

APPENDIX

TECHNICAL / ENGINEERING ELEMENTS SUPPORTING DOCUMENTATION

- SITE SUPERVISOR ROLE
- PHOTO INDICATING DOCUMENTS REQUIRED AND READY FOR AUDIT
 - CLAUSE 105 REQUEST FOR AUDIT
 - INSPECTION TEST PLAN-REQUEST FOR WITNESS OR APPROVAL FORM
- INSPECTION TESTPLAN 005 – DRAINAGE AND SERVICE DUCTS
 - INSPECTION TEST PLAN 015 – STRUCTURAL CONCRETE
 - INSPECTION TEST PLAN 024 – TRACKWORKS
 - INSPECTION TEST PLAN 037 – ROAD PAVEMENT
- SITE INSPECTION PHOTOS OF PRINCES STREET 21 MAY 2010
 - NEW SUPERVISOR QUALITY CHECKLISTS
 - QUALITY MATRICS MEETING MINUTES
 - DELIVER A SAFE TRAM INSPECTION - CHECKLISTS

SITE SUPERVISORS ROLE

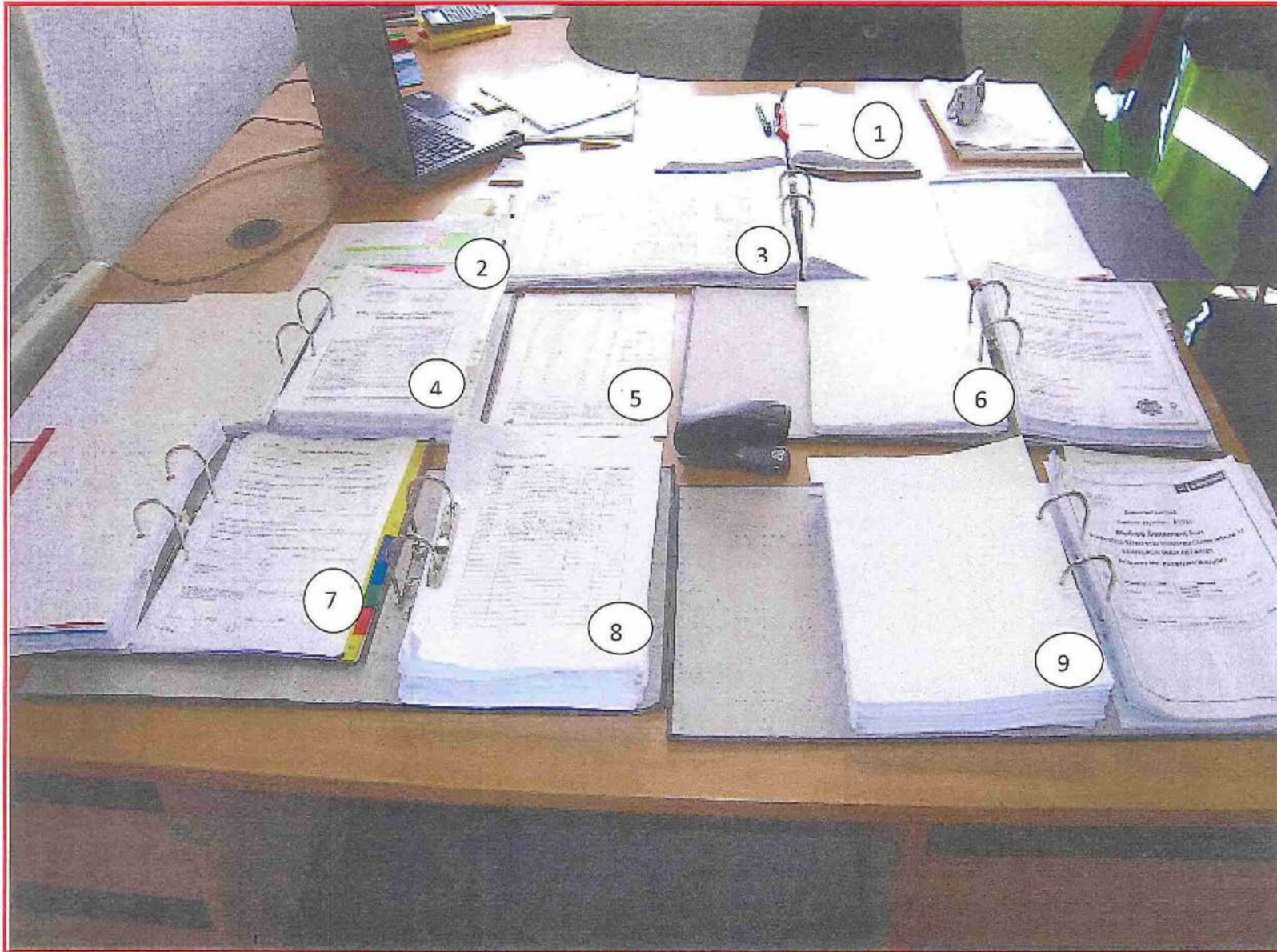
Site Supervisor Role

The requirement for TIE to have a site supervisory role is not required under the terms of the self certification contract; this role is undertaken by Bilfinger Berger. The presence of a TIE supervisors or Project Managers on site enables TIE to monitor the progress and help facilitate any needs the contractor may have in a timelier manner. There role would encompass the bullet points below.

- Daily record sheets which should include the following information
 - *Day, Date and Weather conditions*
 - *Number of men on site this should include, management and labour from BSC and subcontractors*
 - *Activity being carried out*
 - *Plant on site both used and idle plant*
 - *A note of any conversations with contractor/subcontractors and ant outcomes*
- Photographic evidence of work being done and issues or concerns,
- Audit of large and small plant on site,
- Ensure that work is being carried out in accordance with drawings, WPP and Method Statements,
- Monitor work against programme,
- Ensure that all relevant testing is being carried out and witnessed,
- Ensure that all relevant test and quality certification is being recorded/retained by BSC,
- Ensure that dilapidation surveys are carried out of areas prior to work commencing,
- Monitor and report and H&S and environmental issues,
- Be present at meetings with utilities and record discussions and outcomes of meetings,
- As required attend daily/weekly progress meetings with BSC/subcontractors
- Review and check allocation sheets submitted from BSC and subcontractors
- Review 2week look ahead programme issued by BSC to TIE indicating proposed work
- Weekly meetings with BSC to discuss programme and progress and any issues that need to be resolved
- Weekly meeting of all TIE Project Managers to report back to TIE Directors on site progress
- Go through the weeks allocation sheets with BSC and agree what is to be sent to the QS for payment

PHOTO INDICATING DOCUMENTS REQUIRED AND READY FOR AUDIT

ITP Supporting documentation.



1. Site Diary.
2. Site sketch.
3. Drawing schedule & IFC DWG pack.
4. Inspection and Test Plans.
5. Piling record form
6. CARES Certificates.
7. Witness for information and approval sheets.
8. Technical Queries Register.

**Clause 105 Health & Safety, Quality Assurance and Environmental
Management System**

105. HEALTH AND SAFETY, QUALITY ASSURANCE AND ENVIRONMENTAL MANAGEMENT SYSTEM

105.1 The Infraco shall operate:

105.1.1 a health and safety management system, the standard of which shall comply with OHSAS 18001 or HSG65;

105.1.2 a quality management system, the standard of which shall comply with BS EN ISO 9001:2000; and

105.1.3 an environmental management system, the standard of which shall comply with BS EN ISO 14001:2004;

which shall be known together as the "HSQE System".

105.2 The Infraco shall (and shall procure that the Infraco Parties) comply with the HSQE System and the Infraco shall develop appropriate management plans so as to ensure such compliance with the HSQE System.

105.3 If any Deliverable has not been prepared in accordance with the HSQE System, tie's Representative shall so inform the Infraco in writing giving reasons. If such non-compliance gives rise to a defect in the Infraco Works then the Infraco shall not be entitled to make any claim against tie for an extension of time or payment in respect of such defect.

105.4 Compliance with the HSQE System shall not relieve the Infraco from any of its other duties, obligations or liabilities under this Agreement.

105.5 The Infraco shall appoint (or shall procure the appointment of) an HSQE Manager as soon as reasonably practicable following the Effective Date. The identity of the HSQE Manager (and any replacement) shall be subject to the approval of tie's Representative (such approval not to be unreasonably withheld or delayed).

105.6 The HSQE Manager shall:

105.6.1 ensure the effective operation of the HSQE System described in this Clause 105 (*Health and Safety, Quality Assurance and Environmental System*);

105.6.2 audit the HSQE System at regular intervals and report the findings of such audit to tie's Representative;

105.6.3 review the HSQE System at intervals agreed with tie's Representative to ensure its continued suitability and effectiveness; and

105.6.4 liaise with tie's Representative on all matters relating to the HSQE System.

