

Bilfinger Berger – Siemens – CAF Consortium

**EDINBURGH TRAM NETWORK
INFRACO CONTRACT**

**PERIOD REPORT No 13
TO 28 MARCH 2009**

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1 EXECUTIVE SUMMARY

53,000 hours were worked in period 12, of which 29,000 were site hours with one reportable accident.

The basis for progress measurement in this report is the programme showing the agreed mitigated impact of the initial design slippage as 38 days (7 weeks 3 days) on the end date. The impact of design information from the current design issue programme and known access dates after MUDFA completion is to shift the original Contract programme completion date to 18th July 2012, unchanged from the last report. Section A completion however, has slipped to 13 January 2011 due to a delay in commencing earthwork in the depot.

Work is in progress to produce revised road, trackform and OLE designs, incorporating Infraco proposals.

System engineering design is finalised for OLE and traction power and approaching finalisation for track, Depot equipment, signalling and other disciplines.

Tram manufacturing is progressing well.

Virtually all construction works are impacted by external issues which require resolution through the change process or the contract. Meetings of Principals representing Tie and the BSC partners and follow-on discussions have continued.

2 HSQE

2.1 Health & Safety

2.1.1 Safety Management including CDM

The Construction Phase Health & Safety Plan Rev 4 has been reviewed internally within BSC and will be forwarded in due course.

2.2 Accidents, Incidents and Near misses/unsafe conditions

Period 12-13 records up to the 13/03/09

2 Accidents recorded

- A member of the public was trapped between the fencing at princes street Gardens at 3.45am on Sunday the 8th March , he was removed by the fire brigade and ambulance crew and taken to hospital, investigation being carried out by the Police. This is **not** a recorded incident for the project.

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- An employee of MacKenzie twisted an ankle at Section 1B Princes Street whilst stepping off a kerb, this again wasn't a lost time accident, the operative received hospital treatment and returned to work the following day. Reported the 23rd February.

7 Unsafe conditions recorded in the period

- 1 theft of plant raised on the 3rd February from George Street being dealt with by the police.
- 1 Heras fencing left open at the foot of Hope Street on the 2nd March.
- 1 Unloading of rhino barrier on the 21st February on Princes Street incident was discussed in "a lessons learnt" meeting in March with tie and the Infraco team.
- 3 further breaches of security on site at 1c Princes Street. Over a period of the 3rd-8th of March some of which are associated with the Mound area that have been raised through consultation with MUDFA.
- 1 unsafe condition recorded by TCA on a trailing cable outside the Roxburgh Hotel action was taken by placing physical barrier.

1 Incident recorded

- 1 Princes Street service damage on a cable by a mini excavator with breaker. Reported the 12th March 2009.

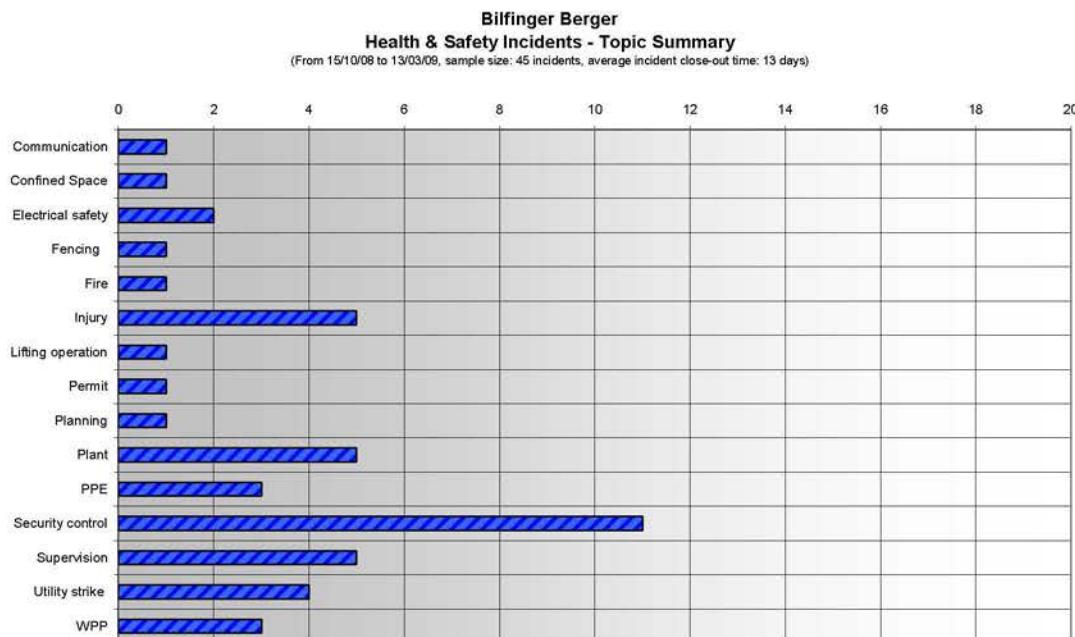
The rolling AFR for the first 12 periods is now 0.31.

Total Hours worked in Period 12

Total:	52.775
Non site hours =	24,237
Site Hours =	28,518

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2.2.2 Trend Analysis on Safety Related Activities.



2.3 Environment

- 2.3.1 Construction Environmental Management Plan under review to incorporate the Site Specific Environmental Management Plan, Waste Management Plan and the Environmental Mitigation and Management Plan.
- 2.3.2 First review of the document will be submitted within Period 14, this will ensure appropriate consideration of the risks and allow the client to review and feedback.

2.4 Quality

2.4.1 Quality Management System

Controlled copy Project Management Plan (PMP) volumes were issued and distributed to all applicable parties during the last period; this included 5 copies for **tie's** internal distribution.

BSC has developed an Excel 'Audit Findings Tracking Register' to keep track of all audit findings and actions to be taken and closed-out. This includes HSQE audits from **tie**, BSC internal, BSI, Network Rail, etc. At a later stage [once enough data has been collated] the NCRs from BIW will be added to the tracker and this will enable the sorting/export of applicable data to provide 'trending' graphs and reports.

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BSC is continuing to work on improving the documentation & records filing structure on BIW to reflect the CDM/Handover structure document provided by *tie*/Turner Townsend.

BSC is seeking help from the BIW company to improve the NCR process on BIW to include and facilitate additional data fields and integrity controls.

2.4.2 NCRs

At the time of writing there are currently 8 'open' 'quality' NCRs from a total of 19 raised to-date; 1 having been cancelled, and the remainder having been closed-out. 4 of the currently 'open' 'Quality' NCRs are 'overdue' and the other 4 due NCRs were raised during the last period as a result of the findings from the BSC Internal Design Processes & Interfaces Audit (2nd of March 2009) from which BSC has submitted the report to *tie*.

2.4.3 Audits

A 'BSC Internal Design Processes & Interfaces Audit' was carried out on the 2nd March 2009, to which *tie* was invited.

A 'BSC Internal 'Procurement, Commercial Change Management & Project Controls' was carried out on the 12th March 2009, to which *tie* was invited.

An 'BSC Internal 'Construction Activities' Audit is scheduled for the 31st March 2009, but may be postponed due to the fact that the Sub-Contractors who are to be audited are not on-site yet.

It is understood that *tie* plan to re-schedule their Audit Schedule. BSC would also like to revise their Audit Schedule to align with *tie's* by way of auditing the same functions/disciplines internally prior to *tie's* audits. BSC think this set-up would benefit the Project as there would be the opportunity to correct / improve any findings prior to the systems and processes being validated later by *tie*. The BSC Audit Schedule could also be revised to reflect periods, rather than months, to correlate with *tie's* Audit Schedule and resulting HSE Period reporting of Audit/NCR KPI's.

2.5 KPI

2.5.1 KPI spreadsheet for Period 12 is attached at Appendix 10.1.

2.6 Other Business

2.6.1 Occupational health meetings and arrangements are ongoing with another milestone meeting due on the 31st March with the contractors, as to their progression with their systems and procedures and the commitment to the project.

2.6.2 Further meeting scheduled for the 24th April with the HSE to demonstrate where we are on the Infraco project with our processes.

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- 2.6.3** Occupational health provider was procured for the project on the 9th March and will be in place by the 2nd week in April.
- 2.6.4** The A-B flyer is being well received on the project. It provides information to the workforce and contractors on the project of events and initiatives, as well as information from the consultation of the workforce meetings.

3. PROGRAMME

3.1 Contract Programme

The programme in the appendix to this report has the V31 mitigation programme, (now approved as revision 1 of the Contract Programme), as a baseline (which shows a 7 week 3 days slippage to the final Sectional Completion date compared with the original Contract Programme)

Progress achieved up to 20th March 2009 has then been recorded against the above baseline including inputting the latest IFC dates received from SDS (V42). Where the V42 IFC dates are forecast to be after the data date of the V42 programme (23rd February 2009) but before the data date of this programme (20 March 2009) and the drawings have not been received the date is defaulting to the 20 March 2009.

In addition the SDS V42 programme is showing that the design package for 2A Road and Track has been issued. This package has not been issued in full and therefore the date of IFC drawings for this intermediate section is defaulting to the programme data date (20th March 2009). No IFC date has been received for the redesign of South Gyle Access Bridge (again showing 20th March 2009)

We have received revision 7.9 of the MUDFA programme. The Contract Programme identifies completion of MUDFA works in each Intermediate Section and uses this date as a start milestone for the INFRACO work. Dates have been extracted from MUDFA revision 7.9 to update the V31 mitigation programme using the same logic. However in a number of areas the works have not been completed in line with rev 7.9 and this update of the programme is showing the finish of these works defaulting on the 20th March 2009.

It should be recognised that the programme has only been updated where noted in this report and does not include for all changes that we are aware of or have been notified to date e.g. dealing with abandoned services, mis alignment issues etc.

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The result is the following changes to Section Completion Dates:

	20 March 2009 Update	20 February 2009	Contract Revision 1
A	13 January 2011	03 December 2010	01 June 2010
B	30 March 2011	30 March 2011	01 July 2010
C	20 January 2012	20 January 2012	10 March 2011
D	18 July 2012	18 July 2012	06 September 2011

The above slippages is a direct consequence of incorporating revision V42 of the design programme and rev 7.9 of the MUDFA programme into the revised contract programme and is brought about by significant changes to some of the predicted IFC drawing dates.

At a number of locations the construction sequence has been changed, from that originally considered, to suit current constraints. Presently the logic of the Contract Programme remains unaltered from that envisaged at Contract Award. Therefore some minor inaccuracies occur when "progress to date" has been entered into the programme.

Note – the links between the third party consents and the related activities present in the Contract Programme have been deleted to enable a true analysis to be provided of the current situation.

3.2 Look Ahead Programme

The Look-Ahead Programme for the period March to June 2009 is an extract from the current Construction Programme updated with the latest IFC dates from the SDS V42 Programme. MUDFA activities remain in accordance with their programme Rev.07.9 which is out of date and misleading. The inclusion of accurate current MUDFA locations and planned completion dates are a priority. The programme has also been updated with progress of the works recorded to 20th March 2009.

Princes Street

The Princes Street Detailed Programme Rev.A accommodates a bus lane until 9th March 09 prior to full closure of Princes Street. The programme is also planned around the constraint that MUDFA Works on Princes Street at The Mound and at South St. Andrews Street will be complete on 31st March 2009.

The programme also allows for MUDFA occupation of the Lothian Road/Princes Street Junction until 24th April 2009. The Enabling Works period was scheduled from 5 January 09 until 21 Feb 09 prior to the construction start on 23rd February 2009. The Enabling Works were completed as planned.

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The Princes Street Programme is presently slipping as restricted operations continue.

These works are estimated to be 4 weeks late to the detailed Construction Programme and 6 weeks behind the Contract Programme Rev.1.

3.3 Design and Consents Programme Status

Revision 1 of the Contract Programme has been issued by BSC to take account of the 7 weeks 3 day extension of time awarded by tie.

The combined effect of post V31 design programme slippages, late site possession due to the presence of MUDFA, the transfer of MUDFA scope to INFRACO, dealing with abandoned services, notified variation and alignments issues are currently being considered in a sequential manner by BSC.

Planners from tie and BSC have jointly prepared first draft delay schedules for the above classes of delay measured at month end time slices of July, September and December 2008. This analysis is currently been placed on hold by agreement between tie and BSC.

Currently a Recovery Programme is being considered jointly by tie and BSC to see if an improved completion date to that noted above can be achieved. Individual "civil" works programmes have been prepared and distributed for each intermediate section of the works. The M&E works are currently being incorporated into these programmes to produce a single new programme for the project.

3.4 Tramco Programme Status

Updated tram design, procurement, manufacturing, delivery and commissioning programme is attached as Appendix 10.4.

4 PROGRESS

Programme update attached as Appendix 10.2.

4.1 CIVIL & BUILDING WORKS

4.1.1 Civil & Building Design

4.1.1.1 Production IFC Design

The design tracker which is shown in Appendix 10.9 identifies the status of design available in each section.

During the last period we have received IFC design for sections 1B, 1C and 1D.

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We are expecting IFC design on OLE Foundations, Track Improvement Layer and Roads Construction Methodology.

Submissions for OLE, Trackform and CAF - Design and will be covered under 4.1.1. E&M Systems.

Workshops for the identification of misalignments and design integration are ongoing.

Tie requested to be invited to misalignment workshops for the start to avoid duplication of meetings.

The development schedule is shown in Appendix 10.9.1.

4.1.1.2 Approvals & Consents

Outstanding design submissions are Roads for section 1A3 which is depending on clarification from CEC/Forth Ports.

Submission for 5A Balgreen Road NRW Access Bridge is scheduled for 20.03.09.

The Roads Packages for 1C2 and 6A are with CEC for approval.

The Road Design for sections 1A1/1A2, 1A4, 2A, 5A, 5B, 5C and 7A is approved with comments which are being closed out.

The Drainage design for sections 2A, 5A, 5B and 5C have been received back at marked up drawings for close out.

Drainage section 6 will be dealt with as amendment to existing approvals package.

Pedestrian Crossing Timings (TAL 5/05).
BSC awaits tie instruction.

OLE Bases Design Changes. BSC await approval from tie.

Formal recognition of the resource required for the Extended Construction Support and Design Support still not fully received for historical proposals.

4.1.1.3 Issues and Concerns

While most of the ongoing design issues could have been dealt with in the regular Design Issue meetings the following issue are in dispute and need to be elevated.

- New Ingliston Limited (NIL); SDS developing supplemental estimate based on new scope of work.
- CEC preference for Demarcation between Tramway and Roadway; CEC design comment unresolved as CEC need to determine preferred method of demarcation.

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- CEC Transport request for relocation of OLE poles is deemed to be genuine change.
- Transdev comments received late and need tie instruction.

4.1.1.4 Extended Construction Support and Design Support

Proposed staffing for the upcoming month, based on anticipated construction activities from the BSC look-ahead programme is included as Appendix 10.9.2.

Roads Construction Support Teams

- Support and attendance to section progress meetings.
- Section 1
 - a. Pavement Surveys/Conflict Reporting in an attempt to keep in front of construction works.
 - b. Supervision and consideration of road excavation for CBR testing.
 - c. Assistance with GI survey.

Geotechnical Construction Support Teams

- Section 6
 - a. Depot remediation works survey/design.
- Section 7
 - a. Ongoing investigations and verifications of ground conditions in line with Farran's programme of works.
- Section 5
 - a. Inspection of base formations and embankment profile and track slab foundations.

Civil and Structural teams

- Support and attendance to section progress meetings.
- Section 7
 - a. Ongoing inspections of piling, bridge and culvert concrete works.
- Section 5
 - a. Ongoing inspections of piling and bridge works.

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4.1.1.5 Request for Information

Request for Information is scheduled in the RFI Register in Appendix 10.5.

4.2.1 Procurement

4.2.1.1 Sub- Contractors

A sub-contract procurement schedule, showing status at the 16th March 2009, is attached as Appendix 10.5.

Section 1A

Section 1A has now been split into three areas, Newhaven to Ocean Terminal (1A1), Ocean Terminal to Bernard Street (1A2) and Bernard Street to Foot of the Walk (1A3).

Meetings have been held with McKean Construction & Barr Surfacing & Civil Engineering regarding subletting 1A1 and 1A2. Final negotiations are continuing however uncertainty on programme in these areas as a result of MUDFA are hindering progress.

We intend to extend Crummcock involvement down from Foot of the Walk to Bernard Street (1A3).

Section 1B

We have concluded our procurement process for Section 1B.

Section 1C

Crummock have submitted their price for 1C1 (MacDonald Road-London Road) and we are currently reviewing this. Our ability to conclude discussions with Crummock are restricted by the uncertainty over programme / access.

We are in the final discussions with Mackenzie Construction Ltd over section 1C3 (Castle Street-Waverley Bridge) however our ability to conclude these negotiations is affected by the uncertainty over programme and access.

It is our current intention to self deliver the remaining works in Section 1C2 (London Road – Waverley Bridge) and a final strategy for carrying out the works is still to be agreed. This work is not now expected to start until Jan 2010 and a procurement process will commence late spring 2009.

Section 1D

Final negotiations are proceeding with MacKenzie to conclude a subcontractor order.

Section 2A and 5A (Part)

Final negotiations are proceeding to conclude a subcontractor order.

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Section 5A (Part), 5B and 5C (Part)

Dunne, Expanded and Farrans have provided competitive lump sum fixed price quotations for the balance of the structures. Discussions continue over programme etc.

Package quotations for the balance of the civils works in section 5 have been received and are currently under review, however our ability to review these prices is affected by the uncertainty over programme and access.

Section 6

We are currently finalising the terms and conditions of the full subcontractor order for Barr Ltd for the construction of the depot.

