

Brighton & Hove

Valley Gardens Temporary Traffic Management Plan



Enhancing Valley Gardens has been an objective of Brighton & Hove City Council for a number of years. The longstanding recognition of the need to improve Valley Gardens is reflected in a number of the city's core, strategic documents.

The key principles of the Valley Gardens proposals are to simplify the existing highway network making the journey through Valley Gardens less complicated and more legible for all users, improving cycle and pedestrian networks and improving safety and air quality within the project area.

Version 7 Sept 2017

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1.0 INTRODUCTION

Introduction to the Project

- 1.1 Edburton Contractors Ltd were awarded the Early Contractor Involvement Temporary Traffic Management design project as part of the overall road improvements scheme in the Valley Gardens area of the city of Brighton & Hove. The contracts intention was to create a temporary traffic management design through thorough consultation and engagement with stakeholders of the city's transport network. A phased approach to construction works has been developed to ensure maximum traffic flows are maintained during the build for Valley Gardens.
- 1.2 The project involved the creation of Computer Aided Design(CAD) drawings to map the existing and proposed traffic flows as well as diversion routes for displaced traffic. Great emphasis has been placed on maintaining the free flow of public transport vehicles during the construction stages to ensure the city can continue to function whilst the works are ongoing.
- 1.3 The overall phased construction layout drawing can be seen in **Appendix A**

Introduction to the Temporary Traffic Management Plan

- 1.4 This document was developed to provide information on the traffic management requirements and procedures associated with the proposed construction work to be undertaken on the project. Edburton Contractors Ltd highlights the need to manage, maintain and monitor the traffic management during the construction phase to maintain the health and safety of the public and construction staff as well as maintenance of traffic flows.
- 1.5 Guidance with regards to the **Temporary Traffic Management** designs developed for this project has been obtained from,
 - New Roads and Street Works Act 1991
 - The Traffic Signs Regulations and General Directions 2016
 - *Traffic signs manual, Chapter 8 Traffic Safety Measures and Signs for Road Works and Temporary Situations Part 1: Design and Part 2: Operations*
 - *Safety at street works and road works: a code of practice 2013 (2nd impression June 2014)* The Stationery Office 2014 (The Red Book)

Further guidance with regards to **Health and Safety legislation** can be obtained from,

- Health and Safety at Work etc. Act 1974
- The Construction (Design and Management) Regulations 2015
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- Personal Protective Equipment at Work Regulations 1992 (as amended).
- Provision and Use of Work Equipment Regulations 1998



- 1.6 Due to the location of the project there is potential for delays and disruption to be created by means of the temporary traffic management required for elements of the works, such as junction layout changes, resurfacing etc. However, through careful planning these issues can be minimised or even eliminated before the works commence, for example from co-ordinating works, changing works sequencing or adopting alternative traffic management schemes. All efforts must be made to reduce the disruption caused by the scheme works and methods such as advanced warning signs, temporary variable messaging signs and advertising through press releases, web updates, letter drops etc. as appropriate should be used.
- 1.7 The appointed works contractor will be required to avoid unnecessary delays and disruption to traffic, pedestrians, cyclists and public transport during construction of the project while maintaining access to properties and businesses whilst maintaining relevant safety standards for traffic, the public and the construction staff.
- 1.8 It is suggested a Traffic Management Working Group (TMWG) be formed for the Valley Gardens construction project which includes representatives from the local highway authority, public transport providers, emergency services and the contractors for the Valley Gardens scheme build.

2.0 TEMPORARY TRAFFIC MANAGEMENT

2.1 Temporary Traffic Management Contractor Duties

Name	TBC
Contact Details	TBC
Responsibilities	All temporary traffic management measures
	Ensuring all temporary traffic management equipment is in place and in full working order through a structured method of inspections as agreed with the local highway authority and Valley Gardens works contractor.
	Enforcement of health and safety in liaison with the Valley Gardens Contractor’s Health and Safety Manager, relating to operations and live traffic
	Liaison with any Employer’s Representative, CDM Co-ordinator and relevant authorities and ongoing monitoring of traffic management measures
	Arranging for site inspections and equipment attended to and maintained and in the case of accidents or incidents
	Informing BHCC permit team, public transport providers, affected road users, local radio and the local press at least two weeks in advance of any planned major changes to the traffic management layouts, including any plans to reduce the number of available running lanes.



	<p>In the event of a traffic incident occurring in or adjacent to the Site, contacting the emergency services and the Employer informing them of:</p> <ul style="list-style-type: none"> • The location of the incident • The seriousness of the incident and whether any persons are trapped • Whether the incident involves vehicles carrying flammable, corrosive or hazardous substances; and • Whether there is a possibility of ignition from leaking fuel or chemicals
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3.0 TIMINGS OF OPERATIONS

- 3.1 It is suggested normal working hours for activities generating noise on the Valley Gardens scheme shall be Monday to Friday - 08:00 hrs to 18:00 hrs and Saturday – 09:00 to 13:00 hrs as per BHCC Environmental Health team advice. Phase durations are based on these normal working hours. The Valley Gardens works contractor will be required to provide such information as may be considered necessary in accordance with the Noise and Vibration Monitoring Plan if an extension to the normal working hours is sought.
- 3.2 The Valley Gardens road network is identified as Traffic Sensitive on BHCC’s street gazetteer therefore erection and removal of any traffic management installation, temporary diversion or Road Safety Audits shall **not** be carried out during the following hours or during any other time periods specified by BHCC or TMWG:
Monday to Sunday – 06:00-10:00 hrs inclusive and 16:00 (15:30 on Fridays) to 19:00 hrs inclusive and on any local or national public holiday or ‘one-off special events’ identified by BHCC, unless agreed in writing by BHCC and any other relevant authority, or on specific instructions from the police.
- 3.3 Key events are scheduled in table 3.3 below. Edburton Contractors Ltd have ensured that the traffic management proposals take account of events and public holidays which are likely to affect traffic flows. The events schedule should be updated quarterly or as required to revise dates and include any additional events identified that may be affected by the works. Only those events occurring directly within the Valley Gardens area are listed below. It must be noted that BHCC hosts numerous events throughout the calendar year many of which will traverse the Valley Gardens works area and these will need to be accommodated by the works contractor.

Brighton Half Marathon	February 2018, 2019
Brighton Marathon	April 2018, 2019
The Warren	May – June 2018, 2019
Fringe Central Hub	May – June 2018, 2019
Lady Boys of Bangkok	May – June 2018, 2019
Brighton Spielgeltent	May – June 2018, 2019
Brighton Festival	May 2018, 2019
Historic Comm’ Vehicle Run	May 2018, 2019
Mini Owners Run	May 2018, 2019
BHF Lon2Brighton BikeRide	June 2018, 2019



Pride, PVP	August 2018, 2019
Fiery Food Festival	September 2018, 2019
Ace Café (motorcycle)Run	September 2018, 2019
Veteran Car Run	November 2018, 2019
Remembrance	November 2018, 2019

Table 3.3 Events Schedule

4.0 CONSTRUCTION TRAFFIC ACCESS

- 4.1 A haulage route plan must be developed for the site for the major suppliers (concrete, earthworks, surfacing etc.) showing routes to be used to get to work areas and access locations for the works areas. Controlled site access / egress will need to be incorporated into each phase of the build. The access egress plan will need to be communicated to the suppliers and any subcontractors.
- 4.2 The site compound location will need to be developed to minimise site traffic movements and disruption to road users in and around the build.
- 4.3 The Valley Gardens scheme contractor must consult and comply with BHCC’s Permit Team regarding the routing of vehicles to and from their Site and review/submit to BHCC proposals for construction traffic access as necessary.

5.0 MEASURES TO PROVIDE FOR THE SAFETY OF TRAFFIC, THE PUBLIC AND CONSTRUCTION STAFF DURING THE TRAFFIC MANAGEMENT WORKS AND TEMPORARY TRAFFIC CONTROL MEASURES

- 5.1 All traffic management works to be completed by trained competent personnel from specialist temporary traffic management contractor. All temporary traffic management (TTM) shall be designed and installed in accordance with Chapter 8 and *Safety at street works and road works: a code of practice*.
- 5.2 A risk assessment and method statement shall be completed for each TTM installation and shall consider hazards associated with each phase and necessary control measures.
- 5.3 The risk assessment proforma to be used can be found in **Appendix B**.
- 5.4 During the period when traffic restrictions are imposed on any road, the temporary traffic management contractor shall provide a minimum of one responsible and appropriately experienced operative with an appropriate vehicle on a 24-hour day, 7 day a week basis whose responsibility shall be for the periodic monitoring (at least twice per day one am and pm) of the TTM.
- 5.5 In the event of an incident occurring in or adjacent to the site, the Valley Gardens scheme contractor and or temporary traffic management contractor shall immediately contact the emergency services as appropriate using the emergency 999 service.
Non-emergency contact details for the local blue light services are:



Sussex and Surrey Police	01273 470101
SECAMB	0300 1230999
ESFRS	0303 9991000

- 5.6 The Valley Gardens scheme contractor shall provide a breakdown recovery service as agreed with BHCC during the construction phases where rerouting of traffic is not possible.
- 5.7 Where reasonable and practicable, construction vehicles will avoid travelling in convoys on public roads.
- 5.8 Construction staff using private vehicles to travel to the site will park their vehicles in designated construction site car parks and not on public roads within the boundaries of the construction site or those roads immediately adjacent to cause delays to traffic. Parking of vehicles being used for construction purposes will be permitted on public roads within the limits of any traffic management scheme provided for the works.
- 5.9 The Valley Gardens scheme contractor will seek to arrange delivery of materials to the site by road between 10:00 hrs and 16:00 hrs to minimise disruption to road users during peak periods. This will be subject to the need for deliveries to occur at other time to maintain the safe and efficient operation of the construction works.

6.0 EXISTING PEDESTRIAN, AND CYCLIST ROUTES

- 6.1 The Valley Gardens scheme contractor shall take account the needs of cyclists, pedestrians and other road users, as appropriate, whilst undertaking any works on or adjacent to the site or roads adjacent to the site. The Valley Gardens scheme contractor in association with the temporary traffic management contractor shall take all reasonable measures to provide appropriate mitigation for these road users.
- 6.2 Cyclist routes are affected within the vicinity of the works and the Valley Gardens scheme contractor will need to be managed in line with the best practice standards of BHCC to ensure adequate provision is made to support cyclists during the scheme build.
- 6.3 The Valley Gardens scheme contractor shall ensure adequate temporary footway diversions are used wherever their Works interfere with existing public or private footways or other ways over which there is a public or private right of way for traffic.
- 6.4 Private accesses affected by the TTM shall have their access maintained wherever possible. If access cannot be maintained for private accesses affected mitigation must be offered to the resident and discussed with BHCC.