106. ENTIRE AGREEMENT

106.1 Except where expressly provided otherwise in this Agreement, this Agreement constitutes the entire agreement between the Parties in connection with its subject matter and supersedes all prior representations, communications, negotiations and understandings including the PB Agreement, Weisbaden Agreement and Rutland Square Agreement and the 9th May 2008 Agreement, concerning the subject matter of this Agreement.

106.2 Each of the Parties confirms to the other that it has neither been induced to enter into this Agreement in reliance on, nor has it made, any representation or warranty except those contained or referred to in this Agreement.

106.3 Any representations or warranties other than those contained or referred to in this Agreement are superseded and extinguished by this Agreement.

106.4 The Parties agree that the PB Agreement, Weisbaden Agreement and Rutland Square Agreement and the 9th May 2008 Agreement shall terminate forthwith on the Commencement Date and neither Party shall have any liability in respect thereof from the date of such termination.

106.5 Each Party irrevocably and unconditionally waives all rights and remedies which it might otherwise have had in relation to any representations or warranties other than those contained or referred to in this Agreement save in respect of any fraudulent misrepresentation.


107. FURTHER ASSURANCE

107.1 Each Party shall at the reasonable request and cost of the other (save where it is expressly provided that the cost of such act or execution shall be for that Party's account) do any act or execute any document that may be necessary to give full effect to this Agreement.

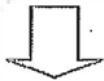
108. VARIATIONS TO BE IN WRITING

108.1 No variation or alteration of any of the provisions of this Agreement shall be effective unless it is in writing and signed by both Parties.

INSPECTION TEST PLAN – REQUEST FOR WITNESS OR APPROVAL

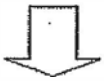
	<h2>Request for Witness or Approval</h2>	Form : F79-2 Rev : A Page : 1 of 1
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Project:		Date:	
From:		To:	
We notify you of the opportunity to examine the following:			
Location of Inspection:		Section No:	
Inspection Required:		ITP No.	Activity No
will be ready for WITNESS/APPROVAL at: time: date:			
Note we intend to undertake the follow-on activity of:			
at: time: date:			
Received: time: date:			



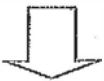
2) Distribution

1 Site File (as raised) 2/3 Client



3) Result – This item has been

WITNESSED	NOT WITNESSED	APPROVED	NOT APPROVED
Cross reference any supporting test results			
Reasons if not approved:			
Signed: time: date:			



4) Filing

1 Site File (as raised) 2/3 Client 3 Site file (when complete, replacing copy 1)
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INSPECTION TEST PLAN 005 – DRAINAGE AND SERVICE DUCTS

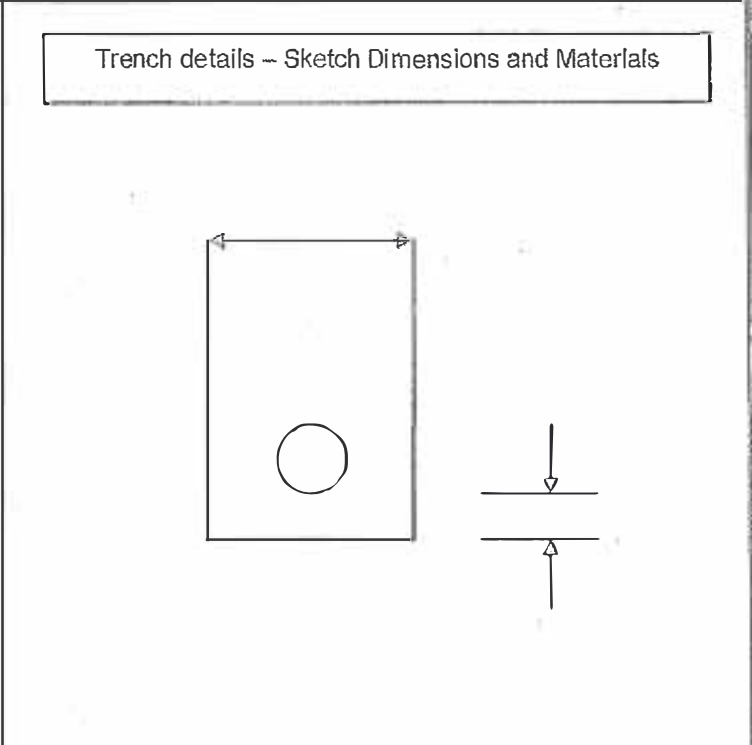
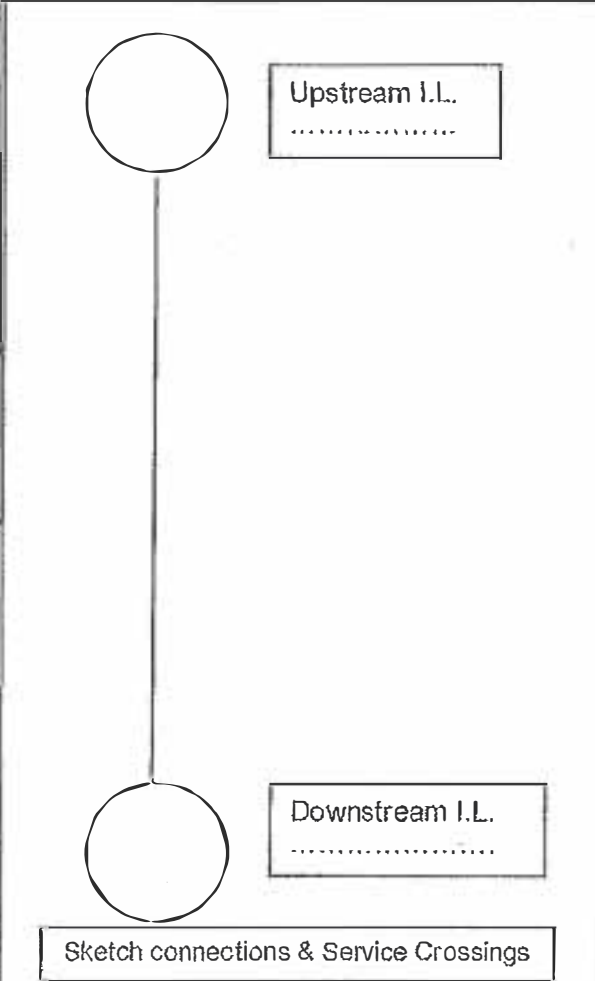
Contract : Edinburgh Tram Network

No. 25.1.201.00

Drain/Service Run From:To:..... ITP No.....

Location.....Drawing No / Rev.....

Pipe Dia & Type



Dimensions / Data Reviewed

Notes:

Inspection/Test	Accepted		Handover
	S/C Initials, date	Bilfinger Initials, date	Siemens Initials, date
Upstream Chamber			
Downstream Chamber			
Duct Box(s)			
Materials			
Excavated Base			
Trench Details Checked			
Line & Level Checked			
Interim Pipe Tests:			
Air Test *			
Mandrel *			
Visual *			
NCR Required	Y/N	NCR No.	

For S/C or Bilfinger (Delete as appropriate)

Sign

Date

Final Inspection / Test

The above works have been inspected and comply with the Approved Design and the Employer's Requirements

Organisation	Name (print)	Signature	Date
Sub-Contractor			/ / 09
Bilfinger Berger			/ / 09
Siemens			/ / 09

* Delete as appropriate

	<h1>Inspection and Test Record</h1>	Form : F79-3 Rev : A Page : 1 of 1
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Project:	Date:
ITP Ref:	Test Ref:
Location:	
Activity (Type of Inspection):	
Type of Test (Method/spec for test):	
Standard Required (Acceptance Criteria):	
Frequency:	
Tested by:	

Test Results:

Compliance check against acceptance criteria:	Acceptable / Not Acceptable (Cross reference any NCR)	
Name:	Company:	Date:
Name:	Company:	Date:
Name:	Company:	Date:

INSPECTION TEST PLAN 015 – STRUCTURAL CONCRETE

	<h2 style="margin:0;">Concrete Pour Record</h2>	Form : PSF79-31 Rev : A Page : 1 of 1
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PROJECT:	Sheet No:
ITP Ref:	Pour Ref:
POUR LOCATION:	
Drawing No:	
Concrete Supplier:	Rate of Pour:
Quantity m ³ :	Time required:
Mix Spec:	Date required:
Minimum cure time to strike:	
Provisionally called off by & date:	Confirmed by & date:

No	PRE-CONCRETE Description	Checked (initial)	Date	Remarks (cross reference any NCR or other records)
1	Surface Preparation			
2	Formwork			
3	Falsework			
4	Dimensions			
5	Reinforcement Correct			
6	Cover to Reinforcement			
7	Encast Items			
8	Cleanliness			
9	Temperature Checks (Ambient / Substrate)			
10	Earthing & Bonding			
11	Other:			
12	Pre-pour Checks Complete as Specified ('W'-Point)			
13	Pour can Commence			

No	POST-CONCRETE Description	Checked (initial)	Date	Remarks (cross reference any NCR or other records)
13	Weather conditions at striking			
14	Striking time / date			
15	Curing			
16	Finish			
17	Encast Items			
18	Other:			


Remarks:

The above works have been inspected and comply with the Approved Design and the Employer's Requirements

Organisation	Name (print)	Signature	Date
Sub-Contractor			/ /09
Bilfinger Berger			/ /09

Form to be used in conjunction with F79-6.

