

TRAFFIC

Introduction

- 7.1 The Jersey Future Hospital (JFH) application includes the phased construction of new hospital buildings at the General Hospital site and Westaway Court. This chapter provides an assessment of the potential traffic impacts associated with JFH on sensitive receptors, pedestrians and the local highway network. This assessment considers the likely environmental impacts both during construction and once the facility is operational.
- 7.2 The Transport Assessment (TA) submitted in support of the planning application provides a complete assessment of the potential traffic and transportation impacts of the development proposals during and after construction, and should be read alongside this chapter of the EIS. A supporting Framework Travel Plan (TP) is included within the TA as Appendix A.

Review of proposed development

This section provides an outline review of the transport related proposals associated with the proposed JFH during construction and once operational. A detailed project description can be found in Chapter 3 of the EIS.

Construction

- 7.3 The transport proposals for the construction stages (Phase 1A and Phase 1B) are illustrated on **Figure 7.1** and **Figure 7.2** in EIS Volume III. A summary of these proposals is set out below with a detailed description included within the TA.
- 7.4 To enable the demolition of the acquisitions on Kensington Place in Phase 1A, and the construction of Block A of the JFH, the following road closures are proposed on Kensington Place as detailed below. It should be noted that whilst these road closures will not be permanent, they could be in place for a significant proportion of the construction period. The full Construction Environmental Management Plan (CEMP) would provide further detail on the timings of the road closures.
- 7.5 The phased closure of Kensington Place would be located directly north of the Patriotic Street MSCP vehicular egress and south of the junction with Kensington Street. This element of the road would still be used for construction vehicles accessing the site.
- 7.6 To accommodate the road closure on Kensington Place, it is proposed to make the road south of the closure two-way until the junction with Lewis Street. The direction of one-way traffic on Lewis Street will also be reversed, enabling traffic to be redistributed from Kensington Place to Kensington Street.

- 7.7 Prior to Phase 1A, works are proposed at the St Aubin's Road/Peirson Road/Kensington Street junction to enable the largest construction vehicles to exit the site via a combination of Kensington Street and St Aubin's Road. This junction improvement scheme will include traffic signals and provide improvements for pedestrians crossing at this junction.
- 7.8 The healthcare facility proposed at Westaway Court will be constructed during Phase 1A, however it is not envisaged at this stage that any full road closures will be required to enable construction.
- 7.9 In Phase 1B, to enable the demolition of the Gwyneth Huelin Wing and Peter Crill House and the construction of Block B of JFH, the phased closure of Newgate Street is proposed, including the closure of the Patriotic Street MSCP egress and the removal of the on-site staff, disabled and blood donor parking. A phased closure approach would reduce the period in which a full road closure is in place.
- 7.10 To accommodate the closure of Newgate Street and the associated MSCP vehicular egress, it is proposed to make Patriotic Place two-way and reverse the direction of the northern vehicular access into Patriotic Street MSCP. To allow for the two-way running of Patriotic Place, it is proposed to install traffic signals at the currently uncontrolled junction with Gloucester Street and Seaton Place.
- 7.11 As a result of the demolition of the Gwyneth Huelin Block and Peter Crill House, accesses into JGH from Newgate Street would be removed. This will be mitigated by the creation of an access into JGH from Gloucester Street. This is discussed further in the mitigation section of this chapter.
- 7.12 Staff cycle parking would be relocated from the Newgate Street basement car park to allow demolition to take place. It is proposed that staff cycle parking would be relocated during construction into Patriotic Street MSCP, utilising the exiting motorcycle access. It is proposed for a cage to be provided to ensure the cycles are secure.
- 7.13 The healthcare facility at Westaway Court would be in operation in Phase 1B. To improve pedestrian connectivity, a signalised crossing is proposed on Savile Street at the signal controlled junction with Rouge Bouillon, Elizabeth Place and Parade Road.