7.0 MEASURES TO REDUCE TRAFFIC IMPACTS DUE TO THE IMPLEMENTATION OF TEMPORARY TRAFFIC MANAGEMENT FOR THE VALLEY GARDENS SCHEME



Valley Gardens Existing Traffic Flows

- 7.1 Valley Gardens is made up of the series of green spaces running from The Level down to the Old Steine and the seafront. Many of the busiest transport routes in the city pass through Valley Gardens area including the A23 and the A270. The current road layout has developed over time and includes designated bus/taxi lanes, segregated contraflow bus/taxi routes and a combination of off and on road cycle routes.

Traffic leaving the A23 and A27 trunk roads wishing to head in to the city is signposted towards Valley Gardens area in order to reach their preferred destination. Be that the seafront, The Royal Pavilion, city centre car parks or any of the numerous attractions the centre of Brighton & Hove has to offer.

Valley Gardens traffic flows are expected to continue during the scheme build therefore the temporary traffic management has been designed to accommodate existing traffic flows and allow the scheme build to continue in unison. A Plan showing the existing traffic flows around the Valley Gardens scheme build area can be found at **Appendix C**.

- 7.2 The city centre is a primary hub for multiple bus routes operated by Brighton and Hove Buses, Big Lemon, Metro Bus, Compass Travel and Stage Coach buses. Public transport is an essential facilitator of the successful commerce for the city and existing bus services must be accommodated on the road network at all times during the Valley Gardens scheme build. Brighton and Hove Buses city centre bus route map can be found at **Appendix D**.

Valley Gardens Proposed Traffic Flows

- 7.3 The Valley Gardens scheme build has been broken down in to multiple phases of operations designed to ensure the roads within and adjacent to the scheme can continue to operate in as near to a normal way as possible during the works. A written breakdown of the phases is detailed below: - To note all greenspace works to be programmed to occur in collaboration with highway works in so far as it is reasonably practicable to do so.

- *Phase 1 commences on the southbound section of the A270 Richmond Parade/Grand Parade from 50metres north of the junction with St Peter's Place and proceeds southerly to a point approximately 50m north of the junction with Edward Street. The works will necessitate the inside lane being removed from use and all southbound traffic will be temporarily redirected into the outside lane by the means of temporary traffic management.*
- *Phase 2 switches southbound traffic on the A270 to the newly completed inside lane by the means of temporary traffic management between the junctions of St Peter's Place and Marlborough Place. Phase 2 will also allow construction works to occur in St Peter's Place including setting aside an area to be used as a temporary Taxi pick up and drop off point whilst the scheme continues to phase 6 when the new permanent taxi rank will have been completed.*
- *Phase 3 encompasses the Victoria Gardens area and allows for works on the outside lane of the southbound A270 Grand Parade between Marlborough Place and Church Street and the northbound A23 Marlborough Place with all traffic diverted on to the inside lanes by the means of temporary traffic management.*

- *Phase 4 switches northbound A23 Marlborough Place traffic on to the outside lane and manages traffic using Church Street by the means of temporary traffic management to allow for access and construction to occur in unison.*
- *Phase 5 allows construction on the north bound inside lanes of Gloucester Place, St Georges Place and York Place with all northbound traffic temporarily redirected into the outside lanes by the means of temporary traffic management.*
- *Phase 6 removes the northbound segregated bus lanes in the area of St Georges Place and York Place with northbound buses joining general traffic flows in the newly completed northbound sections of St Georges Place and York Place as constructed in phase 5.*
- *Phase 7 allows for works to the segregated northbound and southbound bus lanes in Gloucester Place with buses joining normal northbound and southbound traffic lanes.*
- *Phase 8 will manage eastbound traffic flows exiting North Road and crossing Marlborough Place by the means of temporary traffic management with bus flows redirected to the new traffic lanes on the eastern side of Valley Gardens as necessary.*
- *Phase 9 closes the A270/Richmond Place cut through and no temporary diversions or traffic management is required apart from closing the site to traffic.*
- *Phase 10 finalises construction of the Grand Parade/Edward Street traffic islands and is managed by means of temporary traffic management.*

Proposed traffic flow diagrams have been created for each phase of the build and these drawings can be found in the Traffic Flow Arrangements pack supporting this report. The rationale for the phases of construction were developed after a period of consultation with affected Valley Gardens road users and are designed to allow the Valley Gardens scheme contractor to build the new road layouts in the least disruptive way possible.

The completed Valley Gardens scheme separates much of the local bus and taxi traffic from the commuter, visitor and through traffic (normal traffic). Works will begin on the normal traffic side (eastern side) of the Valley Gardens area and continue in a sectional nature until all the normal traffic running lanes are constructed.

On completion of the Eastern side of Valley Gardens scheme works can commence on the local buses and taxis lanes on the Western side of the build area. The finished lane widths are reduced and therefore some of the bus traffic will need to be integrated in to the completed normal traffic lanes during the build. Priority for public transport vehicles should be offered wherever it is possible to do so without unduly impeding the normal traffic flows.

Areas of Concern, Solutions and or Mitigation Offered

- 7.4 Extensive consultation has been undertaken to ascertain the needs of road users affected by the Valley Gardens scheme build and further liaison will be expected before and during the works period. Consultation has been carried out with Police, SECAMB, ESFR, Local transport providers including Buses and Taxis, Brighton Marina, Local NHS trust, and officers within BHCC including Civil Contingencies, Health and Safety, Outdoor Events Team and Environmental Health. Consultation comments received and actions are documented in **Appendix J.**

In cooperation with BHCC consultation meetings / drop in centres, letter drops, local press and radio and on-line communication tools will all be used to ensure those affected by the scheme build will have up to date information available to them at all times. The Valley Gardens scheme contractor will be expected to bring their knowledge, skills and experience in these endeavours to the project in order to support the consultation works already undertaken.

The information gathered during previous consultation exercises is summarised in Appendix J but should not be considered complete and further areas of concern requiring mitigating efforts should be expected as part of the Valley Gardens scheme build. The list has been developed in line with the phased build designs and should be read in conjunction with the Traffic Flow and Arrangements Pack.

8.0 OUTER AND LOCAL DIVERSION ROUTES

8.1 Outer and local traffic diversions have been designed to facilitate the different phases of the works and the drawings associated with these diversion routes can be found at **Appendix E and F**. All diversion drawings should be read in conjunction with the **Table of Consultation Comments and BHCC Decisions and Comments** and the Traffic Flow Arrangements pack.

9.0 DURATIONS AND PROPOSED TIMINGS

9.1 The Construction Programme was established by identifying keys operations and applying typical outputs to these to give appropriate durations for the operations and phases. The programme was sequenced in phases from a start date of June 2018. The first draft programme gave a project duration of 29 months, with a projected completion date of October 2020.

We understand the Clients' expectation of a completion by May 2020 and so reconsidered the outputs and durations, making an allowance for increased outputs through extended working hours, a six-day working week and increased resources where appropriate.

This gave a revised project duration of 23 months with a projected completion of April 2020. The durations are estimated, the final timings and programme will be agreed with the appointed contractor.

The duration construction programme can be found in **Appendix G**

10.0 PROJECTED COSTS

10.1 We have estimated the projected costs for temporary traffic management required during the construction works.

This includes an assessment of the likely requirement for materials eg. barriers, signs and cones, which will be purchased for the scheme. This is deemed to include:

Standard Signs – Plastic and fitted in raised height frames for increased visibility. For use on approaches to the works

- 150 no 750mm Quickfit frames
- 10 no 870mm x 360mm supplementary plates
- 50 no 750mm diameter
- 20 no 1050mm x 450mm



- 60 no 1050mm x 750mm
- 20 no 600mm x 450mm

Class Ref 2 Road Signs – GRP in high frames for increased visibility. For use within the roadworks

- 150 no 900mm Quickfit frames
- 30 no 900mm x 350mm supplementary plates
- 100 no 1050mm x 450mm
- 70 no 900mm diameter
- 50 no 1050mm x 750mm
- 15 no 975mm x 1125mm 2 lane wickets
- 15 no 1350mm x 1125mm 3 lane wickets

Road Cones, Traffic Separator Blocks (red/white), Sand Bags and Lamps

- 100 no TM spec. coloured sand bags
- 1000 no 750mm Rubber based road cones
- 600 no 1m water-filled barrier
- 500 no Dorman static cone lamp

Local Diversion Signs

An allowance has been made for the re-use of some signs

- 20 no 750mm road works triangle
- 35 no 1050mm x 750mm road closed
- 60 no 1050mm x 750mm diversion
- 25 no supplementary plate
- 10 no bespoke 1050mm x 750mm

Outer Diversion Route Signs

- 20 no bespoke signs

The costs also include for the provision of the outer diversion routes signage and provision of 4no. VMS signs for the duration of the works.