In the meantime Barr Ltd has been issued with a Limited Instruction to Proceed to progress any area of the depot where it is possible to do so.

Section 7A

Final negotiations with Farrans on the terms and conditions of a subcontract order have been concluded.

The terms and conditions have been sent to tie and we await their approval before being in a position to execute the formal order.

General

Procurement of relevant key subcontractors (Major Civil Works Contractors, Piling Contractors, Ground stabilisation specialists) includes the requirement for provision of a Collateral Warranty, in accordance with cl 28.7 of the Contract.

We may need to offer tie, in some instances, alternative wording for their agreement, as we have not as yet been able to conclude our negotiations with potential subcontractors using the template in Schedule 8 part F.

The length of time it has taken to either procure, negotiate and conclude any subcontract has been affected by the complexity of the main contract negotiations and how we step these down into the subcontract, the necessity to operate a complex milestone schedule which can be adversely affected by progress and change on site and the overall uncertainty on programme.

4.2.1.2 Materials

No comment.

4.2.1.3 Long Lead Procurement Management

A letter of intent was issued to Fairfield Mabey to secure delivery of the beams for the Water of Leith Bridge.

Issues with programme and delivery dates have been resolved and we have placed the formal order for the supply of the precast concrete beams to Edinburgh Park, Carricknowe and South Gyle Access Bridge.

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We are currently sourcing prices for the beams and bearings for Tower Dock Bridge to maintain programme. These materials relate to section 1A2.

4.1.3 Construction

4.1.3.1 Progress on site, to 20th March 2009

Reported against Revision 1 of the Contract Programme (ie V31 Mitigation programme)

Section	Planned Completion Contract Programme Revision 1	Actual Completion to 20-02-2009	Completion Date Contract Programme Revision 1	Anticipated Completion Date (Contract Programme Revision 1)
1A	21%	0%	07/03/2011	14/11/2011
1B	25%	3%	05/11/2010	25/08/2011
1C	17%	1%	11/03/2011	20/01/2012
1D	26%	1%	17/09/2010	02/06/2011
2A	44%	8%	03/03/2010	18/11/2010
5A	27%	0%	20/12/2010	12/09/2011
5B	33%	8%	31/08/2010	01/06/2011
5C	30%	1%	20/09/2010	07/07/2011
6	34%	1%	01/06/2010	03/12/2010
7	36%	6%	05/10/2010	06/07/2011
Construction	29%	4%	Section C	Section C
			10/03/2011	20/02/2012
			Section D	Section D
			06/09/2011	18/07/2012

4.1.3.2 Section 1A Newhaven Road to Foot of the Walk

No activities carried out during period, section progress remains at 0%.

Currently 20.5 weeks behind revised Contract Programme dated 24th November 2008.

4.1.3.3 Section 1B Foot of Leith to McDonald Road

Section progress remains at 3%.

Ch 100-350

Limited activities carried out during period,
Demobilisation works completed on 20th March 2009.

Currently 31 weeks behind revised Contract Programme dated 24th November 2008.

Ch 0 -100

No activities carried out during period.

Currently 27 weeks behind revised Contract Programme dated 24th November 2008.

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Ch 350 -600

No activities carried out during period.

Currently 20.5 weeks behind revised Contract Programme dated 24th November 2008.

Balfour Street Ch 600 – 850

No activities carried out during period.

Construction activities 14 weeks behind revised Contract Programme dated 24th November 2008.

4.1.3.4 Section 1C McDonald Road to Princes Street West

Section progress remains at 1%.

McDonald Road to Picardy Place

Ch 0 – 375

No activities carried out during period.

Construction activities currently 20.5 weeks behind revised Contract Programme dated 24th November 2008.

4.1.3.5 Section 1D Princes Street to Haymarket

Section progress remains at 1%.

Lothian Road Junction Ch 440 – 280

Princes St Closure completed on 22nd February 2009.

Limited construction activities ie site investigation works completed 20th March 2009.

Construction activities are currently 6 weeks behind Contract Programme dated 24th November 2008.

Haymarket Ch1250 -1125

No activities carried out during period.

Construction activities 9 weeks behind revised Contract Programme dated 24th November 2008.

4.1.3.6 Section 2A Haymarket to Roseburn Junction

Section progress remains at 8%.

Haymarket Station Viaduct

No activities carried out during period.

Currently 25 weeks behind revised Contract Programme dated 24th November 2008.

Verity House Access Road

Limited construction activities commenced 23rd February 2009

Haymarket – Roseburn Trackwork

No activities carried out during period.

Construction activities currently 29 weeks behind revised Contract Programme dated 24th November 2008.

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4.1.3.7 Section 5A Roseburn Junction to Balgreen Road

Section progress remains at 0%.

Russell Road Bridge

No activities carried out during period.

Currently 39 weeks behind revised Contract Programme dated 24th November 2008.

Russell Road Retaining Walls W3 & W4

No activities carried out during period.

Currently 18 weeks behind revised Contract Programme dated 24th November 2008.

Murrayfield Tram Stop Retaining Wall

No activities carried out during period.

Currently 32 weeks behind revised Contract Programme dated 24th November 2008.

Roseburn Street Viaduct

No activities carried out during period.

Murrayfield Retaining Wall

No activities carried out during period.

Currently 30 weeks behind revised Contract Programme dated 24th November 2008.

Murrayfield Stadium Underpass

No activities carried out during period.

Currently 30 weeks behind revised Contract Programme dated 24th November 2008.

Murrayfield Retaining Walls 21D

No activities carried out during period.

Currently 7 weeks behind revised Contract Programme dated 24th November 2008.

Water of Leith Bridge

No activities carried out during period.

Currently 40 weeks ahead of revised Contract Programme dated 24th November 2008.

Baird Drive Retaining Wall

No activities carried out during period.

Currently 29 weeks behind revised Contract Programme dated 24th November 2008.

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Section progress 9%.**Carrick Knowe Bridge**

South Abutment – excavation complete and blinding concrete placed.
Currently 25 weeks behind revised Contract Programme dated 24th November 2008.

Trackwork Balgreen Road – Saughton Road
No activities carried out during period.
Currently 30 weeks behind revised Contract Programme dated 24th November 2008.

Bankhead Retaining Wall
No activities carried out during period.
Currently 39 weeks behind revised Contract Programme dated 24th November 2008.

South Gyle Access Bridge
No activities carried out during period.
39 weeks behind revised Contract Programme dated 24th November 2008.

Track work Saughton Road North – Bankhead
No activities carried out during period.
Currently 20 weeks behind revised Contract Programme dated 24th November 2008.

Track Work Bankhead – Edinburgh Park Station
No activities carried out during period.
Currently 31 weeks behind revised Contract Programme dated 24th November 2008.

Track Work Edinburgh Park Station – Edinburgh Park Central
No activities carried out during period.
Currently 30 weeks behind revised Contract Programme dated 24th November 2008

Edinburgh Park Station Bridge
Construction of sub-structure has continued.
Beam delivery now scheduled for 8th April 2009.
Currently 17.5 weeks behind revised Contract Programme dated 24th November 2008.

4.1.3.9 Section 5C Edinburgh Park Central to Gogarburn
Section progress remains at 1%.

Track Work Edinburgh Park Central – Gyle Centre
No activities carried out during period.

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Currently 29 weeks behind revised Contract Programme dated 24th November 2008.

Gyle Tram Stop Retaining Wall

No activities carried out during period.

Currently 40.5 weeks behind revised Contract Programme dated 24th November 2008

A8 Underpass

Sheet piling operations to Phase 1 commenced 13th March 2009.

Currently 18 weeks behind revised Contract Programme dated 24th November 2008.

Track Work Depot Stop – Gogarburn

No activities carried out during period.

Currently 19 weeks behind revised Contract Programme dated 24th November 2008

4.1.3.10 Section 6A Depot

Section progress 0%.

No activities carried out during period.

Currently 38 weeks behind revised Contract Programme dated 24th November 2008.

4.3.1.11 Section 7A Gogarburn to Edinburgh Airport

Section progress 7%.

Gogarburn Culvert No 1

Precasting of Culvert units has continued.

Currently 15 weeks behind revised Contract Programme dated 24th November 2008.

Gogarburn Culvert No 2

Excavation has been completed and PC units placed. Bacfill to structure has commenced.

Currently 14 weeks behind revised Contract Programme dated 24th November 2008

Gogarburn Culvert No 3

Precasting of Culvert units has commenced.

Currently 14 weeks behind revised Contract Programme dated 24th November 2008

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Formwork, reinforcement and concreting activities to sub structure have continued.

Backfill has been placed to allow reinforced earth works to commence.

Currently 32 weeks behind revised Contract Programme dated 24th November 2008

Ingliston Park & Ride – Edinburgh Airport

No activities carried out during period.

Gogarburn Retaining Wall W14

No activities carried out during period.

Currently 19.5 weeks behind revised Contract Programme dated 24th November 2008.

4.1.3.12 Submissions

91 Work Package Plans have now been approved/accepted.

28 Work Package Plans are currently in draft form or within the approvals process.

4.2 E&M SYSTEMS**4.2.1 OLE (Overhead Line Equipment)****Design**

Detailed design of OCL system is submitted and reviewed by tie.

Requirements clarification has been carried out with tie, where all requirements in Employers' Requirements addressed to lot OCL have been talked through, a common understanding has been reached and a validation & verification/ close-out method has been mutually agreed on with tie and BSC.

A small number of open items has been identified and will be followed up accordingly.

Approvals and Consents

No specific review comments have been received from tie with respect to location of poles with specified timescales.

An update of the concept of combined OCL poles has been presented to tie and is currently under review, informal comments have been communicated, and an updated version for CEC is programmed for 25th of March 2009.

A design walks through with tie and Transdev has been completed in support of the review and planning approval processes.

Issues and Concerns

No specific changes as a result of Planning Approval process have been received so far.

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Competitive tenders from sub suppliers for poles, wires and installation have been received and currently in negotiations.

OLE Installation contractors - Based on free issue of material from Siemens (orders placed or about to be placed). Tenders evaluated, short list generated. Confirmation required that programme can be changed by mutual agreement to mitigate abortive costs re standing time etc. No specific comments on tender submissions for governance reasons.

4.2.2 TPS (Traction Power Supply)**Design**

Design finalised.

Both, basic design (4) and detailed design submissions (7) have been submitted to tie, walk through reviews have been held and tie's formal replies have been received, one with review status level A – no objection, 10 with level B - proceed, none with level C – resubmit. BSC is currently in the process of formally replying to tie's comments for close out.

As communicated earlier (both formally and in meetings), detailed design submission regarding 11kV MV-switchgear (technically it detailed specification was finalised, earlier) will be submitted after subcontract with supplier was signed (planned within the next two weeks). The submission of relay coordination study is planned for June/ July 2009 and needed not before start of commissioning, as further hardware definition/ design activities are not dependent on study results.

6 of 7 FAT procedures have been submitted to tie for information. Review meetings have been held with tie and BSC has received review comment on 4 of the procedures with review status level A – no objection. tie's formal reply to 2 procedures is open. The FAT procedure, which has not been submitted to tie, yet is the one for 11kV MV switchgear, where the same thing applies as described above.

Requirements clarification has been carried out with tie and BSC, where all requirements in Employers' Requirements addressed to lot TPS have been talked through, a common understanding has been reached and a validation & verification close-out method has been mutually agreed.

Approvals and Consents

No current issues.

Issues and Concerns

Some clarifications regarding Employers' Requirements wording conflicts have been submitted to tie. Formal reply committed no response or date when one be supplied. Same applies for mutually agreed clarification on requirements close out methods. For the records, tie's formal reply is urgently required for mutual benefit.

Bilfinger Berger – Siemens – CAF Consortium**Production**

Competitive tenders from sub suppliers for 11kV MV switchgear have been received and currently in negotiations.

TPS Installation contractors - Tenders issued, clarifications being raised and responded to. Programme issue as per OLE.

4.2.3 TRW (Trackwork)**Design**

- Trackwork Specification Rails, Rail report welds and Joints was submitted.
- Trackwork Specification for Concrete Rev A and Rev B report was submitted.
- Transitions on Embankment Rev A report was submitted.
- Start of Detailed Design for Sections 1B, 2A, 5B and 6.
- Basic Design Direct Fixation Rev A report was submitted for BSC internal approval.
- Basic Design Rheda City G Rev A was submitted for BSC internal approval.
- Wheel Rail Interface Report was submitted for internal review.

Approvals and Consents

- 38 Technical Queries have been raised. 29 have been closed, 9 are still open.
- Technical meeting with tie, Siemens, VAE and BAM held in Croydon to review crossings.
- Technical meeting with tie, Siemens, BAM was held to present the rail stressing and CWR strategy.

Issues and Concerns

- Changes in design and Change Orders may influence the programme.
- Un-clarified programme situation.

Following activities are planned with the reporting period

- Resubmittal of Basic Design documents based on tie comments.
- Document in preparation to get CEC approval for Drainage Boxes as described within Infraco Agreement.
- Finalise complete Basic Design.

Production

- WPP for Section 1C and 1D Princes Street Rev A was submitted for BSC internal approval.
- WPP for Test Track at South Yards was issued.
- Princes Street Construction programme Rev A was received.
- Subcontractor BAM was instructed to start construction on Princes Street on 7 April 2009 on 4 February 2009.
- Arrival of second shipment of Rheda City C sleepers.

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Following activites are planned with the reporting period

- Delivery of 1900 m Rheda City C material.
- Delivery of 500 m Rheda G material.
- Preparation Princes Street Track Construction.

4.2.4 DWE (Depot Workshop Equipment)**Design**

Design is further progressing.

Current progress includes preparation of detailed design of

- Measuring Equipment
- Machines
- Storage equipment

all in support of procurement of long lead time items and to provide design input .

Design of the Service Vehicles are finished and will be submitted to tie within the next days.

Technical meetings with the tram maintenance for the performance requirements of the equipment are conducted and will be followed up.

Approvals and Consents

Under floor Wheel Lathe design submittals handed over in October.
Comments from tie are received and will be answered in March.

Crane Submittal handed over in January.

Lifting Plant Submittal handed over in January

Washing Plant Submittal handed over in January

Issues and Concerns

No current issues.

Production

Procurement of long lead items finalised.

Orders placed for underfloor wheel lathe, underfloor lifting plant, washing plant.

4.2.5 Signalling, Communication, SCADA, PIS, PA**Design****Signalling**

Detailed Design of the TPDS onboard equipment and of supervisory control system VICOS OC 100 issued. The Detailed Design of the TPDS wayside equipment and the point controller/ interlocking system are ongoing and – to be issued in line with submission schedule.

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Design Review meetings with TIE/ Transdev have been scheduled for week commencing 23 March 2009.

Communication

Detailed Design - Tramstop Cabinet, Detailed Design - Onboard Radio System, Detailed Design - Fibre Optic Cable, and Detailed Design - Tramstop Cabinet UPS issued

Design Review meetings with TIE/ Transdev have been scheduled for week commencing 23 March 2009.

SCADA, PIS, PA (RailCom Manager)

The formal comments received against the Preliminary Design (PD) have been incorporated and will be re-submitted. Where applicable these comments have also been incorporated in the Detailed Design Documentation for the RailCom Manager. The Detailed Design for SCADA, PIS, PA is ongoing and will be issued in accordance to the latest submission schedule.

Approvals and Consents

It should be noted that a number of Detailed Design submissions is being delayed by the lack of response/clarification to Request For Information (RFI) and Technical Queries (TQ's) submitted via the BIW process.

Issues and Concerns

No current issues.

Production

TPDS onboard computer have been ordered.
Points heating systems have been ordered.
Tramstop E&M Cubicles have been ordered.

Revised quotations for the ODN equipment are being finalised with the target for ordering this equipment by the end of March 2009.

SIG & Comm - partially in-house, tenders for residue not yet issued. option in OLE contract to undertake Sig and Comm works.

4.2.6 TLC (Traffic Light Control)

Design

Comments from tie received and will be incorporated into next proposal update.

Approvals and Consents

No current issues.

Issues and Concerns

No current issues.

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Production

No current issues.

4.2.7 HV/LV - Supply

Design

Coordination with tie in regard of Siemens content took place. Update of HV/LV proposal ongoing, Scottish Power procurement to be announced to tie when executed.

Approvals and Consents

No current issues.

Issues and Concerns

No current issues.

Production

No current issues.

4.3 TRAMS

4.3.1 Design

CAF considers Siemens' Radio and TPDS systems as fully defined.

On the other hand, CAF considers as an outstanding issue the fully definition of the Bus Tracker system provided by TIE/Lothian Buses.

It is important to clarify that the Bus Tracker supplier already delivered information to CAF at the end of 2008 and it has recently informed CAF that the mechanical interface will not change and that they are on the final stages defining the functionality which for CAF will imply the full definition of the system with no major change compared with existing information.

CAF has used information delivered last year 2008 in order to develop its tram design. Hopefully, there will be no impact when fully and final detailed information is released.

4.3.2 Procurement

CAF manufacturing process has started since beginning of December 2008.

Several bodyshells have been finished and made available for inspection.

First bodyshell C-1 was inspected by Tie on the 26 February 2009. Second bodyshell D-1 is available on the 9th of March and on the 13th of March, bodyshells A-1 and F-1 will be available for inspection.

First bodyshell C-1 has been applied with primer and based coated.

The first A - B - C modules will be used for bodyshell testing.

Please see the manufacturing status on the attached document "Estado fabricación Edimburgo; 09-03-2009".

Bilfinger Berger – Siemens – CAF Consortium**4.4 SYSTEMS INTEGRATION****4.4.1 EMC****4.4.1.1 Earthing & Bonding**

Clarification of individual civil structures such as parapets has been done.

4.4.1.2 Stray Current

Presentation of Calculation Results has been carried out at SCWP on 5 March 2009.