Operational

- 7.14 The transport proposals for the operational stage are illustrated on the Final State Overview of Proposals (JFH-ARP-ZZ-XX-DR-Y-1001) figure attached as **Figure 7.3**. A summary of these proposals are provided below and detailed within the TA.
- 7.15 The transport proposals are illustrated on **Figure 7.3** and summarised below:

- Extension of Newgate Street to be made available for hospital vehicles (ambulances and service vehicles);
- Relocation of ED and ambulance bay to Newgate Street and introduce ambulance lanes on Newgate Street and Kensington Place;
- Reinstate Patriotic Place as one-way and retain pedestrian signals at the junction with Gloucester Street;
- Proposed traffic signals at the Gloucester Street/Newgate Street junction; and
- Reinstate the pedestrian refuge island at The Parade/Gloucester Street junction.

7.16 The access strategy for JFH is presented on **Figure 7.4**.

Policy context

States of Jersey Island Plan 2011 (Revised 2014)

7.17 The States of Jersey Island Plan was adopted in the summer of 2011 and revised in 2014, superseding the 2002 Island Plan, and includes a set of policies and proposals that provide a holistic and integrated approach to land-use planning in Jersey.

7.18 The transport chapter of the Island Plan 2011 identifies the following objectives relevant to the Jersey Future Hospital proposals:

- *To influence travel demand and choices of travel mode by achieving development forms and patterns which enable and encourage a range of alternatives and which positively enable and promote walking, cycling and public transport as a more sustainable mode of travel than the private car;*
- *To make efficient use of existing transport infrastructure and minimise new road construction; and*
- *To reduce pollution, noise and the physical impact and risk to health posed by traffic and transport.*

7.19 In order to achieve these objectives, the Island Plan sets out a number of policies. Those policies considered relevant to these proposals are summarised in Table 7.1.

Table 7.1: Summary of relevant policies

Ref	Summary
SP 6	New development must demonstrate it will reduce dependence on the private car by providing for more environmentally-friendly modes of transport.
TT 2	New development should contribute towards the provision of improved footways and walking routes.
TT 3	Applications for large developments will be assessed to determine their potential to contribute towards the further development of the Eastern Cycle Route network.
TT 4	Cycle parking provisos will be required in all new developments.
TT 7	Developers will contribute towards improved waiting facilities and pedestrian access to/from bus stops and enhance information provision in order to meet modal split targets.
TT 8	Developments resulting in a significant movement of people should be within 400m of a bus stop
TT 9	Developments that are forecast to generate a significant amount of travel will be required to submit a travel plan.
TT 10	To contribute towards the objective of reducing peak hour congestion by 15%, additional public parking spaces will not be permitted within the Town of St Helier unless total provision falls below 4,000 spaces, or where it is in lieu of private off-street parking provision.
TT 13	The creation of new access points that are safe and adequate will be supported.
TT 14	The design of new or widened roads should consider the needs of pedestrians and cyclists.

Strategic Plan 2015-2018

7.20 The Jersey Strategic Plan (2015-2018) sets out the Council of Ministers' key priorities for its term in office. With regards to transport, the strategic plan identifies the following key areas of focus for the period 2015-2018:

- *Develop public transport, road and cycle networks that meet the needs of the community; and*
- *Produce a clear and comprehensive plan for travel and transport in and around St Helier to ensure movement within St Helier is easy and convenient.*

Jersey Sustainable Transport Policy 2010

7.21 Jersey Sustainable Transport Policy (2010) was prepared in response to the Strategic Plan (2009-2014) which proposed to protect and enhance the built and natural environment through the reduction in pollution and traffic, and the development of sustainable internal transport infrastructure.

