

Edinburgh Tram Network

SDS Progress Report -

Period 3-9

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1 TOP ISSUES

1. Late issue of Instruction for Design Support period 3-8 and Outstanding Instruction for Extended Construction and Design Support for next period (3-9) and 3-10
2. Tram Stop Informatives closeout, including shelter and **tie** changes to requirements.
3. Resolution of Outstanding SDS Changes inc Misalignment Changes for Tram Stops, Substation and Earthing and Bonding
4. Receipt of outstanding information to complete design.
6. Picardy Place and Elder Street Closeout for original TAA
7. CEC Change Requirements for Picardy Place
8. Grosvenor Street revisions and OLE instruction
9. Depot Design Completion
10. Section 3 TAA Closeouts
11. Technical approval for OLE bases in Section 1 requires **tie** letter to CEC and CEC signoff.
12. Lack of Vehicles for ECS staff
13. Change Orders for the Misalignment changes for OLE, Earthing and Bonding, Tram Stops and Substations.

2 COMMERCIAL

2.1 General

This report covers Period 08th November to 03rd December '10. The progress is detailed for the time period of 25th October '10 to 12th November '10, during which actual events occurred. There are several critical issues outstanding on the project. These are presented per the drawings in Appendix A.

2.1.1 Applications for Payment

The certification of the Applications for Payment is up to date, with the only significant discrepancy being on the valuation for a few change orders, which are relevant to interpretation of percentage completes or Pre Novation changes. There is minimal outstanding payment in ECS and ATR's and these are now worked through on a periodic basis, which is a welcomed progression from previous periods. There are very few ATR's outstanding now, following at productive meeting (SDS/BSC) on 21st October 2010. However the ATR's relating to Siemens works are not received any response, which is hindering progress for design and financial closeout.

The Extended Construction and Design Support organisation charts were instructed late for this period (3-8) and are still not finalised due to amendments agreed a week into the period. The next period (3-9) has not been agreed with tie and therefore not instructed. , SDS requires more notice of what is required - this is not in line with the Novation Agreement and requires resolution.

2.1.2 Change Control

Approximately £3.25 million worth of Change Instruction has been instructed to SDS to date. This is a progression in terms of the change process, and SDS is keen to work on this success to 'unlock' other outstanding changes, including the Development workshop changes, and new changes that are instructed. SDS requires updating on the Development Workshop Changes in particular, as we are not invited to the meeting with **tie** about these and do not know the status of commercial resolution.

SDS, BSC and **tie** discussed the 'Pre Novation' changes at the Change Liaison meeting on 19th June 2010, and **tie** have recently rejected these changes. SDS continues to chase **tie** to resolve these 2 changes, and will advise BSC on progress.

SDS still awaits Change Order for DCR0036 (BSC to confirm scope) as per the Design Completion works. .

2.1.3 ATR's

SDS await response to 3 no. ATR's from BSC, ATR0156, ATR0180 & ATR0190.

2.2 Summary of Changes

- Changes Identified; 301
- Change Notification Received; 178
- Change Estimates Submitted; 181
- Changes Withdrawn/Closed/ Superseded; 134
- Change Instructions Received; 131

2.3 Programme

Version 64 of the programme was issued to BSC at the beginning of the period.

Version 65 of the programme will be released next reporting period.

3 APPROVALS

3.1 General

SDS is progressing to obtaining the final planning and technical approvals to complete the design. From a total of 270 planning and technical approvals:

- 80% are approved (217).
- 10% are pending approval (27).
- 10% are to be submitted (26).

Current status (today) is:

90% Planning Approvals granted.

73% Technical Approvals granted.

The remaining outstanding approvals are either: 1) to be approved imminently, 2) have been subject to re-prioritisation and long standing changes, or 3) are new with recent changes instructed. Some of the approvals have been identified as obsolete and are no longer included in the numbers (hence affecting the overall numbers month to month. This will continue to be reviewed as the changes are moved forward and it is understood if formal re-approval is required. However, this will not be known until either the work is further progressed or clarification is received by SDS on various topics.

In order to complete to CEC:

- Roads Approvals and Prioritisation – Section 1C2 and the entirety of Section 3 need to be reviewed and approved by CEC. SDS understands that this is being completed in line with a prioritisation list.
- Instruct known changes.
- Freeze on any future changes to allow current scope to progress to completion.

The CEC/tie/BSC/SDS Approvals Task Force meets monthly. The next meeting will be on the 23rd November 2010.

Various changes being instructed as part of the approvals process will also require updates to the planning approvals. These items have been included in this report upon receipt of the formal instructions. The variations programme has been updated in line with BSC construction priorities following discussion with Simon Nesbit. SDS is currently working to this programme unless instructed otherwise.

Variations to the planning approvals due to technical comments / Siemens designs are also not included; however recent meetings between SDS and BSC have identified an agreement in principle on how to move forward with overlapping requirements. SDS looks forward to the formalisation of this discussion by BSC.

The Approvals Look Ahead is emailed to BSC on a monthly basis to inform Task Force. The approvals tracker can be provided on an as needed basis.

3.2 Systemwide

3.2.1 Outstanding:

- Scottish Water Approval/Consents. Formal process now agreed and SDS has received the majority of the formal approvals. Section 3 approvals and Section 1C1/2 outstanding for reasons out with SDS control. Recent communication from SW indicates that Section 3A and 3B are now being progressed. SDS has written to BSC on this issue.
- All Scottish Water submissions have to be reissued due to updates of the design due to changes and BSC infrastructure/component design. To date all have been submitted except 1C1/2, 5B, 5C and section 7.
- SDS has issued a suit of standard Scottish Water details to Business Stream. These are under review by Business Stream and SDS await comments. These will be applied to each of the new connections made to the Scottish Water infrastructure.

3.2.2 Progress

a) General

- DCR0036 works for reconstituted Planing VE is approximately 0% complete. Scope to be confirmed by tie/BSC and instructed.
- DCR0144 for Stage E drawings approximately 0% complete. SDS has issued letters to BSC identifying the current status of the issue raised by CEC and proposed resolution. This requires early resolution of the on-going tram stop issues.
- DCR0214 works for provision of 110v power supply approximately 95% complete.
- DCR0212 works for Tramstop Development Workshop approximately 95% complete.
- DCR0213 works for Substation Development Workshop approximately 95% complete. This takes account of updates to the latest Siemens Sub-station requirements and final details for cable pulling.
- DCR0216 works for Drainage Development Workshop approximately 92% complete.

b) TRO

- A meeting was held between BSC / SDS / tie to resolve the outstanding change orders for TRO. SDS to provide formal position on outstanding changes.
- tie to confirm level of assistance they require moving forward.
- BSC forwarded letter to SDS containing tie letter with six queries which require response / assistance. tie confirmed via email that this was the total of queries to be received by BSC.

c) Traffic Modelling

- SDS received comments from CEC outlining CEC issues with modelling. SDS has reviewed and developed draft responses.
- SDS held a meeting with CEC on 17 June 2010 to go through in detail the queries raised. Further consultation and formal response to CEC letters to be provided as an outcome.
- SDS has raised a letter to BSC highlighting new issues arising from this meeting.
- Preliminary work has commenced to review the newly instructed change for Picardy Place re-design to take on board the additional lane and throughput within the scheme. The overall effect of the additional lane will be evaluated both for junction specific and the wider area effect.

d) Track and Trackform

- DCR0125 works for trackform ground improvement and vibration mitigation approximately 90% complete.
- SDS has been instructed to undertake additional analysis to review ballasted areas.

- SDS undertaking revisions to tram stop design to accommodate revised dimensions for CAF DKE. BSC to issue instruction.
- SDS has produced a design for the heavily trafficked areas of the roads sections for Rheda C track form using proposals that were the result of a meeting of BSC track from experts.
- SDS have also produce a solution for the sections not deemed by BSC to be heavily trafficked for future construction of the track in street.
- Roads Design
- Appendix 7/1 designs for Princes Street submitted and approved by CEC. CEC have signed off original appendix 7/1. Updated appendix to be provided to replace original 7/1.
- Meeting held with CEC to go through comments received. SDS reviewing comments and preparing responses.
- DCR0140 works for Roads construction analysis of results approximately 33% complete. Full testing requirements awaited.

e) OLE and OLE Foundations

- DCR0127 for Building Fixing Owner agreements is approximately 90% complete.
- DCR0177 works to amend OLE system documents approximately 90% complete.
- DCR0178 works to amend building fixing locations approximately 25% complete.
- DCR0179 works to provide alternative lighting design to accommodate relevant aspects of BSC OLE design 95% complete.
- DCR0180 works for development workshop approximately 100% complete.
- DCR0227 works for OLE technical and planning alignment 90% complete.
- DKE checks are ongoing throughout the route to identify from Revision F (pole positions required by Siemens) any conflict or encroachment within the RSP 2 Guidelines.

3.3 Section 1

3.3.1 Outstanding – Planning

- 1/18 – Cathedral Lane Substation Redesign Full Planning – Instruction required.
- 1/18a – Cathedral Lane Substation Redesign Building Warrant – Instruction required.
- Variations to Prior Approvals to deal with Siemens OLE repositioning and alignment with technical designs underway.

3.3.2 Outstanding - Technical

- 1A - DCR0202 (Forth Ports Drainage) – advised by CEC that this is a required approval. Instruction received. **tie** has informally advised that Forth Ports drainage

has now been adopted by CEC. Formal verification required. Approximately 90% complete.

- 1A2 – DCR0232 - Tower Place Bridge revisions – design underway.
- 1A3 – DCR0175 (Revised Road 8 Drainage) - approved by CEC. IFC issued.
- 1A4 – DCR0141 (Roads) – design on hold by tie.
- 1A4 – DCR0147 (Roads) – with CEC for approval
- 1A4 – DCR0225 (Roads) – high-low level connection at Lindsay Road Retaining Wall – awaiting instruction.
- 1A4 – DCR0225 (Structures) – high-low level connection at Lindsay Road Retaining Wall – awaiting instruction
- 1A4 – solution to resolving level difference identified in field works on Lindsay Road has been submitted to CEC. Awaiting approval.
- 1C1 Drainage with designers awaiting confirmation of design.
- 1C2, Roads with CEC. Being held due to prioritisation and CEC issues with modelling.
- 1C3 – DCR0215 (Frederick Street) – with CEC for approval.
- 1D – DCR0255 (Grosvenor Street) – awaiting instruction.
- Sectionwide – revisions to Roads and Street Lighting due to Siemens OLE positions (DCR0179 and DCR0227) with CEC for approval.
- Sectionwide – Informatives being submitted to BSC and discussed with CEC on bi-weekly basis. Closeout of issues progressing.