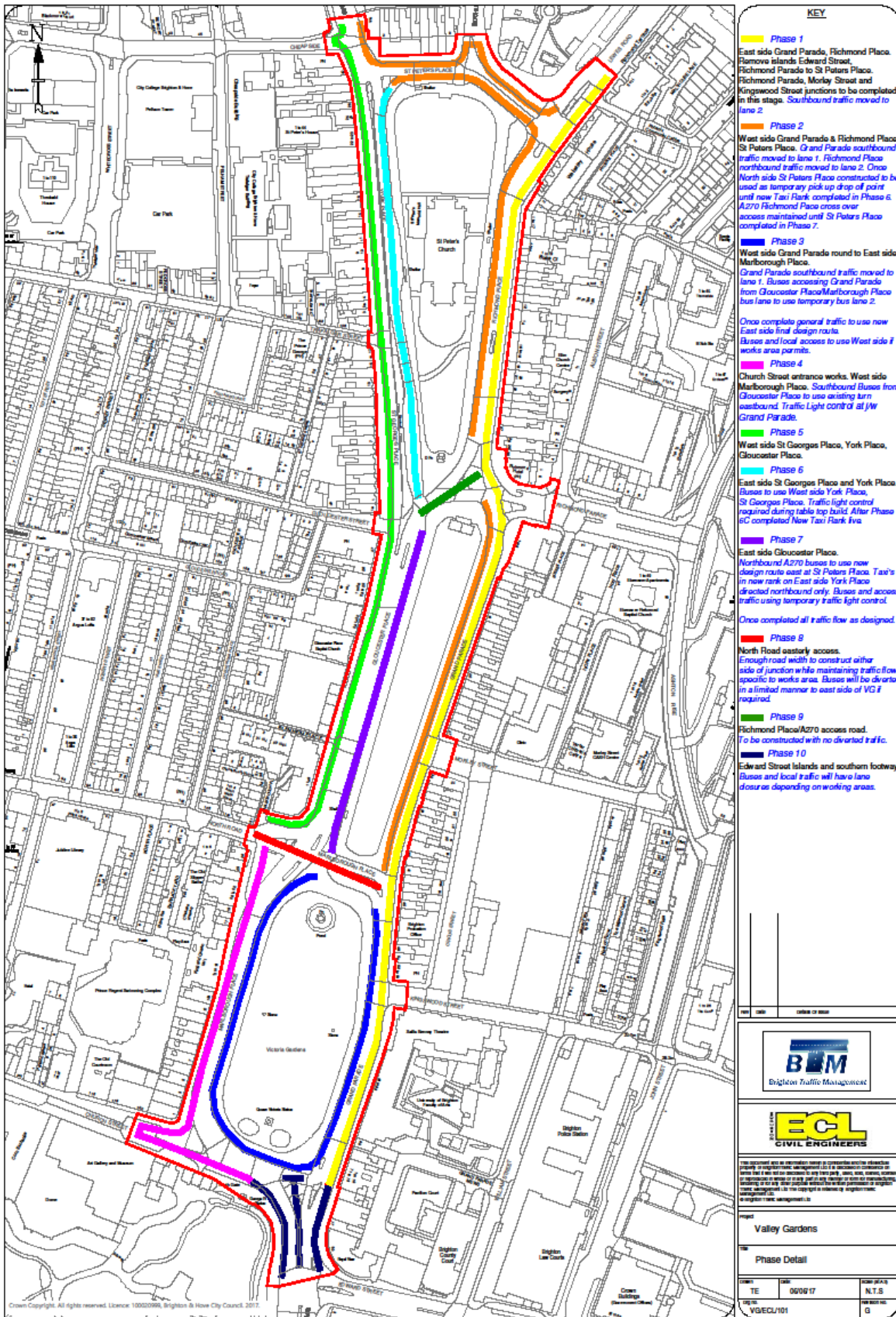
It is the intention to utilise the existing traffic lights as much as is practical throughout the scheme. There will, however, be the need to provide temporary 3-way lights at the junction of North Road and Grand Parade from Phase 3B to Phase 9 for a period of 52 weeks. The costs provided include for hire of these lights. We have not considered alternative costings to purchase these lights as the hire includes for a quick response maintenance from the suppliers. If purchased, the traffic light system would potentially be at risk of down time, even when under warranty, during any period of maintenance or disruption.

The costs also account for a permanent TM resource on site to make any set-ups and changes as may be required, as well as perform the maintenance of the TM.

Details are provided in **Appendix H**.



APPENDIX A



APPENDIX B

Traffic Management Hazard Identification & Risk Assessment Control Form

Location	
Date	
Completed by	
Review Date	
Describe how mobile plant or vehicles in area are interacting with other mobile plant, vehicles and pedestrians	

This form can be used to identify possible hazards to persons or property in areas where pedestrians and mobile plant and vehicles interact. If a hazard is identified which is not currently or effectively controlled, a corrective action is to be entered column 4

To minimise the risks to persons and property the following should be considered:

- Identify all reversing operations
- Identify who is at risk
- Eliminate reversing where possible
- Remove pedestrians from danger areas where possible
- Ensure safe systems of work i.e. provide instructions for responsible staff / drivers, and
- Modify the premises where possible



1. Item	2. Specific risk / hazard and identify whom is at risk	3. Existing Controls in place / further recommendations	4. Additional risk controls required	5. Person Responsible	6. Date to be actioned
1. Workplace Environment / Conditions					
a) Describe the lay out, physical conditions of the area					
b) Lighting –					
c) Do adverse weather conditions increase risks to those in area?					
d) Are roadways marked where necessary e.g. to indicate the right of way at road junctions?					
e) Is there a need for directions signs, speed limit signs and where applicable?					
f) Is there a need for features such as fixed mirrors to provide greater vision?					

2. Mobile Plant / Vehicles					
a) Type and purpose of mobile plant in area					
b) Types of loads, deliveries undertaken in area					
c) Frequency, duration of mobile plant activity in the area					
d) Is there a pedestrian traffic management plan in place? Is this up to date? Do all persons working in area know of it's existence and comply with the plan?					
e) Reversing of mobile plant – is this kept to a minimum in the area?					
f) Is there a need to have a dedicated reversing area? Is there a need for a signaller/banksman to direct reversing vehicles?					

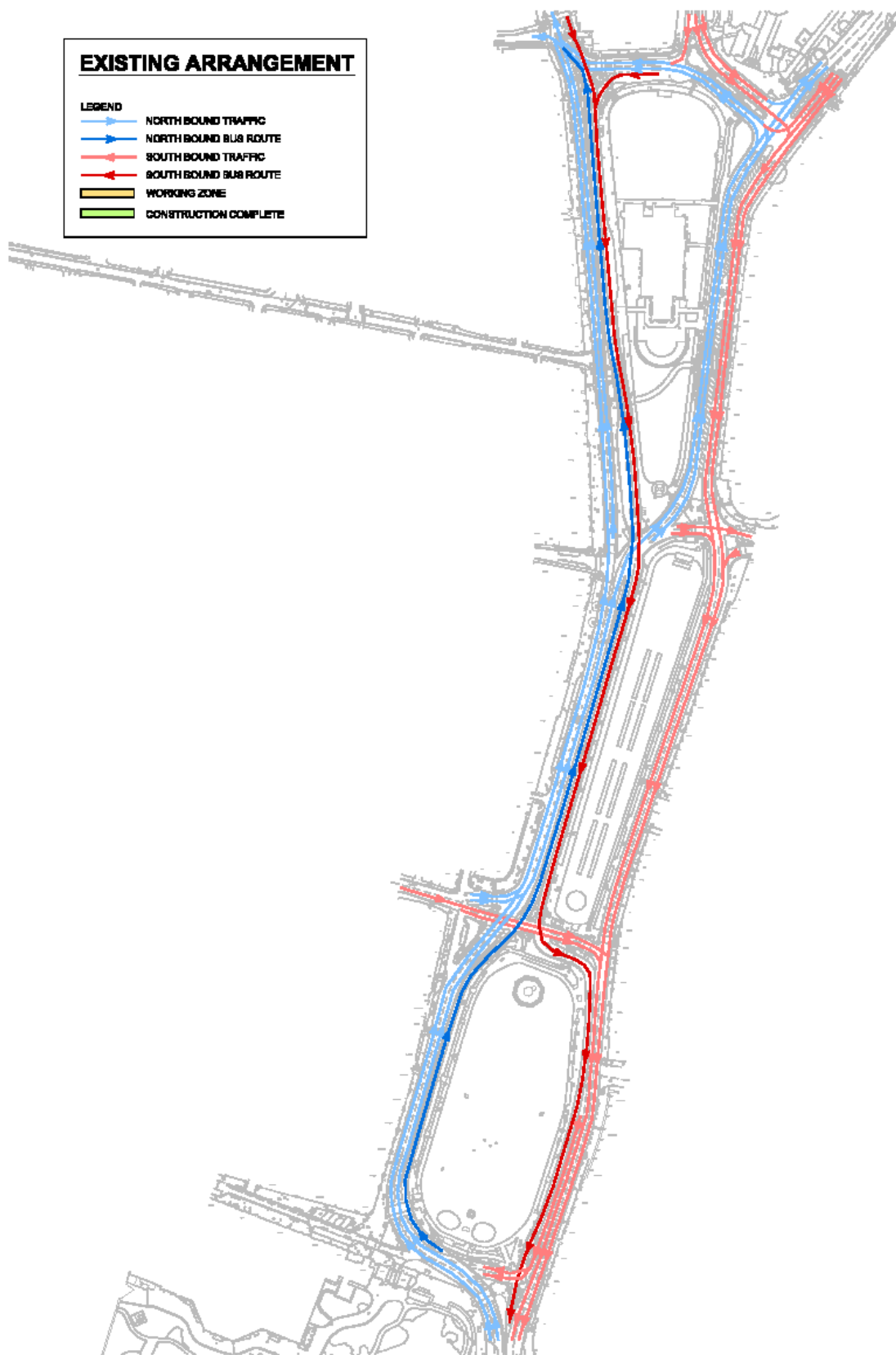
g) Do operators/drivers of plant/vehicles experience blind spots when in the area?					
h) Are there any obstructions to vision for operators of plant / vehicles which would prevent them seeing pedestrian's other operators?					
i) Does mobile plant have audible warning devices? Are these operating and appropriate to situation?					
j) Does mobile plant have visual warning devices? Are these operating and appropriate to situation?					
k) Is mobile plant and vehicle speeds controlled?					
l) Are there designated parking areas for mobile plant and vehicles?					

m) Are all operators of vehicles entering area familiar with environment & traffic management systems?					
n) Do emergency vehicles require access to the area to respond to emergency situations?					
o) Parking for visitors – designated or mixed provision					
3. Pedestrians					
a) Describe the types of pedestrians entering area					

b) Are there suitable and appropriate numbers of pedestrian crossing points on vehicle routes?					
c) Are persons entering / exiting area from <ul style="list-style-type: none">• Footpaths• Blind corners• Entrance / exit of buildings					
d) Are shared vehicle and pedestrian travel paths signed / unsigned?					
e) Do pedestrians entering area experience blind spots which prevent them from seeing moving plant or vehicles entering into area?					

f) Do all persons entering area understand the hazards – how is this communicated?					
4. History of incidents / near misses					
a) Is there a history of any incidents / near misses which have occurred in area involving pedestrians and mobile plant / vehicles					
Manager's Name / Title					
			Manager's Signature		Date