7.22 The principal target of the policy document is to reduce peak hour traffic levels to and from St Helier by at least 15% by 2015. It is proposed to achieve this modal shift by:

- *Increasing bus use by at least 100% through improved bus services and awareness, marketing campaigns, travel plans and parking charge increases;*
- *Increasing cycling by 100% by improving the cycle network, awareness campaigns, travel plans and parking charge increases; and*
- *Increase walking by at least 20% through awareness campaigns, travel plans, parking charge increases and improvements to the pedestrian network.*

Sustainable Travel Policy Progress Report 2015

- 7.23 The Sustainable Travel Policy Progress Report was published in December 2015 and assesses the outcomes of the policy document over the previous five years. The document notes that an amendment to the 2010 Sustainable Travel Policy was made which restricted disproportionate increases in the cost of motoring (including parking) until viable alternatives were in place for all. This is suggested to be the principal reasoning behind the reduction in peak hour congestion for the period 2010-2015 of 1.6%, significantly short of the “ambitious 15% target.”
- 7.24 The report suggests improvements have been made to alternative forms of travel to the private car; however, there has been no progress in addressing the relative cost of travel. This was identified as an integral part of the Sustainable Travel Policy 2010.

Scoping and consultation

Scoping

- 7.25 Despite the submission of a revised proposal for the hospital, it is considered that the methodology set out in the Scoping Request for the EIS for the 2017 application issued on 20/02/2017 is sufficient. The 2017 scoping request set out the assessment methodology in accordance with the guidance provided in *The Guideline for the Environmental Assessment of Road Traffic* produced by the Institute of Environmental Assessment (IEA) (now Institute of Environmental Management and Assessment (IEMA)) produced in 1993, hereafter known as the IEMA guidelines. The Transport Assessment Scoping request was submitted to DfI Transport Policy on 15/02/2018 in order to agree the parameters of the revised TA. Any comments received through that process has been fed into the assessment for inclusion within the EIS.

- 7.26 The EIA scoping request suggested that a TA, Travel Plan (TP) and a Parking Study would be submitted in support of a planning application. Whilst it is no longer proposed to include a Parking Study as a supporting document to the planning application as a baseline assessment of parking conditions has already been undertaken, a parking strategy has been detailed within the TA.
- 7.27 The EIS summarises the findings of these assessments, but focuses on environmental issues associated with potential increases or changes in traffic flows and any consequent effects on the local community, such as driver delay, travel severance or an increased accident rate.
- 7.28 The following rules, summarised from the IEMA guidelines, have been used as a screening process to define the scale and extent of this assessment.
- Rule 1: Include roads where traffic flows are predicted to increase by more than 30% (or where the numbers of HGVs are predicted to increase by more than 30%).
 - Rule 2: Include any specifically sensitive areas where traffic flows are predicted to increase by 10% or more.
- 7.29 It has been agreed that the extent of the study area for the traffic element of the EIA should reflect the traffic impact assessment within the TA. **Figure 7.5** presents the 37 links that are assessed within this EIA.
- 7.30 An EIA Scoping response was received on 12 May 2017 from DfI Transport Policy in relation to the previous 2017 application. This is summarised in Table 7.2 below alongside the responses presented in the EIA submitted in support of the 2017 planning application.

Table 7.2: Summary of relevant policies (2017 Application)

Scoping opinion	
The suggested corridors for assessment in the scoping request is acceptable, although we would recommend the inclusion of Patriotic Place car park and consideration given to the transport effects listed in assessment methodology in the scoping note.	The effects of the proposed works to Patriotic Street MSCP have been considered within this EIS, using the assessment criteria set out in the methodology.
It is anticipated that once the JFH is completed there may be an issue of severance caused by traffic on The Parade, particular with regard to the anticipated redevelopment of Westaway Court site into community care facilities. The extent of severance should be assessed and mitigated as far as possible.	The impact of the proposed JFH on traffic flows on The Parade alongside all other junctions have been assessed fully within the TA and included within this EIS.

Scoping opinion	
<p>We note that there is to be a noise and air quality assessment of the site as part of the EIA. As these assessments will require outputs from the traffic assessment work (to identify whether traffic contributions towards changes in baseline levels of either noise or air quality) we would welcome the earliest possible submission of the TA to enable the EIA work to keep to programme.</p>	<p>A series of Technical Notes have previously been submitted to DfI Transport Policy for comment and agreement. These technical notes consider topics including trip generation and trip distribution. This was intended to provide an opportunity for all traffic figure to be agreed prior to the submission of the JFH planning application and this EIS. However due to the availability of data, the submission on TN5: Trip Generation was delayed and comments have therefore not been taken on board within this assessment.</p>
<p>The scoping request note identifies possible mitigation measures at this early stage before the assessment work has been carried out. It is the view of the department that the assessment work and identification of likely issues should shape the possible mitigation measures rather than the mitigation measures be fixed before the outcome of the assessment work is known. It may be appropriate that additional mitigation, either on or offsite may be required following the conclusions of the assessment work.</p>	<p>Whilst the potential mitigation measures provided in the Scoping request outlined some assumed works that would need to be carried out, the finalised list of measures identified within this chapter of the EIS and the TA have been based on the outcome of the assessment work undertaken.</p>