Preliminary Report of these results has been prepared and forwarded to tie.

4.4.1.3 Network Rail Immunization

Soil Resistivity Test Report has been submitted to tie.

The Milestone structure has been refined and updated.

4.4.2 System Assurance**4.4.2.1 Deliverables issued**

- System Assurance Plan, Rev D - updated and issued to **tie**. This describes the activities required to satisfy the project requirements under ROGS (2006). This incorporates comments received from tie. ICP still has comments these have been addressed in Rev E of the document which is in the process of being signed off and delivered to **tie**.
- System Hazard Log - A Hazard Log Base Line report was issued to the PSCC Sub-Committee and all Hazard owners. This has been agreed and the 484 hazards identified have been closed. This leave 317 hazards open each with a single hazard owner.

4.4.2.2 Activities completed:

- Hazard Log - The 'Open' Hazards have been issued to their respective owners and a close out / mitigation argument has been requested. The initial ranking / mitigation arguments have been issued by Tram Maintenance, REL and RA and will be reviewed by the PSCC Sub Committee.

4.4.2.3 Activities Started and/or Ongoing:

- Update and manage Hazard Log based on Hazard owners responses (on going). Based on mitigation provided by the Hazard owner the **tie** PSCC will review the hazard, rank the hazards' residual risk and confirm the if the hazard has been controlled so Far As Is Reasonably Practicable (SFAIRP). (Target Date ongoing).
- Conduct Hazard Analysis Work Shops as per System Assurance Plan (SAP). The objective is to ensure that a complete set of risks / hazards is has been identified and managed. Two activities are planned these are a 1). Hazard Workshop to be conducted by REL (19th March 09) and 2). HAZID workshop

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to identify any Hazards associated with the use of Track Circuits on the ETN Project (NOTE - The remaining Hazard workshops require planning. These should be complete by the end of April 2009, in order to prevent the possibility of any major rework of design. The operator and Maintainer will require to be involved in each review).

- NR / ETN Immunisation Work - Meeting planned with FMA to update hazard log with agreed mitigations and a close out report. This hazard log will then be handed to BSC to manage. A presentation is planned to the Network Rail Infrastructure Systems Review Panel (ISRP) a 'Case For Safety' to demonstrate that the two work streams that we have undertaken above have minimised the risk to the Network Rail Infrastructure ALARP. This document is due in August / September.
- Human Factors - Control Centre - The contract requires an ergonomic assessment of the control centre against Standard - ISO 11064 "Ergonomic Design of Control Centres." To date some work has been done by the LOTS (REL, RA, York and Transmittion) to involve the Operator and Maintainer but this standard also requires an assessment in respect to the SCC furniture, lighting, climate control, etc).

4.4.2.4 Regular activities and attendances:

- As well as the above a number of other activities are ongoing such as regular attendance at the following meetings; PSCC, PSCC Sub-Committee, Technical Coordination, Requirements Man, SCWP.

4.5 TESTING, COMMISSIONING AND START-UP

CAF manufacturing process has started since beginning of December. First body shell finish should be available for inspection before the end of February. As an attachment you can see the up-date for manufacturing.

5 NOT USED**6 STAKEHOLDER AND THIRD PARTY ISSUES**

Discussions have continued to agree how tie's existing Stakeholder Management and Communications team can be best used to mutual advantage. BSC are willing in principle to contribute in kind or cost transfer to supplement this team, rather than duplicating resources to comply with the specific requirements of the Employer's Requirements as drafted.

7 COMMERCIAL**7.1 Milestones**

Preliminary Milestones Achieved in the Period

Month 11 Preliminaries (BB)
Month 11 Preliminaries (S)
Month 11 SDS Interface

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Months 1,2 and 3 Network Rail Immunisation

Construction Milestones Achieved in the Period

107	Russell Road Retaining Walls (W3 and W4)	Site Clearance
111	Murrayfield Retaining Walls (S21D)	Site Clearance
114	Baird Drive Retaining Walls (W8)	Site Clearance
116	Carrick Knowe Bridge (S23)	Blinding
194	Edinburgh Park Station Bridge (S27) Disruptive Possessions	Pier 2
359	Edinburgh Park Station Bridge (S27) Disruptive Possessions	Pier 3
174	Edinburgh Park Station Bridge (S27) Disruptive Possessions	Pier 4
329	Gogarburn Culvert No2 (S31)	Backfill and Finishes
A8250	Lothian Road Junction Ch 440 - 280	Establish Traffic Management & Temporary Fencing
A13840	Princes Street Ch 280 - 0, 1980 - 1360	Establish Traffic Management & Temporary Fencing

Milestones Programmed but not Achieved

Regular discussions take place now between tie and BSC on the subject of Milestones and the Milestones Programmed but not achieved are recorded elsewhere.

7.2 CHANGE MANAGEMENT

7.2.1 Changes/Instructions/Departures

The Change Register in Appendix 10.7 to this report shows 357 notifications of change at 13 March 2009, which are being processed currently.

To date 21 tie Change Orders have been issued. However there is no agreement to some Estimates that BSC provided as tie have unilaterally modified these Estimates and issued the tie Change Orders. Also included in

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tie's Change Order Pro-forma; "Relief required from compliance with Infraco obligations under the contract", "Programme impact and required Extension of Time", "Impact on Performance" remain unresolved.

Main reasons for not issuing Change Orders are: change not agreed in principle, BSC not being able to submit estimates within contract period, figures in estimates not agreed, Base Date Design Information not agreed, percentages for preliminaries and overheads not agreed.

Cost related issues for INTC No.1 programme misalignment V26 - V31 remain not agreed. Time related issues have been agreed.

With regards to matters corresponding to the SDS provider notices, tie has rejected all SDS Provider's notices of extension of time and related impact. tie does not accept that these issues constitute a change (36 SDS notices).

The complexity, nature and amount of changes have overloaded the change mechanism included in the Infraco contract, because the estimates cannot be submitted within the time frame requested in the contract and also due to the fact that the overall impact to the programme from a given change cannot be assessed on an individual basis. It has been agreed that the estimates submitted by BSC will only deal with direct related effects (costs) of a given change and the time related effect will be assessed as a separate issue, when dealing with programme issues, in order to have a more realistic approach for assessing the change effects to the overall construction programme.

Prioritisation of changes has been established in order to focus agreements on major/critical changes. Said prioritisation is included in Appendix 10.7.

A series of high level management meetings with the aim of solving major outstanding issues (among others: Base Date Design Information, applicable percentages for preliminaries and overheads, period for estimate submission, etc) are being held.

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7.2.2 E&M System

1 Change known / opened	36	58%
2 Calculation in progress	2	3%
3 cost breakdown to TIE	3	5%
4 negotiations with TIE ongoing	2	3%
5 signed cost breakdown sheet by TIE	0	0%
6 signed Change Order / Claim / Instr. by TIE	1	2%
7 Paid / Closed	4	6%
Time related Changes (in preparation, no letters)	14	
Lump Sum	62	

8 RESOURCES

8.1 Organisation Charts

Consortium and Systems organisation charts are included in this report.

See Appendix 10.8.

9 OTHER ISSUES

No comments.

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10 Appendices

10.1 KPI Report

PERIOD END DATES
(subject to confirmation)

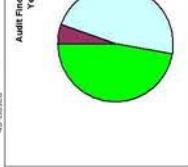
	2007 / 08	2008 / 09	2009 / 10	2010 / 11	2011 / 12
1	28/04/2007	26/04/2008	25/04/2009	24/04/2010	23/04/2011
2	26/05/2007	24/05/2008	23/05/2009	22/05/2010	21/05/2011
3	23/06/2007	21/06/2008	20/06/2009	19/06/2010	18/06/2011
4	21/07/2007	19/07/2008	18/07/2009	17/07/2010	16/07/2011
5	18/08/2007	16/08/2008	15/08/2009	14/08/2010	13/08/2011
6	15/09/2007	13/09/2008	12/09/2009	11/09/2010	10/09/2011
7	13/10/2007	11/10/2008	10/10/2009	09/10/2010	08/10/2011
8	10/11/2007	08/11/2008	07/11/2009	06/11/2010	05/11/2011
9	08/12/2007	06/12/2008	05/12/2009	04/12/2010	03/12/2011
10	05/01/2008	03/01/2009	02/01/2010	01/01/2011	31/12/2011
11	02/02/2008	31/01/2009	30/01/2010	29/01/2011	28/01/2012
12	01/03/2008	28/02/2009	27/02/2010	26/02/2011	25/02/2012
13	31/03/2008	28/03/2009	27/03/2010	26/03/2011	31/03/2012

NB 2010/11 and 2011/12 in particular may change

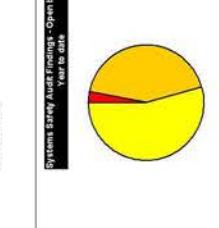
Data required by first Tuesday 12:00 hrs following period end.

Updated for Period 12 T7m report

Audit Findings Status - All
not accepted by auditee
awarding actions from auditee
Accepted and signed by one or more auditees
Actions dates agreed with auditee
presented by auditee for closure



Key Audit Findings - By Category



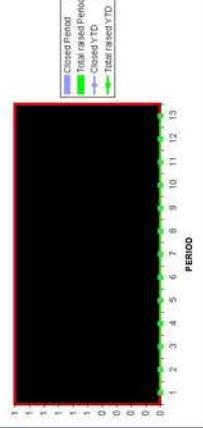
AUDIT FINDINGS - ALL

Closed Period
Total raised Period
Closed YTD
Total raised YTD
Open



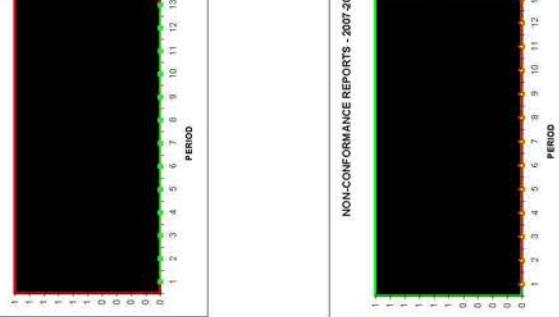
THEORY AND PRACTICE IN THE FIELD OF COUNSELLING

AUDIT FINDINGS - ALL 2007-2008



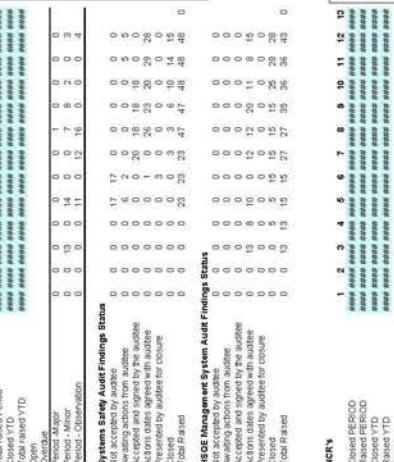
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AUDIT FINDINGS - ALL 2007-2008

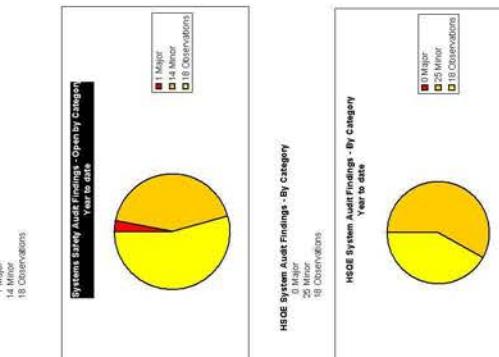


4 5 6 7 8 9 10 11 12 13

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Items Safety Audit Findings - By Category



CEC01002684_0033

INJURED BODY PARTS



The image shows a worker in an orange high-visibility vest and hard hat using a power tool to cut through a large pile of brush or branches. Blue arrows point from various body part categories to specific areas on the worker's body: the head/neck area, the torso area, the arm area, the hand/wrist area, the leg area, the foot/ankle area, the eye area, the face area, and the hand area.

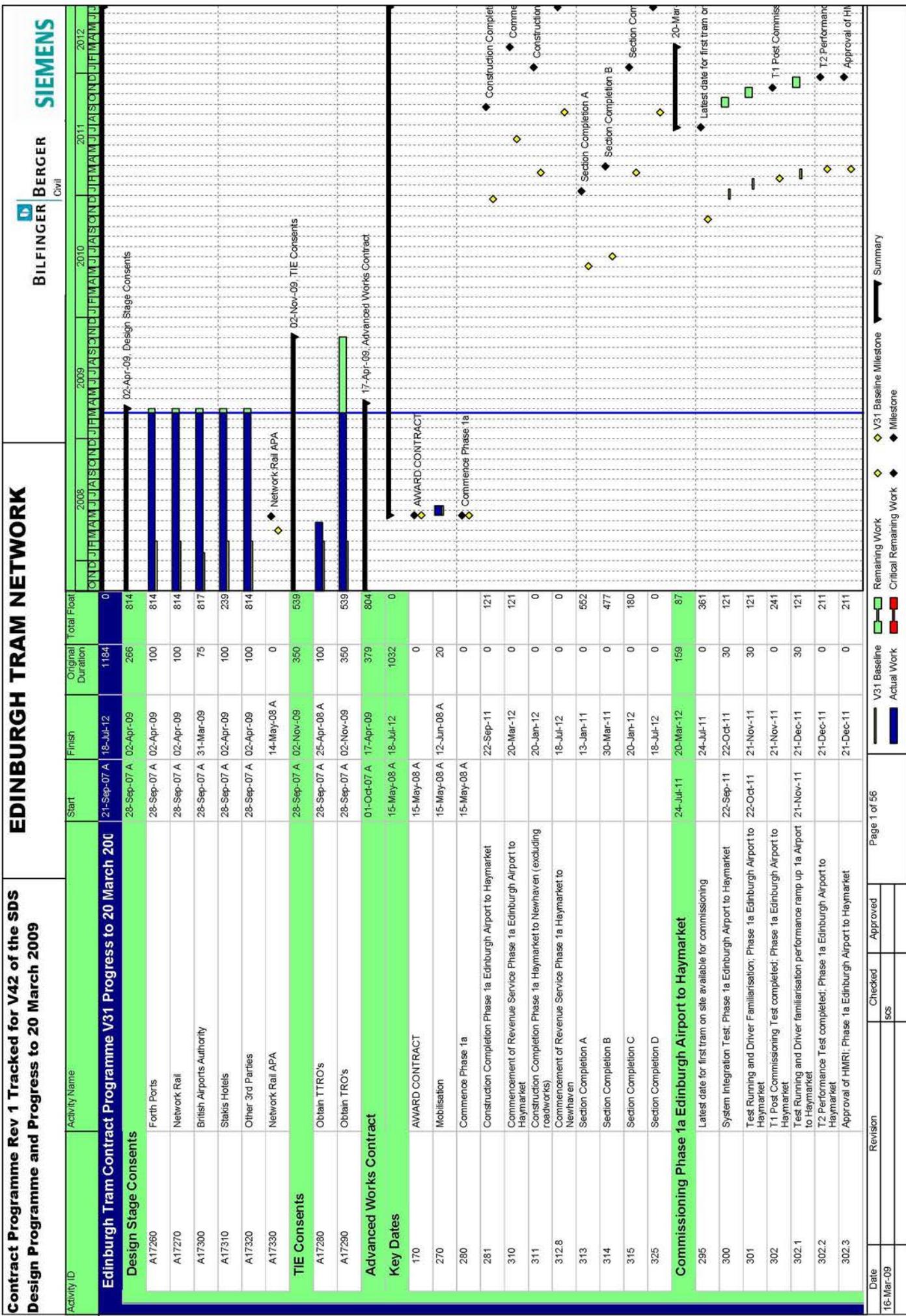
HEAD/NECK			
Period	YTD	13 Period	RIDDOR
0	0	0	0
BACK/TORSO			
Period	YTD	13 Period	RIDDOR
1	2	2	0
ARM			
Period	YTD	13 Period	RIDDOR
0	0	0	0
LEG			
Period	YTD	13 Period	RIDDOR
1	3	3	0
EYES			
Period	YTD	13 Period	RIDDOR
0	0	0	0
FACE			
Period	YTD	13 Period	RIDDOR
0	0	0	0
HAND/WRIST			
Period	YTD	13 Period	RIDDOR
1	2	2	0
FOOT/ANKLE			
Period	YTD	13 Period	RIDDOR
0	0	0	0