3.3.3 Subsection 1A1 – Dock Gates to Foot of the Walk

a) Roads, Street Lighting, Landscaping, Drainage 1A1

- IFC already issued.
- Closeout Report issued to CEC.
- Closeout comments received. IFC re-issued based on closeout comments.
- DCR0243 - CEC raised new issue about additional wider area signing. SDS sent letter to BSC. Change order required.
- SDS completed detail design of private wall relocation to south of Port of Leith tram stop. Planning approval previously achieved. IFC issue immanent.
- CEC have identified an issue with turning vehicles at Laurie Street from Constitution Street. SDS designers provided options to CEC. Awaiting CEC confirmation of preference..
- Various informatives issued to CEC TAA for closeout.

b) Tram Stop – Bernard Street (Ch 102+240)

- IFC already issued.

c) Tram Stop – Foot of the Walk (Ch102+700)

- IFC already issued.

3.3.4 Subsection 1A2 – Victoria Docks Entrance Bridge to Dock Gates

a) Roads, Street Lighting, Landscaping, and Drainage

- IFC already issued.
- Closeout Report issued to CEC.
- Closeout comments received. IFC re-issued based on closeout comments.
- DCR0240 - Forth Ports raised new issued about adding additional access points near the casino. SDS sent letter to BSC. Change order required.

b) Tram Stop – Port of Leith (Ch 101+780)

- IFC already issued.

c) Victoria Dock Entrance Bridge – S16 (Ch 101+370)

- IFC already issued.
- DCR0249 - Additional change to containment provision required. Instruction required.

d) Tower Place Bridge - S17 (Ch101+470)

- IFC already issued.
- DCR0232 - Change notice issued to review ramp, coping layouts, and Siemens OLE design. BSc to confirm actual scope before SDS can provide an estimate

3.3.5 Subsection 1A3– Ocean Terminal to Victoria Docks Entrance Bridge

a) Roads, Track, Street Lighting and Landscaping

- Roads issued to CEC for TAA close-out comments in December 2009.
- IFC issued.
- Planning condition by CEC in conflict with CEC TAA approval. SDS working with CEC for resolution.
- Forth Ports - Final agreement between CEC and Forth Ports on the proposed bypass road (Road 8) pending.
- SDS has requested copy of agreement with Scottish Government and designs for the movement of the access gate to the Scottish Government complex with Forth Port has indicated is being completed. SDS has completed review and assessment of required gate move in line with request by BSC and ATR approved.
- SDS issued drawing under ATR0102 showing potential road shift as requested by tie.

- SDS provided detail finishes drawings for frontage of Ocean Terminal to **tie** (via BSC) for concurrence with CEC / FP with respect to revised Forth Ports agreement. No response received to date.
- b) Drainage – Subsection 1A3 – Ocean Terminal to Port of Leith
- Approved by CEC and Scottish Water.
 - Revised design prepared to align with concept on Forth Ports Employers Requirements.
 - Issued to **tie** to obtain Forth Ports concurrence.
 - SDS responded to letter points to assist BSC in response to **tie**.
 - SDS revised drainage per agreement with **tie**. SDS provided revised design to **tie** for **tie** to obtain Forth Ports acceptance with respect to future provision. Confirmation received.
 - Approval granted by CEC on supplemental Road 8 drainage. IFC to be issued immanently.
- c) Tram Stop – Ocean Terminal (Ch 100+950)
- Approved by CEC. Comments addressed.
 - IFC issued.

3.3.6 Subsection 1A4

- a) Roads, Track, Street Lightning and Landscaping – Subsection 1A4 – Newhaven to Ocean Terminal
- Roads issued to CEC for TAA close-out comments in April 2009 and updated for Lindsay Road in May 2010.
 - DCR0147 works for change due to traffic signal modification outside LOD requested by CEC – works 90% complete. Awaiting CEC approval.
 - Closeout report issued to CEC (not including new changes noted above). CEC letter of 18 September 09 indicates refusal to confirm closeout without new changes being incorporated.
 - DCR0244 issue with new radio mast. Change order required.
 - Solution to resolving level difference identified in field works on Lindsay Road has been submitted to CEC.
- b) Drainage – Subsection 1A4 Newhaven to Ocean Terminal
- Prior Approval granted.
- c) Tram Stop – Newhaven (Ch 100+080)
- IFC already issued.
 - SDS provided additional details on arrestor bed as requested. No response received to date.

d) Lindsay Road Retaining Wall – W1 (Ch 100+170)

- IFC already issued.

e) Substation – Leith Sands – SS16 (Ch 100+570)

- DCR0203 - Change due to Forth Ports having completed construction of a new substation and access drive through this area. No as-built information available. Works for redesign of substation approximately 90% complete.
- SDS responded to BSC letter containing tie letter regarding the lack of response to SDS TQ.

3.3.7 Subsection 1B

a) Roads, Track, Drainage, Street Lighting, Landscaping, and Drainage – Subsection 1B

- IFC already issued.
- Closeout Report Issued to CEC. Acceptance received with comments.
- CEC provided letter noting closeout of Road Safety Audit and requirements.
- SDS working with BSC on closeout of drainage issues raised.
- DCR0227 works approximately 90% complete.
- Report issued to BSC for transmittal to tie / ICP noting requirement for variation from guidance. No response received to date.
- Various informatives issued to CEC TAA for closeout.

b) Tram Stop – Balfour Street (Ch 110+670)

- IFC already issued.

c) Substation – Leith Walk – SS11 (Ch110+380)

- IFC already issued.

d) Leith Walk Railway Bridge

- DCR0235 – Special trackform on bridge. SDS issued estimate. Change order required.

3.3.8 Subsection 1C1 – Section 1B to north of Annandale Street

a) Roads, Track, Street Lighting, Landscaping, and Drainage – Subsection 1C1 – London Road

- SW approved drainage via email. Design to be submitted to Business Stream and Scottish Water for formal approval with 1C2 due to interrelationship.
- DCR0227 works approximately 90% complete. Awaiting CEC approval.
- Various informatives issued to CEC TAA for closeout.

b) Tram Stop – McDonald Road (Ch110+670)

- IFC already issued.

- Revised IFC issued reflecting shift in Tramstop due to levels issues arising.

3.3.9 Subsection 1C2 – North of Annandale Street to Broughton Street

a) Roads, Track, Street Lighting and Landscaping – Subsection 1C2 – London Road to Picardy Place

- TAA submittal with CEC for approval. SDS submitted supplemental information based on initial comments received from CEC via letter.
- Prior Approval granted.
- SW approved drainage via email. Design to be submitted to Business Stream and Scottish Water for formal approval with 1C1 due to interrelationship.
- Awaiting Detailed Design Change for Picardy Place to be approved.
- DCR0227 works approximately 90% complete.

b) Substation – Cathedral Lane – SS12 (Ch120+400)

- Building Warrant granted.
- Full planning permission granted.
- IFC Issued.
- DCR0167 works for developer request to provide new building works approximately 20% complete. Survey completed.
- DCR0256 - BSC requested SDS to stop DCR0167 and progress with original design to incorporate Siemens requirements. Confirmed via email on 07 April 10 (S. Nesbitt). Estimate submitted. Change Order required.
- Design works on Cathedral Lane Sub-station is on hold. Instruction to re-commence design on original scheme or new scheme required from tie.

c) Tram Stop – Picardy Place (Ch120+600)

- TAA submittal with CEC for approval. Initial informal comments from CEC on submittal addressed
- Prior Approval granted.

3.3.10 Subsection 1C3 – Broughton Street to Section 1D

a) Roads, Track, Street Lighting and Landscaping – Subsection 1C3 – York Place

- IFC already issued.
- Closeout report issued to CEC. Acceptance received with comments.
- DCR0219 works for new Frederick Street crossing approximately 90% complete. Meeting held with CEC on site to go through requirements. Design with CEC for approval. Letter received and SDS has discussed with CEC. Final approval awaited.
- Letter received from CEC on 18 September 09 indicating changes required to the Elder Street junction and removal of bus lane along York Place. Change order required.
- DCR0227 works approximately 90% complete.

- Various informatives issued to CEC TAA for closeout.
- b) Tram Stop – Princes Street (Ch121+950)

- IFC already issued.

- c) Tram Stop – St Andrew Square (Ch121+150)

- IFC already issued.

3.3.11 Subsection 1D

- a) Roads, Track, Drainage, Street Lighting and Landscaping – Subsection 1D

- IFC already issued.
- Closeout Report issued to CEC. Acceptance received with comments.
- DCR0193 works for Haymarket street light approximately 20% complete.
- DCR0211 works for West Maitland tunnel design approximately 95% complete.
- CEC have indicated the potential that they may wish to change the concept at Torphichen Street. Clarification required and instruction as appropriate required.
- DCR0255 - Requirement to change kerb lines and traffic movements at Grosvenor Street. Resolution of TRO change orders required. SDS issued letter to BSC. Change order required.
- DCR0227 works approximately 90% complete.
- Various informatives issued to CEC TAA for closeout.

- b) Tram Stop – Shandwick Place (Ch130+710)

- DCR0011, 11a works for Shandwick Place preferential treatments complete.
- IFC already issued.

3.4 Section 2

3.4.1 Outstanding

- New wall at Balbirnie Place identified. Discussed with Planning at informal consultation. No technical approval required (Category 0).

3.4.2 Subsection 2A

- a) Roads, Track, Street Lighting and Landscaping – Subsection 2A

- Revised street lighting Issued for Construction which deals with agreed Operational Design Review comment.
- Revised design for Phase 1A/1B separation (Roseburn Delta / cycleway) submitted to CEC Roads authority for TAA approval. Drawings subsequently withdrawn after discussion with tie on scope. Requires approval of Section 3A for IFC. New design works complete.
- DCR0227 works approximately 90% complete.

- b) Drainage
 - IFC already issued.
- c) Substation – Russell Road – SS03 (Ch 200+790)
 - IFC already issued
- d) Russell Road Bridge – S20 (Ch 200+770)
 - IFC already issued
- e) Substation – Haymarket – SS02 (Ch 200+070)
 - Prior Approval granted and Siemens now to complete the design and issue the IFC.
- f) Tram Stop – Haymarket (Ch 200+070)
 - IFC already issued.
 - Revised design issued to CEC to deal with comments received on bus and tram shelter location and integration.
- g) Haymarket Station Viaduct – S19 (Ch 200+020)
 - IFC already issued.
 - DCR0169 works for new cycle provision on steps 0% complete. **tie** have informally discussed with CEC and indicated via email to SDS that this change may not be required. **tie** to confirm change status with BSC. SDS instructed by BSC to complete as required as part of CDC. SDS queried CEC via email on 10 March 10 for status of closeout. SDS understands that this change is no longer required. BSC to confirm.
 - DCR0250 – changes to internal retaining wall requested. Change order required.
- h) Verity House Access road retaining wall
 - IFC already issued.
- i) Crew Relief Facility
 - Building Warrant granted.
 - IFC issued.
 - SDS attended meeting with **tie** / BSC on 04 February 10 to go through **tie** requested changes. **tie** has now reverted back to approved design. SDS responded to additional queries from **tie** to BSC. ATR for this meeting approved.
- j) Balbirnie Place Wall
 - New wall identified. Discussed with planning at informal consultation. No technical approval required (Category 0).
 - Submitted to CEC Structures TAA for confirmation.