INSPECTION TEST PLAN 024 – TRACKWORKS

Document	CQF006	Edinburg Tram Network		
Version	1.0	Rheda open formation quality form		
Date	13-8-2009			
Project number:	28025	Project name	Edinburgh Tram Network	
Date:		Registration by:		Nr
Drawing number:		Requirements:		
Track section:				
Code	Description	Remarks	Method	
	<i>+ approved, - disapproved, 0 not applicable</i>			

Start conditions

SS + - 0 Substructure

SS1	<input type="radio"/>	FPL is at correct level below TOR (tolerance 0 / -30mm)		Survey		
SS2	<input type="radio"/>	Handover form SAG-BB received and accepted		CRF001		
SS3	<input type="radio"/>	Substructure seems compacted enough		Visual		
SS4	<input type="radio"/>	Substructure is clean and without holes (busway/structures)		Visual		
Site supervisor			Construction manager			
Date: / /			Date: / /			

Rough Alignment Stage

SL + - 0 Sleepers

SL1	<input type="radio"/>	Sleepers rectangular to rails		Visual
SL2	<input type="radio"/>	Sleeper distance 750 mm (+15 mm/-15 mm)		Check
SL3	<input type="radio"/>	Sleeper distance on structures as in drawing		Visual
SL4	<input type="radio"/>	Sleepers not damaged around fastenings		Visual
SL5	<input type="radio"/>	Right type of sleepers (incl. fastenings) is used		Visual

Welding Stage

TW + - 0 Aluminio thermic welds (check of weld registration forms)

TW1	<input type="radio"/>	Welds are made according to regulations		CRF004
TW2	<input type="radio"/>	Welds are visual inspected and approved		Visual
TW3	<input type="radio"/>	Geometry of welds within tolerances		CRF005
TW4	<input type="radio"/>	Welds are ultrasonic approved		CRF006
TW5	<input type="radio"/>	All material (sand, moulds, steel) are removed		Visual
TW6	<input type="radio"/>	All reports received on welds and weld testing		Check
TW7	<input type="radio"/>	Stressing welds are left open and temporary fixed		Check

Fine Alignment Stage

RF + - 0 Rail fastenings

RF1	<input type="radio"/>	Fastenings are at right torque (check 1 every 24) 100-120Nm		Check
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TA + - 0 Track alignment

TA1	<input type="radio"/>	Horizontal Alignment, check every 5m (tolerance +/- 5mm)		CRF002
TA2	<input type="radio"/>	Vertical Alignment, check every 5m (tolerance +/- 5mm)		CRF002
TA3	<input type="radio"/>	Straight track level (tolerance +/- 5mm)		CRF002
TA4	<input type="radio"/>	Cant in curved track as in drawing (tolerance +/- 5mm)		CRF002
TA4	<input type="radio"/>	Cant in straight track as in drawing (tolerance +/- 5mm)		CRF002
TA5	<input type="radio"/>	Cant transition as in drawing (tolerance +/- 5mm)		CRF002
TA6	<input type="radio"/>	Radius curves as in drawing		Survey

SW + - 0 Track gauge

SW1	<input type="radio"/>	Gauge 1435mm (tolerance -2mm/ +2mm) check every third sleeper		CRF003
SW2	<input type="radio"/>	Rail fastenings full contact to rail		Visual


Site supervisor			Construction manager			
Date: / /			Date: / /			


Concreting stage



CQF006-Rheda Open


Print date:17-8-2009

CEC02086413_0017

Document	CQF006	Edinburg Tram Network		
Version	1.0	Rheda open formation quality form		
Date	13-8-2009			
Project number:	28025	Project name	Edinburgh Tram Network	
Date:		Registration by:	Nr	
Drawing number:		Requirements:		
Track section:				
Code	Description	Remarks	Method	
<i>+ approved, - disapproved, 0 not applicable</i>				
CS	+ - 0	Concreting (third party activity)		
CS5	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Struts applied and secured by BAM?		Visual
CS1	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Proposed BAM procedure followed?		Visual
CS2	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Photographs taken		Visual
CS3	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Track not disturbed? (concrete hose/labour)		Visual
CS4	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Rails free of concrete?		Visual
Bonding				
TO	+ - 0	Track bonding		
TO2	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Track bonding correct mounted		Visual
TO3	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Track bonding approved by Siemens		Visual
Finishing stage				
TO	+ - 0	Temporary fixtures		
TO2	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Spindles all removed		Visual
TO3	<input type="radio"/> <input type="radio"/> <input type="radio"/>	Struts all removed		Visual
Site supervisor	Construction manager			
Date: / /	Date: / /			

Document	NCR001	Edinburgh Tram Network		
Version	1.0	NCR001-Report		
Date	17-8-2009			
Project number:	28025	Project name	Edinburgh Tram Network	
Date:		Composed by		
Supplier		NCR number		
Batch nr:				
Location Details				
Location	<input type="text"/>	Chainage	<input type="text"/>	
Street name	<input type="text"/>	Other	<input type="text"/>	
Track type	<input type="text"/>	In / Outbound track	<input type="text"/>	
Curve Radius	<input type="text"/>	Left leg	<input type="checkbox"/>	
		Right leg	<input type="checkbox"/>	
Rail markings				
Left	Profile	<input type="text"/>	Right	Profile
	Brand	<input type="text"/>		Brand
	Month	<input type="text"/>		Month
	Year	<input type="text"/>		Year
	Hardness	<input type="text"/>		Hardness
Problem analysis				
<input type="checkbox"/> Weld	<input type="checkbox"/> Alignment (VA)	<input type="checkbox"/> Drainage box		
<input type="checkbox"/> Rail	<input type="checkbox"/> Alignment (HA)	<input type="checkbox"/> Chamber elements		
<input type="checkbox"/> Railhead	<input type="checkbox"/> Can't	<input type="checkbox"/> Joint Sealing		
<input type="checkbox"/> Sleeper spacing	<input type="checkbox"/> Gauge	<input type="checkbox"/> Concrete		
<input type="checkbox"/> Other/ remark	<input type="text"/>			
			Name:	
			Date:	/ /

Document	NCR001	Edinburgh Tram Network												
Version	1.0	NCR001-Report												
Date	17-8-2009													
Project number:	28025	Project name	Edinburgh Tram Network											
Date:		Composed by												
Supplier		NCR number												
Batch nr:														
Situation sketch														
 <div style="border: 1px solid black; width: 100%; height: 150px; margin: 20px auto;"></div> <p>Insert Picture / or make sketch</p>														
Situation details														
<table border="1" style="width: 100%;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>														

Document	NCR001	Edinburgh Tram Network	
Version	1.0	NCR001-Report	
Date	17-8-2009		
Project number:	28025	Project name	Edinburgh Tram Network
Date:		Composed by	
Supplier		NCR number	
Batch nr:			
Corrective action	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
Priority	<input type="checkbox"/> High (24 hours) <input type="checkbox"/> Medium (1-7 days) <input type="checkbox"/> Low (>7 days) <input type="checkbox"/> No action needed	Notify to	<input type="checkbox"/> TIE <input type="checkbox"/> BSC <input type="checkbox"/> SAG <input type="checkbox"/> BAM (internal)
Discovered by	<input type="checkbox"/> Notification by client <input type="checkbox"/> Maintenance <input type="checkbox"/> Incidental <input type="checkbox"/> Construction	Name	<input type="text"/>
		Function	<input type="text"/>
Date discovered	<input type="text"/>		
Temporary measure	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
Planned measure			
Remarks			
	Construction manager	Site Supervisor Siemens	
	Date: / /	Date: / /	

INSPECTION TEST PLAN 037 – ROAD PAVEMENTS

Contract : Edinburgh Tram Network **No. 25.1.201.00**

Formation Level/Type (indicate ✓)

Sub-Formation	Formation	Top of Sub-Base
Top of Basecourse	Top of Binder	Top of Wearing Course

Location & description of works to be inspected: _____

Reference Drawing Nos.: _____ General Arrangement: _____ ITP No: _____

Details:

Are Compaction Tests Required? YES / NO * Record Sheet No.: _____

Are Settlement Tests Required? YES / NO * Record Sheet No.: _____

Dips Required? YES / NO * Record Sheet No.: _____

Designed Batter Slope: _____

Any other Checks or Tests Required? YES / NO * Record Sheet No.: _____

Checks Items Checked*	Sub-Contractor Signature/Date	Bilfinger Berger Signature/date	Siemens Signature/date
Visual Inspection			
Setting Out & Levels			
Cleanliness & Dryness			
Compaction Tests			
Settlement Tests			
Soft Spots			
Membrane Coverage & Laps			
Cutting Slope			
Batters			
ITP No. 37** Items Checked			

NCR Required? Yes / No _____ NCR No. _____

General Comments (including any need for counterfort drains, starter layer etc.): _____

Final Inspection / Test

The above works have been inspected and comply with the Approved Design and the Employer's Requirements

Organisation	Name (print)	Signature	Date
Sub-Contractor			/ /09
Bilfinger Berger			/ /09
Siemens			/ /09

* Delete as appropriate

** Denotes 'Road Pavements' ITP

Dip Sheet

Project:..... Date:.....