- 7.31 Through the submission of a Transport Assessment Scoping Note and a subsequent meeting with DfI Transport Policy, it was agreed that the study area for the revised application should remain the same. As such, it is considered appropriate that the same study area adopted for Traffic chapter of the EIA.

Consultation

- 7.32 The content of the Transport Assessment was established through the preparation of the Transport Assessment Scoping Note and dialogue with DfI Transport Policy.
- 7.33 The Transport Assessment Scoping Note has previously been submitted to DfI Transport Policy for comment and subsequently discussed at multiple meetings. A copy of the Transport Assessment Scoping Note is attached to the TA as Appendix B.
- 7.34 Subsequent meetings and discussions have been held with DfI Transport Policy to discuss the scope and methodology of the TA. A record of these discussions are included within Appendix C of the TA. These meetings include:
- Transport update meeting dated 1 March 2018;
 - Joint meeting with The Parish of St Helier (PoSH) 15 March 2018
 - Junction modelling Workshop date 22 March 2018.

- 7.35 To ensure the development proposals are fit for purpose, there have also been consultations with key stakeholders including:
- DfI Parking;
 - DfI Public Transport and Liberty Bus (2017 Application);
 - PoSH;
 - The Ambulance Service;
 - Patient Transport Services; and
 - Jersey General Hospital Facilities Management.
- 7.36 Meeting notes for all of the above consultations and discussion can be found attached as Appendix D to the TA.

Methodology

Overview

- 7.37 A TA and Framework TP have been submitted in support of the planning application and provide an assessment of the traffic and transportation impacts of the development proposals. Included within the TA is the Parking Strategy, which sets out the proposed potential allocation of patient, staff and public parking within the study area.
- 7.38 Whilst this chapter of the EIS summarises these findings, it will focus on environmental issues associated with potential increases or changes in traffic flows and any consequent effects on the local community, such as driver delay, travel severance or an increased accident rate. The IEMA guidelines have been adopted to ensure a robust assessment is undertaken.
- 7.39 A baseline year of 2016 has been adopted for the purposes of this assessment. Assessments have been carried out for the demolition and construction phases (Phase 1A and Phase 1B) and the operational phase.
- 7.40 The TA also assesses a future year scenario without the development proposals, to understand what the traffic impact would be if the development proposals do not come forward.

Methodology for establishing baseline conditions

- 7.41 To establish a baseline position, traffic data has been collected at key locations within the agreed study area. The locations of the traffic surveys were identified through discussions with DfI Transport Policy during the scoping process for the Transport

Assessment. It was subsequently agreed that no further surveys would be required for the EIA.

- 7.42 Traffic data was collected in the neutral months of October 2016, November 2016 and February 2017, as per agreement with DfI Transport Policy. Additional surveys were also undertaken in May and June 2017 outside of school holidays. To ensure the traffic counts are still reflective of existing conditions, an assessment is presented within the TA to validate this data.
- 7.43 Development trips associated with committed developments have been included within the future assessment years to forecast the background traffic growth.

Assessment methodology

- 7.44 The IEMA guidelines recommend a list of effects that should be considered in relation to traffic from an individual development. These have also been identified by DfI Transport Policy and include:
- Severance;
 - Pedestrian delay;
 - Pedestrian amenity;
 - Fear and intimidation;
 - Driver delay; and
 - Accidents and safety.
- 7.45 Other potential effects could arise from the traffic impacts of a proposed development including noise, vibration, visual impact, heritage and conservation, ecological effects and air quality. These are assessed within other chapters of this EIS relating to the specific discipline.