3.5 Section 3

3.5.1 Outstanding – Planning: None

3.5.2 Outstanding - Technical:

- All 6 technical approvals that are with CEC for consideration are currently on hold due to the agreed prioritisation list between **tie** and CEC. SDS is in delay with respect to these items.
- Drainage information submitted to Scottish Water (SW). SW has recently contacted SDS looking for a meeting to discuss process. SDS provided clarification to **tie** email on this issue. SDS has written formally to BSC on this issue.

3.5.3 Subsection 3A

a) Roads, Track, Street Lighting and Landscaping – Subsection 3A

- Prior Approval achieved.
- Roads, Drainage and Street Lighting IFC is outstanding as TAA comments are outstanding. Section 3 has been de-prioritised by CEC therefore it is not know at present when comments are likely to be received. Letter sent to BSC 08 July 2008. **tie** responded 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. **tie** stated expected IFC submission 09 August 2008, which was not achieved. The de-prioritisation is apparently as **tie** to CEC agreement. SDS awaits approval and any comments.

b) Drainage

- Submittal with SW for approval.
- Section 3 has been de-prioritised by CEC therefore it is not know at present when comments are likely to be received. Letter sent to BSC 08 July 2008. **tie** responded 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. **tie** stated expected IFC submission 09 August 2008, which was not achieved. The de-prioritisation is apparently as **tie** to CEC agreement. SDS awaits approval and any comments.

c) Tram Stop – Crewe Toll for Western General (Ch 303+010)

- IFC already issued.

d) Roseburn Corridor Retaining Structure H (Ch 302+600) (Ch 303+030)

- IFC already issued.

e) Tram Stop – Telford Road (Ch 302+604)

- IFC already issued.

f) Roseburn Corridor Retaining Structure G (Ch 302+300) (Ch 302+600)

- IFC already issued.

- g) Telford Road Bridge – S10 (Ch 302+220)
 - IFC already issued.
- h) Groathill Road South Bridge – S09 (Ch 302+010)
 - IFC already issued.
- i) Substation – Craigleith – SS13 (Ch 301+960)
 - Prior Approval granted and Siemens now to complete the design and issue the IFC.
- j) Roseburn Corridor Retaining Structure F (Ch301+900) (Ch 302+300)
 - IFC already issued.
- k) Tram Stop – Craigleith (Ch 301+860)
 - IFC already issued.
- l) Queensferry Road Bridge – S07 (Ch 301+700)
 - IFC already issued.
- m) Holiday Inn Access Bridge – S07 (Ch 301+630)
 - IFC already issued.
- n) Roseburn Corridor Retaining Structure E (Ch 301+600) (Ch 301+900)
 - IFC already issued.
- o) Craigleith Drive Bridge – S06 (Ch 301+320)
 - IFC already issued.
- p) Roseburn Corridor Retaining Structure D (Ch 301+200) (Ch 301+600)
 - IFC already issued.
- q) Ravelston Dykes Bridge – S05 (Ch 300+960)
 - IFC already issued.
- r) Roseburn Corridor Retaining Structure C (Ch 300+900) (Ch 301+200)
 - IFC already issued.
- s) Tram Stop – Ravelston (Ch 300+860)
 - DCR0005 works for landscaping completed.
 - IFC already issued.

- t) St George's School Footbridge – S04 (Ch 300+650)
 - IFC already issued.
- u) St George's School Access Bridge – S03 (300+640)
 - IFC already issued.
- v) Roseburn Corridor Retaining Structure B (Ch 300+500) (Ch 300+900)
 - IFC already issued.
- w) Coltbridge Viaduct – S02 (Ch 300+470)
 - IFC already issued.
- x) Tram Stop – Roseburn (Ch 300+260)
 - IFC already issued.
- y) Roseburn Terrace Bridge – S01 (Ch 300+210)
 - IFC already issued.
- z) Roseburn Corridor Retaining Structure A (Ch 300+200) (Ch 300+500)
 - IFC already issued.

3.5.4 Subsection 3B

- a) Roads, Track, Street Lighting and landscaping – Subsection 3B
 - Roads, Drainage and Street Lighting IFC is outstanding as TAA comments are outstanding. Section 3 has been de-prioritised by CEC therefore it is not know at present when comments are likely to be received. Letter sent to BSC 08 July 2008. **tie** responded 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. **tie** stated expected IFC submission 09 August 208, which was not achieved. The de-prioritisation is apparently as **tie** to CEC agreement. SDS awaits approval and any comments.
- b) Drainage – Subsection 3B
 - Submittal with SW for approval.
 - Section 3 has been de-prioritised by CEC therefore it is not know at present when comments are likely to be received. Letter sent to BSC 08 July 2008. **tie** responded 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. **tie** stated expected IFC submission 09 August 208, which was not achieved. The de-prioritisation is apparently as **tie** to CEC agreement. SDS awaits approval and any comments.
- c) Tram Stop – Caroline Park (Ch 311+310)
 - IFC already issued.

d) Substation – Granton Mains East – SS14 (Ch 310+950)

- Prior Approval granted and Siemens now to complete the design and issue the IFC.

e) Tram Stop – West Pilton (Ch 310+670)

- DCR0067 works for annotated drawings complete.
- IFC already issued.

f) Crewe Road Gardens Bridge – S12 (Ch 310+390)

- IFC already issued.

3.5.5 Subsection 3C

a) Roads, Track, Street Lighting and Landscaping – Subsection 3C

- Roads, Drainage and Street Lighting IFC is outstanding as TAA comments are outstanding. Section 3 has been deprioritised by CEC therefore it is not know at present when comments are likely to be received. Letter sent to BSC 08 July 2008. **tie** responded 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. **tie** stated expected IFC submission 09 August 2008, which was not achieved. The deprioritisation is as **tie** to CEC agreement. SDS awaits approval and any comments.

b) Drainage – Subsection 3C

- Submittal with SW for approval.
- Section 3 has been de-prioritised by CEC therefore it is not know at present when comments are likely to be received. Letter sent to BSC 08 July 2008. **tie** responded 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. **tie** stated expected IFC submission 09 August 2008, which was not achieved. The de-prioritisation is apparently as **tie** to CEC agreement. SDS awaits approval and any comments.

c) Tram Stop – Saltire Square (Ch 320+370)

- IFC already issued.

d) Tram Stop – Granton (Ch 321+120)

- IFC already issued.

e) Substation – Granton Road – SS15 (Ch 400+020)

- Prior Approval granted and Siemens now to complete the design and issue the IFC.

3.6 Section 5

3.6.1 Outstanding - Planning:

Approvals:

- 5/07d – Murrayfield Accommodation Works (Advertising Consent). Change order has been received. Consultation with CEC underway.

- 5/23 – Roseburn Street Bridge – new prior approval required to accommodate change in design. Informal consultation underway, CEC requested additional changes at pre-submittal meeting on 08 February. BSC to advise on way forward.
- 5/24 – Gogar Interchange. Prior approval submitted and pending consideration.
- 5/30 - Tram Stop Gogarburn. Change Order received. Design progressing. Approximately 70% complete. Informal consultation held with CEC Planning.

Building Warrants:

- 5/05c - JB McLean – revised application submitted, pending consideration.
- 5/07c – Murrayfield Accommodation Works. Application submitted and pending consideration.
- 5/24a – Building Warrant for Gogar Interchange – Informal consultation started with CEC.
- Potential demolition warrants required at properties 96 and 101. Instruction required for SDS to progress. Clarification required on scope.

3.6.2 Outstanding - Technical:

- Revised Roseburn Street Bridge and retaining structures – revised designs have been issued to CEC for review and approval.
- Turning Head Lighting – submitted to NWR if required.
- W18 OLE interface – To be submitted if new approval is required.
- S21E OLE interface – To be submitted if new approval is required.
- S22A OLE interface – To be submitted if new approval is required.
- S23 OLE interface – To be submitted if new approval is required.
- S24 OLE interface – To be submitted if new approval is required.
- S25 OLE interface – To be submitted if new approval is required.
- S26 OLE interface – To be submitted if new approval is required.
- Gogar Interchange Retaining Wall – CEC – design underway
- Gogar Interchange Retaining Wall – NWR – design underway
- DCR0132 – RBS / Gogarburn Tram Stop – design underway
- New wall identified west of Carrick Knowe Bridge.

3.6.3 Subsection 5A

a) Roads, Track, Street Lighting and Landscaping – Subsection 5A

- DCR0201 works for Network Rail Turning head lighting submitted to NWR for acceptance.
- Revised design for Roseburn Street Bridge VE submitted for approval.

b) Drainage – Subsection 5A

- IFC already issued.
- Revised design for Roseburn Street Bridge VE submitted for approval.

- c) Balgreen Road Tram Bridge – S22 (Ch 511+400)
- IFC already issued
- d) Balgreen Road Network Rail Access Bridge (Ch 511+410)
- IFC issued.
 - DCR0016 works for amended technical design complete.
 - Design issued to Network Rail and CEC. Form B approval received from NWR.
 - Minor comments received from CEC via email. SDS has addressed.
- e) Baird Drive Retaining Wall – W8 (Ch 511+190)
- IFC already issued
- f) Water of Leith Bridge – S21E (Ch 511+060)
- IFC already issued.
 - Revised IFC issued based on DCR0076 works for sewer / pile conflict.
- g) Murrayfield Training Pitches Retaining Wall (Ch 510+870) (Ch 511-060)
- IFC already issued
- h) Murrayfield Stadium Underpass – S21C (Ch 510+860)
- IFC already issued
- i) Murrayfield Stadium retaining Wall – S21B (Ch 510+650) (Ch 510-870)
- DCR0018 works for patterned finish complete.
 - DCR0157 works for additional GI complete.
 - IFC already issued
- j) Roseburn Street Bridge – S21A (Ch 510+580)
- DCR0024 works for detailed VE redesign approximately 75% complete.
 - New TAA and Prior Approval required.
 - Several pieces of information were outstanding a number of weeks, as outlined in various correspondence between SDS, BSC, and **tie**. Design now progressing with information recently provided.
 - Bridge and retaining structures issued to CEC for technical approvals.
 - Informal consultation started with planning. Meeting held 06 November 09 - comments received and under consideration. **tie** have confirmed that design is to remain as proposed as part of VE and be submitted to CEC regardless of CEC comments at informal consultation. Pre-submittal meeting held 08 February 10, and CEC are looking for additional revisions. SDS evaluating requests and to advise. Meeting held 11 May 2010 to discuss issues.

- Meeting held on 03 June 2010 with CEC TAA and Planning to resolve final agreed details and mutually acceptable requirements.
- k) Murrayfield Tramstop Retaining Wall – W18 (Ch 510-450)
- Change Order received.
 - SDS progressing design.
- l) Tram Stop – Murrayfield (Ch 510-470)
- IFC issued.
- m) Russell Road Retaining Wall 1 – W3 (Ch 510-200)
- IFC already issued.
 - DCR0257 – change notice required for unforeseen ground conditions.
- n) Russell Road Retaining Wall 2 – W4 (Ch 510-150)
- IFC already issued
- o) SRU / Murrayfield Accommodation Works (DCR0114 / DCR0194)
- Coordination with SRU on-going.
 - Planning application submitted. Approval granted.
 - Detailed points raised by planning for fence type and gate position being addressed with detailed design. Sample provided and agreed.
 - Building warrant package with CEC for approval.
 - Design 100% complete.

