



MUDFA Draft Rev.07 Programme Report

Background

tie have recently agreed with Infraco a timetable to revise, agree and re-issue a baseline Infraco construction programme that will deliver Open for Revenue Service of Phase 1a on or before 16th July 2011. This programme has to be in place by Friday 29th August with various iterations planned between now and then, the first of which is to be in place by Wednesday 13th August 2008.

A major driver in achieving this is to understand the expected MUDFA Revision 7 programme to completion and its potential impact on the Infraco construction programme. As this programme itself has gone through various iterations over the last number of weeks it was important that a view of the current MUDFA revision 7 programme in its draft format was reviewed and understood to inform as accurately as possible any assumptions made on completion of MUDFA utility diversions by subsection.

The following report forms that view.

Report

The review took place in MUDFA construction offices on Friday 25th July between J.McAloon (MUDFA Programme Planner) and Tom Hickman (Tram Programme Manager).

Summary of Issues (Further detail follows table)

Current confirmed Impact to Infraco programme Potential impact to Infraco programme if not actioned No impact to Infraco programme at this point MUDFA team comments at 1-Aug-08

Location	MUDFA Finish	Infraco Start	Issue
Newhaven Roundabout to Ocean Terminal	9/1/9	3/11/8	Await utilities IFC dwgs Forth Ports licence required – licence Non Critical, can be applied for now. Impacts Lindsey Rd Retaining Wall Impacts track installation
Balfour Street to Foot of the Walk	29/8/8 or 17/10/8 (Draft V7 date) Tom, don't know about 17/10/08 date. Leith Walk will be complete by 29/08/08 including outstanding crossings, gulleys, 2 no. side entry	1/9/8	2 side entry man-holes to be installed from ch. 100-350 & another 6 to complete between ch.350 and McDonald Rd. 30-Way Telecoms crossing from Jane







tile			Trams
	manholes, Gas & Water connections, LV cable jointing. Gas service connections will continue thereafter from December onwards.		Street to east side of Leith walk to be done. Telecoms programme currently reflects completion by 29 th November 2008 for Section 1B. Will impact road and track works.
London Rd Roundabout South on Leith Walk 0-375m	7/11/8	31/10/8	Telecoms work additional to 7/11/8 completion. Expected to be 8 weeks+ Looking at revising TM to accelerate BT works prior to completion of overall worksite to mitigate delay with INFRACO start.
Haymarket to East End of Shandwick Place	13/2/9 21-Jan-09 completion based on working thro' December Embargo. Completion date will be 13/02/09 if embargo is enforced and 10/4/9 for BT	5/1/9	Direct delay to Infraco works at Haymarket junction Potential de-scoping of diversions and double- shifting to reduce timescale and bring completion of works prior to Christmas. BT diversions will continue for 8 weeks after completion.i.e 10/4/9
Edin Park TS to South Gyle TS	15/8/8	June 08 – await MUDFA completion	Delay to South Gyle Access bridge Re- design of Structure Foundation to mitigate clash with sewer. SI issued to SDS some 4 weeks ago. Delay to Bankhead Drive RW
Gogarburn Tramstop to Edinburgh Park TS	15/8/8 Critical Path activities for this section of work are; 3 rd Party Issue Way-leave with Scottish Power / Gyle Centre requires finalisation prior to 6 weeks notice going into SP to disconnect HV supply, thereafter 6 weeks work to complete diversions. Works will not be completed in way of Gyle TS Retaining Wall until 31 st October 2008.	July 08 – await MUDFA completion	Delay to W16 Gyle TS Retaining Wall Delay to track installation Telecoms work to be programmed 12 weeks+??? Tie assessment based on manhour content is 10 weeks for BT diversions.