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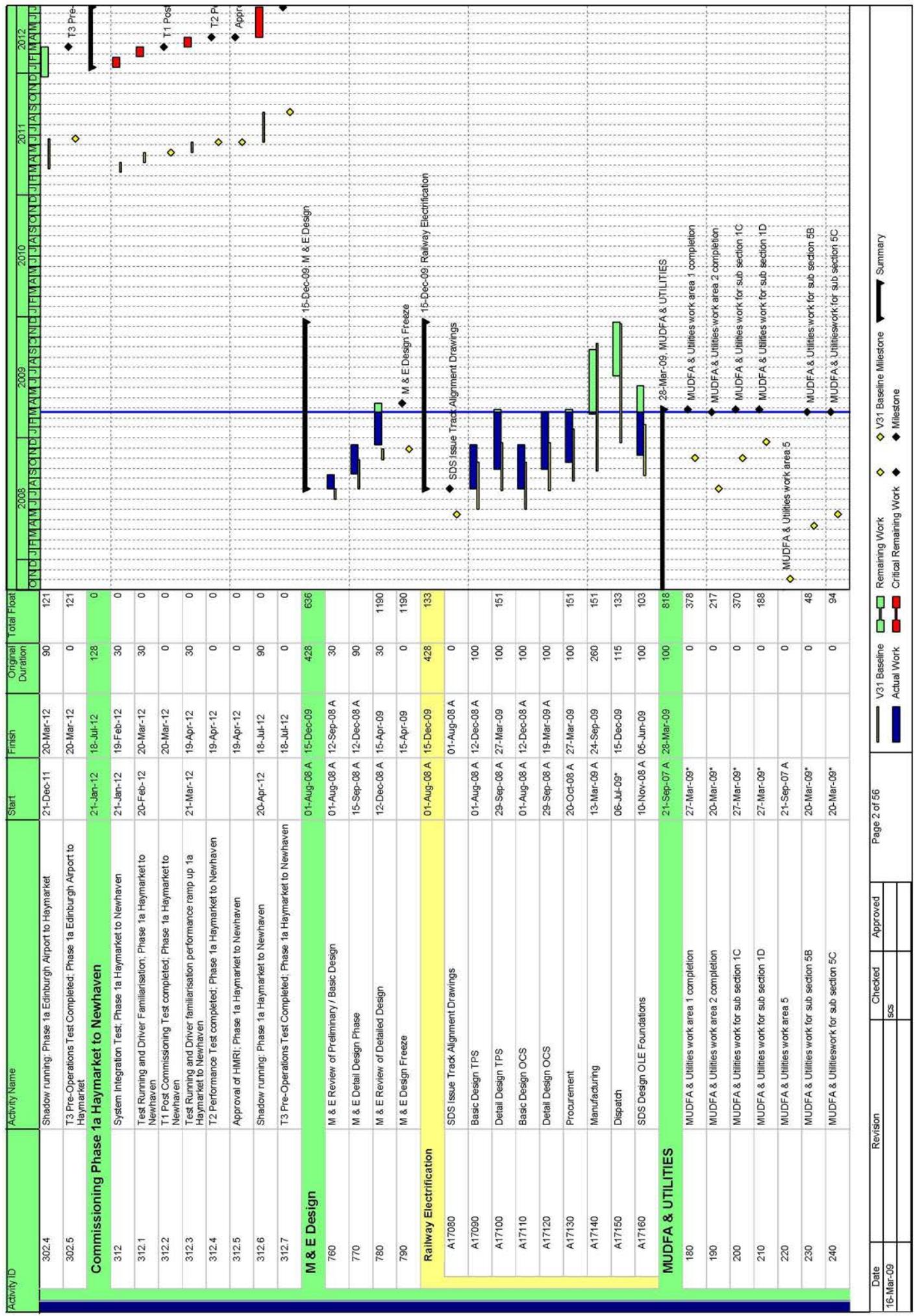
10.2 Programme Update

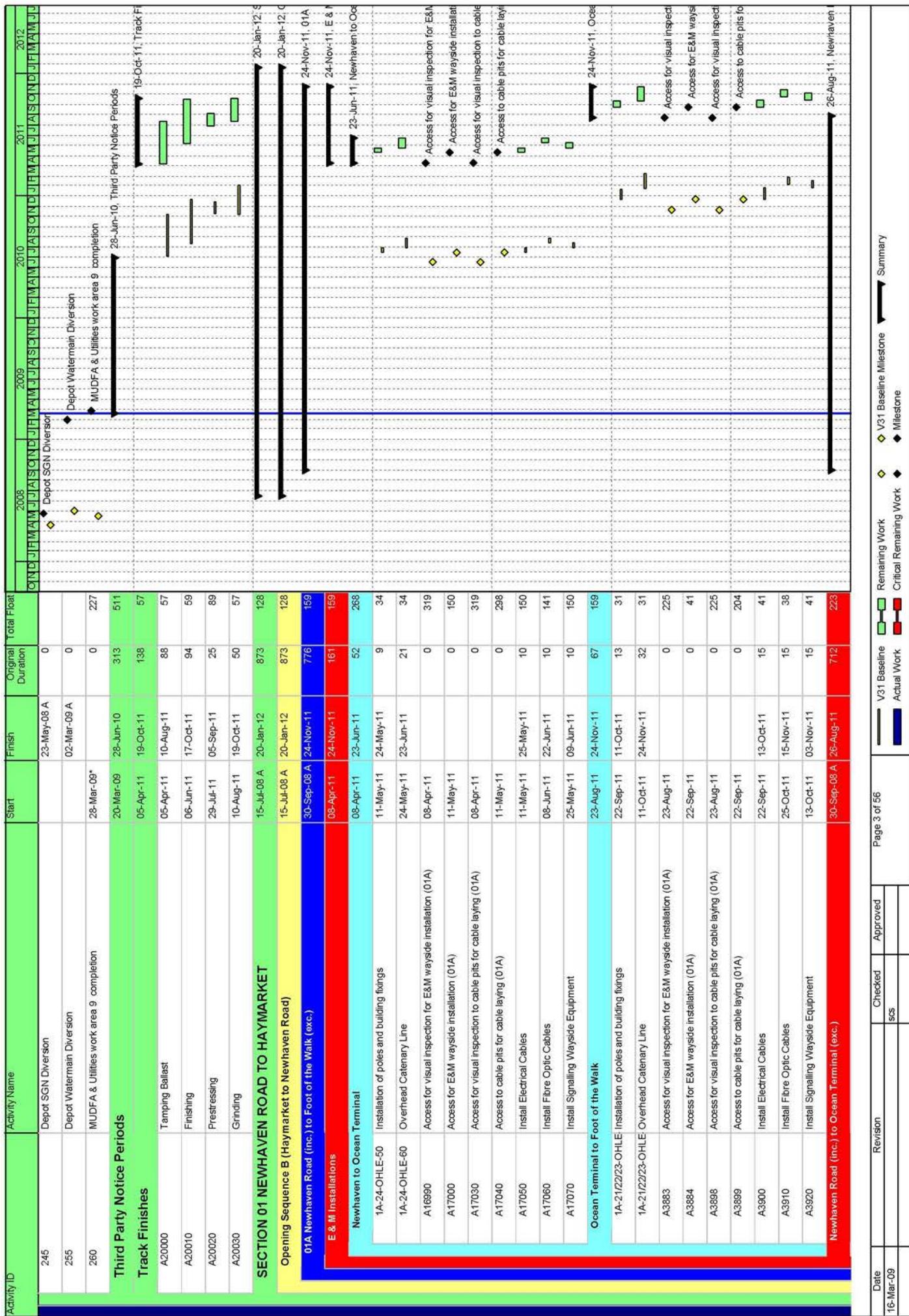
**Contract Programme Rev 1 Tracked for V42 of the SDS
Design Programme and Progress to 20 March 2009**

EDINBURGH TRAM NETWORK

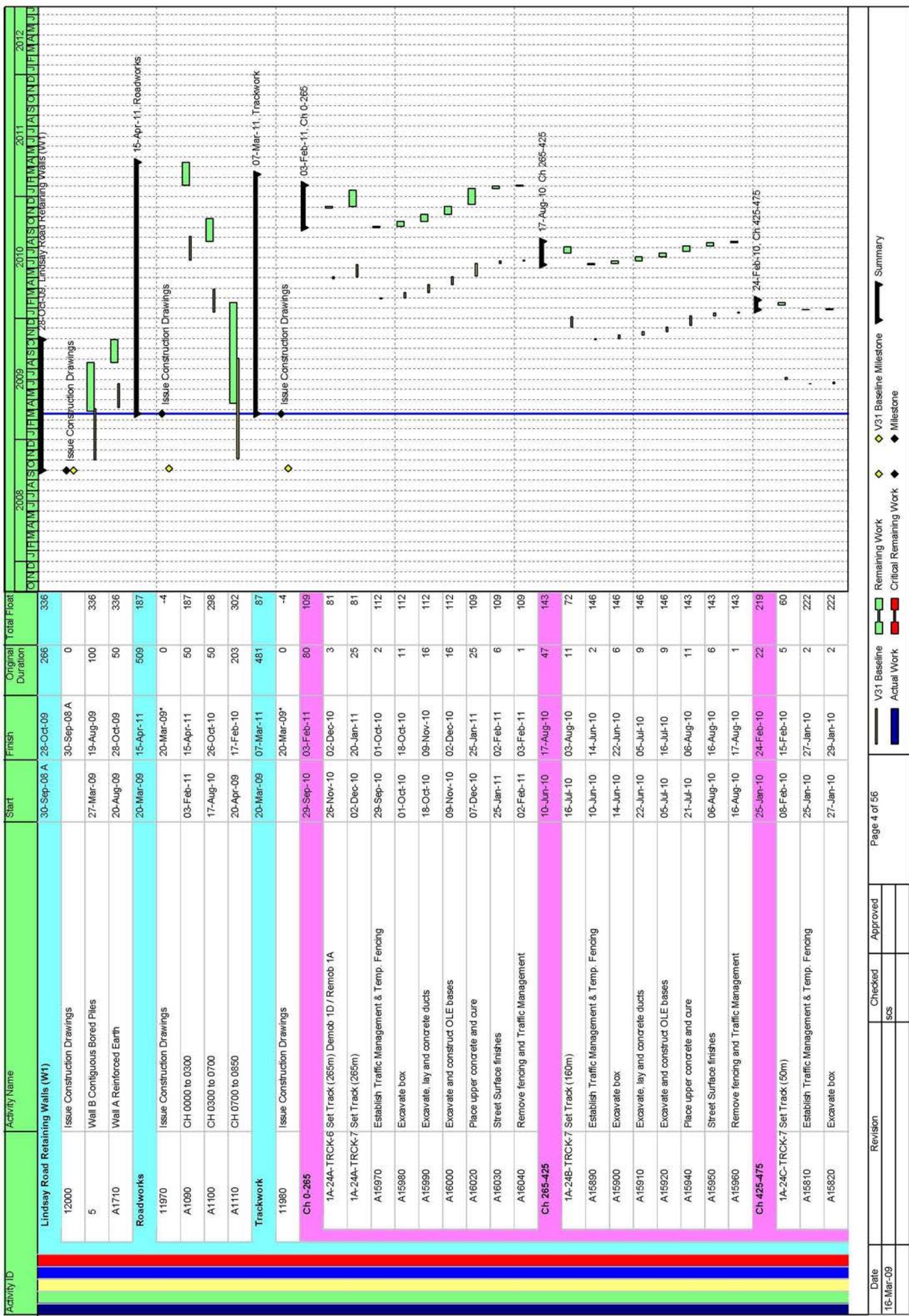


CEC01002684_0036





CEC01002684_0038



CEC01002684_0039

The Gantt chart displays the project timeline across three phases: 2010, 2011, and 2012. The tasks are color-coded by phase:

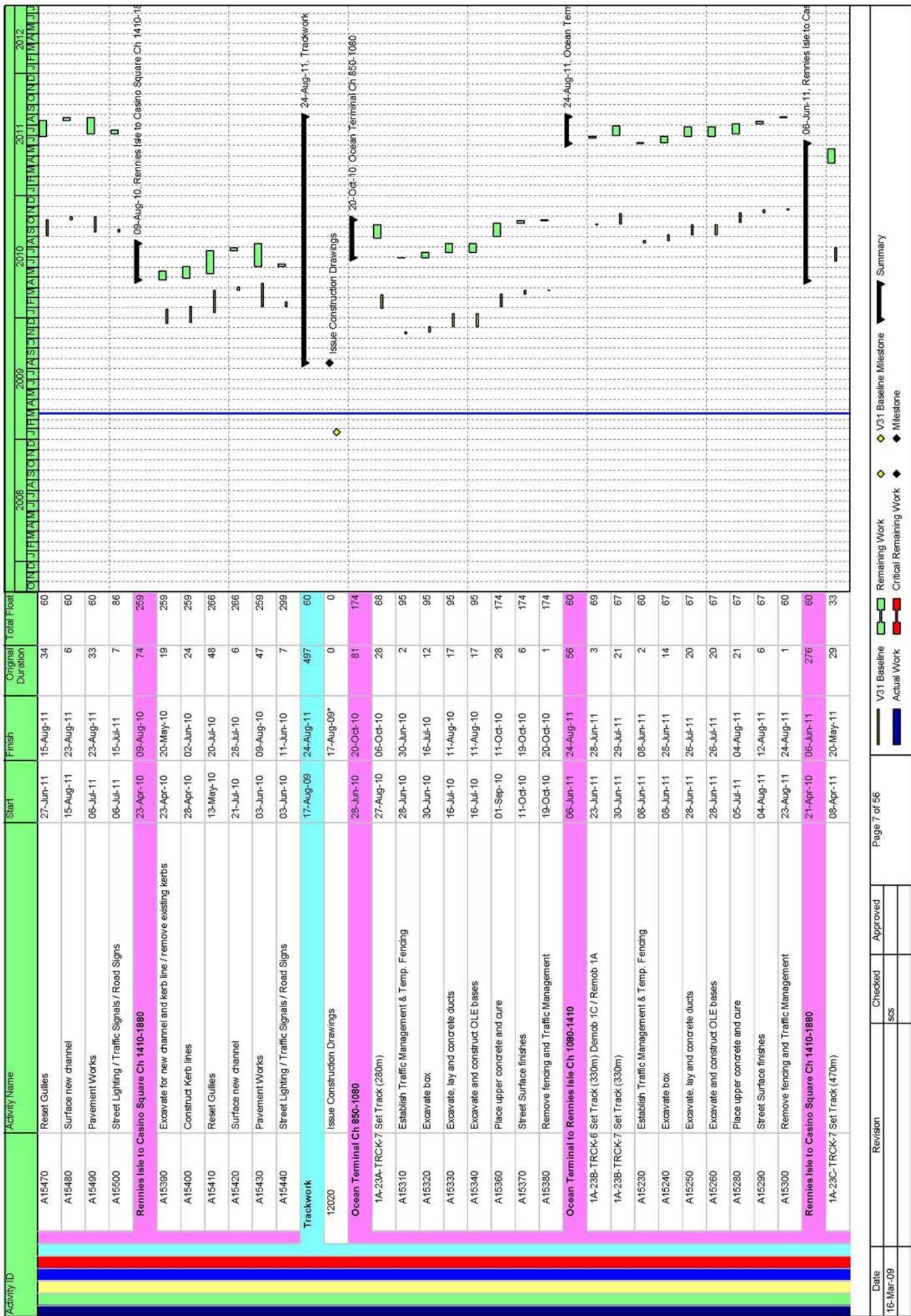
- Ch 475-800 Phase (January 2010 - January 2011):**
 - A15830: Excavate, lay and concrete ducts (Start: 29-Jan-10, End: 03-Feb-10)
 - A15840: Excavate and construct OLE bases (Start: 03-Feb-10, End: 08-Feb-10)
 - A15860: Place upper concrete and cure (Start: 11-Feb-10, End: 18-Feb-10)
 - A15870: Street Surface finishes (Start: 18-Feb-10, End: 23-Feb-10)
 - A15880: Remove fencing and Traffic Management (Start: 23-Feb-10, End: 24-Feb-10)
 - Ch 475-800** (Start: 29-Oct-09, End: 13-Jan-10)
 - Ch 24D-TRCK-7 Set Track (125m)** (Start: 02-Dec-09, End: 16-Dec-09)
 - Ch 24E-TRCK-6 Set Track Demob 2A /Remob 1A** (Start: 18-Aug-09, End: 21-Aug-09)
 - Ch 24F-TRCK-7 Set Track (100m)** (Start: 27-Jul-09, End: 30-Jul-09)
 - Ch 600-700** (Start: 27-Jul-09, End: 16-Sep-09)
 - Ch 700-850** (Start: 17-Dec-10, End: 07-Mar-11)
- Ch 600-700 Phase (February 2011 - February 2012):**
 - A15730: Establish Traffic Management & Temp. Fencing (Start: 29-Oct-09, End: 02-Nov-09)
 - A15740: Excavate box (Start: 02-Nov-09, End: 09-Nov-09)
 - A15750: Excavate, lay and concrete ducts (Start: 09-Nov-09, End: 19-Nov-09)
 - A15760: Excavate and construct OLE bases (Start: 19-Nov-09, End: 02-Dec-09)
 - A15780: Place upper concrete and cure (Start: 07-Dec-09, End: 04-Jan-10)
 - A15790: Street Surface finishes (Start: 04-Jan-10, End: 12-Jan-10)
 - A15800: Remove fencing and Traffic Management (Start: 12-Jan-10, End: 13-Jan-10)
 - Ch 600-700** (Start: 18-Aug-09, End: 21-Aug-09)
 - Ch 24E-TRCK-6 Set Track Demob 2A /Remob 1A** (Start: 21-Aug-09, End: 02-Sep-09)
 - Ch 24E-TRCK-7 Set Track (100m)** (Start: 27-Jul-09, End: 30-Jul-09)
 - Ch 600-700** (Start: 29-Jul-09, End: 05-Aug-09)
 - Ch 600-700** (Start: 05-Aug-09, End: 13-Aug-09)
 - Ch 600-700** (Start: 13-Aug-09, End: 21-Aug-09)
 - Ch 600-700** (Start: 26-Aug-09, End: 07-Sep-09)
 - Ch 600-700** (Start: 07-Sep-09, End: 15-Sep-09)
 - Ch 600-700** (Start: 15-Sep-09, End: 16-Sep-09)
 - Ch 600-700** (Start: 17-Dec-10, End: 07-Mar-11)
 - Ch 24F-TRCK-6 Set Track Demob 1B / Remob 1A** (Start: 02-Feb-11, End: 07-Feb-11)
 - Ch 24F-TRCK-7 Set Track (150m)** (Start: 07-Feb-11, End: 21-Feb-11)
 - Ch 600-700** (Start: 17-Dec-10, End: 21-Dec-10)
 - Ch 600-700** (Start: 21-Dec-10, End: 12-Jan-11)
 - Ch 600-700** (Start: 12-Jan-11, End: 25-Jan-11)
 - Ch 600-700** (Start: 25-Jan-11, End: 07-Feb-11)
 - Ch 600-700** (Start: 10-Feb-11, End: 24-Feb-11)
 - Ch 600-700** (Start: 24-Feb-11, End: 04-Mar-11)
 - Ch 600-700** (Start: 04-Mar-11, End: 07-Mar-11)
- Ch 700-850 Phase (February 2012 - March 2012):**
 - A15570: Establish Traffic Management & Temp. Fencing (Start: 10-Feb-11, End: 12-Jan-11)
 - A15580: Excavate box (Start: 12-Jan-11, End: 25-Jan-11)
 - A15590: Excavate, lay and concrete ducts (Start: 25-Jan-11, End: 07-Feb-11)
 - A15600: Excavate and construct OLE bases (Start: 10-Feb-11, End: 24-Feb-11)
 - A15620: Place upper concrete and cure (Start: 24-Feb-11, End: 04-Mar-11)
 - A15630: Street Surface finishes (Start: 04-Mar-11, End: 07-Mar-11)
 - A15640: Remove fencing and Traffic Management (Start: 04-Mar-11, End: 07-Mar-11)

Legend:

- V31 Baseline (Solid Blue Line)
- Actual Work (Solid Red Line)
- Remaining Work (Green Box)
- Critical Remaining Work (Red Box)
- Milestone (Black Diamond)

The Gantt chart displays the following project details:

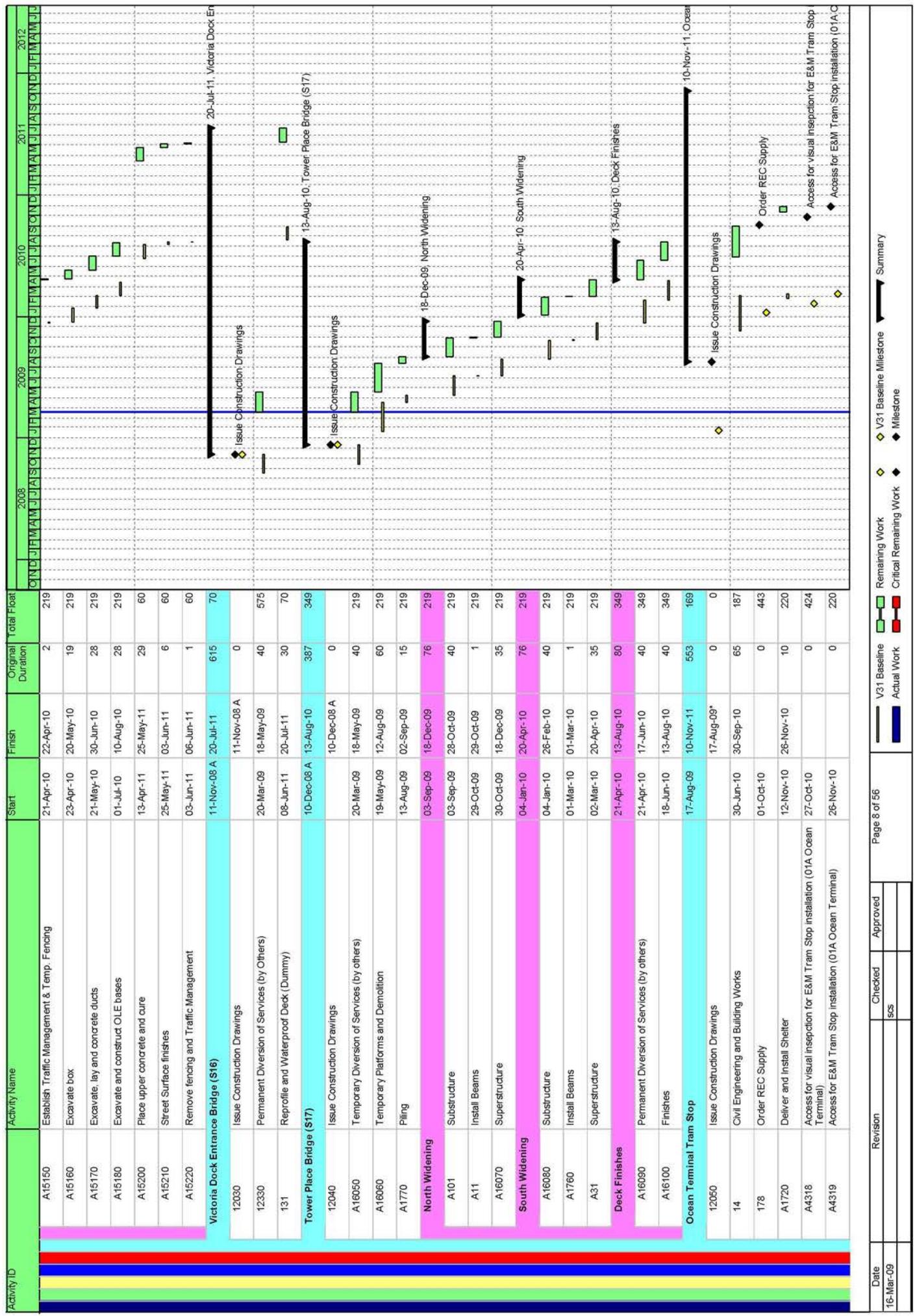
- Newhaven Road Tramstop:**
 - Activity ID: A1680
 - Activity Name: Deliver and Install Shelter
 - Start Date: 03-Feb-11
 - Finish Date: 09-May-11
 - Duration: 95 days
 - Original Duration: 223 days
 - Milestones: Order REC Supply (diamond), Access for visual inspection for E&M (square)
- A4288 & A4289:**
 - Activity ID: A4288
 - Activity Name: Access for visual inspection for E&M Tram Stop Installation (01A Newhaven Road)
 - Start Date: 09-May-11
 - Finish Date: 09-Jun-11
 - Duration: 95 days
 - Original Duration: 223 days
 - Milestones: Order REC Supply (diamond), Access for visual inspection for E&M (square)
- A4289:**
 - Activity ID: A4289
 - Activity Name: Access for E&M Tram Stop Installation (01A Newhaven Road)
 - Start Date: 09-Jun-11
 - Finish Date: 14-Jul-11
 - Duration: 95 days
 - Original Duration: 223 days
 - Milestones: Order REC Supply (diamond), Access for visual inspection for E&M (square)
- A4290:**
 - Activity ID: A4290
 - Activity Name: Install LV Power Supply and LV Power Equipment
 - Start Date: 14-Jul-11
 - Finish Date: 12-Aug-11
 - Duration: 95 days
 - Original Duration: 223 days
 - Milestones: Order REC Supply (diamond), Access for visual inspection for E&M (square)
- A4300:**
 - Activity ID: A4300
 - Activity Name: Install Telecom Equipment
 - Start Date: 14-Jul-11
 - Finish Date: 19-Aug-11
 - Duration: 95 days
 - Original Duration: 223 days
 - Milestones: Order REC Supply (diamond), Access for visual inspection for E&M (square)
- A4310:**
 - Activity ID: A4310
 - Activity Name: Install Station Control Equipment + AFC Equipment
 - Start Date: 19-Aug-11
 - Finish Date: 26-Aug-11
 - Duration: 95 days
 - Original Duration: 223 days
 - Milestones: Order REC Supply (diamond), Access for visual inspection for E&M (square)
- A4315:**
 - Activity ID: A4315
 - Activity Name: Package Test Tramstop
 - Start Date: 13-Jan-11
 - Finish Date: 08-Jul-11
 - Duration: 123 days
 - Original Duration: 257 days
 - Milestones: Order REC Supply from Scottish Power (diamond), Issue Construction Drawings (square)
- Leith Sands Sub Station:**
 - Activity ID: 36
 - Activity Name: Order REC supply from Scottish Power
 - Start Date: 13-Jan-11
 - Finish Date: 03-Feb-11
 - Duration: 157 days
 - Original Duration: 257 days
 - Milestones: Order REC supply from Scottish Power (diamond)
- A5480:**
 - Activity ID: A5480
 - Activity Name: Civil Engineering and Building Works
 - Start Date: 03-Feb-11
 - Finish Date: 09-May-11
 - Duration: 157 days
 - Original Duration: 257 days
 - Milestones: Order REC supply from Scottish Power (diamond)
- A5483:**
 - Activity ID: A5483
 - Activity Name: Power Infed from Public Net available inc HV cable
 - Start Date: 09-May-11
 - Finish Date: 06-Apr-11
 - Duration: 321 days
 - Original Duration: 257 days
 - Milestones: Power Infed from Public Net (diamond)
- A5484:**
 - Activity ID: A5484
 - Activity Name: Access for visual inspection for E&M Substation installation (01A Leith Sands)
 - Start Date: 09-May-11
 - Finish Date: 09-May-11
 - Duration: 0 days
 - Original Duration: 257 days
 - Milestones: Access for visual inspection for E&M (square)
- A5485:**
 - Activity ID: A5485
 - Activity Name: Access for E&M Substation installation (01A Leith Sands)
 - Start Date: 09-May-11
 - Finish Date: 31-May-11
 - Duration: 157 days
 - Original Duration: 257 days
 - Milestones: Access for visual inspection for E&M (square)
- A5500:**
 - Activity ID: A5500
 - Activity Name: Install LV Power Supply and LV Power Equipment
 - Start Date: 06-May-11
 - Finish Date: 20-Jun-11
 - Duration: 129 days
 - Original Duration: 257 days
 - Milestones: Access for visual inspection for E&M (square)
- A5510:**
 - Activity ID: A5510
 - Activity Name: Installation of TPS Equipment
 - Start Date: 27-May-11
 - Finish Date: 20-Jun-11
 - Duration: 129 days
 - Original Duration: 257 days
 - Milestones: Access for visual inspection for E&M (square)
- A5520:**
 - Activity ID: A5520
 - Activity Name: Install Telecom and Scada
 - Start Date: 20-Jun-11
 - Finish Date: 08-Jul-11
 - Duration: 129 days
 - Original Duration: 257 days
 - Milestones: Access for visual inspection for E&M (square)
- Ocean Terminal (inc.) to Port of Leith (exc.)**
- Roadworks:**
 - Activity ID: 12010
 - Activity Name: Issue Construction Drawings
 - Start Date: 17-Aug-09
 - Finish Date: 23-Aug-11
 - Duration: 496 days
 - Original Duration: 60 days
 - Milestones: Issue Construction Drawings (square)
- Ocean Terminal Ch 850-1080:**
 - Activity ID: A15510
 - Activity Name: Excavate for new channel and kerb line / remove existing kerbs
 - Start Date: 30-Jun-10
 - Finish Date: 16-Jul-10
 - Duration: 12 days
 - Original Duration: 205 days
 - Milestones: Issue Construction Drawings (square)
- A15520:**
 - Activity ID: A15520
 - Activity Name: Construct Kerb lines
 - Start Date: 05-Jul-10
 - Finish Date: 23-Jul-10
 - Duration: 14 days
 - Original Duration: 205 days
 - Milestones: Issue Construction Drawings (square)
- A15530:**
 - Activity ID: A15530
 - Activity Name: Reset Gullies
 - Start Date: 19-Jul-10
 - Finish Date: 27-Aug-10
 - Duration: 28 days
 - Original Duration: 205 days
 - Milestones: Issue Construction Drawings (square)
- A15540:**
 - Activity ID: A15540
 - Activity Name: Surface new channel
 - Start Date: 27-Aug-10
 - Finish Date: 06-Sep-10
 - Duration: 6 days
 - Original Duration: 205 days
 - Milestones: Issue Construction Drawings (square)
- A15550:**
 - Activity ID: A15550
 - Activity Name: Pavement Works
 - Start Date: 23-Jul-10
 - Finish Date: 02-Sep-10
 - Duration: 28 days
 - Original Duration: 205 days
 - Milestones: Issue Construction Drawings (square)
- A15560:**
 - Activity ID: A15560
 - Activity Name: Street Lighting / Traffic Signals / Road Signs
 - Start Date: 23-Jul-10
 - Finish Date: 04-Aug-10
 - Duration: 7 days
 - Original Duration: 228 days
 - Milestones: Issue Construction Drawings (square)
- Ocean Terminal to Rennies Isle Ch 1080-1410:**
- A15450:**
 - Activity ID: A15450
 - Activity Name: Excavate for new channel and kerb line / remove existing kerbs
 - Start Date: 08-Jun-11
 - Finish Date: 28-Jun-11
 - Duration: 14 days
 - Original Duration: 60 days
 - Milestones: Issue Construction Drawings (square)
- A15460:**
 - Activity ID: A15460
 - Activity Name: Construct Kerb lines
 - Start Date: 13-Jun-11
 - Finish Date: 06-Jul-11
 - Duration: 17 days
 - Original Duration: 60 days
 - Milestones: Issue Construction Drawings (square)



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Approved
Checked
V31 Baseline Work
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary



The Gantt chart illustrates the project timeline and tasks:

- Trackworks:**
 - A4320: Install LV Power Supply and LV Power Equipment (Nov 2010 - Jan 2011)
 - A4330: Install Telecom Equipment (Jan 2011 - Feb 2011)
 - A4340: Install Station Control Equipment + AFC Equipment (Jan 2011 - Feb 2011)
 - A4350: Package Test Transpot (Feb 2011 - Feb 2011)
 - A6090: Installation of SIG-interlocking cubicle (2) (Dec 2010 - Jan 2011)
 - A6100: Commissioning of SIG -interlocking cubicle (2) (Nov 2010 - Nov 2011)
 - 12060: Issue Construction Drawings (Mar 2011 - Mar 2011)
 - Casino Square to Baltic Street Ch 1880-1880: Set Track (30m) (Mar 2011 - Jun 2011)
 - 1A-22A-TRCK-7: Set Track (30m) (Mar 2011 - Jun 2011)
 - A16110: Establish Traffic Management & Temp. Fencing (Jun 2011 - Jun 2011)
 - A16120: Excavate box (Jun 2011 - Jun 2011)
 - A16130: Excavate, lay and concrete ducts (Jun 2011 - Jun 2011)
 - A16140: Excavate and construct OLE bases (Jun 2011 - Jun 2011)
 - A16160: Place upper concrete and cure (Jun 2011 - Jun 2011)
 - A16170: Street Surface finishes (Jun 2011 - Jun 2011)
 - A16180: Remove fencing and Traffic Management (Jun 2011 - Jun 2011)
- Roadworks:**
 - 12070: Issue Construction Drawings (Mar 2011 - Mar 2011)
 - Casino Square to Baltic Street Ch 1880-2110: Set Track (230m) (Mar 2011 - Jun 2011)
 - 1A-22B-TRCK-7: Set Track (230m) (Mar 2011 - Jun 2011)
 - A15010: Establish Traffic Management & Temp. Fencing (May 2011 - May 2011)
 - A15020: Excavate box (May 2011 - May 2011)
 - A15030: Excavate, lay and concrete ducts (May 2011 - May 2011)
 - A15040: Excavate and construct OLE bases (May 2011 - May 2011)
 - A15060: Place upper concrete and cure (May 2011 - May 2011)
 - A15070: Street Surface finishes (May 2011 - May 2011)
 - A15080: Remove fencing and Traffic Management (May 2011 - May 2011)
- Casino Square to Baltic Street Ch 1880-2110:**
 - A15090: Excavate for new channel and kerb line / remove existing kerbs (May 2011 - Jun 2011)
 - A15100: Construct Kerb lines (May 2011 - Jun 2011)
 - A15110: Reel Gullies (May 2011 - Jun 2011)
 - A15120: Surface new channel (May 2011 - Jun 2011)

Milestones:

- Issue Construction Drawings (Mar 2011)
- Issue Construction Drawings (Jun 2011)
- V31 Baseline Milestone (Jun 2011)

Legend:

- V31 Baseline: Blue bar
- Actual Work: Red bar
- Remaining Work: Green bar
- Critical Remaining Work: Yellow bar
- Milestone: Black diamond

The Gantt chart illustrates the project timeline and tasks for the Port of Leith Tram Stop. The project spans from April 2010 to March 2011, with activities categorized by color-coded phases: Pavement Works (light green), Street Lighting / Traffic Signals / Road Signs (cyan), Civil Engineering and Building Works (blue), Order REC Supply (dark blue), Deliver and Install Shelter (yellow), Access for visual inspection for E&M Tram Stop installation (orange), Access for E&M Tram Stop installation (01A Ocean Drive) (pink), Install LV Power Supply and LV Power Equipment (light orange), Install Telecom Equipment (light pink), Install Station Control Equipment + AFC Equipment (light yellow), Package Test Tramstop (light cyan), Bernard Street (inc.) 10 Foot of the Walk (exc.) (red), Trackworks (dark red), and Baltic to Queen Charlotte Ch 2110-2340 (magenta). Milestones include 'Issue Construction Drawings' (diamond), 'Order REC Supply' (diamond), and 'Access for visual inspection for E&M Tram Stop Installation' (diamond).