3.6.4 Subsection 5B

- a) Roads, Track, Drainage, Street Lighting and Landscaping – Subsection 5B
- IFC already issued
 - Closeout Report issued to CEC. Acceptance received with comments.
 - DCR0168 works for revisions to WEBS trackform approximately 20% complete.
 - Various informatives issued to CEC TAA for closeout.
- b) Drainage
- IFC already issued
- c) Tram Stop – Edinburgh Park Central (Ch 524+530)
- IFC already issued
- d) Edinburgh Park Station Bridge – S27 (Ch 524+010)
- DCR0027 – awaiting scope clarification from BSC for VE works.

- DCR0150 works for U12 Beams complete.
 - IFC already issued
- e) Tram Stop – Edinburgh Park Station (Ch 523+740)
- IFC already issued
- f) Tram Stop – Bankhead (Ch 522+960)
- IFC already issued
- g) Bankhead Drive Retaining Wall – W11 (Ch 522+800)
- IFC already issued
- h) South Gyle Access Bridge – S26 (Ch 522+750)
- IFC already issued
 - Pending change at South Gyle Access Bridge. Partial instruction received.
 - SW has indicated that they have not previously accepted principle of instruction provided by **tie. tie** to confirm.
 - Additional works are required based on tie selected alternative. SDS to identify in Preliminary Design report. Change order required for additional works.
 - Preliminary Design Report submitted.
 - Sewer design issued to SW for approval in accordance with discussions with **tie**.
 - SDS awaiting formal confirmation of any design change required.
- i) Substation – Bankhead Drive – SS22 (Ch 522+580)
- Prior Approval already Granted, Siemens to complete the design and issue IFC.
- j) Tram Stop – Saughton (Ch 521+690)
- IFC already issued
- k) Carrick Knowe Underbridge – S23 (Ch 521+030)
- IFC already issued.
 - Revised IFCs issued.
 - New wall identified west of Carrick Knowe Bridge. In discussion with CEC Planning and TAA on details.
- l) Substation – Jenners Depository (Balgreen) – SS21 (Ch 520+060)
- Prior Approval already Granted, Siemens to complete the design and issue IFC.
- m) Tram Stop – Balgreen (Ch 520+050)
- IFC already issued

n) Utilities

- DCR0258 (Busgate MP Gas Main) – change notice received.

3.6.5 Subsection 5C

a) Roads, Track, Drainage, Street Lighting and Landscaping – Subsection 5C

- IFC already issued
- Closeout Report issued to CEC.
- DCR0104 change instruction received to upgrade Lochside Avenue junction. Updated TAA progressing, submittal immanent. Further CEC clarification on lighting requirements to be confirmed as part of potential VE opportunity. Design approved by CEC. SDS addressing comments received, Approximately 95% complete.
- DCR0102 works for operator comments approximately 0% complete.
- Various informatives issued to CEC TAA for closeout.

b) Drainage

- IFC already issued

c) Tram stop – Gogarburn (Ch 531+860)

- DCR0170 works for RBS Tramstop existing utility works approximately 0% complete.
- DCR0132 works for RBS tram stop future proofing. Confirmation of scope received. Approximately 75% complete.

d) Depot Access bridge – S32 (Ch531+230)

- IFC already issued.

e) A8 Underpass – S28 (Ch 531+000)

- DCR0028 – awaiting scope clarification from BSC for VE works.
- IFC already issued.

f) Tram Stop – Gyle Centre (Ch 530+770)

- IFC already issued.

g) Gyle Stop Retaining Wall – W19 (Ch 530+750)

- IFC already issued.

h) Tram Stop – Gogar Interchange

- DCR0082 change instruction for new tram stop issued. Works approximately 80% complete.
- Coordination with Network Rail designer on-going
- Informal Consultation complete with CEC.

- Clarification on delivery of landscaping on south side of A8 required from **tie**.
- Written confirmation from **tie** / BSC of new design approach to be provided.
- NWR confirmation of mast position to be confirmed.
- SDS received clarification on location of retaining wall due to relocation of sewer pipe by others.
- Prior Approval with CEC pending decision.
- CEC querying location of radio mast as agreed between SDS, BSC, and **tie**.
- Revised Prior Approval submitted based on new requirements and comments.
- SDS advised **tie** of the issues related to procurement of the canopy (ETFE) roof. **tie** to respond with preferred option.

3.7 Section 6

3.7.1 Outstanding:

- Confirmation being sought on requirements due to revised earthworks (north and south batters)
- DCR0026 – awaiting scope clarification from BSC for VE works.

3.7.2 Subsection 6A

a) Roads, Street Lighting & Landscaping – Subsection 6 – Depot

- IFC already issued.
- Closeout report submitted to CEC.
- CEC have raised issue related to departure on depot access road. SDS met with CEC on 14 January 10 and 12 February 10 to discuss issue and resolution. Additional information requested and provided to CEC in line with discussions for agreeable solution.
- Revised IFC submitted which contains agreed resolution.

b) Drainage – Subsection 6 – Depot

- Design received formal approval from SW.
- Revised IFC submitted.

c) Depot Earthworks

- IFC already issued.
- Revised IFC for north batter drainage design issued.

d) Depot Internal Retaining Walls

- IFC already issued.
- On-going discussion between **tie** and BSC regarding use of soil nail slope.

e) Depot Ductwork – External Services

- IFC already issued.
- SDS progressing with revised design based on Siemens requirements provided.

- f) Depot General Layout
 - IFC already issued.
 - DCR0163 works for operational design review of depot approximately 0% complete.
 - DCR0181 works for additional design approximately 75% complete.
 - DCR0220 for Compressed air supply complete.
- g) Depot Building Foundations
 - IFC already issued.
- h) Depot Main Building
 - IFC already issued.
- i) Ground Floor Slab and Pits
 - IFC already issued.
 - Revisions to IFC undertaken to account for Siemens design element details provided.
 - DCR0188 works for pit for manual bogie turntable approximately 60% complete.
- j) Depot Building Steel Superstructure
 - IFC already issued.
 - Reviews of contractor drawings on-going.
- k) Track – Subsection 6 – Depot
 - DCR0151 works for west turnout revision complete.
 - IFC already issued.
- l) Depot Halt
 - IFC already issued.
- m) OLE in Depot
 - IFC already issued.
 - SDS received letter confirming Siemens pole layout. Foundation layout drawings to incorporating Siemens design have been issued IFC.
- n) Substation – Gogar Depot – SS01
 - IFC already issued.

3.8 Section 7

3.8.1 Outstanding - Planning:

Approvals:

- 7/25a – NIL Future Proofing Crossing 2 (DCR0134) – design development underway.
- 7/28a – NIL Future Proofing Crossing 1 (DCR0134) – design development underway.

- 7/29a – Airport Kiosk (Full Planning Permission). Change order has been received.

Building Warrants:

- 7/29b – Airport Kiosk. Change order has been received.

3.8.2 Subsection 7A

a) Roads, Track, Drainage, Street Lighting and Landscaping

- DCR0134 works for NIL future proofing approximately 90% complete. Track alignment completed and provided to NIL for acceptance. Coordination meeting held with NIL on 19 November 09. Additional clarifications provided to NIL and **tie** as requested via email. SDS requested movement of OLE poles to deal with accepted crossing positions. BSC to verify. SDS provided revised designs to BSC / **tie** for confirmation with NIL. Comments received and SDS responded. SDS revised design to reflect 7.3m requirement across tram at Gogar Farm Road. BSC requested via email that Prior Approval be held awaiting BSC resolution of OLE positions.
- Revised earthworks and landscaping layout required due to topo issues arising and design update a Gogar. Amendment to Prior Approval required.
- Revised track vertical alignment issued.
- Revised earthworks and drainage design issued.
- Design progressing on earthworks solution at Gogar Landfill.
- DCR0191 works for Gogar Landfill utility diversion approximately 90% complete.
- DCR0200 works for BAA new Burnside Road alignment approximately 50% complete. Site survey required.
- DCR0205 works for CCRC interfaces with slope and drainage approximately 100% complete.

b) Species Mitigation Plan

- Issued as approved by SNH
- Bird Mitigation Plan revised to take on board BAA comments.

c) Tram Stop – Edinburgh Airport (Ch 712+560)

- IFC Issued (less pending changes).
- Informal consultation meeting scheduled with CEC on 01 December 09.
- DCR0146 works for Airport Canopy approximately 90% complete.
- CEC have raised objection to detail. SDS instructed to hold submittal of Planning Application (email from **tie** to BSC on 13 Jan 09) and provide information instead for further consultation. Information submitted to CEC as requested.
- Additional meeting held with **tie** / BAA.
- Drawings submitted to CEC Planning for informal consultation.

d) Gogar Burn Retaining Wall Two – W14 (Ch 712+220) (Ch 712+570) –

- IFC already issued.

- Issue identified with burn migration. Change instruction required.
 - Issue identified with BAA acceptance to be resolved with redesign.
 - Formal letter received from BSC.
 - Draft revised flood modelling submitted to BSC. Meetings held with BSC, tie and BAA to discuss the latest version of eth flood model and the options for remodelling of the Gogarburn and the flood defences through Section 7 to mitigate any impact of the introduction of tram on the flooding of BAA lands. Solutions reviewed require additional works to be undertaken outside the Limits of Deviation. SDS have been asked to look at further options to present to BAA and further modelling to be undertaken. Update of the Modelling technical report to be issued next period.
- e) Gogar Burn Retaining Wall One – W15 (Ch 712+100) (Ch 712+190)
- IFC already issued
 - Issue identified with burn migration. Change instruction required.
 - Issue identified with BAA acceptance to be resolved with redesign.
 - Formal letter received from BSC.
 - Draft revised flood modelling submitted to BSC. Meetings held with BSC to discuss.
- f) Gogarburn Culvert Three – S34 (Ch712+030)
- IFC already issued. Level of the weir in the culvert has been redesigned/optimised to mitigate flooding on BAA lands.
- g) Gogarburn Culvert Two – S31 (711+830)
- IFC already issued
- h) Tram Stop – Ingliston Park & Ride (Ch 711+740)
- IFC already issued
- i) Substation – Tram Eastfield Road (Ch 711-630)
- Prior Approval granted. Siemens to issue IFC upon completion of their design.
- j) Gogarburn Culvert One – S30 (Ch 711+420)
- IFC already issued
- k) Gogarburn Bridge – S29 (Ch 710+400)
- DCR0069 works complete.
 - IFC already issued

4 ISSUE FOR CONSTRUCTION PROGRESS SUMMARY

As of 29th July 2010, the Issue for Construction packages status is as follows:

From a total of 114 IFC Packages, 108 (95%) have been delivered.

Roads are waiting for CEC close-out comments before IFC on Sections:

1A3; 1A4; 1C1; 1C2; 2A; 3A; 3B; 3C; 5A; 7A

The remaining packages outstanding are being finalised, and have been subject to changes and/or delays due to resolution of comments. It should be noted that several IFC drawings already submitted will require to be updated in line with the emerging changes.