Critical activity of diversion of flows will be 05-Sep-08.	L I E	1		Trams
McDonald Road to Balfour Street McDonald Road to Balfour Street Side entry manholes in this area will be completed by 26-Sep-08. York Place to Picardy Place 20/3/9 York Place to Picardy Place 20/3/9 The Mound Junction 13/2/9 + 8 weeks of telelcoms to 10/4/9 Reviewing date with Carillion to left-shift completion which courrently shows 10-Apr-09. Haymarket Yards Haymarket Yards Haymarket Yards Haymarket Yards 10/10/8 Haymarket Yards Haymarket Yards Edinburgh Airport to Ingliston Park & Ride Edinburgh Street / Bernard will complete by 20-Mar-09. Main at Jane Street may require diversions to confirmed. Telecoms unconfirmed. Telecoms donation to confirmed. Telecoms to		diversion of flows will		
McDonald Road to Balfour Street 26/9/8 / 29/11/8 including telecoms Side entry manholes in this area will be completed by 26-Sep-08. 12/12/8 12/12/8 Programme currently reflects completion by 25/9 November 2008 for Section 1B.	Leith Walk	Not programmed	1/9/8	Main at Jane Street
Place 20/3/9 20/1/10 20/1/1		including telecoms Side entry manholes in this area will be completed by 26-Sep-	12/12/8	Telecoms duration not confirmed. Telecoms programme currently reflects completion by 29 th November 2008
St Andrew Square 10/4/9 Reviewing date with Carillion to left-shift completion which currently shows 10-Apr-09. Haymarket Yards Haymarket Yards Haymarket Yards Can love the complete by 10-Oct-08. Edinburgh Airport to Ingliston Park & Ride Edinburgh Airport to Ingliston Park & Ride Edinburgh Airport to Ingliston Park & Ride Baltic Street / Bernard Street / Bernard Street / Constitution St Andrew Square does not commence until 09-Sep-09. Sep-09. 3/2/9 — Princes St St Andrew Square does not commence until 09-Sep-09. St Andrew Square does not commence until 09-Sep-09. Sep-09. 3/2/9 — Princes St St Andrew Square does not commence until 09-Sep-09. Sep-09. Utility diversions bein carried out under RAT Ability to divert within DKE Delay to new access road. Delay to Haymarket Viaduet. Remaining interfaces in the managed. Dependant on site investigation and design progress Edinburgh Airport to Ingliston Park & Ride Baltic Street / Bernard Street/Constitution Street junction Parkiewing date with Carillion to left-shift complete by 20-Mar-09. St Andrew Square does not commence until 09-Sep-09. St Andrew Square does not commence until 09-Sep-09. Viaduct – 8/8/8 St Andrew Square does not commence until 09-Sep-09. Utility diversions bein carried out under RAT Ability to divert within DKE Delay to new access road. Delay to Aviaduct. Remaining interfaces in the managed. Dependant on site investigation and design progress Parkiewical Street / Bernard		20/3/9	20/1/10	delayed 2 weeks Traffic Management clash with Infraco in
Reviewing date with Carillion to left-shift completion which currently shows 10- Apr-09. Haymarket Yards 10/10/8 Haymarket Yards 10/10/8 Haymarket Yards work affecting viaduct and access road is complete. Remaining diversions for 2A will be complete by 10-Oct- 08. Edinburgh Airport to Ingliston Park & Ride Edinburgh Airport to Clerch Vo. 2 required to be diverted prior to 26-Sep-08. Latest CUs completion 3/10/8 Baltic Street / Bernard Street/Constitution Street junction Baltic Street / Bernard Street/Constitution Street junction 10/14/9 Reviewing date with Carillino to left-shift cornible to be diverted prior to 20-08. 3/2/9 - Princes St St Andrew Square does not commence until 09- Sep-09. Sep-09. Viaduct – 8/8/8 Polay to Haymarket Viaduet No delay to access road. Delay to Haymarket Viaduet No delay to Viaduct. Remaining interfaces in the complete of the diverted prior to 26-Sep-08. Latest CUs completion date for full section is 30-Jan-09. Baltic Street / Bernard Street/Constitution Street junction Further slippage would be of concern.	The Mound Junction		3/2/9	clash with Infraco 8 weeks BT diversions to
Haymarket Yards 10/10/8 Haymarket Yards work affecting viaduct and access road is complete. Remaining diversions for 2A will be complete by 10-Oct-08. Edinburgh Airport to Ingliston Park & Ride Edinburgh Airport to Ingliston Park & Ride Baltic Street / Bernard Street/Constitution Street junction Baltic Street / Bernard Street/Constitution Street junction Indicate the properties of	St Andrew Square	Reviewing date with Carillion to left-shift completion which currently shows 10-	St Andrew Square does not commence until 09-	clash with Infraco No clash with INFRACO TM in St Andrew Square – closed site with St David Street available
Ingliston Park & Ride One critical service, 11kV at Gogarburn Culvert No. 2 required to be diverted prior to 26-Sep-08. Latest CUS completion date for full section is 30-Jan-09. Baltic Street / Bernard Street/Constitution Street junction Street junction One critical service, 11kV at Gogarburn Culvert No. 2 required to be diverted prior to 26-Sep-08. Latest CUS completion date for full section is 30-Jan-09. Further slippage would be of concern.	Haymarket Yards	Haymarket Yards work affecting viaduct and access road is complete. Remaining diversions for 2A will be complete by 10-Oct-	Viaduct – 8/8/8	Delay to new access road. No delay to access road. Delay to Haymarket Viaduct No delay to Viaduct. Remaining interfaces to be managed.
Baltic Street / Bernard Street/Constitution Street junction Baltic St Junction will continue beyond New Year and will complete by 20-Mar-09. Further slippage would be of concern.		One critical service, 11kV at Gogarburn Culvert No. 2 required to be diverted prior to 26-Sep-08. Latest CUS completion date for full	No impact with INFRACO programme dates other than 11kV	Dependant on site investigation and
Baltic Street Junction 10/10/8 1/5/9 No Impact	Street/Constitution	12/3/9 Baltic St Junction will continue beyond New Year and will complete	1/5/9	Further slippage would be of concern.
TOURISM TOURISM TO THE TOURISM TO TH	Baltic Street Junction	10/10/8	1/5/9	No Impact









Charles Company of the last of	- 22		
to Casino Square			
Ocean Terminal to Rennies Isle bridge	20/2/9 – draft V7 date Looking to commence works on 25-Aug-08 and complete by 14- Nov-08	6/7/9	Await utilities IFC dwgs Forth Ports licence required– licence Non Critical, can be applied for now.

Detail

Constitution Street

Duke Street Junction (from Duke Street Junction to Tower Street)

Baltic Street/Bernard Street/Constitution Street Junction

There is expected to be 19 weeks of work required in the area of the Baltic Street junction with Bernard Street / Constitution Street. This area is programmed to commence from w/c 11th August completing by 18th December 2008.

The rev.07 programme at this point does not recognise the Forth Ports embargo that commences 13th October and is lifted 12th January 2009 as this location is out-with the Forth Ports authority.

The issue here is that MUDFA have agreed a relaxation of the embargo within the Forth Ports Authority area to allow works to continue on Ocean Drive and Ocean Terminal with the agreement being that access to Forths Ports area is maintained via a route utilising the Baltic Street / Bernard Street junction.

The worst case scenario would be that there is a 10 week delay to the completion of the works in this area, extending the completion date from 18th December 2008 to 12th March 2009.

Infraco are programmed to commence here from 1st May 2009 so if the Forth Ports embargo is imposed any further slippage would be of concern.

Baltic Street Junction to Casino Square

Rev.07 programmed at 6 weeks duration from end August 2008 to complete prior to potential Forth Ports embargo.

Infraco are programmed to commence here from 1st May 2009. No impact

Newhaven Road to Tower Place Roundabout

Ocean Terminal to Rennies Isle bridge

MUDFA programmed to commence 11th August.

No IFC drawings yet available. Expected ???? – MUDFA to confirm Forth Ports licence required and will take 28 days from receipt of IFC drawings.

Potential start assuming IFC by 1st August would be 1st September 12 week utilities diversion programme would complete by 21st November. If impacted by Forth Ports embargo completion will be 20th February 2009. Infraco start not until July 2009. No impact.

Newhaven Roundabout to Ocean Terminal

Infraco programmed to commence track works from 3rd November.









MUDFA programmed for completion by 18th December based on a start w/c 25th August.

No IFC drawings yet available. Expected ???? – MUDFA to confirm Forth Ports licence required and will take 28 days from receipt of IFC drawings.

Potential start assuming IFC by 1st August would be 1st September which would produce a completion of 9th January 2009.

This area will currently impact structures (W1 Lindsey Rd Retaining Wall) and track installation in the Infraco programme.

York Place to Foot of Leith Walk

McDonald Road to Balfour Street

MUDFA completion programmed for 29th August

Telecoms programme / durations required to confirm that the buffer of 14 weeks is sufficient. Currently expected to complete by 29/11/8. Infraco road works commencement programmed for 12th December.

Balfour Street to Foot of the Walk

MUDFA programmed for completion by mid October but current view is that this may be as early as 29th August including the BT chamber in Manderston Street.

There are still the following works to carry out in range chainage 0-350m

- 2 side entry manholes to be installed
- 30-way access from Jane Street to east side of Leith Walk which will release the north/south runs of telecoms cabling.

Telecoms programme / durations require to be confirmed. Currently indicates completion by 29/11/8 for full section 1b

Infraco road works programmed for commencement from 1^{st} September at chainage 0m - 100m – expected to be revised to 100m - 350m.

Leith Walk

Existing 600mm Scottish Gas Main at Jane Street identified through trial holes as only being 600mm below road surface. This may result in an additional unplanned road crossing in a location where Infraco plan to commence road works from 1st September.

McDonald Road to Broughton Street (London Road roundabout to Picardy) Leith Walk Ch. 0-375m (Assumed to be London Rd roundabout down Leith Walk)

Infraco start 31st October

MUDFA completion currently programmed as 7th November + Telecoms works, expected to be a minimum of 8 weeks.

Telecoms programme / durations require to be confirmed.

This area will currently impact Infraco programme.









York Place to Picardy Place

MUDFA programme currently 4th August until 6th February 2009. This is not currently programmed to take account of August festival so will be delayed 4 weeks to 6th March 2009.

Enabling works that were scheduled to commence 8th September have been delayed two weeks until 22nd September so will incur a further two week delay on programme from 6th March to 20th March 2009.

Infraco not in this section until 2010 although with Infraco in Princes Street from January 2009 until July 2009 there is the potential for Traffic Management issues between these two areas. To be further investigated.

Princes Street

The Mound Junction

Enabling works that were scheduled to commence 8th September have been delayed two weeks until 22nd September, although completion of these works remains as 13th February 2009, although this assumes continued high productivity and does not take account of works required to ramp-down / ramp-up either side of the Christmas embargo. There are also 8 weeks of telecoms works to follow.

Traffic Management needs to be clearly understood between these works and the Infraco works scheduled to commence with the closure of Princes Street on 3rd February 2009 from South Charlotte Street to South St Davids Street.

St. Andrew Square

South / North St Andrew Street

MUDFA start 22nd September 2008 with completion by 10th April 2009. Traffic management will see traffic diverted into South St David Street. Infraco limits are from South Charlotte Street to east side of South St David Street junction therefore there is a Traffic Management clash at this location between 3rd February 2009 and 10th April 2009 under the current programme logic.

Haymarket Yards to East End of Shandwick Place

Haymarket Station to Manor Place Junction

MUDFA rev.07 indicates completion of utility diversions by the end of January 2009 although the programme assumes continued working through the Christmas embargo which has not been agreed at this point with CEC. If this is not possible then the completion date will be 13th February 2009, with telecoms diversions continuing for a further 8 weeks. This will have a direct impact on Infraco who are programmed to commence in this location from 5th January 2009.

Haymarket Yards

MUDFA completion is required prior to the new access road being installed. MUDFA completion currently 10th October (under RATs). Issues still to be resolved with design and ability to divert within the DKE.









The Access road is required prior to commencement of Haymarket Station viaduct.

Haymarket Viaduct expected to commence from 8th August 2008 immediately after demolition of Caledonian Ale House is complete. Utility diversions affecting construction of access road and Haymarket viaduct are complete.

Edinburgh Park Tramstop to South Gyle Access Tramstop

Rev.07 currently indicates mid July completion – best estimate is now mid August.

Infraco delayed at South Gyle Access bridge (foundation re-design for clash with existing sewer) and Bankhead Drive Retaining Wall.

Gogarburn Tramstop to Edinburgh Park Tramstop

Gogarburn A8 Roundabout to Edinburgh Park Tramstop

Rev.07 currently indicates completion by 28th November 2008. Telecoms programme / durations require to be confirmed as could be as much as 12 weeks.

Potentially delay Infraco at W16 Gyle Stop Retaining Wall and track installation between Edinburgh Park and Gyle centre.

Gogarburn Tramstop to Edinburgh Airport Tramstop

Edinburgh Airport to Ingliston Park and Ride

Programme received from Carrillion indicates completion by 3rd October 2008 but is dependent on site investigations and Design having being progressed the status of which is not readily available.

Potential

Gogar Depot

Scottish Water 800mm Water Main

Thrustblocks and new valves expected by 1st September. Completion expected by 19th September. Infraco claiming this is delaying their earthworks removal at Depot.

Resources

Resource requirements and associated outputs required to meet the Rev.07 programme to be confirmed once final programme in place.

Footnote

We still await the inclusion of scope transferred from MUDFA to Infraco to be included in the Infraco programme.