Location (inc. c/way):..... Block-up:.....

Chainage:..... Theoretical dip:.....

Surface checked:..... Tolerance: +.....mm/ -.....mm

Acceptable dips:.....to.....

Note: Transverse grid to be maximum 2m spacing.

GRID (Right channel to be entered)

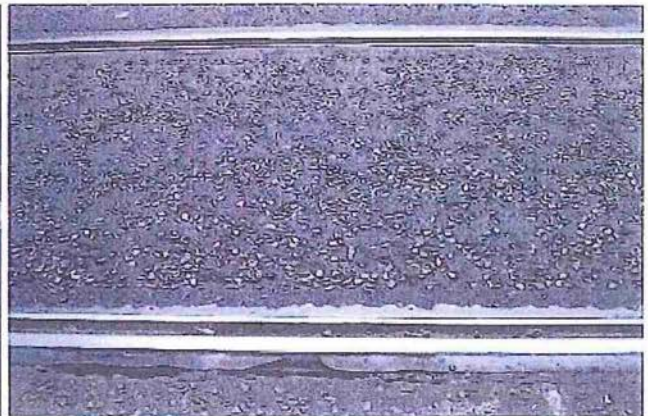
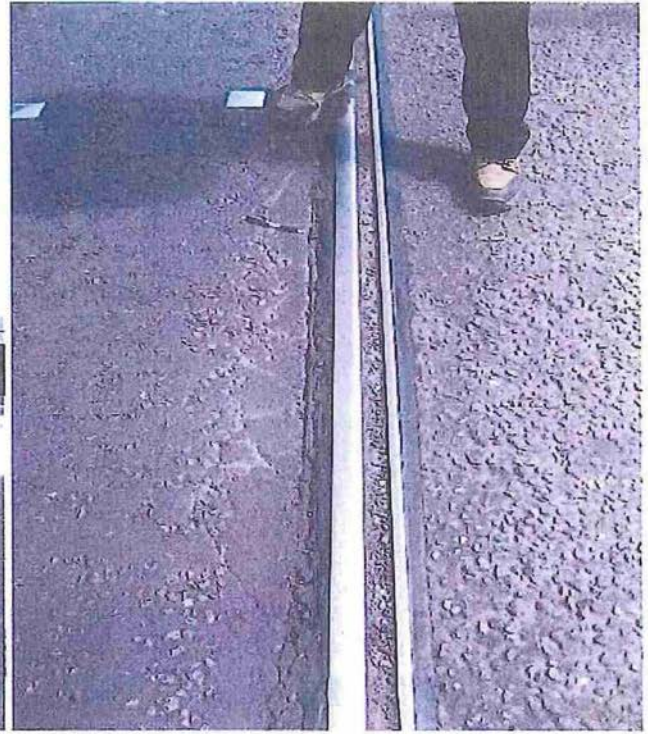
CHAINAGE	Left channel						

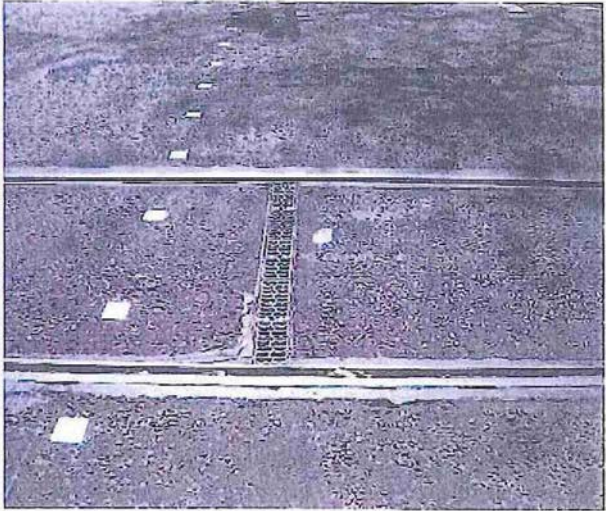
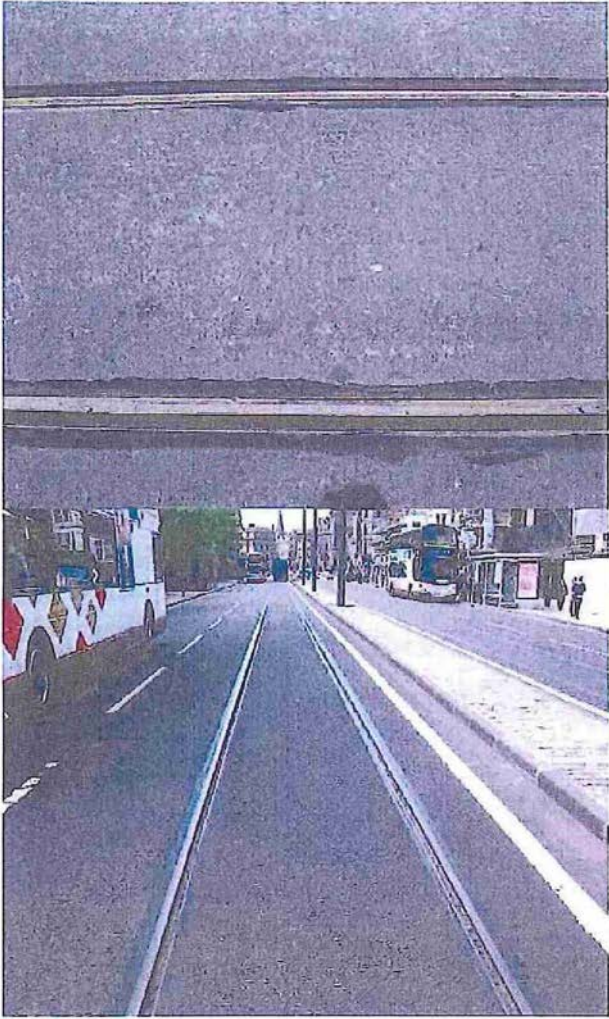
Dips agreed: BBUK:

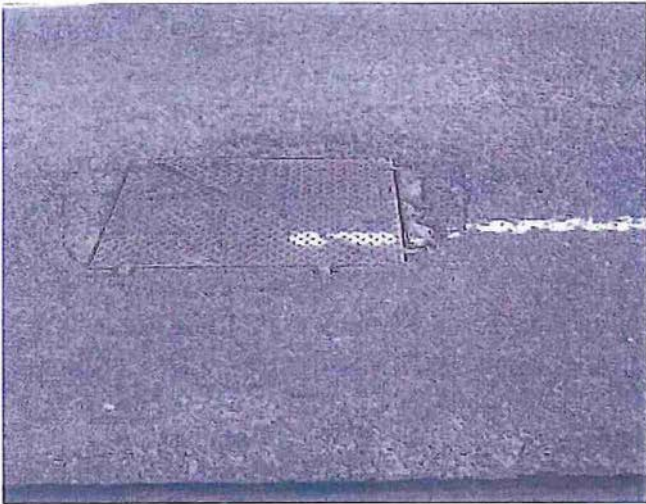
Client's Engineer:

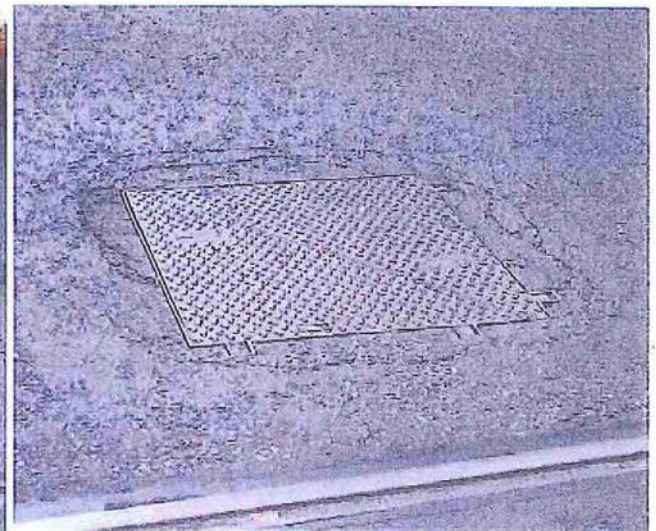
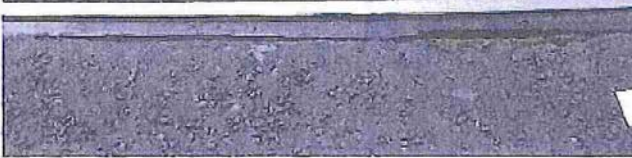
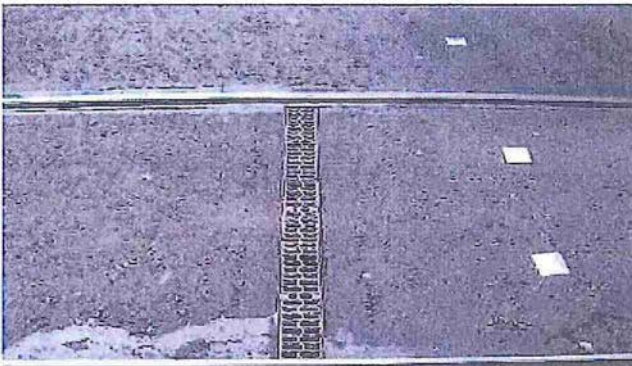
Subcontractor:

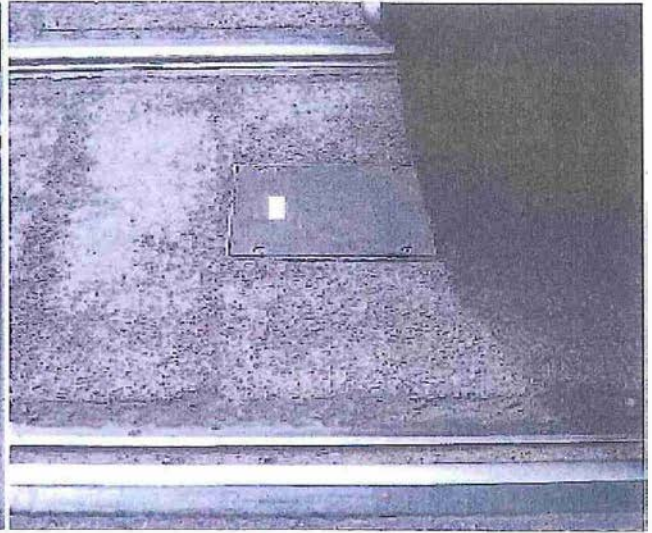
SITE INSPECTION PHOTOS OF PRINCES STREET 21 MAY 2010











NEW SUPERVISORS QUALITY CHECKLIST

Supervisors Quality Checklist

1. Inspection Location					
Location/ Street Name:		Section:			
Activity:	Utility Installation.				
Individual:		Trade:	Foreman / Ganger		
Individual:		Trade:	Site Agent / Engineer		
2. Competency		YES	NO	N/A	COMMENTS
City and guilds / NVQ		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Experience		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CSCS Card available		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Specifications / Standards		YES	NO	N/A	COMMENTS
Specification detailed?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specification available on site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specification details adhered to on site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Drawings / Design		YES	NC	N/A	COMMENTS
Drawing schedule available?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Correct revision on site and in use?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signed as approved by designer?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Contractor Supervision		YES	NO	N/A	COMMENTS
Is the contractors Supervisor present		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Supervisor using the checklist		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Supervisor checklist signed off		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Contractor Permits		YES	NO	N/A	COMMENTS
Is permit to dig in place		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is evidence of Track inspection		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is trench support adequate?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Inspection & Test Plans (ITP's)		YES	NO	N/A	COMMENTS
Latest revision of ITP on-site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Can operative demonstrate knowledge of ITP?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Witness forms sent to tie/SDS.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. tie Supervisor:					
General Comments:					
Name:		Signature:		Date:	

Supervisors Quality Checklist

1. Inspection Location					
Location/ Street Name:		Section:			
Activity:	Structural Concrete				
Individual:		Trade:	Concrete Foreman / Ganger		
Individual:		Trade:	Site Agent / Engineer		
2. Competency		YES	NO	N/A	COMMENTS
City and guilds / NVQ		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Experience		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CSCS Card available		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Specifications / Standards		YES	NO	N/A	COMMENTS
Specification detailed?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specification available on site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specification details adhered to on site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Drawings / Design		YES	NO	N/A	COMMENTS
Drawing schedule available?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Correct revision on site and in use?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signed as approved by designer?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Contractor Supervision		YES	NO	N/A	COMMENTS
Is the contractors Supervisor present		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Supervisor using the checklist		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Supervisor checklist signed off		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Contractor NCR's		YES	NO	N/A	COMMENTS
NCR register in place		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Agreed action in place		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NCR's Close in time		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Inspection & Test Plans (ITP's)		YES	NO	N/A	COMMENTS
Latest revision of ITP on-site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Can operative demonstrate knowledge of ITP?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Witness forms sent to tie/SDS.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. tie Supervisor:					
General Comments:					
Name:		Signature:		Date:	

1. Inspection Location				
Location/ Street Name:		Section:		
Activity:	Earthing Requirements:			
Individual:		Trade:	Operator / Foremen / Ganger	
Individual:		Trade:	Site Agent / Engineer	
2. Competency	YES	NO	N/A	COMMENTS
City and guilds / NVQ relating to Electrical Earthing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CSCS Card available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Specifications / Standards	YES	NO	N/A	COMMENTS
Is the Siemens "Earthing and Bonding for DC railways Report 19/09/08" referred to on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has 24 hour notice been given to SDS per structure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the CVI refer to the standard for each structure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Inspection and testing	YES	NO	N/A	COMMENTS
Are digital photos of connections available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has pre-concreting witness forms been sent to tie & SDS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has the forms been signed off?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Contractor Supervision	YES	NC	N/A	COMMENTS
Is the contractors Supervisor present?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Supervisor using the checklist? Appendix 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Supervisor checklist signed off?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Reinforcement Bar	YES	NO	N/A	COMMENTS
Is Checklist PSF79-31 complete?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the checklist accompanied by a CARES cert?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the re-bar visual free from damage caused by rust?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. tie Supervisor:				
General Comments:				
Name:		Signature:		Date:

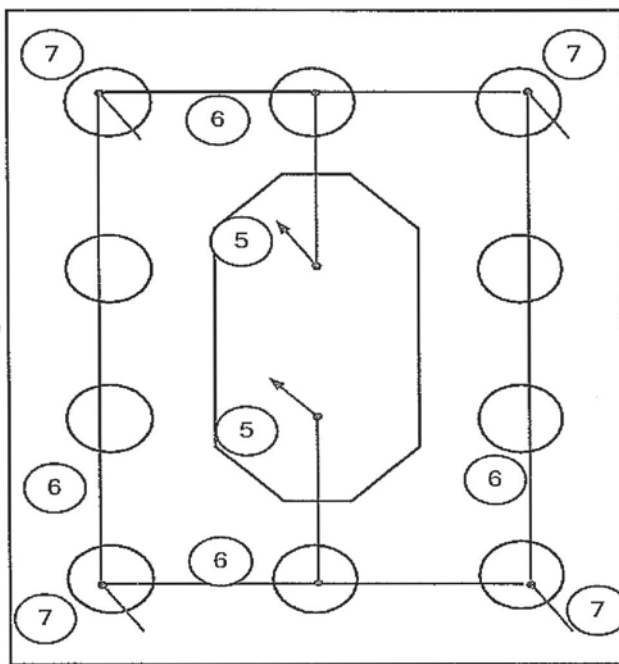
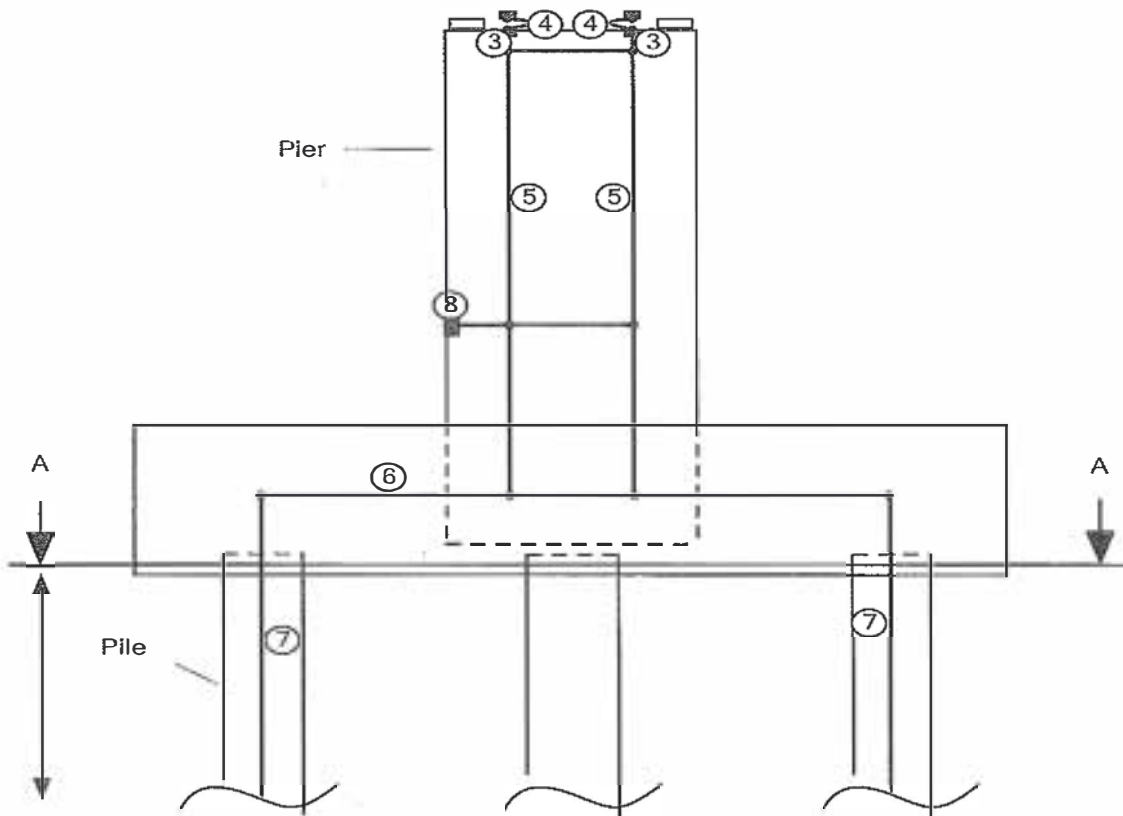
GUIDANCE NOTES* APPENDIX 1