5 UTILITIES

5.1 Utilities

5.1.1 Section 1A

- Under instruction from tie SDS have supplied an additional resource to work on resolving Section 1A utilities issues. Tie instructed the removal of requirement for additional resource.
- Section 1A (1-5) IFC drawings have been issued to **tie** (Excluding SW foul for Plate 2 only which require further information, tie undertaking survey).
- Section 1A (6-10) IFC drawings have been issued to **tie**.
- Section 1A (11-12) IFC drawings have been issued to **tie**.
- Section 1A (13-20) IFC drawings have been issued to **tie**.
- Change Order issued to SDS for re-design of Baltic Street, tie/SDS held first design meeting at which tie highlighted that they require additional diversions to be design and that an additional change request would be submitted. Trial pit work undertaken by tie and information forwarded to SDS for revised change estimate. SDS submitted revised estimate and requested to amend estimate with further additional scope. SDS received change instruction and commenced design. SDS has issued the IFA drawings to tie and the SUC's and are in consultation with the SUC's
- SDS asked to review Clancy Docwra design proposal and accept on TQ, highlighted that some utilities may wish for new IFC's. tie asked SDS to continue with TQ strategy.

5.1.2 Section 1B

- IFC drawings have been issued to **tie**.
- The IDC has been carried out and issued to **tie** showing the conflicts between the Utilities IFC infrastructure design and the Approved infrastructure design.

5.1.3 Section 1C

- IFC drawings have been issued to **tie**
- 1C (Picardy Place) **tie** have requested that SDS compare the IFC design with the roads and track layout issued to CEC for approval, The IDC has been carried out and issued to **tie** showing the conflicts between the designs.
- The redesign of the Mound Gas design has been issued IFC.
- SDS have produced revised IFA drawings for Broughton St to North St Andrews St showing the remaining works to completion as agreed by tie. SDS chasing SUC

approvals, currently issues with Thus and SW. IFA's updated with TQ since original issue in order to gain approvals and re-issuing currently.

- The IDC has been carried out and issued to **tie** showing the conflicts between the Utilities IFC infrastructure design and the Approved infrastructure design.
- Crawley Tunnel roof slab design is on-going and changing based on the results of the work undertaken on site, the position of the new roof slab and dimensions has altered along with the tie-in details and the addition of a scour valve due to the contractor not installing it outside the tunnel.
- SDS requested and carried out design of restraint of pipe inside the tunnel, SDS to prepare estimate for the work carried out and submit to tie. Awaiting as-built information to complete design.
- Crawley Tunnel Design structural design issued for IFC

5.1.4 Section 1D

- IFC drawings have been issued to **tie**.
- Haymarket Junction utilities redesign is complete and issued IFC.
- SDS has produced revised IFA drawings for Shandwick Place to Haymarket showing the remaining works to completion as agreed by tie. SDS chasing SUC approvals, SGN comments incorporated and IFA re-issued.
- Under instruction from tie SDS have supplied an additional resource to work on resolving Sections 1B-1D utilities issues. The additional resource has left the project and tie do not wish for a replacement.
- The IDC has been carried out and issued to **tie** showing the conflicts between the Utilities IFC infrastructure design and the Approved infrastructure design.
- SDS asked to close out remaining TQ's.

5.1.5 Section 2A

- IFC drawings have been issued to **tie**

5.1.6 Section 5A

- IFC drawings have been issued to **tie**
- Water of Leith Sewer lining issued IFC to **tie**.
- Roseburn St Viaduct Change means that the utility diversions need to be reassessed in proximity to the new structure. Coordinating with Network Rail/tie to resolve remaining outstanding issues.
- Scottish Water and BTO drawings re-issued IFA

5.1.7 Section 5B

- IFC drawings have been issued to **tie**.
- All sewer design issued for IFC except at South Gyle Access, design approved by Scottish Water. SDS has produced Prelim Design for revised scheme as instructed against Option 4. Awaiting further instruction from BSC. Revised design for South Gyle Access Sewer has been issued to Scottish water for Approval and comments being incorporated. Scottish water acceptance has been given with comments, the changes

requested in the design has led to structural work being required and this design to be commenced upon receipt of change order. Instruction given and structural design was carried out. IFC drawings issued to **tie**.

- SDS working with tie to amend original SDS design to reflect site conditions.
- 5B/MH/D/02 structural design issued to Scottish Water and CEC, approval gained and IFC drawings issued to tie.

5.1.8 Section 5C

- IFC drawings have been issued to **tie**.
- SDS amending Edinburgh Park utilities design based on site conditions and the supply of new as-builts.
- All Edinburgh Park TQ's responded to and revised details issued where required.
- New design required for 250mm main south of the depot for the area of pipe removed by MUDFA
- Discussion undertaken with BSC/tie and Scottish Water with regards position of 250mm main at Depot, trial holes to be carried out at road sign bases, commercial discussions on going.

5.1.9 Section 6A

- IFC drawings have been issued to **tie**.

5.1.10 Section 7A

- 7A was carried out under RATS, **tie** to supply XYZ coordinate as-builts for comparison to design
- Gogar landfill sewer re-design has been issued IFA to Scottish Water. Scottish Water have given final comments and revised IFA to be issued.

5.1.11 Section 7B (utilities only section)

- Design being carried out by others (not SDS scope)

6 ADDITIONAL CONSTRUCTION SUPPORT

6.1 TQs

- 27 TQs were received during the reporting period (25th October 2010 to 18th November 2010) and 35 responded to; refer to the TQ register which is updated and maintained separately.

6.2 Month Ahead Org Chart and Activities

Proposed staffing for the upcoming month, based on anticipated construction activities from the BSC look-ahead programme is included as Appendix B.

Roads Construction Support Teams

- Support and attendance to section progress meetings
- Section 1A
 - a. Responding to on site and technical queries as activity commences with BSC package contractor McKean.
 - b. Supporting Forth Ports queries
 - c. Monitoring of any ongoing activities in line with ITP requirements
 - d. Attending meetings as required
- Section 1B
 - a. Ready to Mobilise and providing any design advice on mobilisation
 - b. Responding to on site and technical queries as necessary.
- Remainder of Section 1C
 - a. Ready to Mobilise and providing any design advice on mobilisation
 - b. Responding to on site and technical queries as necessary.
- Remainder of Section 1D
 - a. Ready to Mobilise and providing any design advice on mobilisation
 - b. Review and inspection of any advanced works
 - c. Responding to on site and technical queries as activity commences with BSC package contractor
 - d. Attending meetings as required
- Section 2A
 - a. Responding to technical queries and on site reviews.
 - b. Monitoring of activities in line with ITP requirements.
- Section 5A
 - a. Responding to technical queries and on site reviews.
 - b. Monitoring of activities in line with ITP requirements.
- Section 5B
 - a. Responding to technical queries and on site reviews.
 - b. Monitoring of activities in line with ITP requirements.
- Section 6

- a. Responding to technical queries and on site reviews.
- b. Monitoring of activities in line with ITP requirements.

Geotechnical Construction Support Teams

- Section 1A
 - a. Monitoring of activities in line with ITP requirements
 - b. Responding to Site TQ's
- Section 2A
 - a. Ongoing technical support to construction team through technical queries
 - b. Attendance at client and package contractor progress meetings as required
- Section 5
 - a. Review, inspection and witness of earthworks throughout Section 5 in line with ULE90130-SW-GEO-00015
 - b. Ongoing technical support to construction team through technical queries
 - c. Review and check suitability of arisings for use in make up
 - d. Monitoring of the placement of material
 - e. Monitoring of activities in line with ITP requirements
- Section 6
 - a. Ongoing technical support to construction team through Technical Queries
 - b. Attendance at client and package contractor progress meetings
 - c. Monitoring of ongoing activities in line with ITP requirements
 - d. Formation inspections for ballast placement
 - e. Slope inspections
- Section 7
 - a. Review of investigations and verifications of ground conditions in line with Farrans programme of works
 - b. Ongoing technical support to construction team through technical queries
 - c. Attendance at client and package contractor progress meetings as required
 - d. Review and support for earthworks in line with ULE90130-SW-GEO-00015
 - e. Monitoring of activities in line with ITP requirements

Civil and Structural teams

- a. Ongoing review of Construction programmes to ensure appropriate supervision of construction activities and ITP requirements.
- b. Attendance at progress and technical issues meetings as required for each section.
- c. Monitor and manage TQs in and out
- d. Manage and provide detail for design changes as a result of site queries
- e. Drainage connection details for specific manholes
- Section 1A
 - a. Responding to site queries related to ducting, drainage, civil and structural items
 - b. Attendance at Contractor and package contractor progress meetings
 - c. Support to BSC in resolution of Tower Place Bridge and review design change requests in relation to this structure
 - d. Witness and inspections as requested and in line with ITP's
- Remainder of Section 1C / 1D
 - a. Prepare for Mobilisation commencement on new sites
 - b. Support at start-up meetings and workshops as required
 - c. Responding to site queries/TQ's related to ducting and drainage, civil and structural items
 - d. Attendance at Contractor and package contractor progress meetings as required
- Section 2A
 - a. Attendance at Contractor and Package contractor progress meetings
 - b. Monitoring of construction activities in line with ITP requirements
 - c. Ongoing technical support to construction teams through technical queries
- Section 5
 - a. Attendance at Contractor and Package contractor progress meetings
 - b. Ongoing inspections of Depot Access Bridge construction
 - c. Ongoing technical support to construction teams through technical queries
 - d. Monitoring of construction activities in line with ITP requirements
 - e. Supply of design information and TQ response to diversion carried out by BSC in ScotRail area
 - f. Review of sewer lining contractor proposals

- g. Supply of Utilities information and history and cading of survey information at Edinburgh Park and Depot access
- Section 6
 - a. Ongoing inspections of concrete works slabs and pits and trackform.
 - b. Ongoing inspections and technical support for construction activities related to building works
 - c. Ongoing inspections of drainage and ducting within the depot
 - d. Ongoing inspections of trackform and associated works
 - e. Attendance at contractor and package contractor progress meetings
 - f. Monitoring of construction activities in line with ITP requirements
 - g. Ongoing technical support to construction teams through technical queries
 - h. Depot Substation power inspections
 - i. Equipment room inspection to close out elements to allow Siemens system wide installation
 - j. Health at work barriers and requirements around pits/lifting points
 - k. Depot high level platform interface inspections and fitting out.
 - l. Depot internal second fix inspections
- Section 7
 - a. Ongoing inspections of drainage and ducting installation
 - b. Ongoing inspection of Trackform installations
 - c. Attendance at Contractor and Package contractor progress meetings
 - d. Ongoing technical support to construction teams through technical queries
 - e. Monitoring of construction activities in line with ITP requirements

7 DESIGN AND ADDITIONAL DESIGN SUPPORT

7.1 Activities Undertaken

SDS has continued to provide as-needed Additional Design Support to BSC as required and attended several meetings related to various items. As discussed with BSC and **tie**, SDS has reduced our resourcing during this period. Main focus over the past 4 weeks has been around:

- Coordination of CAF DKE and swept path run analysis results and clarifications
- Meeting and IDR of emerging BSC OLE designs

- Design and coordination of requirements for Road Rehabilitation Works
- Design and coordination of requirements for upcoming design for BSC Trackform integration
- Design and coordination of requirements for OLE design.
- Design and coordination of requirements for OLE foundation designs.
- Updates and changes to Planning Approvals due to OLE pole changes. Discussions with CEC Planning underway.

7.2 Ongoing Design Issues

7.2.1 Picardy Place

- Section 1C-2
- Layout generally agreed with Roads Authority at coordination meeting 06th August pending confirmation of updated modelling results. CEC to advise any further TAA issues. Impact on PA, TA and IFC.
- CEC planning department desire 6no. additional cross sections as advised 01-September 08 via email.
- CEC Planning department have provided no feedback on plaza concept provided for informal comment.
- Informal Consultation drawings issued to CEC 26th Sep '08. Meeting to finalise PA on 02 Oct '08.
- Informal meeting of tie / CEC / SDS on 30 September 2008 where CEC identified new constraints with hotel.
- Informal meeting with CEC on 1st October 2008 to discuss design development. SDS issued letter on 2 October 2008.
- Prior Approval meeting on 2 October 2008. SDS issued information to CEC via email.
- Prior Approval issued on 17 October 2008.
- Comments on Prior Approval received informally from CEC on 30 October 2008.
- Technical Approval issued on 3rd November 2008. SDS responding to initial comments from CEC on TAA submittal.
- CEC informally noted to SDS on 20 November 2008 that they may wish to change Roads layout.
- Prior Approval including CEC comments re-submitted on 28 November 2008.
- TAA including CEC comments resubmitted on 28 November 2008.
- Updated Planning drawings submitted 05 December based on advance TAA comments received.
- Road Safety Audit and Tram Stop submitted to CEC on 12 December 2009.
- Meeting on 15 January 09 with CEC to discuss potential comments and provide clarifications.
- Meeting on 21 January 2009 to discuss CEC modelling concerns. No response from CEC on information provided.
- Email from CEC on 30 March 09 indicates potential CEC change to layout of the area. Clarification required.

- SDS received change notice from BSC. SDS reviewing and preparing estimate.
- **tie** requested this change be included on w/e 08 May Design Changes meeting.
- CEC identified that they have issue with operation of junction based on CEC internal modelling. Junction is designed to instruction provided and subsequent discussions during design development. SDS has done significant advance modelling and has advised CEC of potential issue in advance of CEC raising the issue.
- CEC indicated in recent TRO Meetings that paper sits with M. Paulson and awaits final decision before instruction can be issued.
- Letter issued by CEC on 18 September 09 identifying additional changes required.
- Instruction issued for Stage 1 and Stage 2 CEC change to island geometry. Design underway and advance letter on traffic modelling issued.
- Full report issued.

7.2.2 TIE issued letter on 21 Oct 2010 for the progression of the design. SDS are currently developing the programme and detailed estimate for the completion of the works. Work is commencing on a contract rates basis demonstrable by timesheets.

7.2.3 Transdev comments on 5C Technical Approval – Roads (DCR0102)

- Section 5C
- Transdev have written a paper on the design at Edinburgh Park. SDS has notified BSC of Change and will review paper when instructed.
- SDS received response to letter from BSC. SDS has returned response confirming position that change is required.
- Change Notice received. SDS submitted estimate w/e 27 Feb 09. SDS requested to provide revised estimate.
- Meeting scheduled for week of 22 June 09 to discuss responses.
- SDS evaluating relevant comments as outcome of meeting.
- Letter received from BSC containing tie position on this issue. SDS reviewing letter and SDS / BSC to have meeting to discuss as agreed in Design-Change Issues meeting.
- Meeting held between BSC and SDS on 07 Jan 10 to discuss issues and tie letter. SDS responded to BSC letter.
- SDS awaiting further instruction.

7.2.4 TRO Drawings (DCR0083, DCR0110, DCR0119)

- Section 1
- **tie** (Keith Rimmer) informally handed SDS marked up drawings catching fundamental changes to kerb lines for drawings already approved by CEC and in some instances, Issued For Construction to BSC. Change Order required.
- These drawings must be formally submitted to SDS under cover of tie letter for audit trail and QA / QC procedures.
- Discussion is required prior to execution of design work with the priority of Section 1B as changes to the Technical Drawings (i.e. gullies / kerbs etc) will need to be immediately instructed to BSC as construction work is already ongoing.

- Additional work outside the LOD arising from drawing mark-ups.
- Informal meeting with CEC on 14 November 2008 to discuss the mark-ups.
- SDS provided updated responses to Public Exhibition comments on 08 January 2009.
- SDS prepared scope and estimate for Changes (DCR0110)
- **tie** / CEC request final drawings for public deposit to be provided before Christmas. CEC have indicated that they have not yet reviewed sections 2-7. CEC indicate that they wish TAL 5/05 to be modelled. SDS yet to be instructed to use TAL 5/05, and have previously advised of potential issues which may arise.
- SDS advised **tie** via email on 08 January 2009 about issues arising from TAL5/05 and need for change order to SDS.
- BSC requested a meeting for discussion of TRO changes. BSC to advise.
- Change notices received, SDS submitted estimates w/e 27/02/09.(DCR0083, DCR0119)
- SDS received letter on 24 March 09.
- SDS has requested meetings with BSC to discuss, however these have been cancelled by BSC prior to meeting.
- Discussed at change meeting on 23 April 09. Agreed that higher level meeting to be scheduled to resolve commercial issue, as there is a fundamental disagreement with **tie**.
- CEC provided new comments with respect to recent made TRO along Fastlink after 26 May 09 meeting.
- Site walkout scheduled for 08 June 09 for Little King Street requirements.
- Meeting scheduled with CEC for 10 June 09 to confirm all requirements for TRO and aligned design moving forward.
- Additional meeting held on 17 June 09 completing information not covered in meeting of 10 June 09.
- TRO drawings issued to BSC / **tie** on 19 August 2009.
- Letter received from CEC outlining additional requirements and design for TRO drawings.
- Additional meeting held on 14 September 09 to talk through changes. Change order received.
- SDS has submitted final TRO drawings to **tie** / CEC containing all comments.
- SDS / BSC attended meeting with **tie** on 17 November 09 to discuss comments received from Statutory Consultation. **tie** indicated that they are looking for further written formal justification for the agreed and approved design in addition to the information previously supplied to support the TRO process. SDS believes this request to be extra work, as the drawings, schedules, public meetings, and informal TRO consultations have demonstrated the case that the design has been consulted with all parties in an appropriate manner. SDS to provide response to Statutory Consultation comments when formally received from BSC.
- Outstanding commercial issues to be resolved. BSC has requested meeting, SDS to confirm.

- SDS provided 2 updated versions of TRO General Overview document to BSC, based on multiple sets of informal comments received from **tie** on this document which has been provided to support the TRO process.
- **tie** has provided informal comments on schedules to BSC / SDS. SDS reviewing for any technical issues raised. Formal comments required.
- **tie** raised informal query to BSC on 15 Jan 10 via email to change the agreed and approved design based on frontager comment. SDS replied to BSC request for comment.
- SDS has provided updated TRO General Overview document based on informal comments by **tie**.
- SDS has provided summary of TRO changes from informal public consultation to public deposit document based on request by **tie**.
- SDS has provided updated TRO Schedules and one drawing based on informal comments by **tie**.
- SDS has formally written to BSC on the recent events of TROs.
- SDS received BSC letter containing **tie** letter with six issues requesting SDS response / clarification. BSC advised by **tie** (via email) that these six comments are the total of comments requiring assistance for TRO.

7.2.5 Operator Comments

- System-wide
- At the Design Assurance Presentation, SDS and BSC were informed that Transdev are currently undertaking Operator reviews of the Design. Any changes arising out of this must be instructed via the Change Control procedure.
- 2A Operational Review was on Thursday 30th October 2008. BSC could not attend.
- 6A Operational Review was on Wednesday 29 October 2008. BSC in attendance (Colin Brady).
- There is an ATR outstanding for attendance at these meetings and any future meetings.
- Letter from BSC received on 02 March 09. SDS to formally respond indicating that no revisions to be made unless formally instructed.
- SDS provided response letter to BSC on 09 March 09 (our ref ULE90130-SW-LET-01442)
- Meeting scheduled for week of 22 June 09 to discuss responses.
- SDS evaluating relevant comments as outcome of meeting.
- Meeting held between BSC and SDS to discuss issues arising.
- BSC to advise of any further actions.

7.2.6 Section 1C3 Closeout

- Section 1C3
- CEC provided letter closing out 1C3.
- Meeting anticipated to be held week of 29 June 09 to discuss and new / remaining comments to and requirements to close.

- New informatives included which must be closed during construction with procurement of items.
- New change (DCR0219) identified for additional crossing at Frederick Street. Meeting held with CEC on 27 January 10 at site to go through requirements. Draft design provided to CEC in advance of formal submittal to mitigate comments. Design with CEC for formal approval. SDS received informal comments and has responded to CEC. CEC indicated that they are happy with the SDS design submitted, however have further queries regarding the MUDFA reinstatement of design delaying CEC response to SDS. SDS awaiting final approval from CEC.

7.2.7 Little King Street Reversal

- Section 1C2
- SDS and CEC completed walkout on 08 June 09 and identified several potential issues arising out of instruction.
- Current change instruction does not account for all required works if moved forward.
- SDS provided email to CEC on 12 June 09 outlining issues arising, potential impacts, and proposed resolution. Preliminary information on modelling impacts of not reversing direction of street included to assist CEC in decision making process.
- Formal response from CEC required.
- Letter issued by CEC on 18 September 09 outlining issues with this area.
- SDS await formal closeout.

7.2.8 Elder Street / York Place Design Change

- Section 1C3
- **tie** (D. Fraser) informally requested a design change to the TRO and Roads design via email to SDS (S. Ney) on 19 June 09.
- SDS response was that no action to be taken unless formally instructed through appropriate contractual channels.
- Letter issued by CEC on 18 September 09 outlining changes to this area to accommodate Henderson Global Development.
- Change order required.
- Change estimate for Elder St issued this period and awaiting response from tie.

7.2.9 Gogar Intermodal Stop

- Section 5C
- Kick-off meeting held 17 June 09 with Transport Scotland.
- Change order received. Tie to schedule workshop for 02 July 09 to discuss design details.
- SDS preparing list of required items from NR designer in advance of meeting.
- SDS completed actions arising from initial meeting.
- SDS issued information requested by Network Rail.