Activity ID	Activity Name	Start	Finish	Original Duration	Total Float	Duration
A15130	Pavement Works	29-Apr-10	03-Jun-10	23	104	
A15140	Street Lighting / Traffic Signals / Road Signs	29-Apr-10	11-May-10	7	120	
Port of Leith Tram Stop		16-Feb-09 A	05-Apr-11	521	323	
12080	Issue Construction Drawings	23-Apr-10	26-Jul-10	65	268	
17	Civil Engineering and Building Works	05-Nov-10	0	418	418	
188	Order REC Supply	20-Dec-10	17-Jan-11	10	195	
A1800	Deliver and Install Shelter	16-Dec-10	0	414	414	
A4368	Access for visual inspection for E&M Tram Stop installation (01A Ocean Drive)	17-Jan-11	0	199	199	
A4359	Access for E&M Tram Stop installation (01A Ocean Drive)	17-Jan-11	21-Feb-11	25	195	
A4360	Install LV Power Supply and LV Power Equipment	21-Feb-11	21-Mar-11	20	205	
A4370	Install Telecom Equipment	21-Feb-11	28-Mar-11	25	195	
A4380	Install Station Control Equipment + AFC Equipment	28-Mar-11	05-Apr-11	5	195	
A4390	Package Test Tramstop	16-Feb-09 A	04-Nov-11	671	173	
Bernard Street (inc.) 10 Foot of the Walk (exc.)		16-Feb-09 A	04-Nov-11	671	173	
12090	Issue Construction Drawings	23-Jun-11	16-Feb-09 A	0	268	
198	Order REC Supply	05-Apr-11	07-Jul-11	65	45	
20	Civil Engineering And Building Works	05-Aug-11	19-Aug-11	10	45	
A1850	Deliver and Install Shelter	20-Jul-11	0	261	261	
A4398	Access for visual inspection for E&M Tram Stop installation (01A Constitution Street)	19-Aug-11	23-Sep-11	0	239	
A4399	Access for E&M Tram Stop installation (01A Constitution Street)	23-Sep-11	21-Oct-11	20	55	
A4400	Install LV Power Supply and LV Power Equipment	23-Sep-11	28-Oct-11	25	45	
A4410	Install Telecom Equipment	28-Oct-11	04-Nov-11	5	45	
A4420	Install Station Control Equipment + AFC Equipment	16-Feb-09 A	08-Jul-11	587	92	
A4430	Package Test Tramstop	16-Feb-09 A	08-Jul-11	0	0	
Trackworks		16-Feb-09 A	08-Jul-11	587	92	
12100	Issue Construction Drawings	31-Mar-11	08-Jul-11	68	92	
Baltic to Queen Charlotte Ch 2110-2340		31-Mar-11	21-Jun-11	15	36	
1A-21A-TRK-7 Set Track (230m)	Establish Traffic Management & Temp. Fencing	31-Mar-11	05-Apr-11	2	45	
A14870	Excavate box	05-Apr-11	19-Apr-11	10	98	
A14880	Excavate, lay and concrete ducts	19-Apr-11	10-May-11	14	98	
A14890	Excavate and construct OLE bases	10-May-11	31-May-11	14	98	
A14900	Place upper concrete and cure	03-Jun-11	24-Jun-11	15	95	

Activity ID	Activity Name	Start	Finish	Original Duration	Total Float	2011		2010		2009		2008		2007		2006		2005															
						CONE	JEMMAN																										
A14930	Street Surface Finishes	24-Jun-11	04-Jul-11	6	95																												
A14940	Remove Fencing and Traffic Management	07-Jul-11	08-Jul-11	1	92																												
Queen Charlotte To Foot/Walk Ch 2340-2730		30-Aug-10	02-Feb-11	101	86																												
1A-21B-TRCh-6	Set Track (390m) Demob 1D / Remob 1A	25-Nov-10	01-Dec-10	3	30																												
1A-21B-TRCh-7	Set Track (390m)	01-Dec-10	19-Jan-11	25	30																												
A14630	Establish Traffic Management & Temp. Fencing	30-Aug-10	01-Sep-10	2	89																												
A14640	Excavate box	01-Sep-10	23-Sep-10	16	89																												
A14650	Excavate, lay and concrete ducts	23-Sep-10	27-Oct-10	24	89																												
A14660	Excavate and construct OLE bases	27-Oct-10	01-Dec-10	24	89																												
A14690	Place upper concrete and cure	06-Dec-10	24-Jan-11	25	86																												
A14700	Street Surface Finishes	24-Jan-11	01-Feb-11	6	86																												
A14710	Remove Fencing and Traffic Management	01-Feb-11	02-Feb-11	1	86																												
Roadworks		16-Feb-09 A	03-Jun-11	562	282																												
12110	Issue Construction Drawings		16-Feb-09 A	0																													
Baltic to Queen Charlotte Ch 2110-2340		05-Apr-11	03-Jun-11	41	116																												
A14950	Excavate for new channel and Kerb line / remove existing kerbs	05-Apr-11	19-Apr-11	10	116																												
A14960	Construct Kerb lines	08-Apr-11	26-Apr-11	12	116																												
A14970	Reset Guillies	22-Apr-11	27-May-11	24	116																												
A14980	Surface new channel	27-May-11	03-Jun-11	4	116																												
A14990	Pavement Works	26-Apr-11	31-May-11	23	119																												
A15000	Street Lighting / Traffic Signals / Road Signs	26-Apr-11	06-May-11	7	135																												
Queen Charlotte To Foot /Walk Ch 2340-2730		01-Sep-10	26-Nov-10	62	122																												
A14810	Excavate for new channel and Kerb line / remove existing kerbs	01-Sep-10	23-Sep-10	16	122																												
A14820	Construct Kerb lines	06-Sep-10	04-Oct-10	20	122																												
A14830	Reset Guillies	20-Sep-10	15-Nov-10	40	125																												
A14840	Surface new channel	15-Nov-10	23-Nov-10	6	125																												
A14850	Pavement Works	04-Oct-10	26-Nov-10	39	122																												
A14860	Street Lighting / Traffic Signals / Road Signs	04-Oct-10	13-Oct-10	7	154																												
01B Foot of the Walk (inc.) to McDonald Road (exc.)		15-Jul-09 A	02-Sep-11	783	218																												
E & M Installation		01-Jun-11	02-Sep-11	66	218																												
1B-19/20-OHLE-50	Installation of poles and building fixings	01-Jul-11	15-Jul-11	10	12																												
1B-19/20-OHLE-60	Overhead Catenary Line	15-Jul-11	18-Aug-11	23	12																												
A3763	Access for visual inspection for E&M wayside installation (01B)	01-Jun-11	0	283																													
A3764	Access for E&M wayside installation (01B)	01-Jul-11	0	262																													
Date	Revision	Checked	Approved	Page 11 of 56																													
16-Mar-09		SCS																															

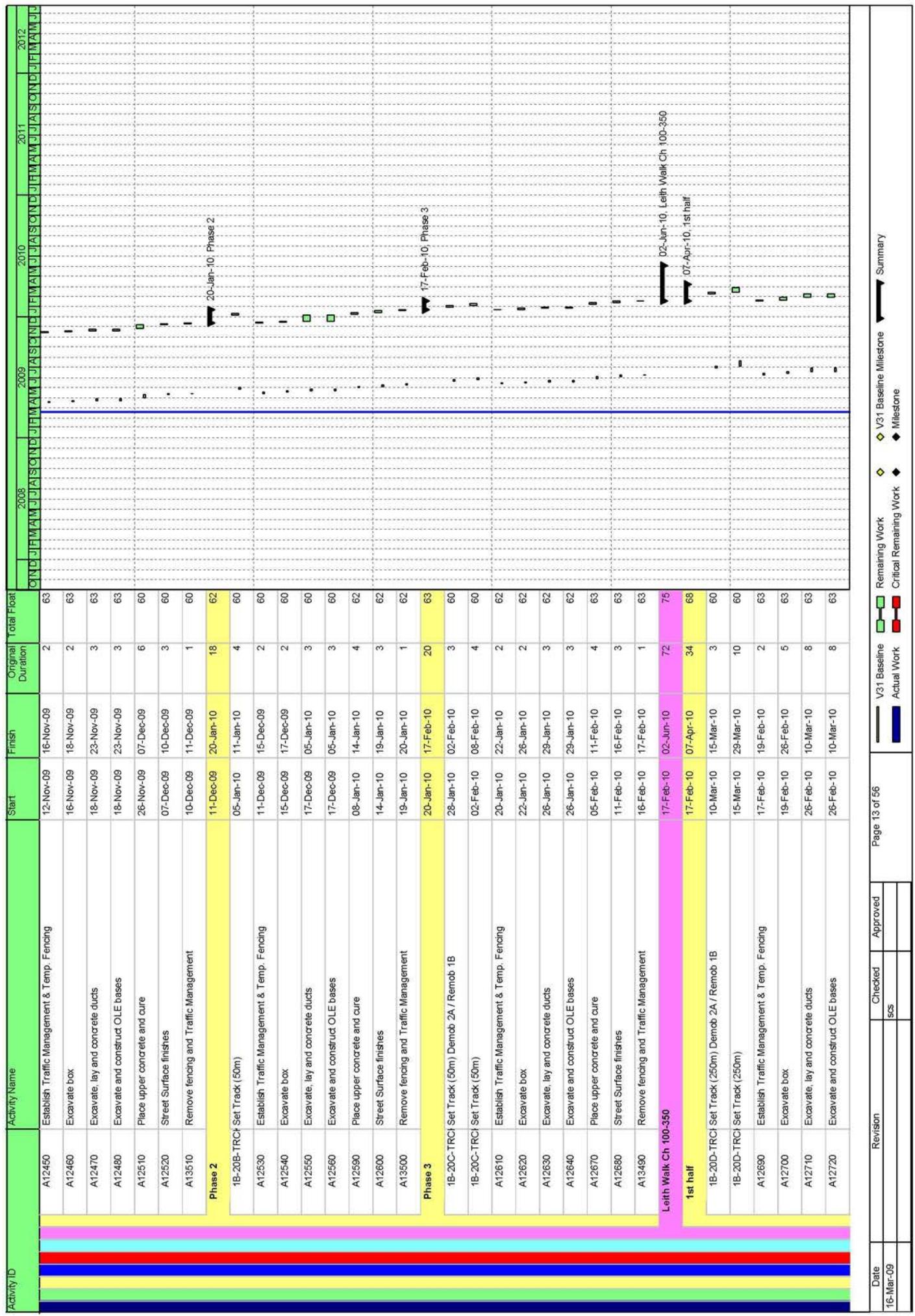


 □ Remaining Work ◻ Actual Work ■ Critical Remaining Work ♦ Milestone

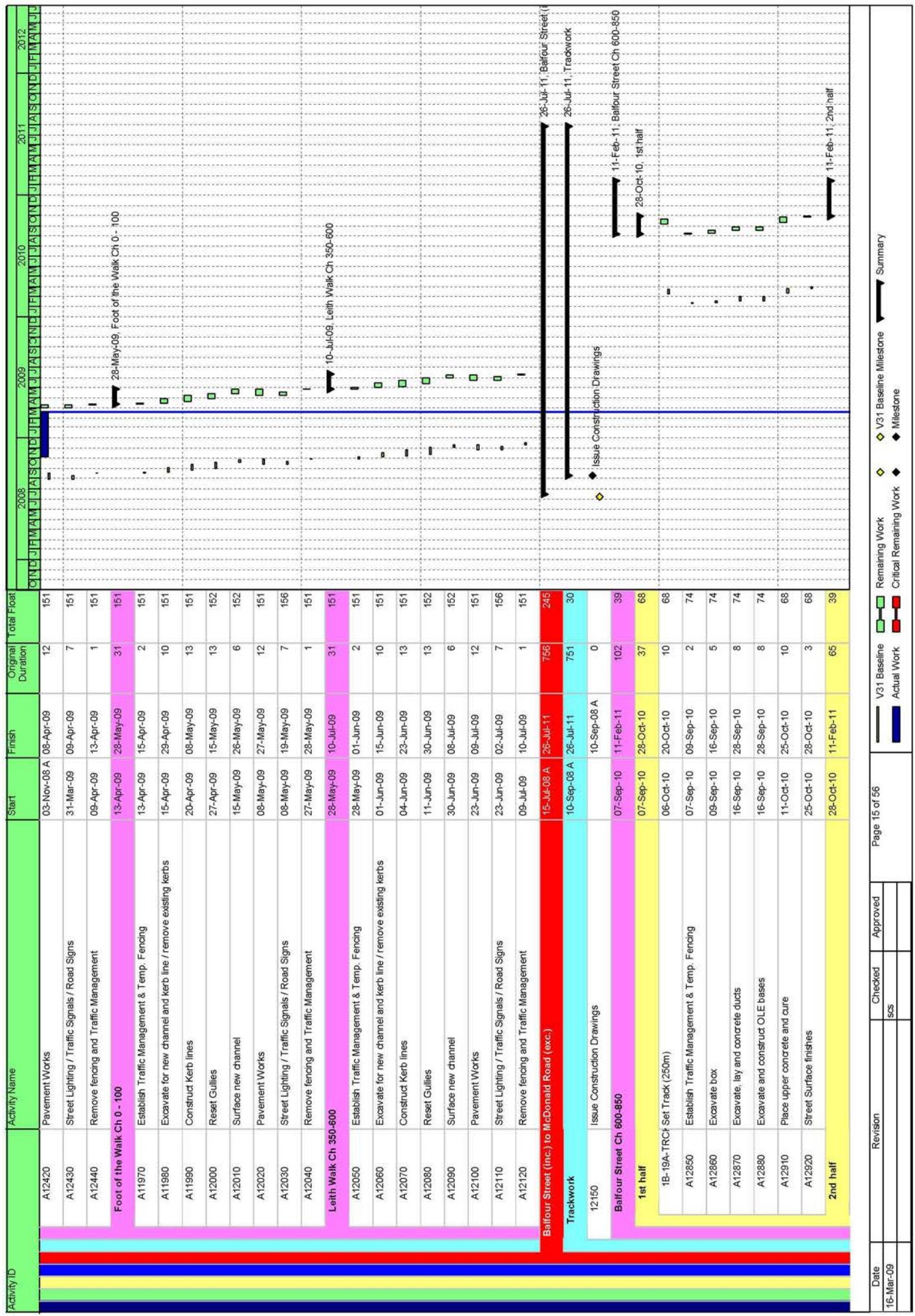
Summary

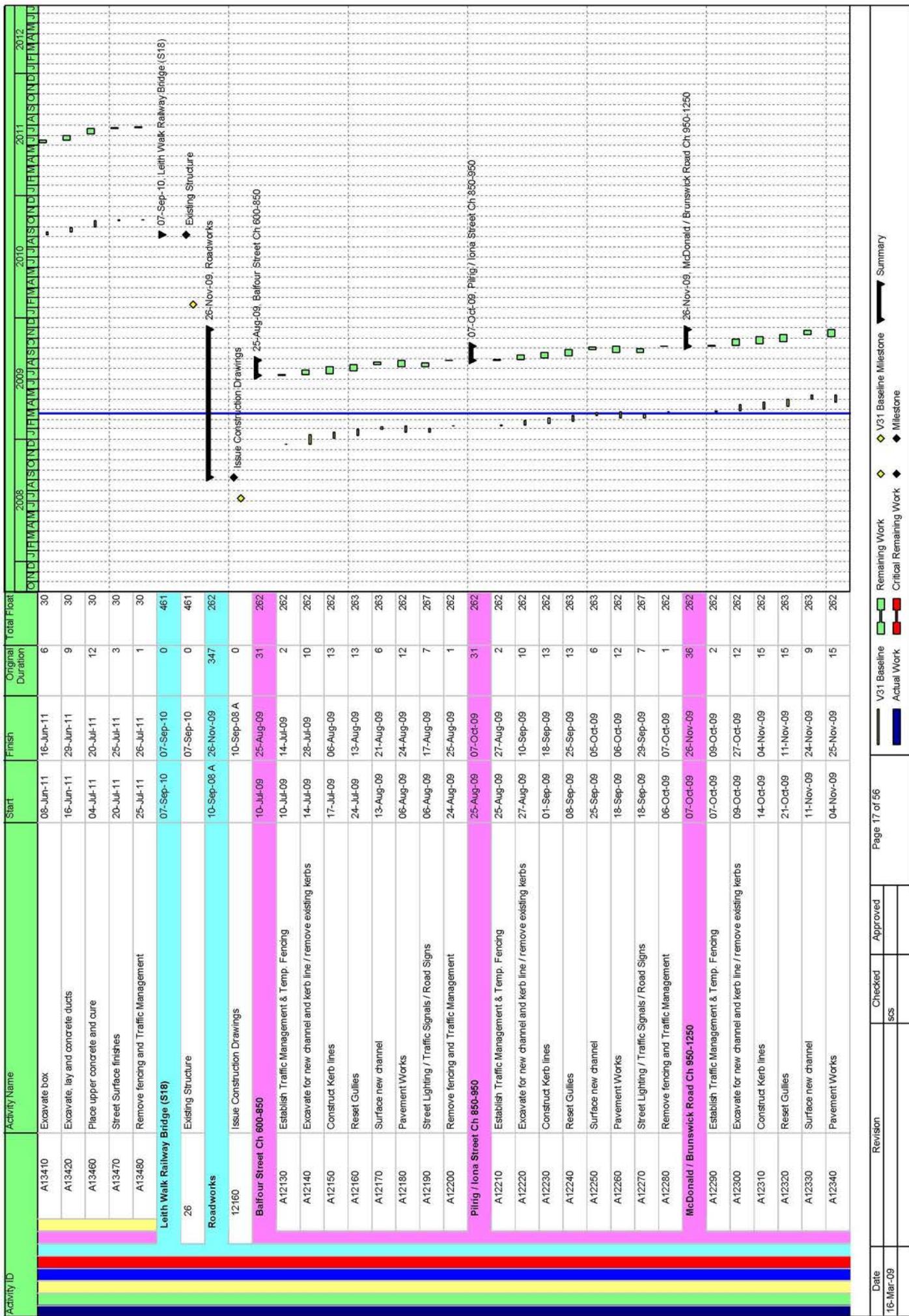
Activity ID	Activity Name	Start	Finish	Original Duration	Total Float	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
A3778	Access for visual inspection to cable pits for cable laying (01B)	29-Jun-11		0	263												
A3779	Access to cable pits for cable laying (01B)	29-Jul-11		0	242												
A3780	Install Electrical Cables	29-Jul-11	17-Aug-11	12	90												
A3790	Install Fibre Optic Cables	29-Jul-11	17-Aug-11	12	102												
A3800	Install Signalling Wayside Equipment	17-Aug-11	02-Sep-11	12	90												
Foot of the walk (inc.) to Balfour Street (exc.)		10-Sep-08 A	21-Jul-11	748	248												
Foot of the Walk Tram Stop		16-Feb-09 A	21-Jul-11	596	248												
12120	Issue Construction Drawings		16-Feb-09 A	0													
528	Order REC Supply	07-Mar-11		0	343												
Construction		01-Sep-10	21-Jul-11	217	248												
50	Civil Engineering And Building Works	01-Sep-10	02-Dec-10	65	232												
A2560	Deliver and Install Shelter	19-Apr-11	04-May-11	10	120												
A4438	Access for visual inspection for E&M Tram Stop installation (01B Foot of the Walk)	04-Apr-11		0	337												
A4439	Access for E&M Tram Stop installation (01B Foot of the Walk)	04-May-11		0	122												
A4440	Install LV Power Supply and LV Power Equipment	04-May-11	09-Jun-11	25	120												
A4450	Install Telecom Equipment	09-Jun-11	07-Jul-11	20	130												
A4460	Install Station Control Equipment + AFC Equipment	09-Jun-11	14-Jul-11	25	120												
A4470	Package Test Tramstop	14-Jul-11	21-Jul-11	5	120												
Leith Walk Substation		11-Aug-10	26-May-11	193	287												
146	Order REC supply from Scottish Power	11-Aug-10		0	257												
176	Civil Engineering and Building Works	01-Sep-10	02-Dec-10	65	257												
A2638	Access for visual inspection for E&M Substation installation (01B Leith Walk)	02-Nov-10		0	446												
A2639	Access for E&M Substation installation (01B Leith Walk)	02-Dec-10		0	272												
A5530	Power Infeed from Public Net available inc HV cable	02-Dec-10		0	257												
A5540	Install LV Power Supply and LV Power Equipment	09-Mar-11	30-Mar-11	15	198												
A5550	Installation of TPS Equipment	23-Mar-11	06-May-11	30	159												
A5560	Install Telecom and Scada	14-Apr-11	06-May-11	15	159												
A5570	Testing and Commissioning	06-May-11	26-May-11	14	159												
Trackwork		10-Sep-08 A	07-Sep-10	535	74												
12130	Issue Construction Drawings		10-Sep-08 A	0													
Foot of the Walk Ch 0-100		12-Nov-09	17-Feb-10	58	63												
Phase 1		12-Nov-09	11-Dec-09	20	60												
1B-20A-TRCf Set Track Demob 1D / Remob 1B		18-Nov-09	23-Nov-09	3	60												
1B-20A-TRCf Set Track (50m)		23-Nov-09	02-Dec-09	6	60												