Inspection of Foundation		Edinburgh Tram Network	
Test according to drawing no.		Check date:	
Test location (chainage)		Document Code	
No. of digital photos			

No.	Check items	satisfactory		Remark
		Yes	No	
	<i>Pile foundation:</i>			
1	min. 4 piles have earth rod of min 5 m (item 7 in sketch)			
2	earth rods are connected to each other (item 6 in sketch)			
3	2 rods will be accessible after pouring of concrete for connection to pile cap (item 5 of sketch)			
	<i>Base Slab/Pile Cap/Block foundation:</i>			
4	Lowest rebar layer connected to a grid (item 6 in sketch)			
5	Grid connected to starter bars of column/pier (item 5 of sketch)			
	<i>Column/Pier</i>			
6	Continuous rebars from bottom to top (item 5 in sketch)			
7	vertical rods have cross connection on top			
8	If bearing: 2 Earthing terminals at top			
9	If no bearing: 2 rods will be accessible after pouring of concrete for connection to deck slab			
	<i>General</i>			
10	all earthing material has min 16 mm diameter (or other shape min 200 mm ²)			
11	Earthing terminals are M16 stainless steel			
12	if connections are welded, all weldings have min 100mm (single side) or 2x 50mm (double side) length			
13	Connections are clamped			

Approval for pouring of concrete			
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Comment / Condition



Section A - A

- Welded connection
- Pile
- Earthing rebar
- ↗ Connection to pier/column rebar
- ③ Terminals made of stainless steel
- ④ Jumper connection $\geq 50 \text{ mm}^2$ copper cable or steel cable of similar capacity
- ⑤ Reinforcing rod for down connection inside of pier
- ⑥ Cross bond (steel bar) inside foundation slab
- ⑦ Minimum length for the rod inside of 4 piles: 5m.
- ⑧ Earthing terminal recommended for measuring purpose
- ⑨ Cross bond (steel bar)

QUALITY MATRICS MEETING MINUTES

**Edinburgh Tram Network
Meeting Minutes**

Subject	Quality Metrics Meeting	Location	Consortium Office
Date	01 February 2010	Time	10h00
Attendees	Representing	Attendees	Representing
Ian Brazenall (IBr)	BSC	Jim Ritchie (JRI)	tie
Iain Crawford (ICr)	BSC	Karl Ivanov (Kiv)	tie
Arran Haynes (Aha)	BSC		
Distribution	Attendees + S Rotthaus (BSC), J Donaldson (BSC), R Bell (tie).		

		Action	Date
1	Guided Busway		
1.1	(JRI) No AFC's available – When will these become available? IBr, These will be available when all designs are complete – Section 5 is expected mid February.	Note	
1.2	(JRI) requested minutes for previous IDR meetings. IBr to provide.	IBr	22-02-10
1.3	(JRI) – There are no close-out dates on the IDR/DC minutes IBr – Dates are difficult to introduce into the meetings due to the nature of the review, but would try and enforce for future meetings.	IBr	22-02-10
1.4	(JRI) – Still no updates on the Hazard log. This was supposed to be Monthly BB to chase.	ICr	22-02-10
1.5	(JRI) noted that Aha has the ITP's in place and was happy with the progress.	Note	
1.6	(JRI) Noted that the track welds were not stamped at certain locations. No Siemens/Bam Present at the meeting.	Note	
1.7	(JRI) enquired about the status of the as-built information. ICr noted that the as-built information is still ongoing and would confirm status.	ICr	22-02-10
1.8	(JRI) enquired about the status of the asset register. BB to chase	ICr	22-02-10
2.0	CarrickKnowe		
2.1	(JRI) requested documentation for current earthing and bonding measures. ICr commented that a CVI was in place and would forward information.	ICr	22-02-10
2.2	(JRI) commented that there was no evidence of checks/certifications and would like to see progress.	Note	
2.3	(JRI) requested that an "IDR Tracker" be made available. IBr to action.	Note	

2.4	(Klv) requested ETN H&S pass, that he has had the induction but has not received his pass to date.	ICr	22-02-10
	ICr to action		
2.5	(JRI) to check Russel Road ITP	Note	
3.0	AOB		
	<u>Next Meeting</u>		
	Friday 19 February 2010 12h00 Consortium Office	Note	

Edinburgh Tram Network
Meeting Minutes

Subject	Quality Metrics Meeting	Location	Consortium Office
Date	22 February 2010	Time	10h00
Attendees	Representing	Attendees	Representing
Ian Brazenall (IBr)	BSC	Oliver McLoughlin (OMc)	BSC
Iain Crawford (ICr)	BSC	Sheena Smith (SSm)	tie
Arran Haynes (AHA)	BSC	Karl Ivanov (Klv)	tie
Originator:	Iain Crawford (BSC)		
Distribution	Attendees + S Rotthaus (BSC), John Riley (BSC), J Ritchie (tie), Holger Platte (BSC), J Chandler (SDS), E Inglis (BSC), Ineke Van-Klaveren (BSC).		

Item Nr.	Item	Action	Date
1.0	Guided Busway		
1.1	(JRI) <i>No AFC's available – When will these become available?</i> (IBr, 01-02-2010), These will be available when all designs are complete – Section 5 is expected mid February. IBr – (Update) All Civils completed designs are anticipated for the end of March as per the current program.	Note	
1.2	(JRI) <i>requested minutes for previous IDR meetings.</i> Br to provide.	IBr	08-03-10
1.3	(JRI) – <i>There are no close-out dates on the IDR/IDC minutes.</i> IBr – Dates are difficult to introduce into the meetings due to the nature of the review, but would try and enforce for future meetings.	IBr	08-03-10
1.4	(JRI) – <i>Still no updates on the Hazard log. This was supposed to be Monthly.</i> Post Meeting Note: – JRI received an email from John Riley (JRY)-19 th February 2010. Email highlights: <ol style="list-style-type: none"> 1. Work on the hazard log is well underway and a fair amount of work has already been referenced within. It is available for viewing anytime. 2. The current program for the Hazard Log Manager is to ensure that all hazard log owners to have all evidence available for review by the end of March 2010. 3. A 4-day review is planned for the 2nd/3rd weeks of April 2010. If the PSCC Sub-Committee are satisfied with the responses/reviews and hazards have been mitigated they will recommend that the hazards are closed for that phase of the project. 4. Currently no hazards are closed. 	Note	
1.5	(JRI) <i>noted that AHA has the ITP's in place and was happy with the progress.</i>	Note	
1.6	(JRI) <i>Noted that the track welds were not stamped at certain locations.</i> AHA – Noted that Siemens have inspected the welds and no further action is required. SSm noted that the weld stamps were not in their regular locations.	Note	