- Network Rail confirmed which proposal they intend to progress forward with. **tie** to issue formal instruction of Network Rail proposal. SDS working to verbal agreement with BSC / **tie** of modified concept.
- Meeting held 22 September to confirm scope requirements.
- Preliminary design completed.
- Assisted Mott MacDonald with NWR planning application as requested.
- Informal Consultation meeting with CEC held 06 November 09.
- BSC confirmed at progress meeting on 21 October 09 that design should be finalised assuming new interchange to be built after implementation of base tram scheme.
- SDS has identified issues with track / sewer level interface which needs to be resolved.
- OLE and trackform designs from Siemens critical to closing out design and planning requirements.
- Radio Mast requirements to be closed out at meeting on 24 November 09.
- Tram stop and canopy design progressing, including structural steel framework.
- Earthworks being progressed, including landscaping based on information received from Mott Macdonald. Change order required for new / additional works identified.
- Change to wall design required due to water line design being proposed by NWR.
- CEC requested radio mast to be placed on NWR building. SDS to confirm with NWR issues arising.
- SDS instructed not to proceed with Prior Approval submittal by **tie**.
- SDS awaiting clarification on requirements for relocated wall as a result of the sewer diversion by others.
- Prior Approval submitted.
- SDS received comments from CEC related to finishes and radio mast location. SDS responded to comments. **tie** to clarify with CEC position of radio mast.
- SDS submitted revised Prior Approval drawings to address further comments and requested modifications.
- Prior approval gained by SDS and Building warrant submitted to CEC
- Interface meetings with NR and their Design Teams to ensure an integrated solution for retaining wall and 1525 sewer diversion is achieved.

7.2.10 CAF DKE Swept Path Analysis

- Systemwide
- Assumptions and analysis finalised.
- Several issues requiring more in-depth analysis have been identified during the review process.
- Draft results issued to BSC via email.
- Closeout report issued.
- Letter received from BSC noting perceived issues. SDS provided response.
- SDS proceeding with revised tram stop layout based on dimensional requirements of CAF tram. Impact to platform width and stop shelter roof dimension.

- Additional analysis for ballasted areas instructed by BSC.
- ATR confirmation is awaited from Siemens to allow SDS move forward on conflicts which remain due to Siemens Revision F pole location plans.

7.2.11 Section 3 Technical Reviews by CEC

- Required to closeout detailed design.
- Revised Road Safety Audits provided.
- De-prioritised by CEC.
- Confirmation of programme to complete required.

7.2.12 Depot

- Responding to TQ's as required.
- Attending weekly meetings at site.
- Raising RFIs to BSC to clarify information shown on ICF documentation.
- Coordinating E&M design with Architectural and Structural elements and amending layouts.
- Updating layouts in line with site changes.
- Reviewing subcontractor drawings.
- Revising inspection pits details and layouts.
- Revising wheel lathe details and layouts.
- Revising switch room trench RC and general arrangement.
- Coordinating energy centre design.
- Blockwork package updates to suit ODR and changes.
- Joinery package updates to suit ODR and changes.
- Partition package updates to suit ODR and changes.
- Fire strategy updates to suit ODR and changes.
- OCR room layout and VDU structures being co-ordinated with framework specialist.
- Floor painting layouts agreed with tie. Safety zones agreed for fork lift truck and battery truck movement lanes.
- Key suiting confirmed with tie during the period

7.2.13 Roseburn Street Viaduct

- SDS submitted to CEC for technical approval – approval received.
- SDS submitted to CEC for informal consultation. Meeting held. CEC requested changes to alignment of retaining walls, new walls beneath bridge, and revised surface finishes.
- Meeting held with tie to discuss design development.
- Additional meeting with tie on 11 May 2010 to determine way forward.

- Meeting held 03 June 2010 with CEC TAA and Planning to closeout find mutually acceptable requirements of CEC.
- SDS awaiting instruction from BSC/tie on final finishes and final scope for Change.

7.2.14 NIL Future proofing

- SDS developing detailed design based on scope.
- SDS requested Siemens to relocate OLE poles based on drive locations in scope of works.
- Design submitted to BSC for tie / NIL confirmation. Comments received and SDS responded.
- Design to be submitted to CEC Planning for Informal Consultation immanently upon confirmation of OLE requirements from BSC.
- SDS revising design to provide 7.3m crossing at Gogar Farms Road.
- Informal Consultation Drawings submitted.
- Informal Consultation meeting postponed by CEC due to principals meeting with tie/NIL. SDS/BSC asked to leave arranged meeting.
- CEC Planning changed its mind on how to deal with earthworks outwith the LOD in November 2010. SDS awaits clarification from TIE/BSC on how to proceed.

7.2.15 Gogarburn (RBS) Tram Stop

- Instruction received.
- SDS developed design based on instruction. Submitted to CEC for Informal Consultation.
- CEC request additional footway from A8 to site along access drive. Path partially outside LOD. SDS notified BSC / tie. tie confirmed path to be included in requirements.
- BSC issued instruction amendment to SDS indicating that future proofing (foundations) no longer to be provided.
- Prior Approval submitted.
- TAA submitted to Roads Authority.

7.2.16 Traffic Modelling

- Comments received from CEC on LINSIG and TRANSYT reports previously submitted.
- SDS held meeting with CEC on 17 June 2010 to discuss comments and agree resolution where possible.
- Contractual issues require resolution (i.e. Picardy Place).
- Additional issues raised by CEC at meeting. SDS wrote to BSC to raise points. Clarifications and / or change instructions required.

7.3 Additional Resources

The Design Team Leaders detailed below can be made available to respond to TQ's and attend the appropriate meeting (subject to suitable notice) on the proviso that BSC give instruction that these DTLs time spent will be paid for.

<u>DISCIPLINE</u>	<u>Code</u>	<u>DTL (and contact details)</u>
Tram	TRM	Tony Goodyear
Track (and Alignment)	TRK	Phil Bull
Track Auxiliaries	TRA	Mike Reeves
Roads	RDS	Mike Rogers
Pavement Design	RDS	Orlando Walters
Structures (P)	STR-P	Andy Groves
Structures (H)	STR-H	Phil McKenna
Traction Power Supply	TPS	Graeme Evans
Sub Stations	SUB	Brian Hall
Depot / Gogar Interchange	DEP	Steven Anderson
Tram Stops	STP	Ashwin Rabadia
Overhead Line Equipment	OLE	Mike Coupe
Supervisory, Control and Comms	SCC	Mike Goldsworthy
Low Voltage Supplies	LVS	John Ash
Street Lighting	STL	Anthony Walsh
Drainage	DRN	Bob Jones
Ducting	DUC	Chris Reid
Geotechnical	GEO	David Raeside
Environment	ENV	Kat Dennis
Utilities (L2 - Sections 2, 5, 6 and 7)	UTL	Alan Dolan
Utilities (L1 - Sections 1 and 3)	UTL	Brian McCrear
Landscape	LSC	John Ramsay
Noise		Rupert Taylor

APPENDICES

APPENDIX A – RFI REGISTER

APPENDIX B – CRITICAL ISSUES DRAWINGS

Doc Ref ULE90130-SW-DRG-00651 (Line 1)

Doc Ref ULE90130-SW-DRG-00652 (Line 2)



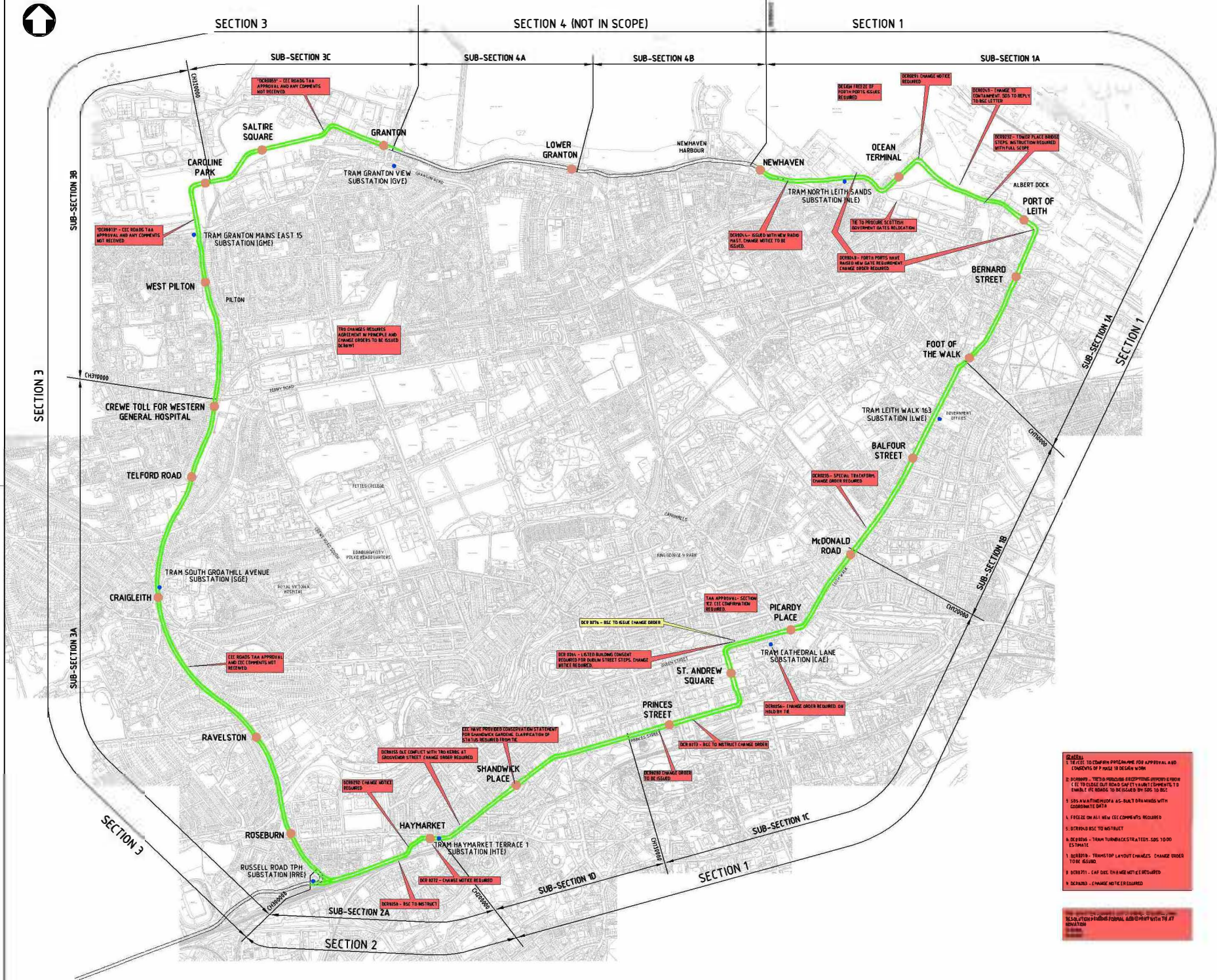
SECTION 3

SECTION 4 (NOT IN SCOPE)

SECTION 1

1 DWG HUMMINGBIRD REF: 88229
PDF HUMMINGBIRD REF: 88239

- KEY**
- DENOTES OUTSTANDING ISSUE (NEW)
 - DENOTES OUTSTANDING ISSUE 4 WEEKS OLD
 - DENOTES OUTSTANDING ISSUE GREATER THAN 4 WEEKS OLD



ISSUE ID	ISSUE DESCRIPTION	STATUS	DATE	ASSIGNED TO
1	ICR BOARDS TAA APPROVAL AND ANY COMMENTS NOT RECEIVED	Open	2023-10-20	J. CHANDLER
2	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
3	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
4	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
5	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
6	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
7	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
8	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
9	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
10	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
11	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
12	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
13	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
14	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
15	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
16	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
17	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
18	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
19	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
20	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER

- 1. ICR BOARDS TAA APPROVAL AND ANY COMMENTS NOT RECEIVED**
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 20. ICR BOARDS TAA APPROVAL AND ANY COMMENTS NOT RECEIVED

For Information Only

EDINBURGH TRAM NETWORK

PR PROJECT RISK MANAGEMENT

21th FLOOR
40, WILKINSON TERRACE

SYSTEM WIDE LINE 1 POST - NOVATION PROJECT ISSUES

ISSUE ID	ISSUE DESCRIPTION	STATUS	DATE	ASSIGNED TO
1	ICR BOARDS TAA APPROVAL AND ANY COMMENTS NOT RECEIVED	Open	2023-10-20	J. CHANDLER
2	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
3	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
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19	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER
20	DEBRIS - CHANGE NOTICE REQUIRED	Open	2023-10-20	J. CHANDLER

ULE90130-SW-DRG-00651 26

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THE FOLLOWING INFORMATION IS REQUIRED FROM BSC IN ORDER TO COMPLETE THE DESIGN.

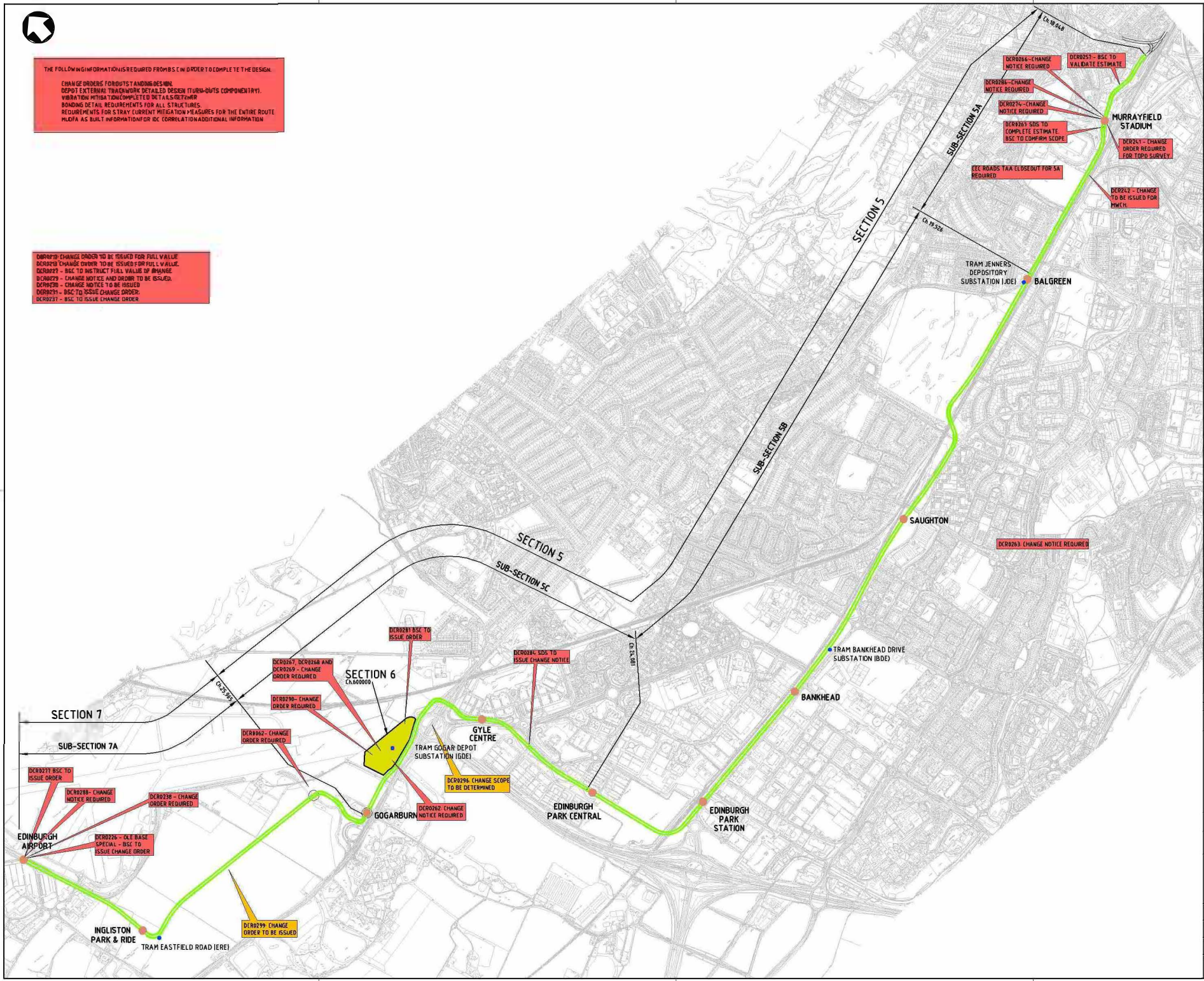
CHANGE ORDERS FOR OUTSTANDING DESIGN.
DEPOT EXTERNAL TRACKWORK DETAILED DESIGN (TURN-OUTS COMPLEMENTARY).
VIBRATION MITIGATION COMPLETED DETAILS (SUPPORT).
BONDING DETAIL REQUIREMENTS FOR ALL STRUCTURES.
REQUIREMENTS FOR STRAY CURRENT MITIGATION MEASURES FOR THE ENTIRE ROUTE.
MUDPA AS BUILT INFORMATION FOR DC CORRELATION ADDITIONAL INFORMATION.

DCR0218 - CHANGE ORDER TO BE ISSUED FOR FULL VALUE.
DCR0219 - CHANGE ORDER TO BE ISSUED FOR FULL VALUE.
DCR0221 - BSC TO INSTRUCT FULL VALUE OF CHANGE.
DCR0223 - CHANGE NOTICE AND ORDER TO BE ISSUED.
DCR0228 - CHANGE NOTICE TO BE ISSUED.
DCR0231 - BSC TO ISSUE CHANGE ORDER.
DCR0231 - BSC TO ISSUE CHANGE ORDER.

NOTES
1. DWG HUMMINGBIRD REF. B8241
PDF HUMMINGBIRD REF. B8247

KEY

- Denotes Outstanding SUE (NEW)
- Denotes Outstanding SUE 1-4 Weeks Old
- Denotes Outstanding SUE Greater Than 4 Weeks Old



NO.	DESCRIPTION	DATE	STATUS
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For Information Only

EDINBURGH TRAM NETWORK

PR PARTNERS

SYSTEM WIDE
LINE 2
POST - NOVATION
PROJECT ISSUES

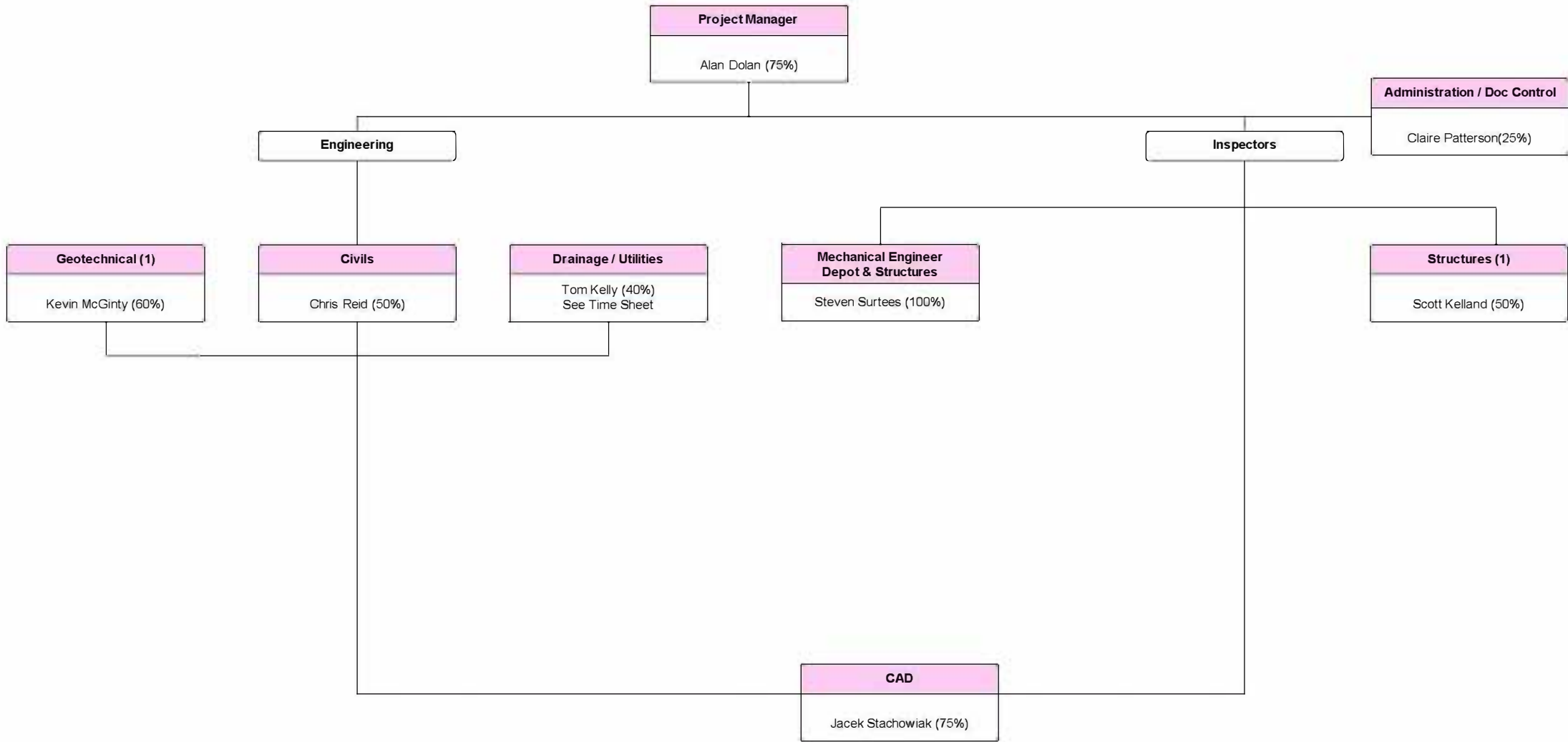
APPROVED BY	DATE
Chandler J	25/01/2024

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**APPENDIX C – ORGANISATIONAL CHARTS FOR DESIGN SUPPORT AND
EXTENDED CONSTRUCTION SUPPORT**

Extended Construction Support Services - For The Period 06/12/10 to 03/01/11



BFB00004349_0053

Design Support Services - For The Period 06/12/10 to 03/01/11