Significance Criteria

- 7.46 Table 7.3 below outlines the criteria by which potential effects have been assessed. The IEMA guidelines have been used as a basis for developing the assessment criteria.

Table 7.3: Assessment criteria

Impact	Assessment Criteria			
	Negligible	Minor	Moderate	Major
Severance	Change in traffic flow of up to 30%	Change in traffic flow of 30% to 60%	Change in traffic flow of 60% to 90%	Change in traffic flow of over 90%

Impact	Assessment Criteria			
	Negligible	Minor	Moderate	Major
Pedestrian delay	To be assessed on a case-by-case basis, with consideration given to the sensitivity and vulnerability of the receptor.			
Pedestrian amenity	To be assessed on case-by-case basis using professional judgement with consideration given to changes to traffic flow.			
Fear and intimidation	To be assessed on case by case basis using professional judgement with consideration given to the increase in HGV			
Driver delay	To be assessed on case-by-case basis using professional judgement and the results of the junction modelling assessments.			
Accidents and Safety	To be assessed on case by case basis using professional judgement with consideration given to accident assessment included within the TA and the forecast increase in traffic flows resulting from the development			

7.47 The assessment criteria set out in Table 7.3 indicate that the key evidence needed to understand the assessment is quantification of traffic or HGV flows.

7.48 The following assessment criteria is set for raising the significance of effect on any link (highway):

- An increase in total traffic flows of 30% from 0-30%, 30-60% and 60-90% and greater than 90% to represent the effect of the development from negligible to major; or
- An increase in HGV traffic of 10%.

7.49 This assessment criterion allows a simultaneous assessment to be conducted on any link whereby total traffic has increased because of the development proposals.

7.50 The sensitivity of a receptor can be defined by the degree by which it responds to change in its environment. In this assessment, it will be predominately relating to the effect in an increase in traffic flow.

7.51 Paragraph 2.5 of the IEMA guidance indicates the followings groups are susceptible to changes in traffic conditions:

- *People at home;*
- *People in work places;*
- *Sensitive groups including children, elderly and disabled;*
- *Sensitive locations, e.g. hospital, churches, schools, historical buildings;*

- *People walking;*
- *People cycling;*
- *Open spaces, recreational sites, shopping areas;*
- *Sites of ecological/nature conservation value; and*
- *Sites of tourist/visitor attraction.*

7.52 Table 7.4 below presents the receptor sensitivity based on paragraph 2.5 of the IEMA guidelines and adapted using professional judgements.

Table 7.4: Receptor Sensitivity

Receptor Sensitivity	Receptor Type
Major	Receptors of greatest sensitivity to traffic flow including roads without footways, schools/colleges/playgrounds, historic accident hotspots and retirement homes.
Moderate	Receptors sensitive to traffic flow including roads with limited/narrow footway or unsegregated cycleways, congested junctions, GPs/Hospitals/Shopping areas with roadside frontages, parks and recreational facilities.
Minor	Receptors with some sensitivity to traffic flow including residential streets with suitable footway provision, places with ecological/nature/heritage value and tourist/visitor attractions
Negligible	Receptors with low sensitivity to traffic flow and those located sufficiently away from affected roads and junctions.

7.53 The assessment criteria and the receptor sensitivity have been compared to determine overall significance.

Table 7.5: Significance of Effects

Sensitivity of Receptor	Magnitude of Impact			
	Negligible	Minor	Moderate	Major
Negligible	Negligible	Negligible	Negligible	Minor
Minor	Negligible	Negligible	Minor	Moderate
Moderate	Negligible	Minor	Moderate	Major
Major	Minor	Moderate	Major	Major

7.54 As presented in Table 7.5, the potential effects are therefore categorised as either Major, Moderate, Minor or Negligible significance. Major and moderate significance represents effects considered significant in IEMA guidelines.