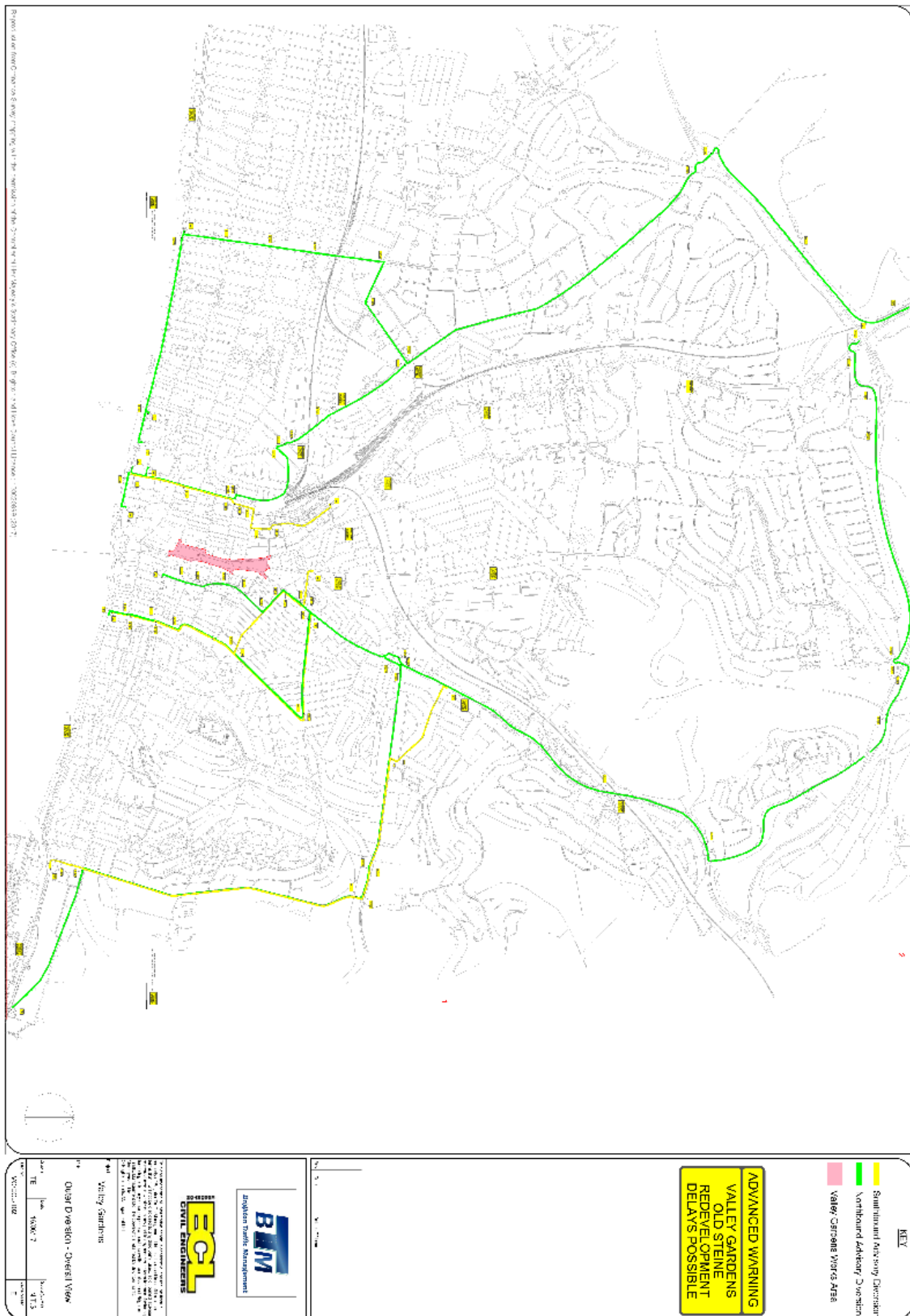
APPENDIX C



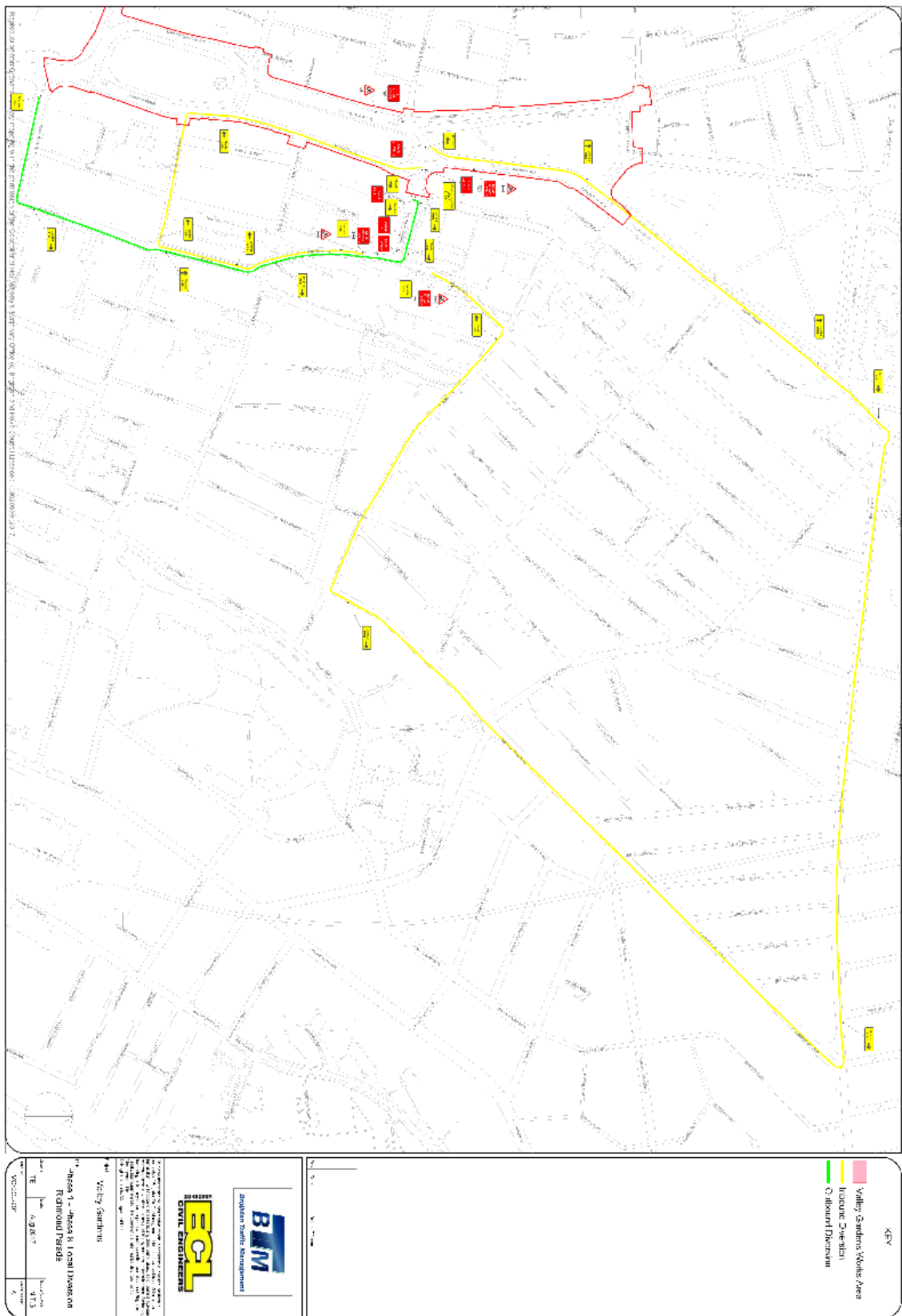
APPENDIX D



APPENDIX E



APPENDIX F



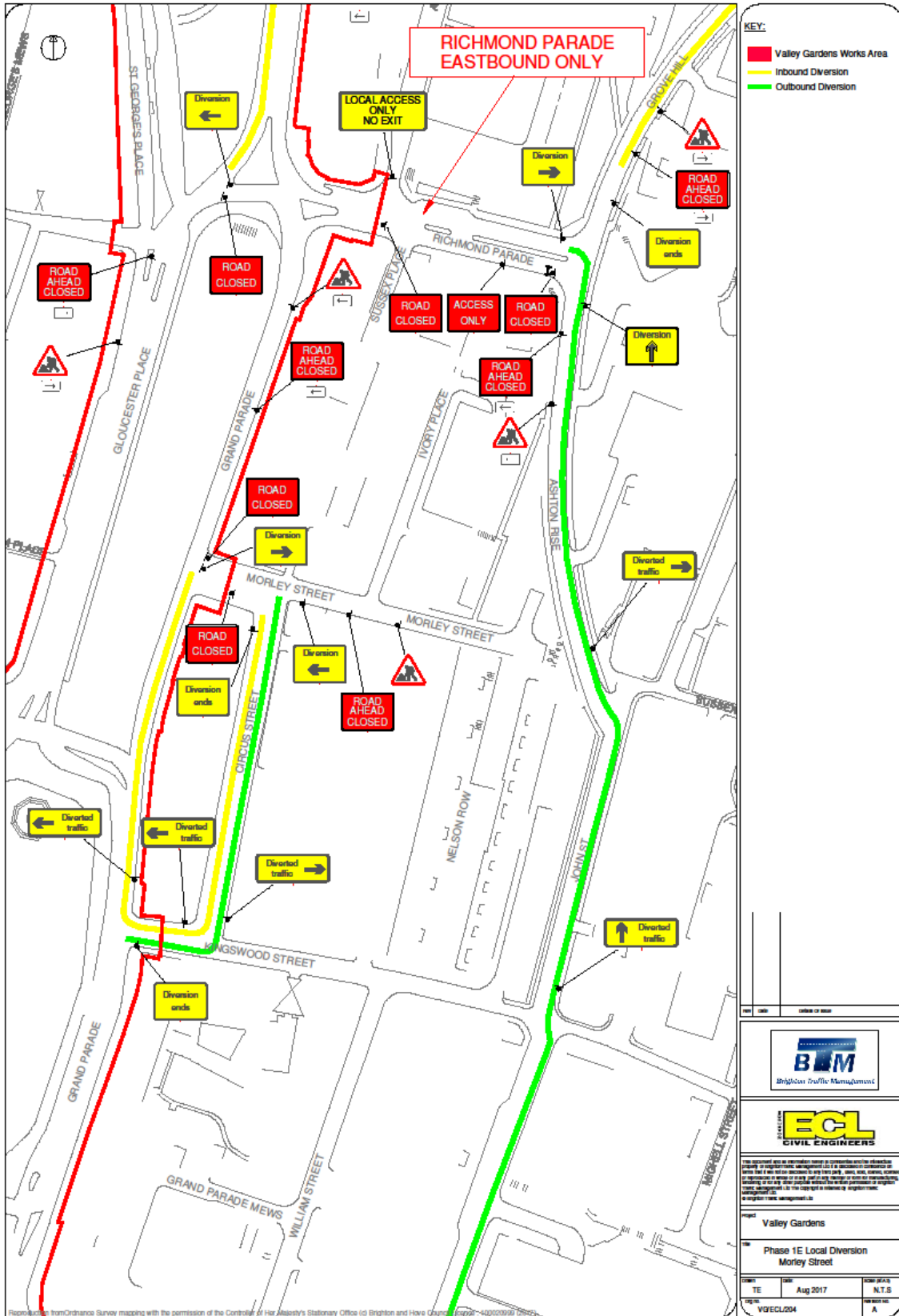
KEY

- Valley Gardens, Water Area
- Future Division
- Oldland Division



Valley Gardens
 - Areas 1 - Areas 8 Local Division
 Richmond Parade
 Date: 15/08/17
 Scale: 1:1000
 Author: JTS
 Version: 1.0