1.7	(JRI) enquired about the status of the as-built information. ICr noted that the as-built information is still ongoing and would confirm status. Email sent and await response.	ICr	08-03-10
1.8	(JRI) enquired about the status of the asset register. BSC to chase ICr – Email has been sent, still awaiting confirmation.	ICr	08-03-10
1.9	<i>Planned inspections</i> SSm – noted that this is with Siemens and JRI would go direct to Ineke Van-Klaveren (Siemens)	Note	
2.0	Carrick Knowe Underbridge		
2.1	(JRI) requested documentation for current earthing and bonding measures. ICr commented that a CVI was in place and would forward information. ICr – CVI-0124 sent (Item can be closed out)	Note	
2.2	(JRI) commented that there was no evidence of checks/certifications and would like to see progress. JRI to clarify.	Note	
2.3	(JRI) requested that an "IDR Tracker" be made available. IBr to action.	IBr	08-03-10
2.4	(Klv) requested ETN H&S pass, that he has had the induction but has not received his pass to date. Klv – Issue has not been resolved (Item can be closed out)	Note	
2.5	(JRI) to check Russell Road ITP	Note	
2.6	<i>Planned Inspections</i> Aha – Inspections are ongoing.	Note	
3.0	Haymarket Viaduct		
3.1	<i>Haymarket Viaduct - Graham</i> AHA – Paperwork complete. Post meeting note:- Site visit in two weeks time.	Note	
4.0	Tower Place Bridge		
4.1	<i>Tower Place Bridge –</i> Aha Meeting held with McKean 12.02.10. No issues to report. Paperwork and drawings made available and up to date.	Note	
5.0	Section 7 Airport Earthworks		
5.1	SSm Asset Register- Still no evidence. Same as Item 1.8	Note	
5.2	SSm – Inspections Aha – From the previous inspection, Farrans (19.02.10) were required to provide calibration certificates. Drawing discrepancies were also noted although JRI appeared to have been given a drawing list from	JRI	08-03-10

	SDS which did not match IFC drawings available on BIW. JRI to confirm the source of the drawings he had received.		
6.0	Gogarburn Bridge		
6.1	<i>Gogarburn Bridge – Structures</i> Aha – Planned Inspection (26.02.10) ready to go ahead.	Note	
7.0	Depot		
7.1	<i>Depot –</i> Post Meeting Note:-Meeting planned for 05.03.10 to assess the depot structure.	Note	
8.0	System Integration Plan (Employers requirements) Not Discussed		
9.0	System Integration (Infraco Contract) SSm – Draft has been issued and is available.	Note	
10.0	AOB		
10.1	<i>(SSm) - Check-sheet</i> SSm – Rev 2.3 of the check-sheet is now available and will be forwarded via email. The only changes are to the wording which should help to close out a few outstanding issues.	Note	
10.2	<i>(SSm) – Period Reports</i> SSm - Reports will be revised from period 12 to include more information	Note	
11.0	Next Meeting Monday 08 March 2010 10h00 Consortium Office	Note	

**Edinburgh Tram Network
Meeting Minutes**

Subject	Quality Metrics Meeting	Location	Consortium Office
Date	08 March 2010	Time	10h00
Attendees	Representing	Attendees	Representing
Holger Platte (HPI)	BSC	Sheena Smith (SSm)	tie
Iain Crawford (ICr)	BSC	Karl Ivanov (Klv)	tie
Arran Haynes (AHa)	BSC		
Originator:	Iain Crawford (BSC)		
Distribution	Attendees + S Rotthaus (BSC), John Riley (BSC), J Ritchie (JRi) (tie), Holger Platte (BSC), J Chandler (SDS), E Inglis (BSC), Ineke Van-Klaveren (BSC).		

Item Nr.	Item	Action	Date
1.0	Guided Busway		
1.1	<p>(JRi) No AFC's available – When will these become available?</p> <p>(IBr, 01-02-2010), These will be available when all designs are complete – Section 5 is expected mid February.</p> <p>IBr – (Update) All Civils Civils completed designs are anticipated for the end of March as per the current program</p>	<p>Note</p> <p>IBr</p>	<p>05-04-10</p>
1.2	<p>(JRi) – There are no close-out dates on the IDR/IDC minutes.</p> <p>IBr – Dates are difficult to introduce into the meetings due to the nature of the review, but would try and enforce for future meetings.</p> <p>ICr – (Update) Close out dates for each item are anticipated to be before the end of the IDR/IDC review process which will be the end of May 2010</p>	<p>Note</p> <p>Note</p>	
1.3	<p>(JRi) – Still no updates on the Hazard log. This was supposed to be Monthly.</p> <p>Post Meeting Note: – JRi received an email from John Riley (JRy)-19th February 2010. Email highlights:</p> <ol style="list-style-type: none"> 1. Work on the hazard log is well underway and a fair amount of work has already been referenced within. It is available for viewing anytime. 2. The current program for the Hazard Log Manager is to ensure that all hazard log owners to have all evidence available for review by the end of March 2010. 3. A 4-day review is planned for the 2nd/3rd weeks of April 2010. If the PSCC Sub-Committee are satisfied with the responses/reviews and hazards have been mitigated they will recommend that the hazards are closed for that phase of the project. 4. Currently no hazards are closed. 	Note	
1.4	<p>(JRi) enquired about the status of the as-built information.</p> <p>ICr noted that the as-built information is still ongoing. HPI to confirm as-built status</p>	HPI	22-03-10
1.5	(JRi) enquired about the status of the asset register.		

	ICr – Email has been sent, still awaiting confirmation. Post Meeting Update: email received from Eddie Inglis 09/03/10: - At the moment each of the lots is responsible for recording what assets if any have been put in place, we are still some way off having a full Asset/Maintenance management system in place. However I am working with both Sinaid & Alastair in trying to realise this sooner rather than later, please find attached the following documents which give assurance that the assets are being recorded, sorry for delay in reply but have been away on business over the last 2 weeks.	Note	
1.6	<i>Planned inspections</i> SSm – noted that this is with Siemens and JRi would go direct to Ineke Van-Klaveren (Siemens) – No BB input is required for this.	Note	
2.0	Carrick Knowe Underbridge		
2.1	(JRi) commented that there was no evidence of checks/certifications and would like to see progress. JRi to clarify.	JRi	22-03-10
2.2	(JRi) requested that an "IDR Tracker" be made available. ICr – (Post meeting Update) IDR/IDC Action register forwarded to SSm and JRi 08 th March 2010.	Note	
2.3	<i>Planned Inspections</i> Aha – Inspections planned for 19/03/2010	Note	
3.0	Haymarket Viaduct		
3.1	<i>Haymarket Viaduct - Grahams</i> AHa – Paperwork complete. AHa- Site visit planned for the 12/03/2010 Earthing and bonding to be inspected.	Note Note	
4.0	Tower Place Bridge		
5.0	Section 7 Airport Earthworks		
5.1	SSm Asset Register- Still no evidence. Same as Item 1.8 ongoing	Note	
5.2	SSm – Inspections Aha – From the previous inspection, Farrans (19.02.10) were required to provide calibration certificates. Drawing discrepancies were also noted although JRi appeared to have been given a drawing list from SDS which did not match IFC drawings available on BIW. JRi to confirm the source of the drawings he had received. Aha – to monitor and provide update.	JRi AHa	08-03-10 22-03-10
6.0	Gogarburn Bridge		
6.1	<i>Gogarburn Bridge – Structures</i> Aha – Planned Inspection (26.02.10) ready to go ahead. Aha – This inspection has been carried out. Aha to provide update	Note AHa	 22-03-10

7.0	Depot		
7.1	<i>Depot –</i> SSm to issue an updated report. New inspection date to be confirmed.	Note	
8.0	System Integration (Infraco Contract)		
8.1	System Integration (Infraco Contract) SSm – Draft has been issued and is available.	Note	
9.0	AOB		
9.1	<i>(SSm) - Check-sheet</i> SSm – Rev 2.3 of the check-sheet is now available and will be forwarded via email. The only changes are to the wording which should help to close out a few outstanding issues.	Note	
10.0	Next Meeting Monday 22 March 2010 10h00 Consortium Office	Note	

DELIVER A SAFE TRAM INSPECTION - CHECKLISTS



Deliver a Safe Tram Inspection

Inspection Details QM039				
Site PM: Alistair Scott		tie PM: Andy Scott		Inspector: Jim Ritchie
Section: Gogar Depot		Date: 14/05/2010		Period: 02 Week 03
Current Activity: ITP 05 Drainage and Service Ducts.				
Data to be Checked	Site/Office	Evidence Available Y/N/P/NA	Data Sources	Evidence (Note evidence found)
Inter-Disciplinary Design Check	S/O	Y	AFC drawing, available for current work?	No, but PAFC via Site Instructions: SI-0096.
	S/O	Y	Evidence of IDR workshop - minutes of meeting, Bilfinger, Siemens and CAF integration	IDR workshop minutes issued via e-mail, 04/03/2010. Reference: IDR/IDC Meeting Minutes Ref.- Depot Ducting/Drainage Review, dated 13/01/2010. IDR/IDC Meeting Minutes Ref.-No: 005, dated 08/10/2009. IDR/IDC Meeting Minutes Ref.-No: 007, dated 05/11/2009. IDR/IDC Meeting Minutes Ref.-No: 013, dated 03/12/2009. IDR/IDC Meeting Minutes Ref.-No: 014, dated 10/12/2009.
	S/O	Y	Initial design only - consortium review evident?	
Hazards	S/O	This will no longer be checked during weekly inspections (RYC 11/01/10)		
Inspection & Test Plan System	S/O	Y	ITP in place for current works	ITP 005 Drainage is being collated by Barr with evidence of BSC review. ITP for service ducts will be prepared on commencement of this phase of works. Drainage records are available for Surface, Foul & Rain Water with sign off from Building control.
	S/O	Y	Are there relevant RAMS and drawings in place to match up with the ITP?	
	S/O	Y	Content of ITP adequate?	
	S/O	Y	Supplementary records being compiled i.e. concrete checks?	
Design Variation/Change	S/O	Y	Evidence in place for any design changes?	Yes
	S/O	Y	Are appropriate CVI's or TQ's in place giving permission to make these changes?	CVI's are in place such as: CVI-131.
	S/O	Y	Evidence these changes have been through the IDC/IDR process (office check)?	Drawings are updated and changes incorporated - office check through review process.
	S/O	Y	Is there evidence that residual risk has been reviewed as a result of changes? If risk has increased, has an appropriate risk assessment been carried out?	Residual Risk Registers are updated on drawing. Appropriate Risk Assessments have been carried out and are incorporated in WPP - 0059, WPP - 0094, WPP - 0095, WPP - 0101, WPP - 0109 & WPP - 0109 Addendum 001.