Activity ID	Activity Name			Original Duration	Total Float	Timeline											
		Start	Finish			2008		2009		2010		2011		2012			
		COND	JUN	MAM	JUL	SEP	OCT	NOV	DEC	JAN	FEB						
A12750	Place upper concrete and cure	18-Mar-10	01-Apr-10	10	68												
A12760	Street Surface finishes	01-Apr-10	07-Apr-10	3	68												
2nd half		07-Apr-10	02-Jun-10	33	75												
1B-20E-TRC1 Set Track (250m)		07-May-10	21-May-10	10	60												
A13090	Excavate box	07-Apr-10	14-Apr-10	5	68												
A13100	Excavate, lay and concrete ducts	14-Apr-10	26-Apr-10	8	68												
A13140	Place upper concrete and cure	12-May-10	26-May-10	10	75												
A13150	Street Surface finishes	26-May-10	01-Jun-10	3	75												
A13160	Remove fencing and Traffic Management	01-Jun-10	02-Jun-10	1	75												
Leith Walk Ch 350-600		02-Jun-10	07-Sep-10	68	74												
1st half		02-Jun-10	26-Jul-10	33	68												
1B-20F-TRC1 Set Track (250m) Demob 1D / Remob 1B		29-Jun-10	02-Jul-10	3	68												
1B-20F-TRC1 Set Track (250m)		02-Jul-10	16-Jul-10	10	68												
A12770	Establish Traffic Management & Temp. Fencing	02-Jun-10	04-Jun-10	2	75												
A12780	Excavate box	04-Jun-10	11-Jun-10	5	75												
A12790	Excavate, lay and concrete ducts	11-Jun-10	23-Jun-10	8	75												
A12800	Excavate and construct OLE bases	11-Jun-10	23-Jun-10	8	75												
A12830	Place upper concrete and cure	07-Jul-10	21-Jul-10	10	68												
A12840	Street Surface finishes	21-Jul-10	26-Jul-10	3	68												
2nd half		26-Jul-10	07-Sep-10	30	74												
1B-20G-TRC1 Set Track		13-Aug-10	27-Aug-10	10	68												
A13170	Excavate box	26-Jul-10	03-Aug-10	5	68												
A13180	Excavate, lay and concrete ducts	03-Aug-10	13-Aug-10	8	68												
A13220	Place upper concrete and cure	18-Aug-10	01-Sep-10	10	74												
A13230	Street Surface finishes	01-Sep-10	06-Sep-10	3	74												
A13240	Remove fencing and Traffic Management	06-Sep-10	07-Sep-10	1	74												
Roadworks		10-Sep-08 A	10-Jul-09	202	151												
12140	Issue Construction Drawings		10-Sep-08 A	0													
Leith Walk Ch 350 - 100		13-Oct-08 A	13-Apr-09	109	151												
A12370	Establish Traffic Management & Temp. Fencing	13-Oct-08 A	15-Oct-08 A	2													
A12380	Excavate for new channel and kerb line / remove existing kerbs	16-Oct-08 A	26-Mar-09	10	151												
A12390	Construct Kerb lines	21-Oct-08 A	31-Mar-09	13	151												
A12400	Reset Culées	28-Oct-08 A	30-Mar-09	13	153												
A12410	Surface new channel	20-Nov-08 A	07-Apr-09	6	153												
Date	Revision	Checked	Approved	Page 14 of 56													
16-Mar-09		SOS		V34 Baseline	Actual Work	Critical Remaining Work	V31 Baseline	Remaining Work	Actual Work	Critical Remaining Work	V31 Baseline Milestone	Summary					

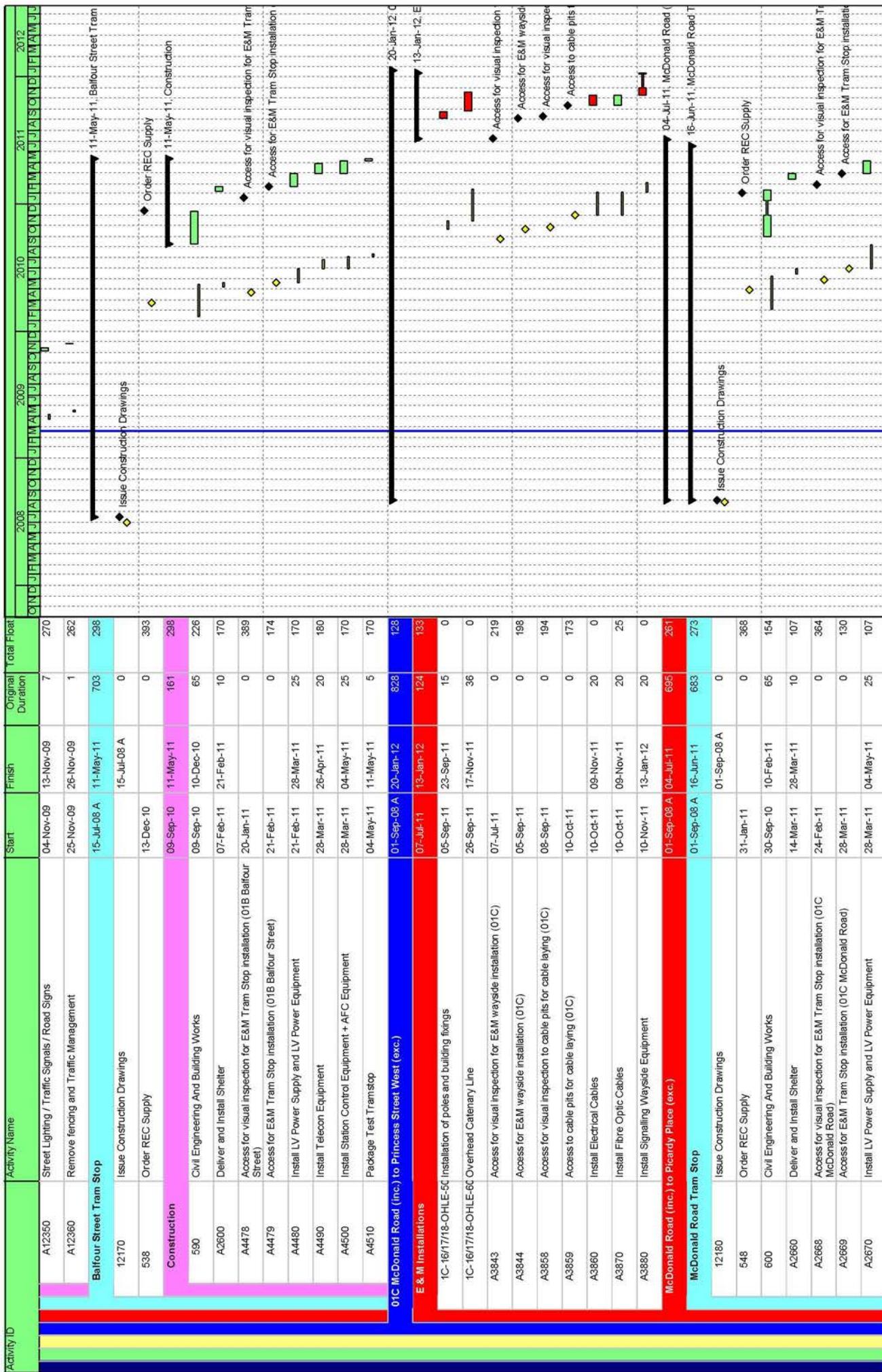




Date Revision Checked Approved Page 17 of 56 V31 Baseline Work Remaining Work V31 Baseline Milestone Critical Remaining Work Milestone

16-Mar-09 SCS SCS

Summary

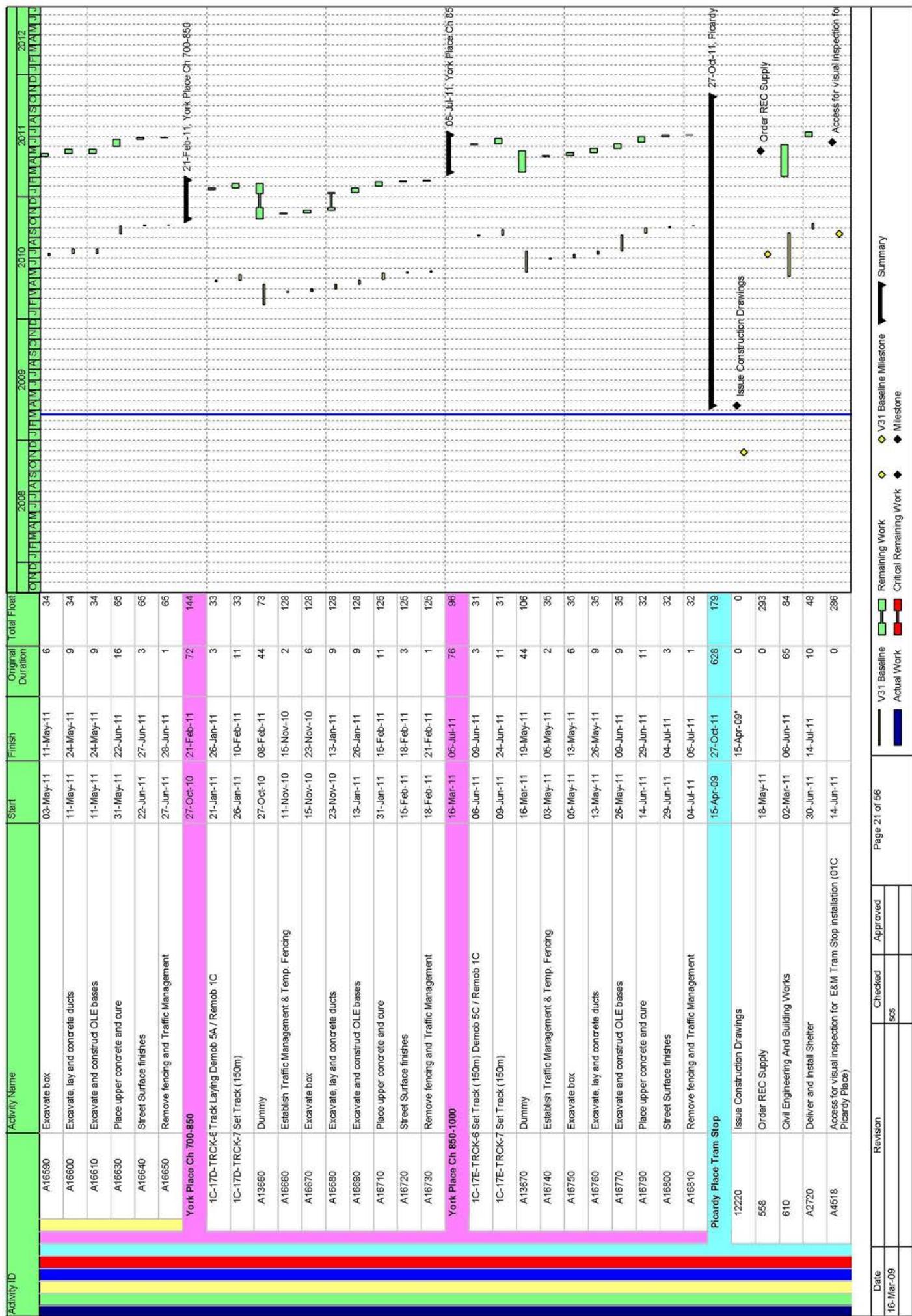


The Gantt chart illustrates the project timeline across four phases:

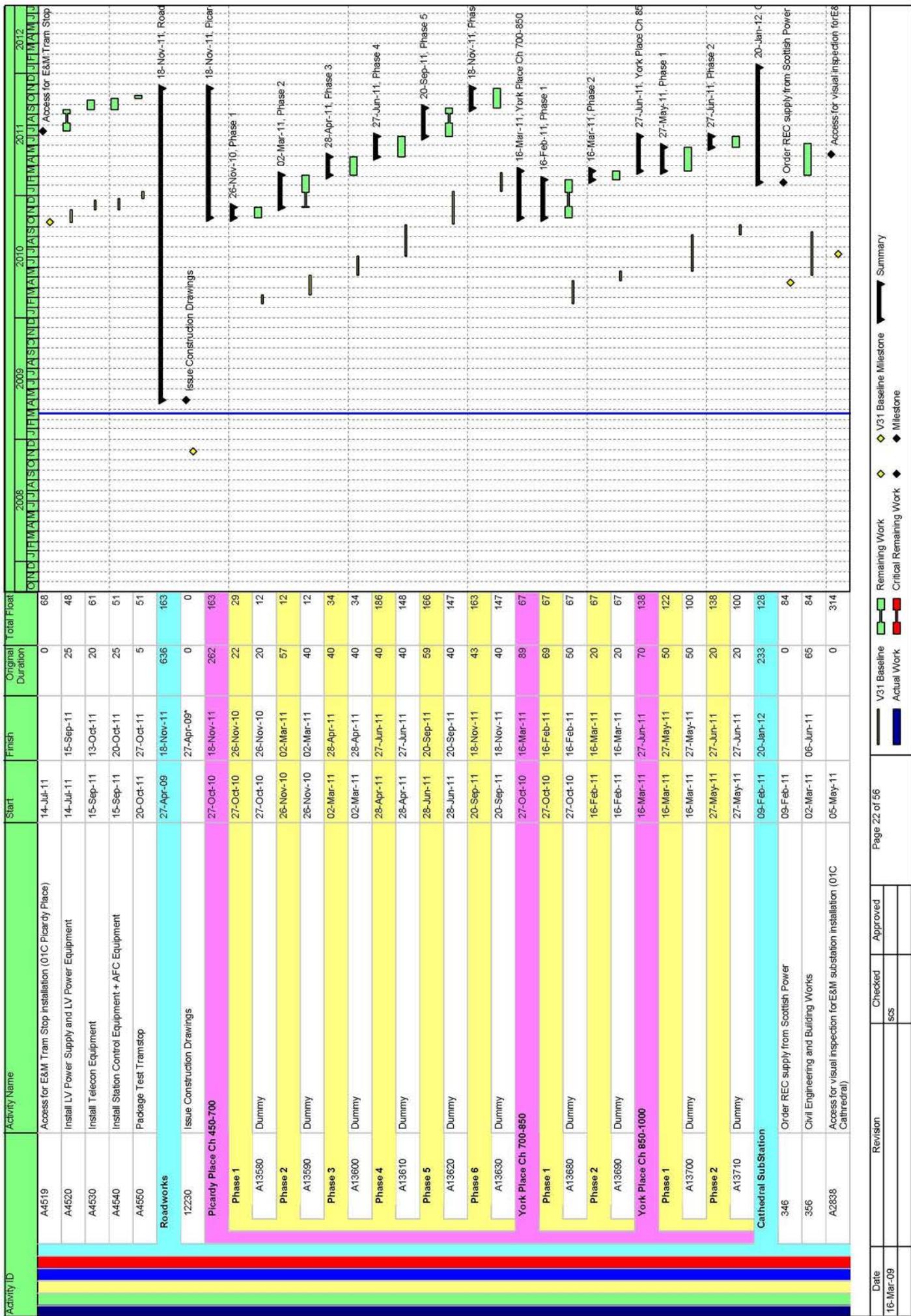
- Phase 1:** Activities include A16420, A16430, A16440, and A16440 (Roadworks). Milestones: Issue Construction Drawings (Leith Walk Ch 0-375), Issue Construction Drawings (London Road Ch 375-450), and Issue Construction Drawings (Picardy Place (inc.) to St. Andrews Square (exc.)).
- Phase 2:** Activities include A13540 (Dummy), A13570 (Dummy), and A13570 (Trackworks). Milestones: 10-Jan-10 London Road Ch 375-450, 18-Jan-10 Roadworks, 20-Jan-12 F Trackworks, 21-Jun-11 Ricardy Place Ch 0-375, 21-Jun-11 Ricardy Place Ch 25-Mar-11 Phase 3, and 25-Mar-11 1st Half (Dummy).
- Phase 3:** Activities include A16450 (Establish Traffic Management & Temp. Fencing), A16460 (Excavate box), A16470 (Excavate, lay and concrete ducts), A16480 (Excavate and construct OLE bases), A16500 (Place upper concrete and cure), A16510 (Street Surface finishes), and A16570 (Remove fencing and Traffic Management). Milestones: 27-Apr-09* Issue Construction Drawings, 28-Jun-11 Issue Construction Drawings, 28-Jun-11 Ricardy Place Ch 0-375, 28-Jun-11 Ricardy Place Ch 25-Mar-11 Phase 3, 28-Jun-11 2nd Half (Dummy), 19-Apr-11 1st Half (Dummy), and 19-Apr-11 2nd Half (Dummy).
- Phase 4:** Activities include A16530 (Excavate, lay and concrete ducts), A16550 (Place upper concrete and cure), A16560 (Street Surface finishes), and A16580 (Establish Traffic Management & Temp. Fencing). Milestones: 28-Apr-11 28-Jun-11 Phase 4, 28-Apr-11 28-Jun-11 Phase 4, 28-Apr-11 28-Jun-11 Phase 4, and 28-Apr-11 28-Jun-11 Phase 4.

Legend:

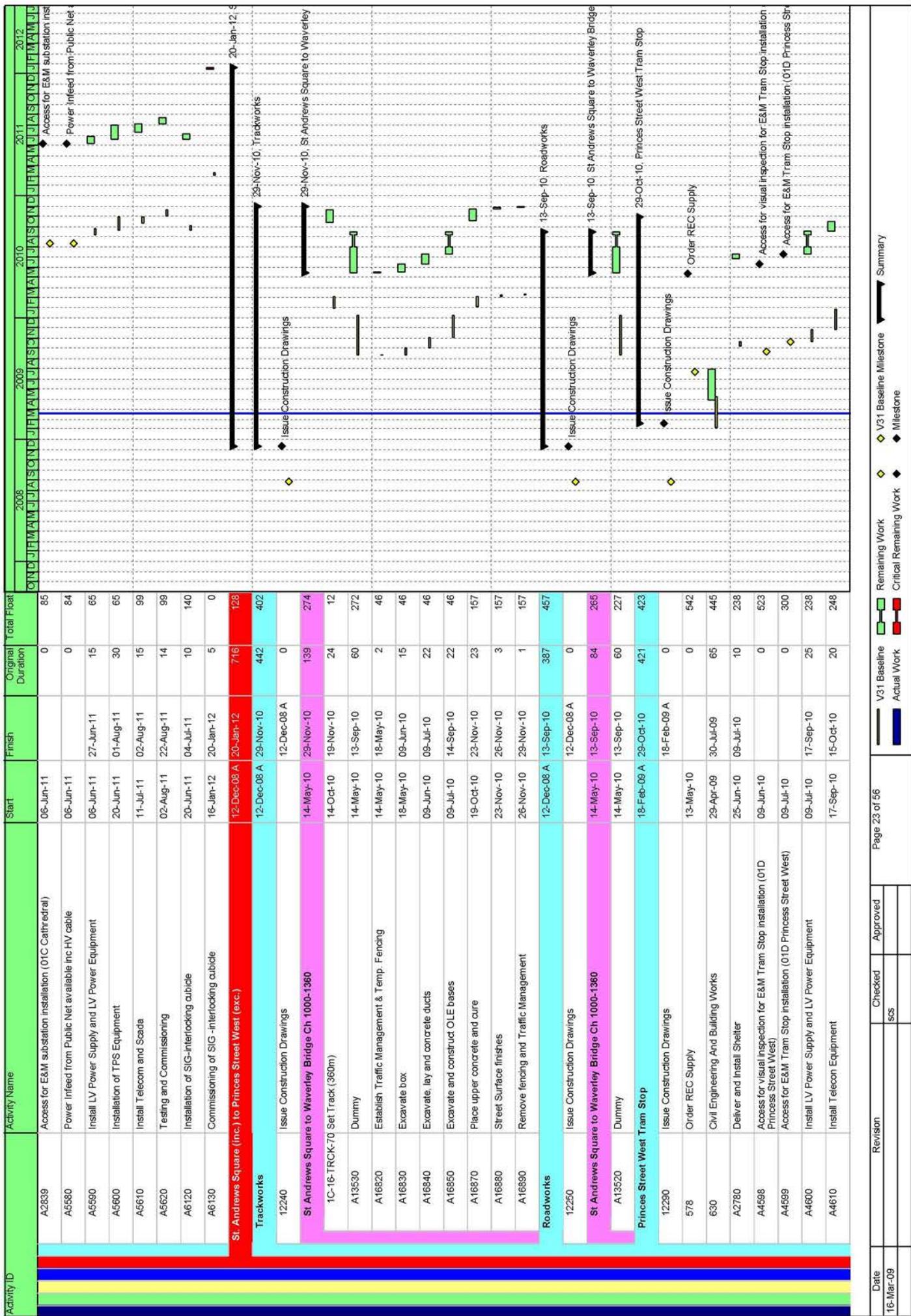
- V31 Baseline Milestone: Diamond symbol
- Remaining Work: Green bar
- Critical Remaining Work: Red bar
- Milestone: Black diamond symbol
- Actual Work: Blue bar



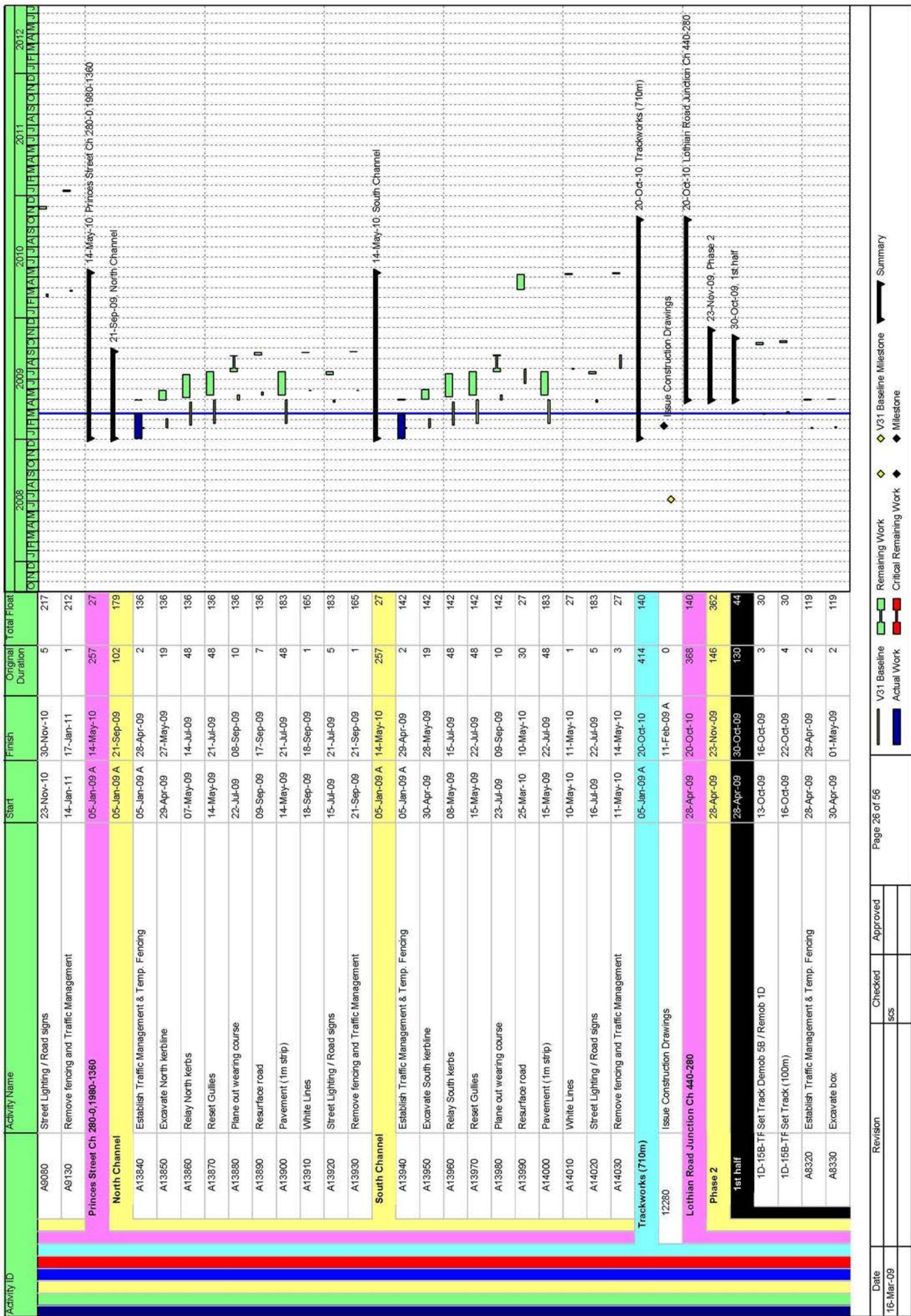
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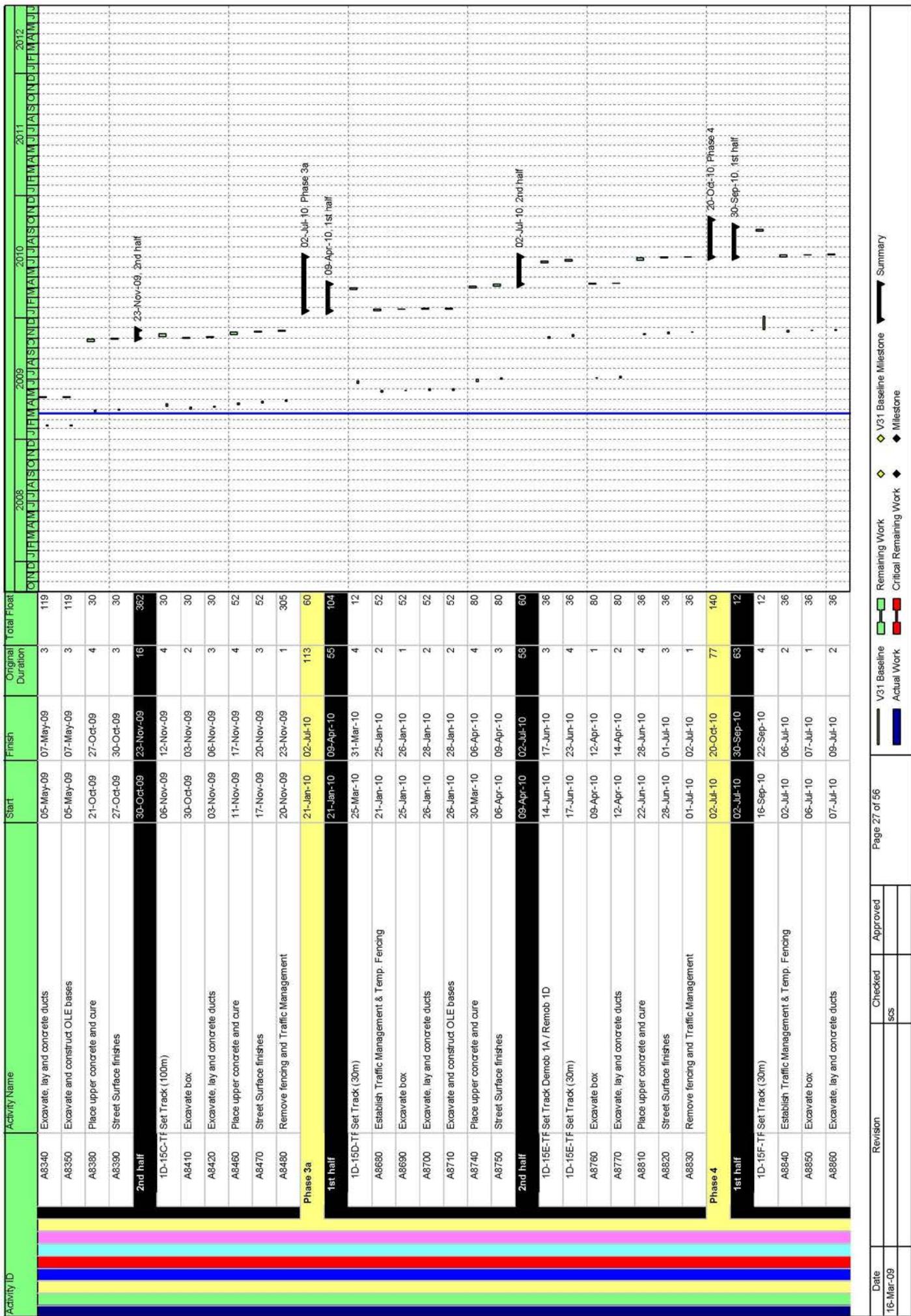
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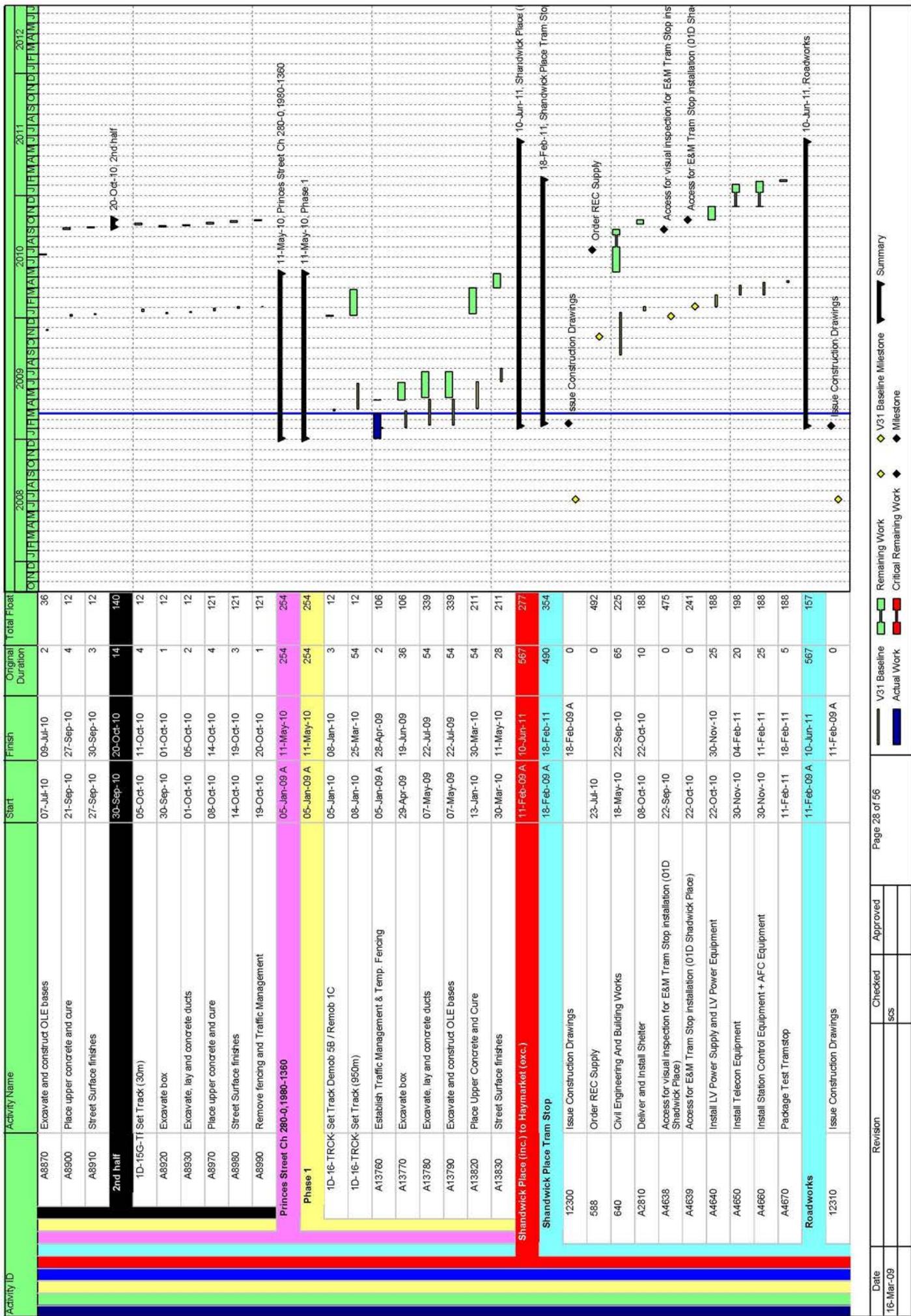
Approved
V31 Baseline Work
Actual Work
Critical Remaining Work
Milestone
Summary



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Checked
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SCS



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