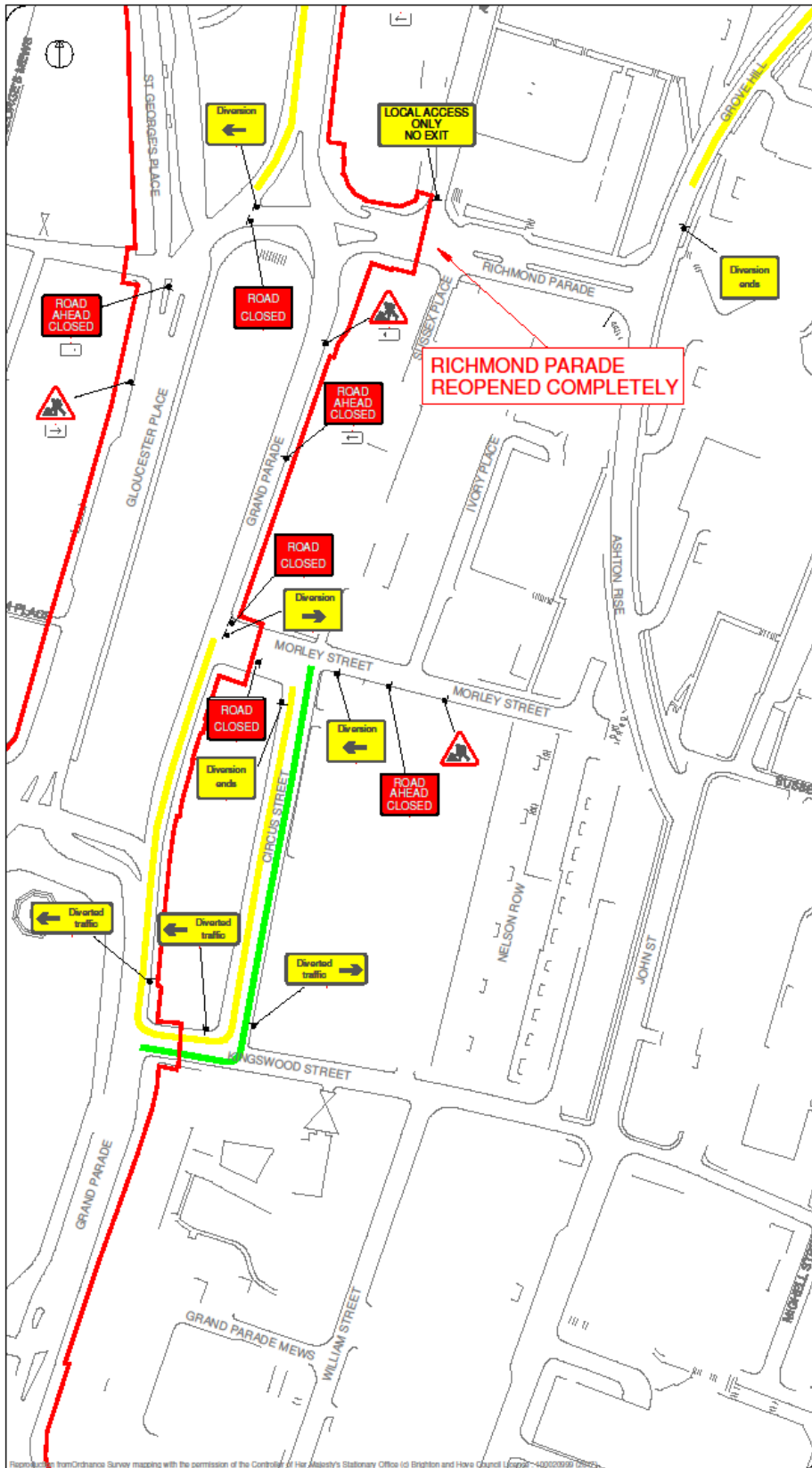




KEY:
 ■ Valley Gardens Works Area
 → Inbound Diversion
 → Outbound Diversion

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Project: Valley Gardens	
Phase 1E Local Diversion Morley Street	
TE	Aug 2017
DATE	N.T.S.
SCALE	A
PROJECT NO.	VGEC1204

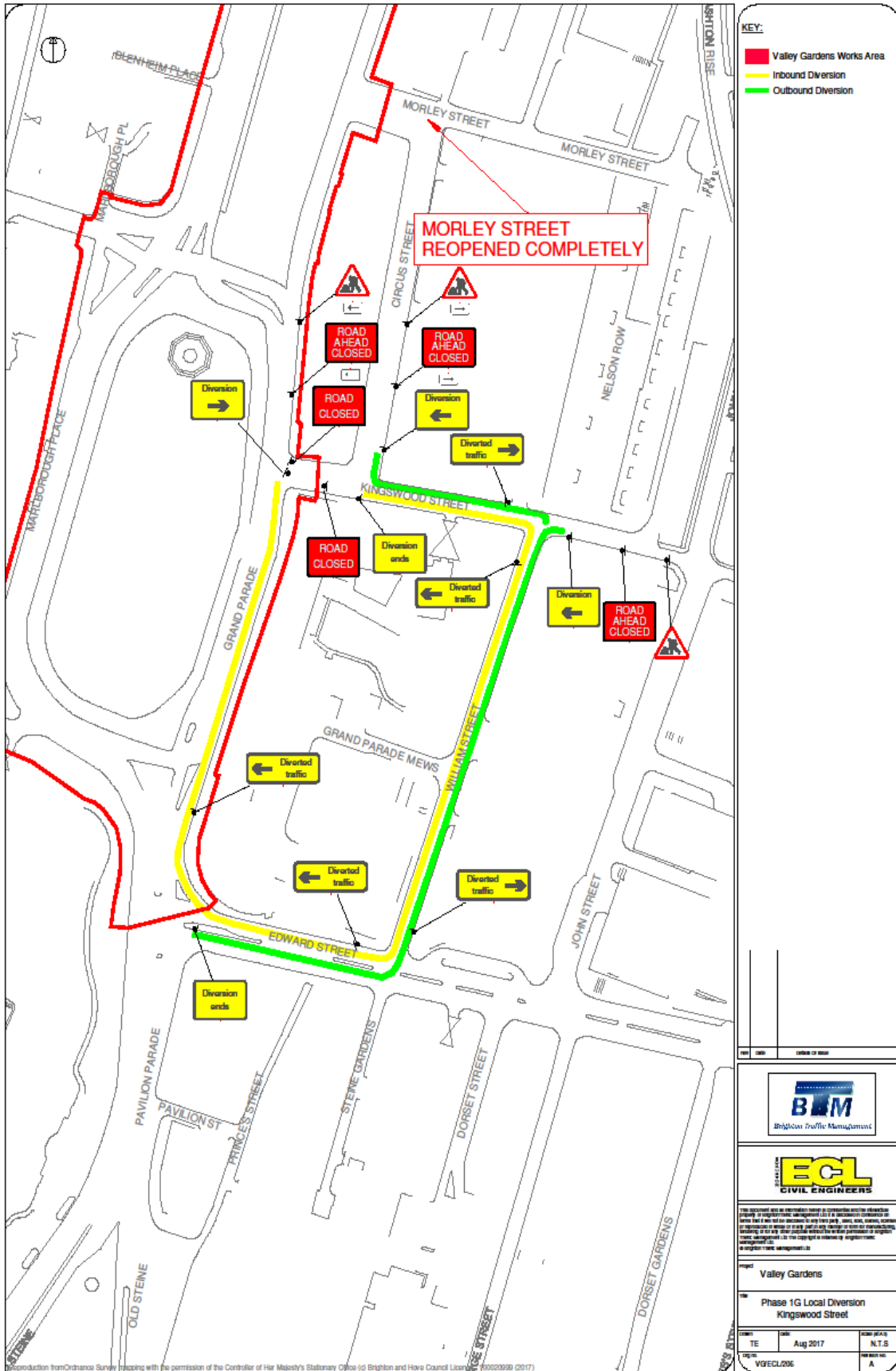




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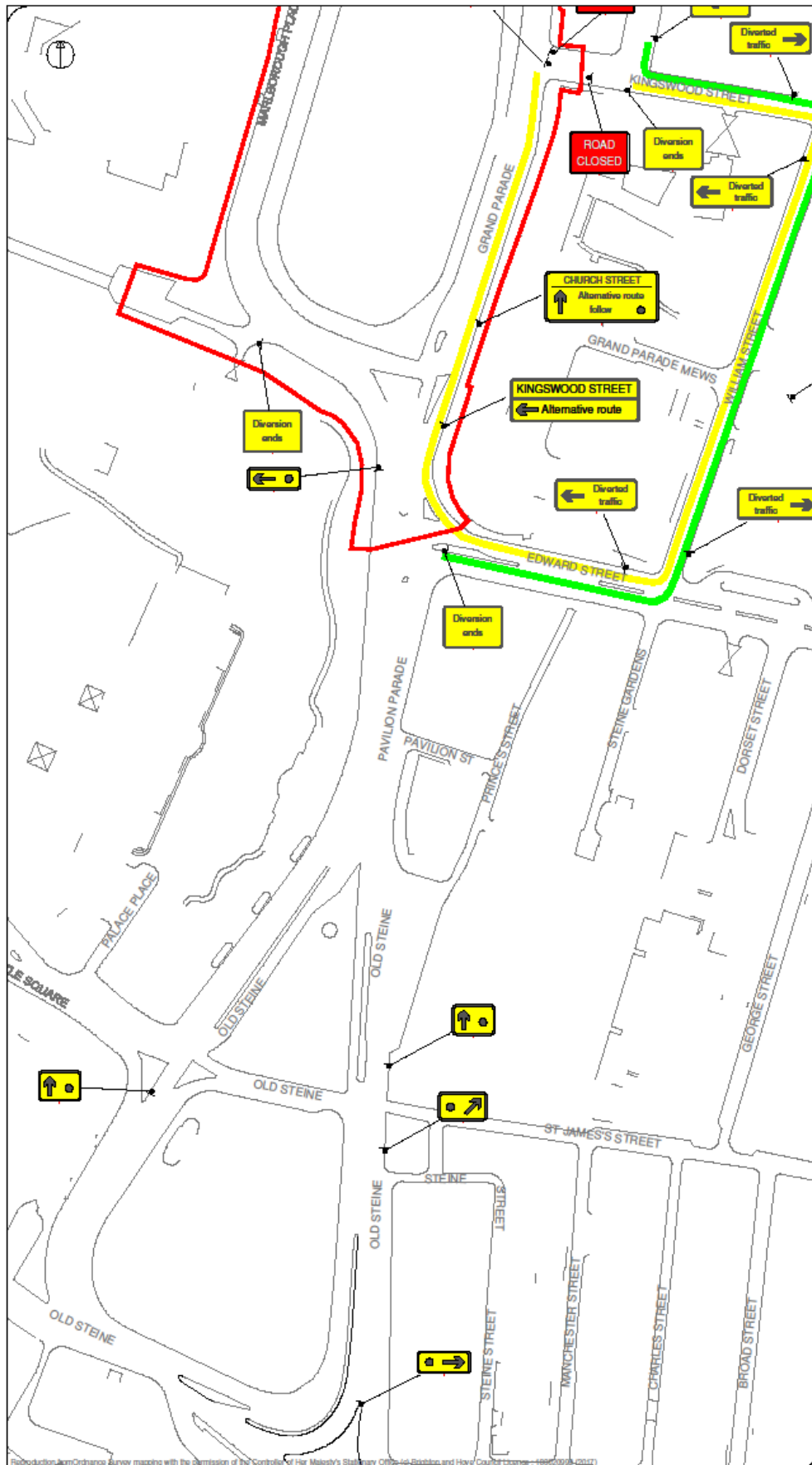
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<p>Project: Valley Gardens</p>	
<p>Phase 1F Local Diversion Morley Street</p>	
<p>DATE: Aug 2017</p>	<p>SCALE: N.T.S.</p>
<p>PROJECT: VGEC205</p>	<p>REVISION: A</p>





DATE: 12/08/17		DRAWN BY: BMM	
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Project: Valley Gardens			
Title: Phase 1G Local Diversion Kingswood Street			
TE	DATE: Aug 2017	SCALE: N.T.S.	
PROJECT NO.: VEGCL206		REVISED NO.:	A

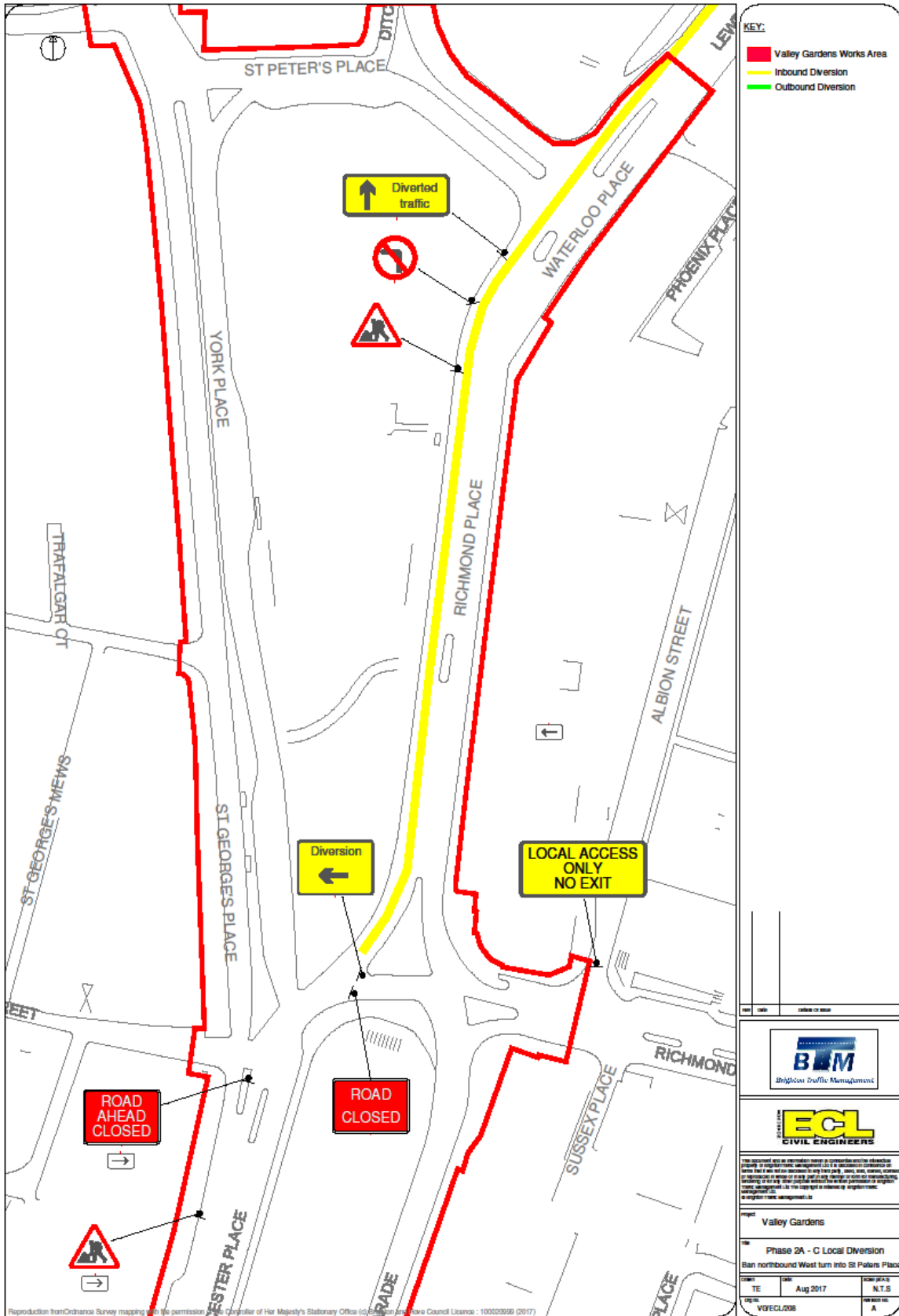


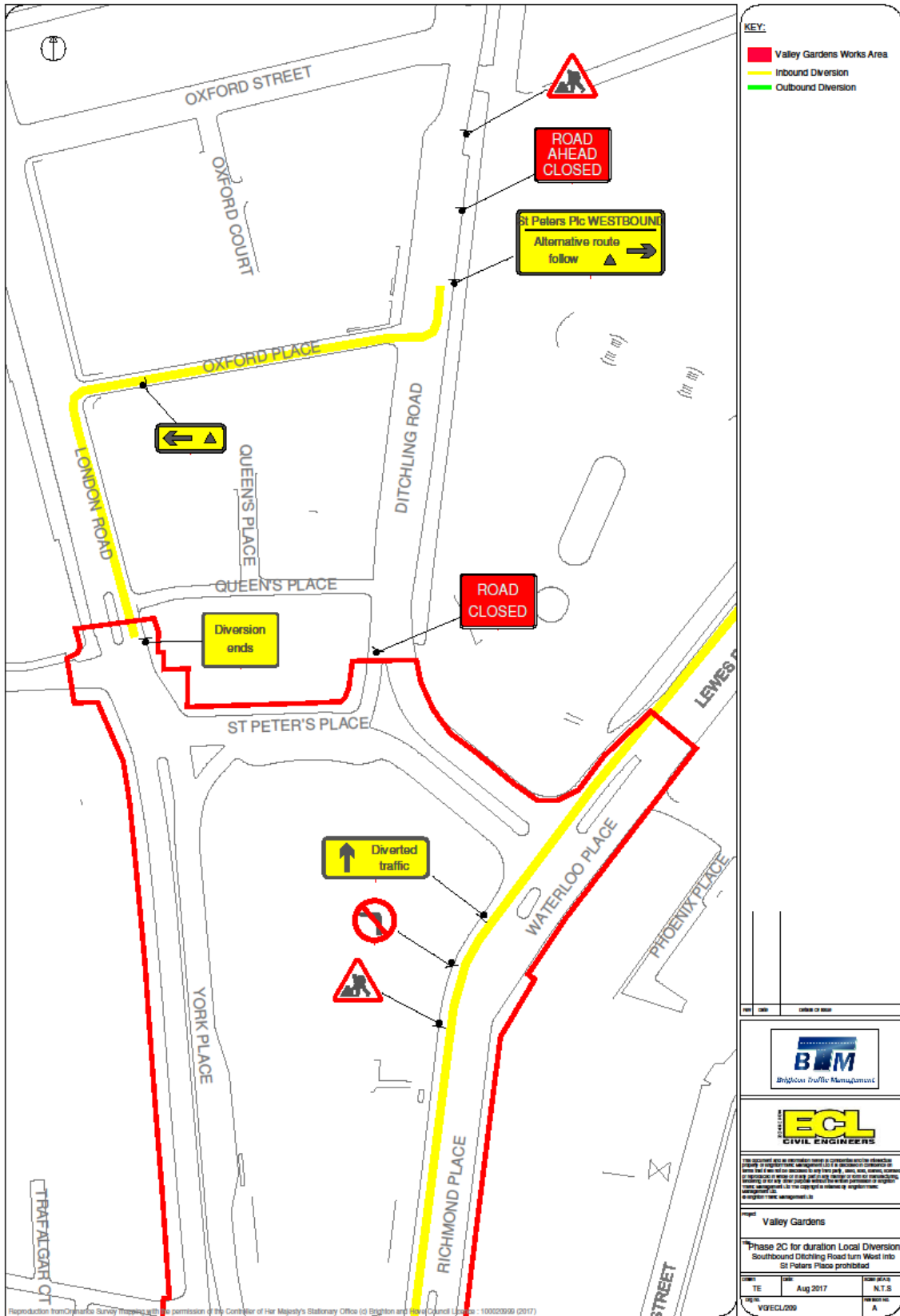


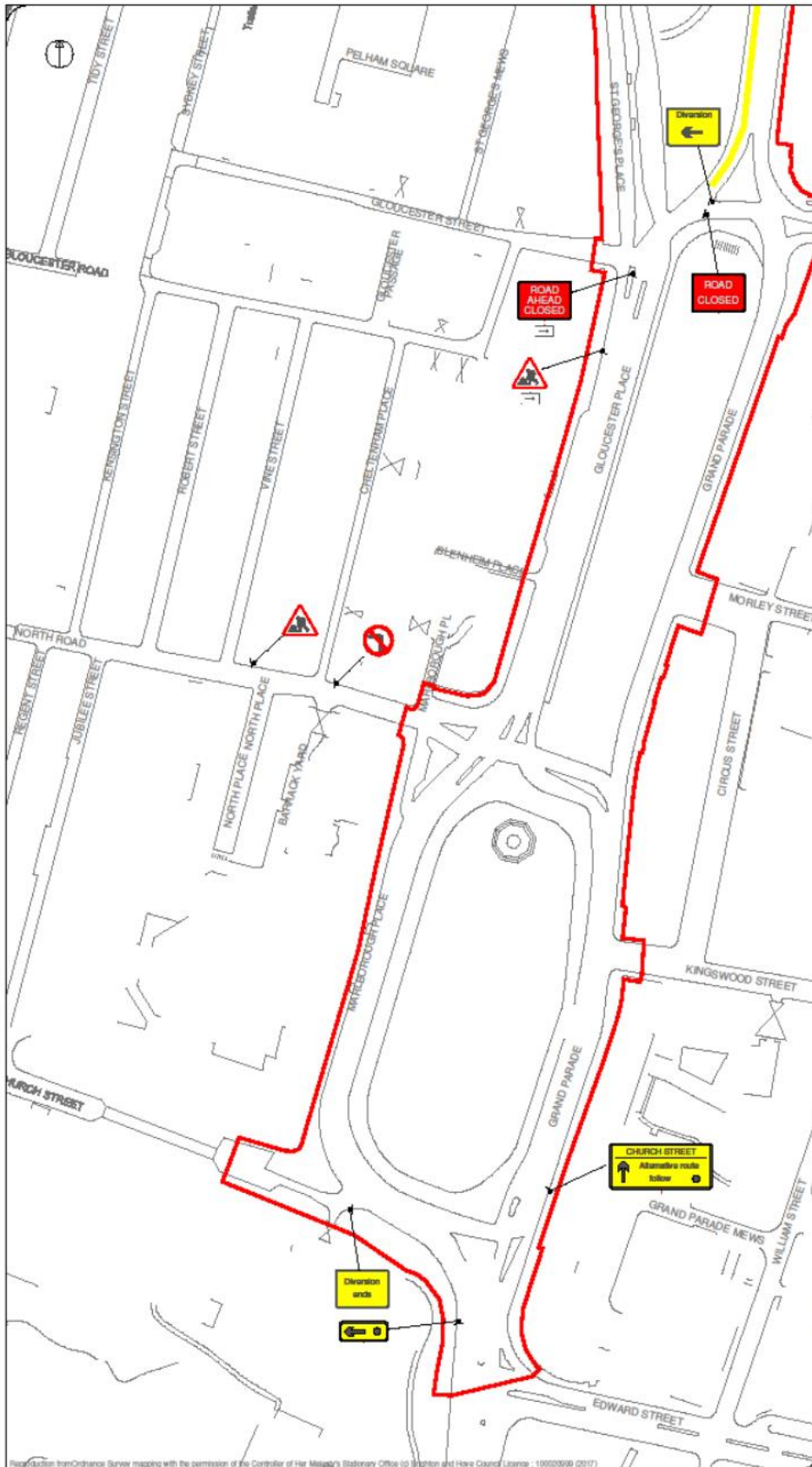
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█ Outbound Diversion

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<p>Project: Valley Gardens</p>	
<p>Phase 1H for duration Local Diversion Church Street Access</p>	
<p>DATE: Aug 2017</p>	<p>SCALE: N.T.S</p>
<p>REF: WGECU207</p>	<p>REVISION: A</p>







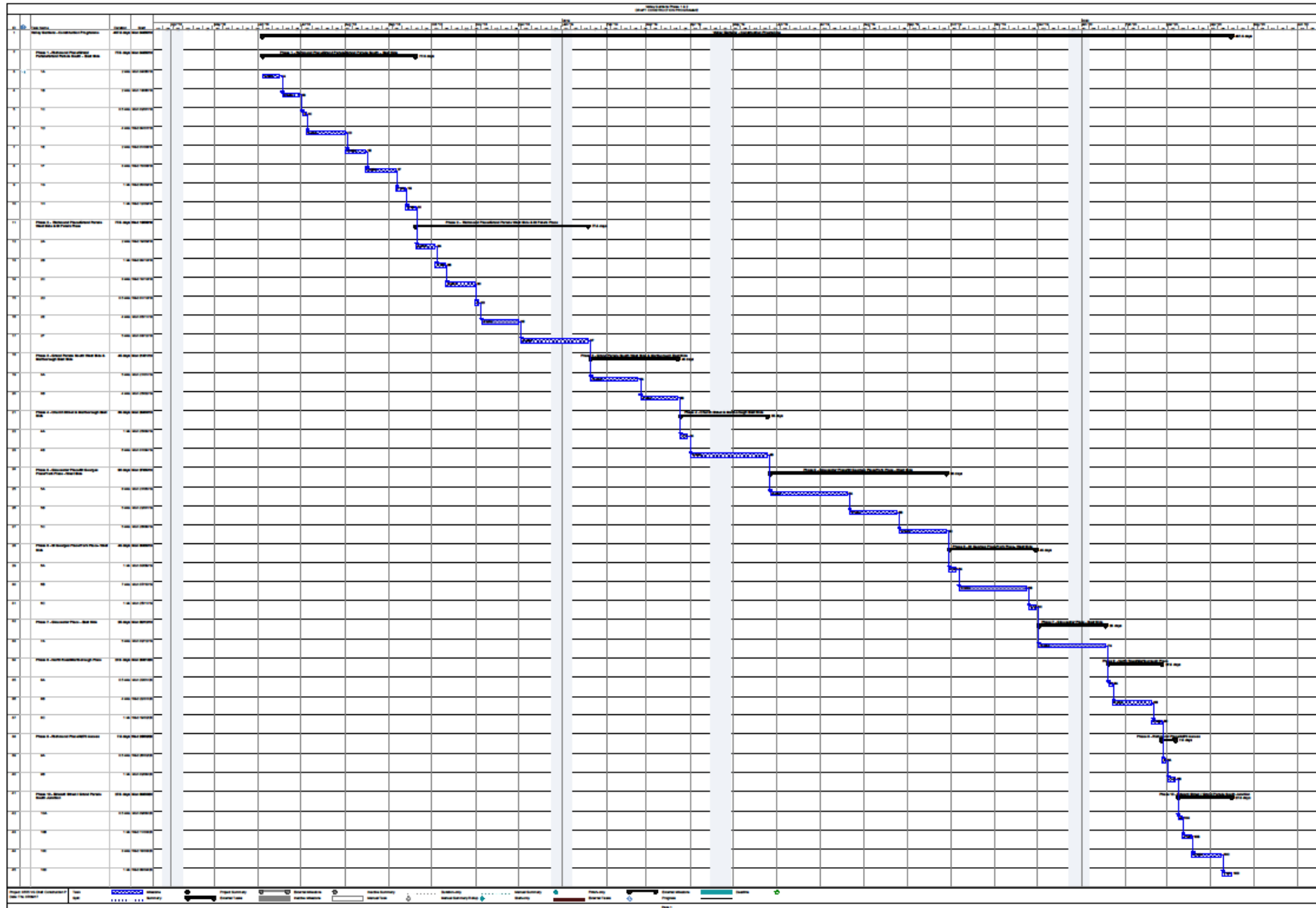


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█ Valley Gardens Works Area
█ Inbound Diversion
█ Outbound Diversion

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<p>Project: Valley Gardens</p>	
<p>Phase 5A Local Diversion Eastbound North Road / Gloucester Place Northbound exit prohibited</p>	
<p>DATE: Aug 2017</p>	<p>SCALE: N.T.S.</p>
<p>REF: VGECL210</p>	<p>REVISED: A</p>



APPENDIX G



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APPENDIX H

1 To purchase equipment to be supplied for the Valley Gardens Scheme Stage 1 phases 1 to 10

Standard signs in Mini Quickfit frames		£6,600.00	
Class Ref 2 signs and Quickfit frames		£25,960.00	
750mm road cones, Traffic Separator Blocks (red/White), sandbags and lamps		£30,800.00	
Total			£63,360.00

2 Local Diversion Signs

Road signs on standard leg frames		£105.00	
Total			£3,800.00

3 Outer Diversion Route Signs

Sign cost each		£105.00	
Total number of signs	20 no.		£2,100.00

4 Variable Message Signs x 4no.

Delivery and installation to site each		£110.00	
Collection and de-installation each		£110.00	
VMS each per week		£550.00	
Total for projected duration	100 weeks		£220,880.00

5 Temporary Traffic Lights - 3 way

Delivery and installation in normal hours		£330.00	
Collection and de-installation each		£330.00	
Battery exchanges		£330.00	
3-way double aspect signals with 3 ped crossing		£1,485.00	
Total for projected duration	52 weeks		£95,040.00



- 6 To provide labour of 2 x Traffic management operatives to install, maintain de-install.
To cover a 6-day working week plus a maintenance visit on Sunday

2 x TMO's including 3.5t vehicle weekday per day		£660.00
2 x TMO's including 3.5t vehicle on Saturday		£550.00
2 x TMO's including 3.5t vehicle on Sunday		£572.00
Total per week		£4,422.00
Total for projected duration	100 weeks	£442,200.00