Deliver a Safe Tram Inspection

As Built	S/O	Y	<i>Evidence that As built are being produced as work progresses?</i>	IFC Drawings updated with information received via the TQ and CVI Process example of changes to IFC attached.
	S/O	Y	<i>Is the information being recorded? Is it adequate?</i>	
Asset Register	S/O	N	<i>Are new assets being logged on the asset register?</i>	No Procedure to date tie to discuss with Eddie Ingles.
	S/O	N	<i>Refer to site drawings to determine new assets</i>	
Inspector Summary	This inspection satisfied ties representatives that the drainage works at the depot are being constructed and laid in line with the Design and ITP requirements. Present at inspection: Arran Haynes BSC, Campbell Stewart BSC, Stephen Milloy Barr, Andy Scott tie,			
Inspection Summary and Acceptance				
Prepared By Inspector:		Print: Jim Ritchie	Sign:	Date: 14.05/2010



Deliver a Safe Tram Inspection

Inspection Details QM040				
Site PM: Alistair Scott		tie PM: Andy Scott		Inspector: Jim Ritchie
Section: Gogarburn Bridge		Date: 21/05/2010		Period: 02 Week 04
Current Activity: ITP 015 Structural Concrete				
Data to be Checked	Site/Office	Evidence Available	Data Sources	Evidence (Note evidence found)
		Y/N/P/NA		
Inter-Disciplinary Design Check	S/O	Y	AFC drawing, available for current work?	No, but PAFC via Site Instructions: SI-0008, SI-0080, SI-0091 & SI-0095.
	S/O	Y	Evidence of IDR workshop - minutes of meeting, Bilfinger, Siemens and CAF integration	IDR workshop minutes issued via e-mail, 25/02/2010. Reference: IDC-Meeting No.006-Minutes - 29/10/09. IDC-Meeting No.009-010-Minutes - 12/11/09. IDC-Meeting No.013-Minutes - 03/12/09. IDC-Meeting No.014-Minutes - 10/12/09. IDC-Meeting No.021-Minutes - 09/02/10.
	S/O	Y	Initial design only - consortium review evident?	
Hazards	S/O	This will no longer be checked during weekly inspections (RYC 11/01/10)		
Inspection & Test Plan System	S/O	Y	ITP in place for current works	Evidence of ITP 015 with various versions up to issue 07.
	S/O	Y	Are there relevant RAMS and drawings in place to match up with the ITP?	Appendix 17/1 specification in line with EN208 and BS8500.
	S/O	Y	Content of ITP adequate?	TQ139 Responded to by SDS.
	S/O	Y	Supplementary records being compiled i.e. concrete checks?	Temp check in line with F79.5
Design Variation/Change	S/O	Y	Evidence in place for any design changes?	Yes
	S/O	Y	Are appropriate CVI's or TQ's in place giving permission to make these changes?	CVI's are in place such as: CVI-126, CVI-125, CVI-117, CVI-133 & CVI-149.
	S/O	Y	Evidence these changes have been through the IDC/IDR process (office check)?	Drawings are updated and changes incorporated – office check through review process.
	S/O	Y	Is there evidence that residual risk has been reviewed as a result of changes? If risk has increased, has an appropriate risk assessment been carried out?	Residual Risk Registers are updated on drawing. Appropriate Risk Assessments have been carried out and are incorporated in WPP –0068 + Addendum 1 to 7
As Built	S/O	Y	Evidence that As built are being produced as work progresses?	IFC Drawings are amended with applicable TQ's and signed off, in order that as built records can be produced
	S/O	Y	Is the information being recorded? Is it adequate?	
Asset Register	S/O	P	Are new assets being logged on the asset register?	No New asset installed to date. BSC have now prepared a register for OLE poles and other various assets ready for tie acceptance and populating.
	S/O	P	Refer to site drawings to determine new assets	



Deliver a Safe Tram Inspection

Inspector Summary

tle HSQE Advisor was accompanied on site by BSC QA/QC Senior Engineer Arran Haynes. Farrans the, package contractor, produce evidence of ITP 015 and collation of as built records. Tram Project Interface Director, Alistair Sim carried out a Safety tour of the site during this inspection. No immediate safety related issue found. AS stated that the site appeared to be well managed with appropriate pedestrian vehicle segregation on site.

Inspection Summary and Acceptance

Prepared By
Inspector:

Print:
Jim Ritchie

Sign:

Date:
21/05/10

Notes and photos:

Inspection Details QM041

Site PM: *Brian Walker*

Site PM: *Tom Cotter*

Inspector: *Jim Ritchie*

Section: *Russell Road*

Date: *28/05/2010*

Period: *03 Week 01*

Current Activity: *ITP 015 Structural Concrete. Fixing Pile Caps.*

Data to be Checked	Site/Office	Evidence Available	Data Sources	Evidence (Note evidence found)
		Y/N/P/NA		
Inter-Disciplinary Design Check	S/O		<i>AFC drawing, available for current work?</i>	<i>No, but PAFC via Site Instructions: SI-0090.</i>
	S/O		<i>Evidence of IDR workshop - minutes of meeting, Bilfinger, Siemens and CAF integration</i>	<i>IDR workshop minutes issued via e-mail, 25/05/2010. Reference: IDC-Meeting No.006-Minutes - 29/10/09.</i>
	S/O		<i>Initial design only - consortium review evident?</i>	
Hazards	S/O		<i>This will no longer be checked during weekly inspections (RYC 11/01/10)</i>	
Inspection & Test Plan System	S/O		<i>ITP in place for current works</i>	<i>Issue No 07 Available onsite and E-mails sent to all parties described in the witness process. Drawing on site latest rev available.</i>
	S/O		<i>Are there relevant RAMS and drawings in place to match up with the ITP?</i>	
	S/O		<i>Content of ITP adequate?</i>	
	S/O		<i>Supplementary records being compiled i.e. concrete checks?</i>	
Design Variation/Change	S/O		<i>Evidence in place for any design changes?</i>	<i>Yes</i>
	S/O		<i>Are appropriate CVI's or TQ's in place giving permission to make these changes?</i>	<i>CVI's are in place such as: CVI-0126, CVI-0125, TQ1151 & TQ1306</i>
	S/O		<i>Evidence these changes have been through the IDC/IDR process (office check)?</i>	<i>Drawings are updated and changes incorporated - office check through review process.</i>
	S/O		<i>Is there evidence that residual risk has been reviewed as a result of changes? If risk has increased, has an appropriate risk assessment been carried out?</i>	<i>Residual Risk Registers are updated on drawing. Appropriate Risk Assessments have been carried out and are incorporated in WPP - 0011 & WPP - 0080.</i>
As Built	S/O		<i>Evidence that As built are being produced as work progresses?</i>	<i>As-built meeting held with EXPANDED on 19/04/2010. Records are being developed as works progresses.</i>
	S/O		<i>Is the information being recorded? Is it adequate?</i>	
Asset Register	S/O		<i>Are new assets being logged on the asset register?</i>	<i>No New asset installed to date. BSC have now prepared a register for OLE poles and other various assets ready for the acceptance and populating.</i>
	S/O		<i>Refer to site drawings to determine new assets</i>	
Inspector Summary	<p><i>The HSQE Advisor was accompanied on site by BSC QA/QC Senior Engineer Arran Haynes. Expanded the, package contractor, produce evidence of ITP 015 and collation of as built records. Lindsay Murphy of the accompanied during this inspection. All documents readily available for inspections and no issues to report.</i></p>			

Inspection Summary and Acceptance

Prepared By Inspector:	Print: <i>Jim Ritchie</i>	Sign:	Date: <i>28/05/2010</i>
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Notes and photos:

