 8 - 12 March 2011 (110331)
Prioritised Works**

**EDINBURGH TRAM
NETWORK**



31-Mar-11 17:00

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014											
						Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Programme following Mediation 8-12 March 2011 rev 2										0										
KEY DATES										0										
1060	Sign MOV for carrying out the Prioritised Works	692	31-Mar-11	25-Jan-14	0															
1070	Re - mobilisation - Prioritised Works	0	15-Apr-11	15-Apr-11*	0															
1000	Sign MOV in Respect of Off Street Works (Other than Prioritised Works) and the On Street Works	10	15-Apr-11	03-May-11	66															
1050	Re - mobilisation	0	01-Jul-11	01-Jul-11*	0															
313	Section Completion A	44	01-Jul-11	02-Sep-11	0															
314	Section Completion B	0	0	16-Dec-11*	0															
281	Construction Completion Phase 1a Edinburgh/Airport to Haymarket	0	0	07-Feb-13*	0															
315	Section Completion C	0	0	29-Jul-13	0															
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0	0	27-Oct-13	0															
325	Section Completion D	0	0	25-Jan-14	0															
TRAM DELIVERY & COMMISSIONING										254										
Deliver & Commission First Five Trams										254										
CAF-01	Certificate of Partial Completion & Depot ready for delivery of first tram	0	14-Oct-11	14-Oct-11	254															
TRACK FINISHES										0										
A20000	Tamping Ballast 6A	40	01-Sep-11	27-Oct-11	0															
TESTING										0										
1C-15/16-1210	On Street Geo - technical testing	86	03-May-11	02-Sep-11	0															
5A-11-S21B/21D-19	Geo-technical testing at Murrayfield	43	04-Jul-11	17-May-11	66															
2167-15/16-1220	Off street testing for contamination	43	03-May-11	02-Sep-11	0															
SECTION 01 NEWHAVEN ROAD TO HAYMARKET										365										
01C & 01D St. Andrews Square to Haymarket										365										
Princes Street										148										
1C-15/16-1080	TM Enabling	20	03-May-11	29-Nov-11	365															
1C-15/16-1090	Area 1 Waverley to Mound	98	03-May-11	20-Sep-11	415															
1C-15/16-1100	Area 1 Frederick to Castle Street	86	03-May-11	02-Sep-11	427															
1C-15/16-1150	Street Lighting	85	03-May-11	01-Sep-11	428															
1C-15/16-1110	Area 3 Castle to Lofthall Road	99	01-Jun-11	19-Oct-11	394															
1C-15/16-1120	Area 3 Frederick to Hanover Street	91	01-Jun-11	07-Oct-11	402															
1C-15/16-1140	OLE foundations	43	01-Jun-11	02-Aug-11	365															
1C-15/16-1160	Tram Stops	30	01-Jun-11	13-Jul-11	463															
1C-15/16-1170	Chambers	15	01-Jun-11	22-Jun-11	478															
1C-15/16-1180	Scottish Water	10	01-Jun-11	15-Jun-11	473															
1C-15/16-1190	BT	10	15-Jun-11	29-Jun-11	473															
1C-15/16-1200	OLE Poles and Street Lighting	20	02-Aug-11	30-Aug-11	365															
1C-15/16-1130	Area 2 Mound Junction	65	30-Aug-11	29-Nov-11	365															
SECTION 2 HAYMARKET CORRIDOR										398										
02A Haymarket Corridor										398										
Haymarket (inc.) to Roseburn Junction (inc.)										125										
Haymarket Station Viaduct (S19)										15										
2A-13-S19-80										209										
Finishes										209										



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**EDINBURGH TRAM
NETWORK**

31-Mar-11 17:00

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
5C-03-W28-10	Finishes	67	03-May-11	08-Aug-11	152
Phase 4					
5C-03-W28-20	Deck Construction	30	03-May-11	27-Sep-11	89
5C-03-W28-30	South Portal	55	01-Jun-11	15-Jun-11	89
5C-03-W28-40	Finishes	73	15-Jun-11	18-Aug-11	117
Tunnel Construction					
5C-03-W28-90	Phases 1 & 2	91	10-Jun-11	18-Oct-11	152
5C-03-W28-90	Phases 1 & 2	91	10-Jun-11	18-Oct-11	152
Depot Access Bridge (S32)	Completion Works	20	31-Mar-11	28-Apr-11	515
5C-03-W62-90	Completion Works	20	31-Mar-11	28-Apr-11	515
Depot Stop (exc.) to Gogarburn (Inc.)	Completion Works	170	04-Apr-11	02-Dec-11	363
Mini Test Track related	Completion Works	170	04-Apr-11	02-Dec-11	363
track laying and E&M	Completion Works	94	22-Jul-11	02-Dec-11	363
5C-02-TRCK-70	Track Laying Rheda green (inbound only Ch. 1588 - 1836)	5	22-Jul-11	28-Jul-11	193
5C-02-TRCK-90	Track Laying direct fix incl 3 switches (Inb. Ch. 1230 - 1588; outb Ch. 1415 - 1511)	35	09-Sep-11	27-Oct-11	281
5C-02-SIGN-70	point machine mechanical set up	15	23-Sep-11	13-Oct-11	388
5C-02-SIGN-60	wayside preparation for loops(4) and boxes(1)	3	25-Oct-11	27-Oct-11	388
5C-02-TRCK-80	Track Finishes	15	28-Oct-11	17-Nov-11	281
5C-02-TRCK-101	Temporary catenary inbound Ch1257 to 1720	10	04-Nov-11	17-Nov-11	363
5C-02-TRCK-111	OCS testing and commissioning Mini Test Track	10	18-Nov-11	02-Dec-11	363
5C-02-TRCK-121	Mini Test Track Available	0	02-Dec-11	02-Dec-11	363
Trackwork Ch 1588 to 1840	Completion Works	149	05-May-11	02-Dec-11	284
5C-02-TRCK-50	Drainage 2.009 to 2.005	14	05-May-11*	24-May-11	193
5C-02-TRCK-40	Ducts	8	25-May-11	06-Jun-11	193
5C-02-TRCK-60	Reinstatements	5	07-Jun-11	13-Jun-11	193
5C-02-TRCK-91	Track Foundations	18	14-Jun-11	07-Jul-11	193
5C-02-TRCK-92	Gogar Castle Road Works	15	01-Jul-11	21-Jul-11	193
5C-02-TRCK-81	Fencing and Reinstatements	12	16-Nov-11	02-Dec-11	284
Trackwork Ch 1230 to 1588	Completion Works	170	04-Apr-11	02-Dec-11	363
5C-02-TRCK-15	Trim & Soil Batter/Bulk Earthworks / Improvement Layer	15	04-Apr-11*	25-Apr-11	26
5C-02-TRCK-25	Pre Earthworks Drainage 1.016 to 1.014	6	26-Apr-11	04-May-11	193
5C-02-TRCK-105	Pre Earthworks Drainage outfall for 5 & 7	5	03-May-11	09-May-11	22
5C-02-TRCK-95	Pre Earthworks Drainage 1.013 to 1.012 to 1.011 to 1.004	25	05-May-11	09-Jun-11	284
5C-02-TRCK-125	Pre Earthworks Drainage 5.002 to 5.000	10	10-May-11	23-May-11	22
5C-02-TRCK-135	Pre Earthworks Drainage 7.002 to 7.000	10	24-May-11	07-Jun-11	22
5C-02-TRCK-35	Excavation / Fill (sub base foundation to track slab)	15	08-Jun-11	28-Jun-11	281
5C-02-TRCK-45	OLE Foundations	10	23-Jun-11	12-Jul-11	281
5C-02-TRCK-55	Drainage & Ducting	9	13-Jul-11	25-Jul-11	281
5C-02-TRCK-65	Reinstatement & Blinding	15	26-Jul-11	16-Aug-11	281
5C-02-TRCK-75	Track Slab	30	12-Aug-11	22-Sep-11	281
5C-02-TRCK-85	Track Slab Upstands	30	19-Aug-11	29-Sep-11	281
5C-02-TRCK-115	Fencing & Reinstatements	12	16-Nov-11	02-Dec-11	363
SECTION O6 GOGAR DEPOT	Completion Works	182	31-Mar-11	16-Dec-11	481
06A Gogar Depot	Completion Works	182	31-Mar-11	16-Dec-11	481
Earthworks	Completion Works	182	31-Mar-11	16-Dec-11	481
6A-01-TRCK-51(3)	Drainage	5	25-Apr-11	29-Apr-11	22

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on 8 - 12 March 2011 (110331)
Prioritised Works**

**EDINBURGH TRAM
NETWORK**



31-Mar-11 17:00

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2011	2012	2013	2014
6A-01-ELEC-41	Access to cable pits for cable laying (Depot)	0	20-May-11	24-Jun-11	108				
6A-01-ELEC-70	Install Electrical Cables Depot	25	20-May-11	24-Jun-11	123				
6A-01-SIGN-40	Installation of 2 SIG-interlocking cubicles depot entries	25	06-Jun-11	08-Jul-11	108				
5C-02-SIGN-90	Installation of SIG equipment on depot entry west	10	20-Jun-11	01-Jul-11	108				
6A-01-SIGN-80	Commissioning of 2 SIG-interlocking cubicles depot entries	10	04-Jul-11	15-Jul-11	108				
6A-01-OHLE-60(3)	Overhead Catenary Line (Depot)	61	31-Aug-11	24-Nov-11	0				
6A-01-TRCK-80	Points machine mechanical set up	20	29-Sep-11	27-Oct-11	36				
6A-01-OHLE-60(3)10	OCS Testing & Commissioning	15	24-Nov-11	16-Dec-11	0				
Operation Control Center (OCC)		50	31-Mar-11	13-Jun-11	132				
6A-01-SIGN-150	equipment floor fit out SIG/COM/SCADA/Radio	25	31-Mar-11	06-May-11	132				
6A-01-SIGN-110	operating floor fit out	25	09-May-11	13-Jun-11	132				
SECTION 07 GOGAR TO EDINBURGH AIRPORT									
07A Gogarburn (exc.) to Edinburgh Airport (inc.)		5	31-Mar-11	06-Apr-11	103				
Ingliston Park & Ride (exc.) to Edinburgh Airport (inc.)		5	31-Mar-11	06-Apr-11	103				
Trackwork (833m)		5	31-Mar-11	06-Apr-11	103				
EAL Programme									
Phase C		5	31-Mar-11	06-Apr-11	103				
7A-05-W14C-07	Site Clearance	5	31-Mar-11	06-Apr-11	103				



Date	Revision	Checked	Approved
17-Mar-11	Revision 0	SCS/MHE	BSC
21-Mar-11	Revision 1	SCS/MHE	BSC
31-Mar-11	Revision 2	SCS/MHE	BSC



EDINBURGH TRAMS

**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

Appendix 9
Princes Street Remedial Works – Traffic Management

NOTES

- KEY
- SITE COMPOUND BUSES
 - SITE COMPOUND (3RD PARTY)
 - EASTBOUND BUSES
 - WESTBOUND BUSES
 - NORTHBOUND BUSES
 - SOUTHBOUND BUSES
 - ROAD CLOSURE

DRAFT

CONFIDENTIAL



EDINBURGH TRAMS
INFRA

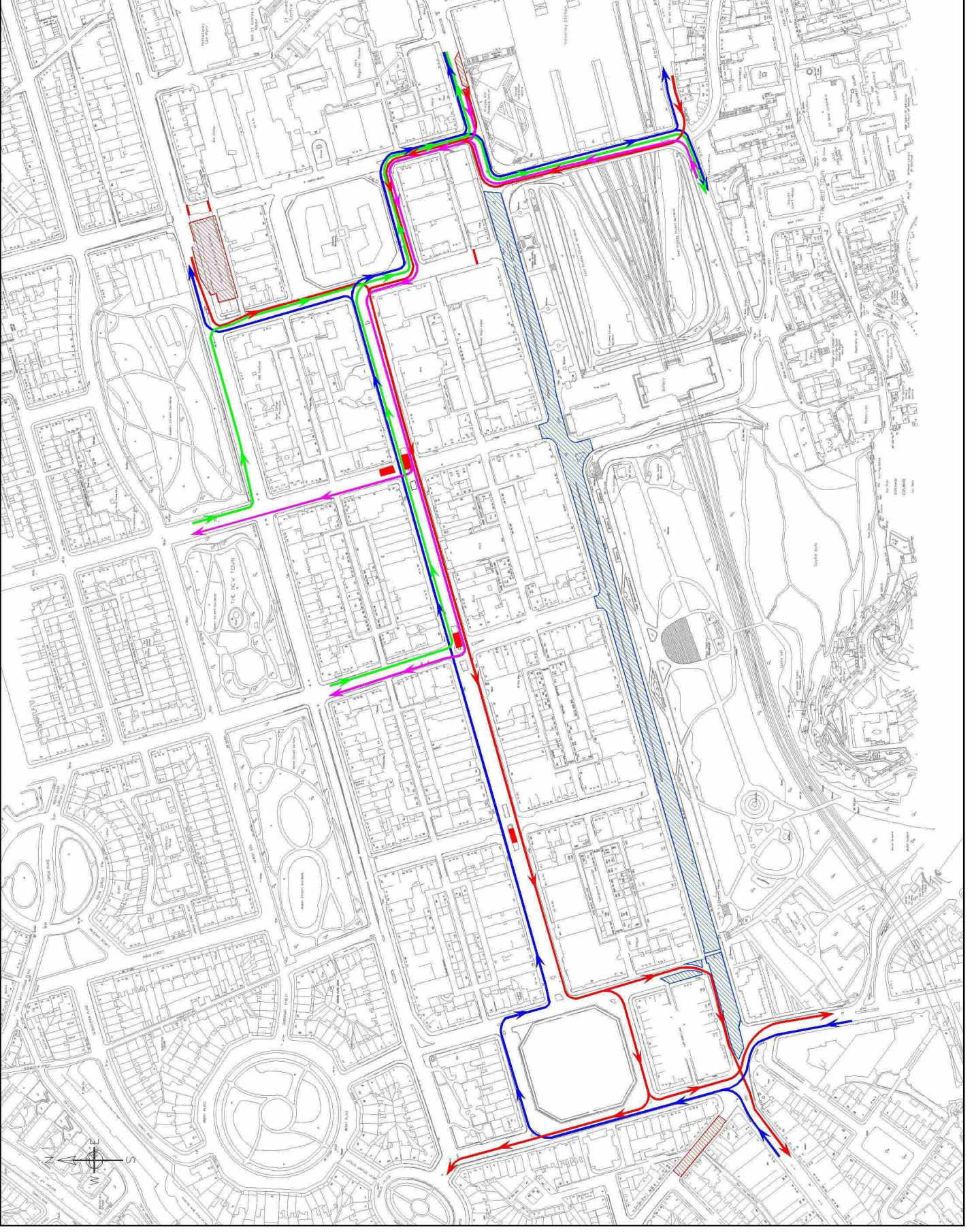
PRINCES ST REMEDIALS 2011
BUS ROUTE
FLOW DIAGRAM

DATE	20/01/11	SCALE	1:1.5
DESIGN	CON	DATE	20
APP'D	JUC		
CHECK	CI		
DATE	20/01/11		

AECOM

TRINITY
15 BRISTOL PLACE
EDINBURGH, EH3 5DA
Tel: +44 (0)131 526 2000
Fax: +44 (0)131 526 2001
www.aecom.com

NO 01051122_SKT_TM_024_S002



Information provided by third parties and referred to herein has not been checked for accuracy. It is advised that users should verify the accuracy of the information provided by third parties within agreement C&A.

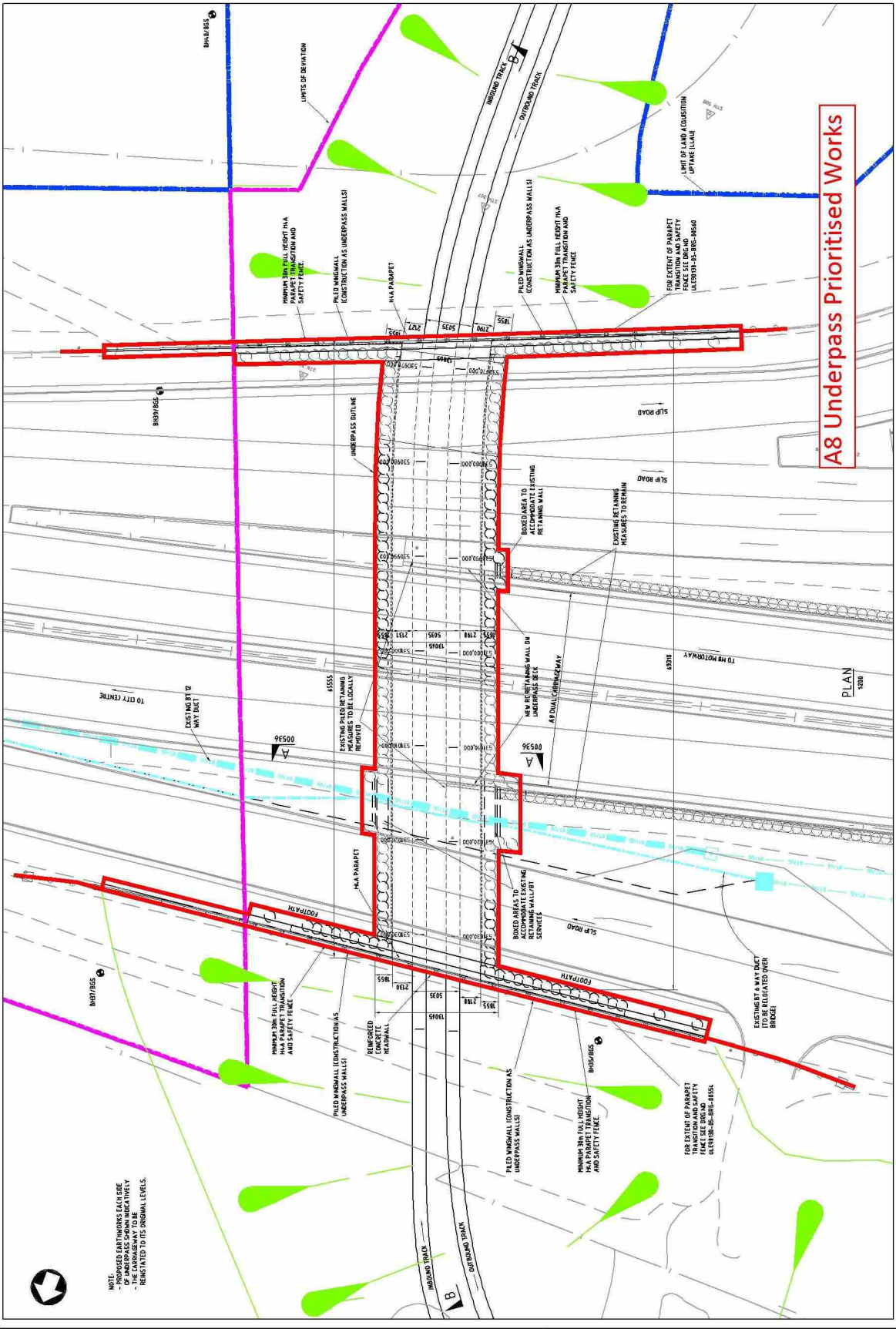
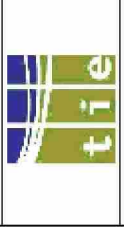


EDINBURGH TRAMS

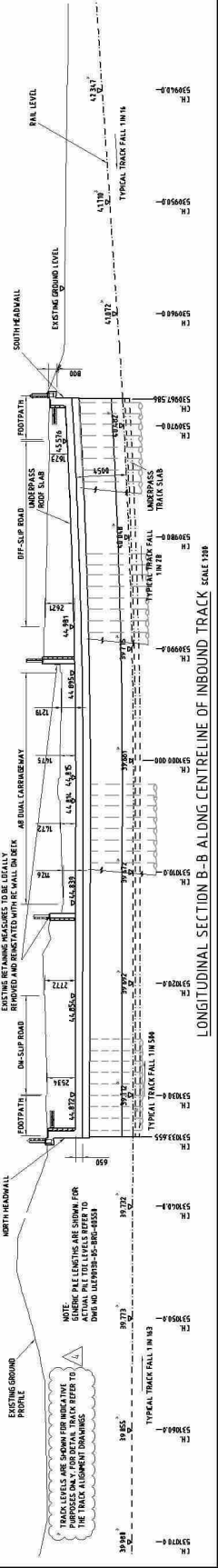
**REPORT ON PROGRESS SINCE COMPLETION OF
HEADS OF TERMS TO 8TH APRIL 2011**

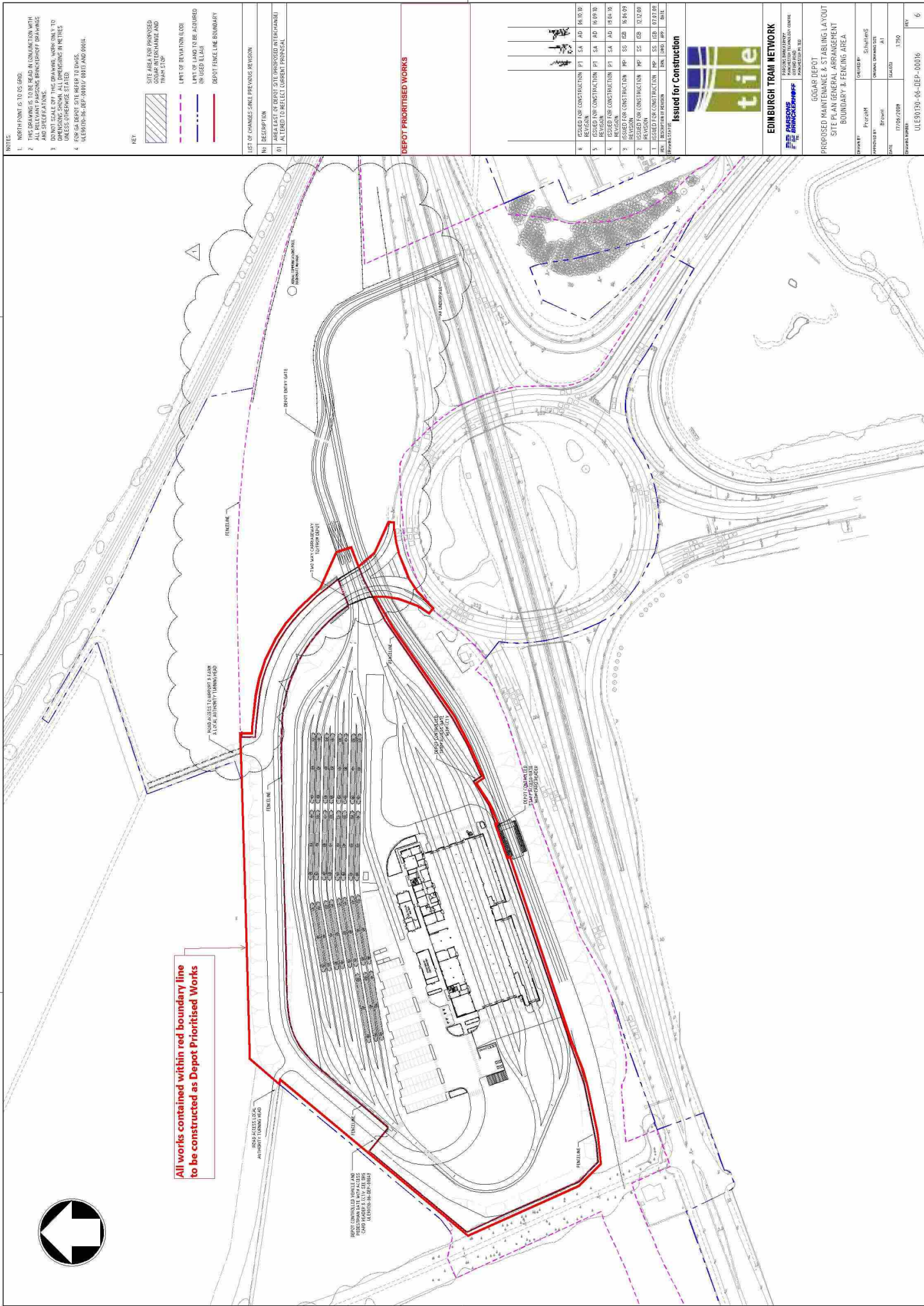
Appendix 10
Prioritised Works – Scope / Red / Yellow line Boundary

- NOTES**
1. DIMENSIONS SHALL BE TAKEN IN CONFORMANCE WITH ALL OTHER DRAWINGS LISTED ON DRAWING AND ALTERNATIVE-8-BRG-A8A-DRAINAGE-SCHEDULE
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED. UNLESS OTHERWISE NOTED OTHERWISE
 3. ALL LEVELS ARE IN METRES ABOVE ORIGINANCE UNLESS OTHERWISE NOTED OTHERWISE.
 4. DO NOT SCALE FROM THIS DRAWING.
 5. THE PROPOSED UNDERPASS FORMS PART OF THE WORKS SHOWN IN SECTION 5 OF THE EMBROIGH TRAM LAYOUT WORKS.
 6. NOT USED.
 7. THE STRUCTURE HAS BEEN DESIGNED FOR FULL I/A ALTERNATIVE-8-BRG-A8A-DRAINAGE-SCHEDULE AND IN ACCORDANCE WITH BS 5701. THE LOADING INCLUDES THE COMBINED WEIGHT OF A Lorry, Lorry TRAILER AND TRAILER LOAD FOR DESIGN PURPOSES. THE STRUCTURE DOES NOT EXCEED THE DESIGN LOADS AND FACTORS IN ACCORDANCE WITH BS 5701.
 8. THE CONSTRUCTION WORKS HAVE BEEN ARRANGED IN PHASES TO MINIMISE DISRUPTION TO TRAFFIC ON THE OVERPASS. PHASES 1 TO 5 ARE TO BE COMPLETED BEFORE THE START OF PHASES 6 TO 10. PHASES 6 TO 10 ARE TO BE COMPLETED PRIOR TO THE START OF PHASES 11 TO 13.
 9. THE CONSTRUCTION SEQUENCE ASSIGNED DURING THE DESIGN OF THE STRUCTURE IS SHOWN ON THE DRAWING. THE SEQUENCE SHALL BE APPROVED BY THE DIVISION OF CONSTRUCTION PRIOR TO THE START OF THE WORKS.
 10. THE CONTRACTOR'S ATTENTION IS DRAWN TO THE UNDERPASS AS SHOWN IN DRAWING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS SHOULD BE CONFIRMED PRIOR TO THE START OF THE WORKS.
 11. NOT USED.
 12. FOR DETAILS OF EARTHWORKS ADJACENT TO THE PROPOSED UNDERPASS REFER TO DRAWING 10. ALTERNATIVE-8-BRG-A8A-DRAINAGE-SCHEDULE.
 13. WORKS WILL REQUIRE A CONTROLLED ACTIVITIES PERMISSION FROM THE EAST ABERDEEN ENVIRONMENTAL PROTECTION AGENCY.
 14. THE CONTRACTOR'S ATTENTION IS DRAWN TO THE NEED TO UNDERTAKE WORKS IN CONFINED SPACES DURING CONSTRUCTION (EARTHWORKS INSIDE THE UNDERPASS).

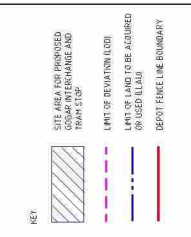


A8 Underpass Prioritised Works





- NOTES:**
1. NORTH POINT IS TO OS GRID.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PREVIOUS DRAWING'S BILLING/PROFIT DRAWINGS AND SPECIFICATIONS.
 3. DO NOT SCALE OFF THIS DRAWING, WORK ONLY TO DIMENSIONS SHOWN. ALL DIMENSIONS IN METRES.
 4. FOR GOGAR DEPOT SITE KEEP TO DIMS. MEM1010-06-DEP-000011-0001A AND 0001A.



LIST OF CHANGES SINCE PREVIOUS REVISION

NO	DESCRIPTION
01	AREA EAST OF DEPOT SITE (PROPOSED INTERCHANGE) ALTERED TO REFLECT CURRENT PROPOSAL

DEPOT PRIORITISED WORKS

NO	DESCRIPTION	DATE	BY	APP.	DATE
6	ISSUED FOR CONSTRUCTION	P1	SA	AD	16/10/10
5	ISSUED FOR CONSTRUCTION	P1	SA	AD	16/09/10
4	REVISION	P1	SA	AD	16/04/10
3	ISSUED FOR CONSTRUCTION	HP	ES	DB	16/04/09
2	REVISION	HP	ES	DB	12/02/09
1	ISSUED FOR CONSTRUCTION	HP	ES	DB	07/07/08

Issued for Construction

EDINBURGH TRAM NETWORK

PARSONS BRINCKERHOFF

MANAGEMENT CONTRACTOR

1000 BRIDGE STREET, GLASGOW G1 3TU

GOGAR DEPOT

PROPOSED MAINTENANCE & STABLING LAYOUT
SITE PLAN GENERAL ARRANGEMENT
BOUNDARY & FENCING AREA

DESIGNED BY: Paragon

DESIGNED BY: Paragon

DATE: 17/06/2009

SCALE: 1:500

PROJECT NUMBER: ULES0130-06-DEP-00016

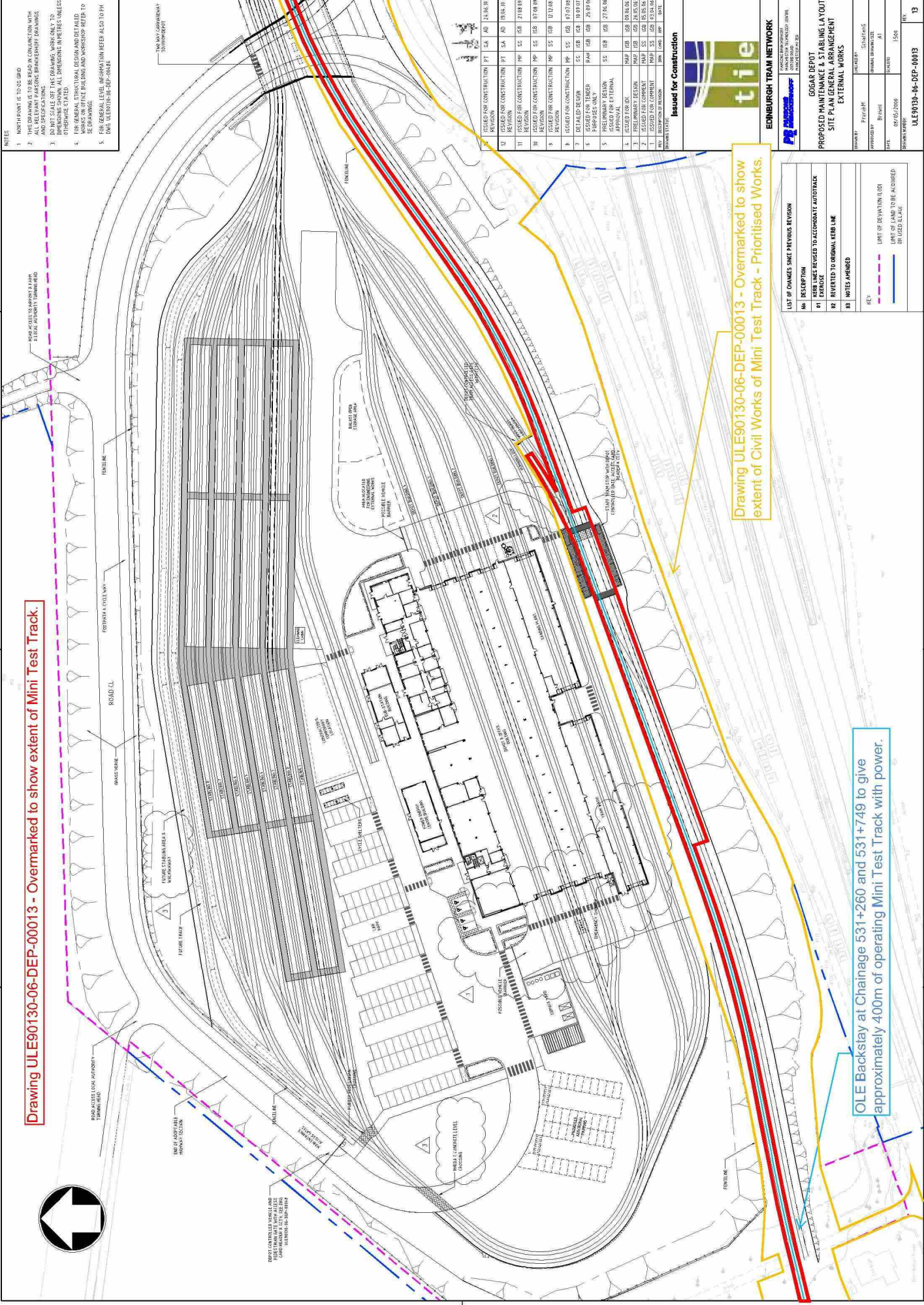
REV: 6

REVISIONS: 1



All works contained within red boundary line to be constructed as Depot Prioritised Works

Drawing ULE90130-06-DEP-00013 - Overmarked to show extent of Mini Test Track.



- NOTES**
1. NORTH POINT IS TO BE GRID
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE DRAWING TITLED 'PROPOSED MAINTENANCE & STABLING LAYOUT SITE PLAN GENERAL ARRANGEMENT EXTERNAL WORKS'.
 3. DO NOT SCALE OFF THIS DRAWING WORK ONLY TO BE USED FOR REFERENCE. ALL DIMENSIONS IN THIS DRAWING UNLESS OTHERWISE STATED.
 4. FOR GENERAL STRUCTURAL DESIGN AND DETAILED WORKS ON OFFICE BUILDING AND WORKSHOP REFER TO SEPARATE DRAWINGS.
 5. GENERAL LEVELS AND DIMENSIONS REFER ALSO TO PH 2000 VERTICAL DATUM.

NO.	DESCRIPTION	DATE	BY	CHECKED BY
12	ISSUED FOR CONSTRUCTION	PT 5/4	AD	24/06/06
13	ISSUED FOR CONSTRUCTION	PT 5/4	AD	19/06/06
14	ISSUED FOR CONSTRUCTION	PP 5/5	ES	15/8
15	ISSUED FOR CONSTRUCTION	PP 5/5	ES	21/08/06
16	ISSUED FOR CONSTRUCTION	PP 5/5	ES	15/8
17	ISSUED FOR CONSTRUCTION	PP 5/5	ES	15/8
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100	ISSUED FOR CONSTRUCTION	PP 5/5	ES	15/8

tie

EDINBURGH TRAM NETWORK

PROPOSED MAINTENANCE & STABLING LAYOUT
SITE PLAN GENERAL ARRANGEMENT
EXTERNAL WORKS

OWNER: Edinburgh Tramways Ltd
DESIGNED BY: Schaffhaus
APPROVED BY: Brown
DATE: 08/05/2006
DRAWN BY: 1550

ULE90130-06-DEP-00013

Drawing ULE90130-06-DEP-00013 - Overmarked to show extent of Civil Works of Mini Test Track - Prioritised Works.

LIST OF CHANGES SINCE PREVIOUS REVISION

NO.	DESCRIPTION	DATE
01	REVISIONS TO ACCOMMODATE AVIATION EXERCISE	
02	REFERRED TO ORIGINAL VEHICLE LINE	

NOTES AMENDED

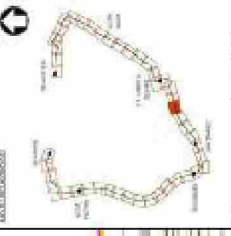
REVISED BY: Schaffhaus
DATE: 08/05/2006

LIMIT OF DEVIATION (LOD)
LIMIT OF LAND TO BE ACQUIRED (LLA)

OLE Backstay at Chaimage 531+260 and 531+749 to give approximately 400m of operating Mini Test Track with power.

1. THE DESIGNER HAS REVIEWED THE SITE PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY OF BURLINGTON'S ZONING BY-LAW AND THE BURLINGTON TRANSPORTATION PLAN.
2. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
3. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
4. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
5. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
6. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
7. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
8. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
9. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.
10. THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.

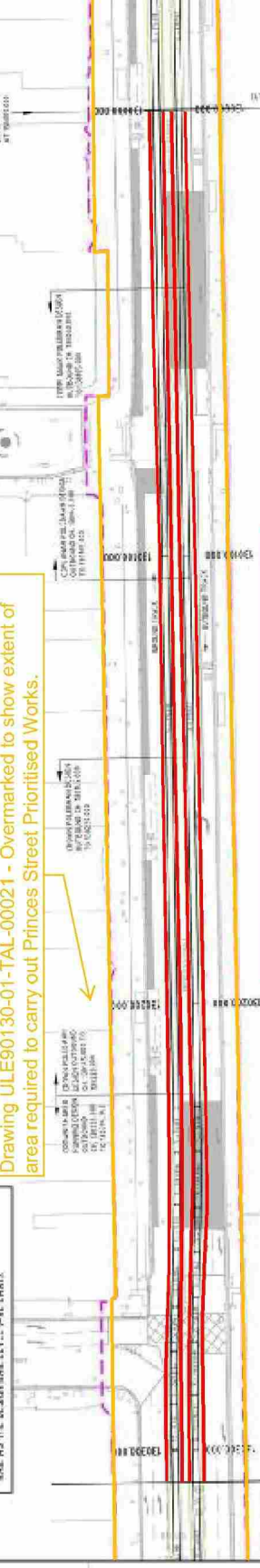
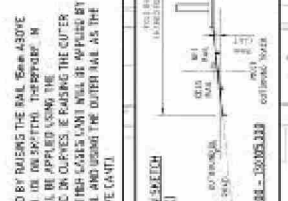
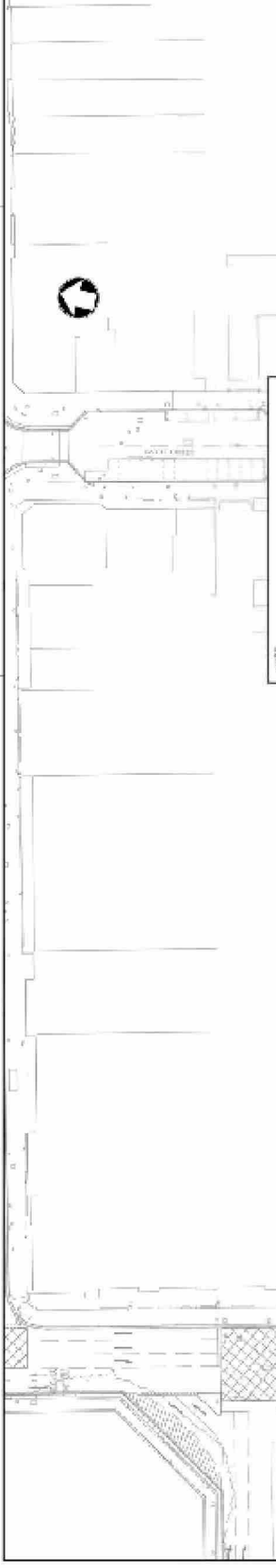
NOTE:
 THIS DRAWING IS A PRELIMINARY DESIGN DRAWING AND IS NOT TO BE USED FOR CONSTRUCTION.
 THE DESIGNER HAS REVIEWED THE CITY OF BURLINGTON'S TRANSPORTATION PLAN AND FOUND THAT THE PROPOSED RAIL ALIGNMENT IS IN ACCORDANCE WITH THE CITY'S TRANSPORTATION PLAN.



NO.	DESCRIPTION	DATE	BY	CHK'D BY
1	ISSUED FOR CONSTRUCTION	10/20/11	JL	JK
2	REVISION	11/15/11	JL	JK
3	REVISION	12/15/11	JL	JK
4	REVISION	01/15/12	JL	JK
5	REVISION	02/15/12	JL	JK
6	REVISION	03/15/12	JL	JK
7	REVISION	04/15/12	JL	JK
8	REVISION	05/15/12	JL	JK
9	REVISION	06/15/12	JL	JK
10	REVISION	07/15/12	JL	JK

Issued for Construction

EDMONTON TRAM NETWORK
 PROJECT NO. 000-1000-0000
 SHEET NO. 000-1000-0000-0000
 PROJECT TITLE: RAIL ALIGNMENT FROM 10th STREET TO 15th STREET
 PROJECT LOCATION: BURLINGTON, ONTARIO
 PROJECT NO. 000-1000-0000
 SHEET NO. 000-1000-0000-0000
 PROJECT TITLE: RAIL ALIGNMENT FROM 10th STREET TO 15th STREET
 PROJECT LOCATION: BURLINGTON, ONTARIO
 PROJECT NO. 000-1000-0000
 SHEET NO. 000-1000-0000-0000



Princes Street Prioritised Works



NOTE:
 CANT IS TO BE APPLIED BY RAISING THE RAIL SLOPE ABOVE THE DESIGN RAIL LEVEL. IN SOME CASES, CANT WILL BE APPLIED USING THE CONVENTIONAL METHOD ON CURVES. IN OTHER CASES, CANT WILL BE APPLIED BY RAISING THE RAIL AND USING THE OUTER RAIL AS THE DESIGN RAIL LEVEL. (SEE CANT)

NOTE:
 CANT IS TO BE APPLIED TO THE RAIL ONLY BY RAISING THE RAIL SLOPE ABOVE THE DESIGN RAIL LEVEL. IN SOME CASES, CANT WILL BE APPLIED USING THE CONVENTIONAL METHOD ON CURVES. IN OTHER CASES, CANT WILL BE APPLIED BY RAISING THE RAIL AND USING THE OUTER RAIL AS THE DESIGN RAIL LEVEL. (SEE CANT)

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NOTE:
 CANT IS TO BE APPLIED TO THE RAIL ONLY BY RAISING THE RAIL SLOPE ABOVE THE DESIGN RAIL LEVEL. IN SOME CASES, CANT WILL BE APPLIED USING THE CONVENTIONAL METHOD ON CURVES. IN OTHER CASES, CANT WILL BE APPLIED BY RAISING THE RAIL AND USING THE OUTER RAIL AS THE DESIGN RAIL LEVEL. (SEE CANT)

NOTES

1. DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
2. FOR STOP RAILS REFER TO RELEVANT TOP DRAWINGS.
3. FOR TRACK RAILS REFER TO RELEVANT ROAD DRAWINGS.
4. FOR STRUCTURE DETAILS REFER TO RELEVANT DRAWINGS.
5. FOR COMPOSITE DRAWINGS SHOWING TRACK, ROAD, R.E. STRUCTURES, SIGNET ETC TOGETHER, REFER TO PLANNING DRAWINGS.
6. FOR SECTIONS PROFILE DRAWINGS SEE DRAWINGS.
7. ULE90130-05-TAL-00024 TO ULE90130-05-TAL-00026.
8. ULE90130-05-TAL-00024 TO ULE90130-05-TAL-00026.
9. FOR NORMAL GROUND REFER TO S&C TRACK ALIGNMENT DRAWING.
10. FOR HORIZONTAL ALIGNMENT REFER TO TRACK NUMBER # 2016.
11. FOR HORIZONTAL ALIGNMENT REFER TO TRACK NUMBER # 2016.
12. THE REFERENCE CHAINAGE TO BE USED IS ON THE OUTER EXTERNALLY REFERENCED CAD DATA.
13. EXTERNALLY REFERENCED CAD DATA.
14. ENBURGH LINE 2 SECTION S&C SURVEY (HEB 22984) DATED 18/04/2016.
15. THE ALIGNMENT DESIGN IS RELATED TO THE SURVEY DATA CONTAINED IN FILES:-
16. S&C ANKSTATE V2.DWG
17. S&C SURVEY V2.DWG
18. S&C SURVEY V2.LED
19. RECEIVED WITH REF 2607

KEY

FILE

ONE BASED ON ASSIGNED DESIGN AUTOMATICALLY NOT INCLUDING FOR ASSIGNED DESIGN UNLESS OTHERWISE STATED. THE DOES NOT TAKE INTO ACCOUNT RAILWAY SAFETY PUBLICATION 2. DETERMINE POSITIONS OF SAFETY RELATIVE TO THE TRACKS.

TANGENT POINT

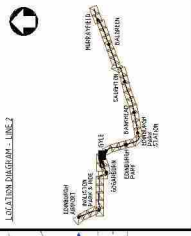
RADIUS

STRAIGHT LENGTH

LIMIT OF EXCAVATION

LIMIT OF LAND TO BE ACQUIRED OR USED

ASCENDING SURBURN - LINE 2



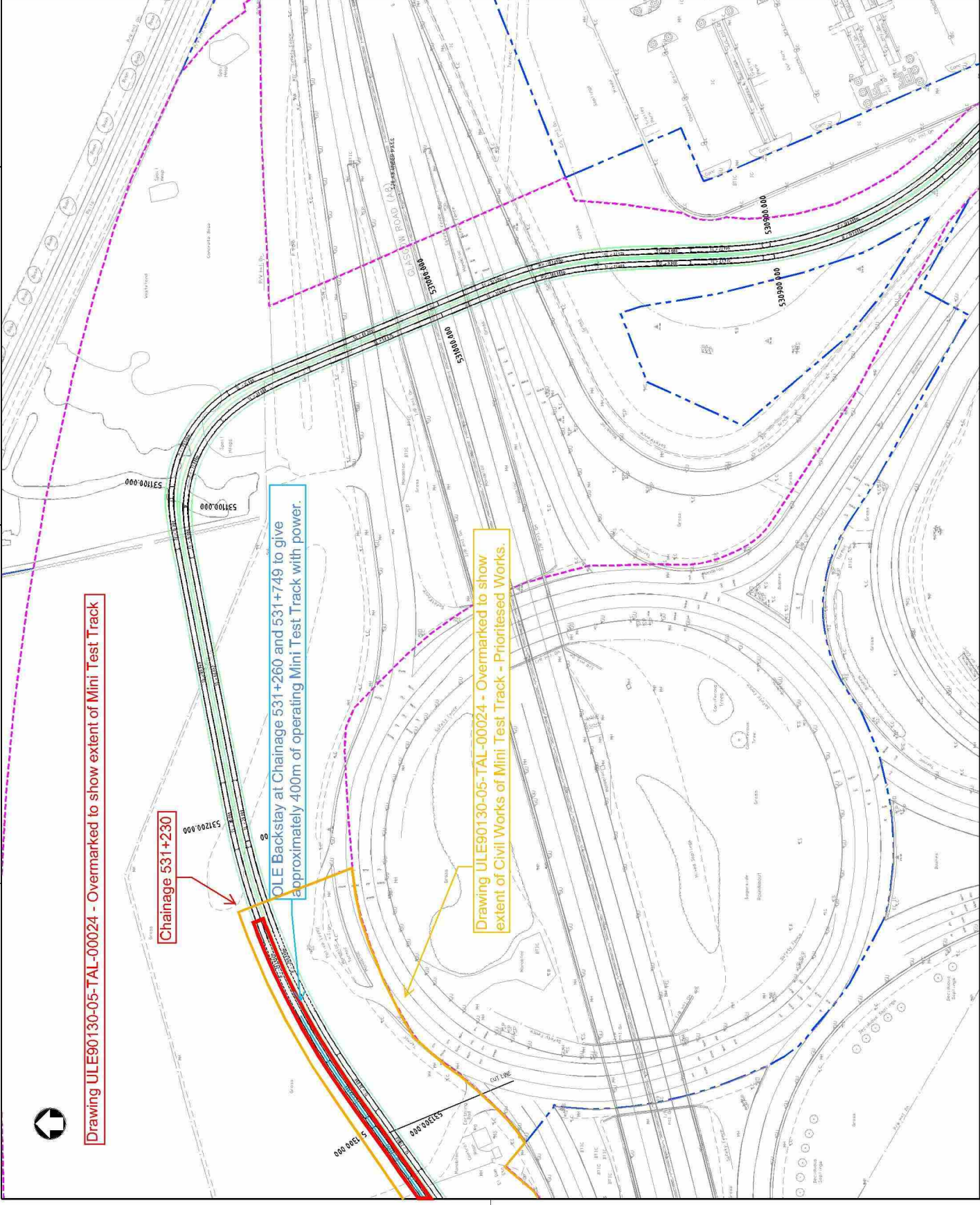
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13	DATE FOR CONSTRUCTION	26/05/2016	AT	AT
14	DATE FOR CONSTRUCTION	26/05/2016	AT	AT
15	DATE FOR CONSTRUCTION	26/05/2016	AT	AT
16	DATE FOR CONSTRUCTION	26/05/2016	AT	AT
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Issued for Construction

EDINBURGH TRAM NETWORK

EDINBURGH TRAM NETWORK
 TRAMWAY OPERATIONS
 100 ROSEBURN JUNCTION
 ROSEBURN JUNCTION TO GOGARBURN
 TRACK HORIZONTAL ALIGNMENT
 SHEET 24 OF 26
 (SUB-SECTION S1)

DESIGNED BY	SMITH	CHECKED BY	FARRELL
APPROVED BY	GILLESPIE	ISSUED DRAWING NO.	AT
DATE	27/05/2016	SCALE	1:500
DRAWING NUMBER	ULE90130-05-TAL-00024	REV	5



Drawing ULE90130-05-TAL-00024 - Overmarked to show extent of Mini Test Track

OLE Backstay at Chainage 531+260 and 531+749 to give approximately 400m of operating Mini Test Track with power.

Drawing ULE90130-05-TAL-00024 - Overmarked to show extent of Civil Works of Mini Test Track - Prioritised Works.

NOTES

1. DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. FOR STOP RAILS REFER TO RELEVANT TOP DRAWINGS.
4. FOR TRACK RAILS REFER TO RELEVANT TRACK DRAWINGS.
5. FOR STRUCTURES DETAILS REFER TO RELEVANT DRAWINGS.
6. FOR COMPOSITE DRAWINGS SHOWING TRACK, ROADS, R.E. STRUCTURES, STOPS ETC TOGETHER, REFER TO PLANNING DRAWINGS.
7. FOR SET OUTS PROFILE DRAWINGS SEE DRAWINGS.
8. ULE90130-05-TAL-00026 TO ULE90130-05-TAL-00028.
9. FOR MORE DETAILS REFER TO ULE90130-05-TAL-00026 TO ULE90130-05-TAL-00028.
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KEY

ONE BASED ON ASSUMED DESIGN. AUTOMATICALLY NOT INCLUDING FOR ASSUMPTIONS AND LIMITATIONS. NB. THE DOES NOT TAKE INTO ACCOUNT RAILWAY SAFETY PUBLICATION 2. DETERMINE POSITIONS OF SAFETY RELATIVE TO THE TRACKS.

TANGENT POINT
RADIUS
STRAIGHT LENGTH
LIMIT OF ROADWAY
LIMIT OF LAND TO BE ACQUIRED OR USED

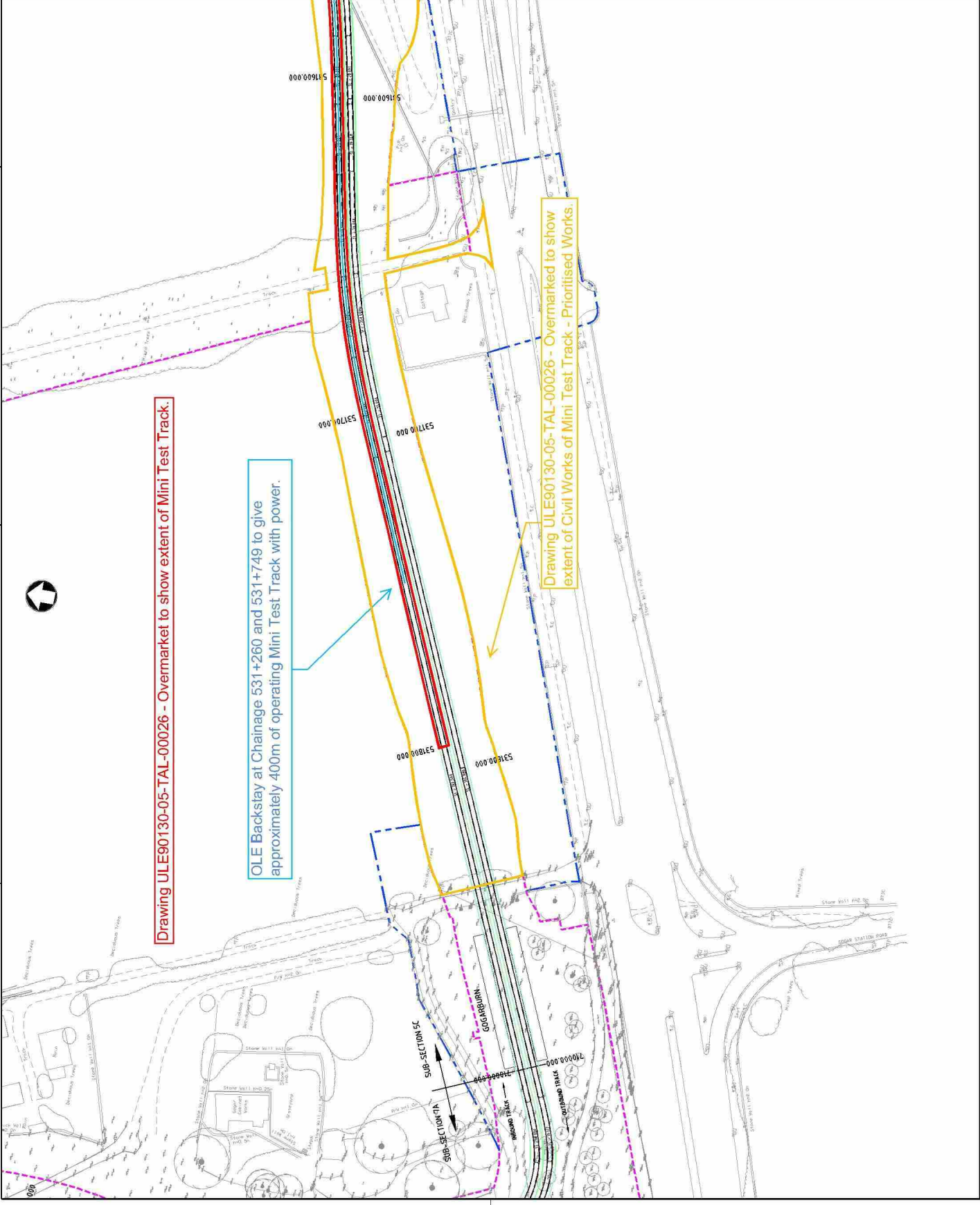
ASCENDING GRABURN - LINE 2

EDINBURGH TRAM NETWORK

ROSEBURN JUNCTION TO GOGARBURN TRACK HORIZONTAL ALIGNMENT SHEET 26 OF 26 (SUB-SECTION 5C)

ISSUED FOR CONSTRUCTION

1.	DESIGN NO.	ULE90130-05-TAL-00026
2.	DATE	20/05/2016
3.	ISSUED BY	AT
4.	ISSUED FOR	CONSTRUCTION
5.	ISSUED TO	EDINBURGH TRAM NETWORK
6.	ISSUED FROM	EDINBURGH TRAM NETWORK
7.	ISSUED BY	AT
8.	ISSUED FOR	CONSTRUCTION
9.	ISSUED TO	EDINBURGH TRAM NETWORK
10.	ISSUED FROM	EDINBURGH TRAM NETWORK



Drawing ULE90130-05-TAL-00026 - Overmarket to show extent of Mini Test Track.

OLE Backstay at Chainage 531+260 and 531+749 to give approximately 400m of operating Mini Test Track with power.

Drawing ULE90130-05-TAL-00026 - Overmarked to show extent of Civil Works of Mini Test Track - Prioritised Works.