Total Projected Traffic Management Cost **£827,380.00**



APPENDIX J

Table of Consultation Comments and BHCC Decisions and Comments

Phase	Comment from Bus Companies - Brighton and Hove and Stage Coach	Decision / Comment	Traffic Light Control Measures
Overall Points	<p>Agreed that the emergency access cross over point between the western and eastern side of valley Gardens opposite the Richmond Parade junction was a good idea and would be an access requirement if either East and West sides were blocked by an incident.</p>	<p>To note - temporary 'bus lanes' as detailed on build phase drawings are not dedicated bus lanes as it will be impossible to police such traffic flows but buses movements will be prioritised where practicable.</p> <p>Advise that from phase 3 onwards buses are diverted to East side of Valley Gardens (Grand Parade). This is due to the Edward Street Island being removed to facilitate northbound general traffic flows and considered a faster traffic flow option than using temporary traffic light control.</p> <p>To note - Police request resulting from consultation meeting - that every Phase/traffic change description and drawings were sent to them in advance of the start for distribution to their response teams. This should be enacted for ESFR and SECAMB as well.</p> <p>To note -Where feasible crossing points will be implemented and or suspended to aid the traffic flow.</p> <p>To note – Valley Gardens scheme contractor to reopen traffic lanes as a priority once each phase of works are completed.</p>	

Outer Advisory Diversion Route	<ol style="list-style-type: none"> 1. Discussions around an 'Existing Direction Signage' Survey to be carried out to prevent confusion with proposed advisory diversion signs. 2. Suggested advisory diversion into Queens Road identified as possible congestion issue, so after some discussion as to its importance it was suggested that this diversion was enacted with a proviso it would be revisited if it was proved that it caused unnecessary congestion. 3. Suggested that Mill Road West entrance would be closed for the duration on VG build. Was suggested this would ease congestion on the Dyke Road roundabout. The closure of this one leg of the Dyke Road roundabout facilitates easier flow for cars exiting Dyke Road Avenue and so would clear the congestion experienced here daily and which may well increase as the VG advisory diversion will add to this traffic flow. 	<ol style="list-style-type: none"> 1. Sign Conflict Survey can be carried out if decided there is a requirement? 2. Agreed will be considered / actioned if needed during scheme build. 3. If decided is a requirement consultation with residents and affected road users will be required before BHCCC can offer permissions. 	
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Phase 1A	<p>Request for the No 25 Bendy Bus coming from Lewes Road to join the southbound West side existing bus lane via St Peters Place. To enable this St Peters Place West end South side footway profile requires re-modelling or the centre islands profile changing. There are 19 No 25 buses per hour.</p> <p>As described below 2 Lanes southbound preferred.</p>	<p>Agreed to reduce width of traffic island St Peters Place J/W York Place to facilitate bus movements.</p> <p>Agreed to further assist southbound traffic flows the East turn from A270 Richmond Place crossover into Richmond Parade would be removed.</p>	<p>T/L control junction TB19: Suggested ban on A270 Richmond Place right turn lane (southbound) to remove one stream of T/L control and simplify whole T/L control area. Ban (Stream 2) access into Richmond Parade suggested.</p> <p>No T/L control for cars required at this junction now as Richmond Parade T/L phase removed.</p> <p>Ped crossings removed and crossing point further North used.</p>
Phase 1B	<p>Suggested southbound general traffic would flow better if made two lanes southbound with northbound as one lane. Due to this stretch of road being fed by two lanes approaching from both Lewes Road and Ditchling Road and condensing down to one lane would possibly cause congestion.</p>	<p>Agreed two lane flows enacted for southbound traffic.</p>	<p>New pedestrian crossing at existing crossing point for St Peters Church to use existing T/L heads.</p> <p>Site at southern end needs to maintain a pedestrian crossing point - to be moved to suit site area.</p>
Phase 1C	<p>As above requested two lanes southbound.</p>	<p>Agreed two lane flows enacted for southbound traffic.</p> <p>Provision of second lane around new island build identified as time critical.</p>	<p>T/L control junction TB08: Existing T/L heads can be put in barrels and re used.</p> <p>Remove secondary centre island pole as not necessarily required.</p>
Phase 1D			<p>To note - As designed signals in place.</p>
Phase 1E		<p>Ban southbound exit traffic from Richmond Parade as would cause congestion to adjacent works area.</p>	<p>To note - New pedestrian crossing point now in place.</p>

Phase 1F		Reinstate southbound exit traffic from Richmond Parade as works area further South now.	To note - New Ped crossing point in place half way down. Existing crossing point at North Road junction removed.
Phase 1H		<p>Southbound Grand Parade bus lane is merged into general southbound traffic flow.</p> <p>Durations are crucial here works identified as time critical.</p> <p>Ban southbound East side VG West turn into Church Street and divert around Old Steine. Traffic diverted South around Old Steine loop and back northbound to turn West into Church Street.</p> <p>No temporary traffic light control at removed Edward Street island is advantageous to traffic flows. Furthermore, the existing traffic light control box located here is not relocated until Phase 10.</p>	

<p>Phase 2A, 2B, 2C and 2D</p>	<p>Concern raised over St Peters Place one lane only westbound. It was suggested that this would cause major congestion due to usage by 22 buses per hour. Requested that the distances between the working area and new kerb line was measured and possibly 2 lanes provided? Requested that St Peters Place be made a bus and taxi route only?</p> <p>Suggested diversion route: Lewes Road southbound. West into Union Road - with removal of south side westbound lane parking bays to make bus lane - straight across Ditchling Road into Baker Street. North into London Road West into New England Road, South into New England Street.</p> <p>TTRO required to lift left turn ban on London Road at Preston Circus into New England Street.</p> <p>Also requested that northbound East side VG general traffic flow was banned left (West) turn into St Peters Place?</p> <p>Northbound buses to use existing A270 Richmond Parade crossover road as temporary taxi pick up/drop off point in St Peters Place.</p>	<p>North and Southbound bus lane enacted in St Peters Place.</p> <p>Ban East side VG general traffic northbound left (West) turn into St Peters Place to reduce traffic flows. Therefore, no diversion required.</p>	<p>Ditchling Road Southbound T/L control for West turn into St Peters Place no longer required.</p>
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Phase 2F		East side VG general traffic northbound left (West) turn into St Peters Place re-opened.	
Phase 3A	Concern raised over possible congestion when southbound Grand Parade right turn into Church Street banned and traffic diverted South to Old Steine. It was suggested that the exit from the south end of The Old Steine give way into exiting traffic from the Aquarium roundabout would be difficult for the number of cars using this. Suggested diversion for southbound general traffic to turn East into Kingswood Street South into John Street and West into Edward Street.	<p>Agreed that more general traffic may use the bus lay over points around this Old Steine loop.</p> <p>But this suggested diversion route was consulted with Police and was rejected due to the narrow width of the road before the junction with John Street. Concern was also raised over traffic turning across Edward Street.</p> <p>Buses advised that at this phase of the build they will have a bus lane in Lane 2 southbound Grand Parade with general traffic in lane 1.</p> <p>To ease congestion on approach to works area southbound general traffic reduced to one lane before traffic lights at North Road cross over.</p>	North Road T/L control programme required to be written - Suggested this would take 6 weeks.

Phase 3B	<p>Concern raised over only 1 lane northbound for buses and general traffic around Church Street entrance. Explained that there were approx. 50 buses per hour / 1 per minute average in this area, so it was felt that one lane would cause congestion. Suggested that northbound general traffic was put in 'as design' northbound traffic flow on East side of scheme on this phase rather than next phase.</p> <p>Requested that on East side southbound Grand Parade Buses had priority bus lane.</p>	<p>Agreed general traffic now in 'as designed' northbound East side of VG.</p> <p>Agreed lane 1 southbound general traffic, Lane 2 southbound bus lane, Lane 3 northbound general traffic.</p> <p>Need to look at northbound temp traffic light junctions for East side general traffic at j/w North Road crossover and A270 Richmond Place cross over.</p> <p>To note - Northbound traffic new route advisory signage required.</p>	<p>General Traffic now in Northbound East side 'as designed' VG route.</p> <p>T/L control now required at North Road and A270 cross over junctions for northbound traffic. New T/L heads required with additional stream on TB19.</p> <p>To note – consideration needed for T/L phases controlling buses crossing general traffic and accessing existing bus lane further south. This will have to tie in with the next design phase further south of Edward Street.</p>
Phase 4A	Requested that buses diverted as above.	Agreed.	
Phase 4B	Requested that buses diverted as above.	Agreed.	
Phase 5A	<p>Requested that Southbound buses now in design route South on Marlborough Place.</p> <p>Asked whether buses exiting from North Road (early morning and weekends) would be able to turn immediately North?</p>	<p>Decided that southbound bus route would not be best placed into new design route (southbound Marlborough Place) as on this phase as there is no traffic light control on the removed Edward Street island. It was felt that the traffic would flow better as no traffic light holds.</p> <p>No Northbound exit from North Road in this phase of works.</p> <p>To Note - Northbound general traffic exiting</p>	T/L control required for traffic exiting North Road eastbound to prevent congestion.

		<p>from North Road to be diverted southbound around Old Steine and back North.</p> <p>Northbound bus lane required across A270 crossover lane as temporary Taxi drop off/pick up point still located in St Peters Place.</p>	
Phase 5B		<p>Southbound Buses diverted to Grand Parade. General access northbound traffic on West side VG to use northbound bus lane.</p> <p>York Place general access northbound traffic to be reduced to one lane to allow Cheapside T/L junction to be prioritised northbound to increase traffic flow.</p> <p>One Lane York Place northbound only required.</p>	
Phase 5C		<p>Southbound Buses diverted to Grand Parade.</p> <p>To note - Ensure Taxis have southbound route available.</p> <p>General access traffic West side VG using bus lanes.</p>	
Phase 6A	<p>Noted that southbound access exiting from St Peters Place is affected in this phase. Requested that A270 Richmond Place crossover be made two way for the duration.</p>	<p>Not agreed – It is not feasible due to temp light requirement on East side VG which would slow northbound and southbound general flow traffic.</p> <p>To Note - Lewes Road buses will be using southbound general traffic lane on East side of VG so these works are identified as time critical.</p>	

Phase 6B	T/L control required to construct build out.	Agreed	
Phase 6C		To Note - Taxi Rank in new "as designed" location. A270 crossover Richmond Place still used for northbound Lewes Road buses.	
Phase 7A	Noted that Taxi in new design rank location - Diverted northbound only. Requested that this phase enacted in three stages using temporary traffic lights.	Remove bus diversions above as St Peters Place now 'as designed'. Agree - Contraflow temporary traffic lights could be used here with work split into a number of sub phases. As the southern area of these works prohibits southbound bus lane using East North Road diversion onto East side of VG - southbound buses now to travel South to temporary island configuration where Edward Street island has been removed. Durations identified as time critical for this phase of work - possibly some works are footway only.	
Phase 8		All traffic in 'as designed' route.	