Limitations and assumptions

Limitations

- 7.55 As agreed with DfI Transport Policy, junction assessments have been undertaken using the software programmes ARCADY (for roundabouts), PICADY (for priority junctions) and LinSig (for signalised junctions). However, some of the junctions being assessed have bespoke layouts that are difficult to replicate within the junction models.
- 7.56 Specifically, the St Aubin's Road/Peirson Road/Kensington Street junction and the Cheapside/Old St John's Road/St John's Road/West Park Avenue junction have both needed to be split into two separate junction models. To reflect local conditions, these junctions have been calibrated using queue length surveys.
- 7.57 Whilst the use of PICADY is considered the most appropriate assessment tool for these junctions, and steps have been taken to calibrate the models using queue length surveys, there are minor limitations to the models to reflect existing and future conditions.

Baseline Environment

Pedestrian Access

- 7.58 An assessment of the existing pedestrian routes to the site from surrounding car parks and bus stops is included within the TA. The assessment considers the standard and conditions of a number of linkages provide by existing footways and crossings.
- 7.59 There are good quality walking facilities provided on The Parade with footways in excess of 2m wide provided on both sides of the road. There are also pedestrian crossings provided on the road including two signalised crossings.

- 7.60 There are footways present on both sides of Gloucester Street. However, there are no formal crossings between the refuge island at the junction with The Parade and the signalised crossing directly north of the junction with Seaton Place and Patriotic Place.
- 7.61 Other footways near the site are generally in good condition, however many are under 2m in width indicating two wheelchair users are unable pass (Manual for Streets 2007). This includes the footway on Savile Street.
- 7.62 Pedestrian crossing counts were undertaken within the study area to understand the volume of movements near the site. All surveys were undertaken on 19th October 2016 aside from the following:
- Pedestrian counts at the Esplanade/Kensington Place priority junction, surveyed on 30th November 2016; and
 - Pedestrian crossing counts at the Gloucester Street/Seaton Place/Patriotic Street junction, surveyed on 7th February 2017.
- 7.63 **Figure 7.6** presents the pedestrian flows in the AM (07:30-08:30) and PM (16:30-17:30) traffic peak hours for consistency and the pedestrian interpeak hour (12:45-13:45).

Cycling

- 7.64 A summary of the facilities provided for cycles is included within the TA.
- 7.65 An off-road cycle route (Route 1) is present on the south side of the Esplanade, 200m south of Jersey General Hospital and 400m southwest of Westaway Court. This cycle route follows the perimeter of the Island providing links to First Tower and St Aubin's to the west and Grouville to the east.
- 7.66 There are existing cycle stands in the vicinity of the general hospital and Westaway Court, located on The Parade, Gloucester Street and Newgate Street. In total, there are approximately 29 cycle stands adjacent to the hospital.
- 7.67 Cycle parking for staff is provided within the basement staff car park accessed from Newgate Street. There are 76 cycle stands, which are sheltered and secured.

Public Transport

7.68 Liberty Bus operates the bus services in Jersey, all of which route via Liberation Station, located 600m from the Jersey General Hospital. There are also bus stops located on The Parade, Rouge Bouillon, Gloucester Street and the Esplanade. Services available from these stops are summarised in Table 7.6 below.

Table 7.6: Local Bus Services

Service	Destination from Liberation Station	Service Frequency		Arrival of first bus (AM)	Departure of last bus (PM)
		Monday-Saturday	Sunday and Bank Holidays		
Bus Services from The Parade and Rouge Bouillon					
19	La Pouquelaye	60 minutes	-	07:48	18:10
Bus services from Gloucester Street (Parade Gardens) and Rogue Bouillon					
5	St John's Church	60 minutes	120 minutes	07:34	22:25
Bus services from the Esplanade (A1)					
7/7a	St John's Church	60 minutes	120 minutes	07:50	21:10
8	Portinfer	120 minutes	-	07:54	19:00
9	Greve de Lecq	60 minutes	60 minutes	07:09	23:15
12/12a	Corbiere	60 minutes	60 minutes	07:20	23:20
15	Airport	15 minutes	30 minutes	06:30	23:45
22	L'Etacq	120 minutes	120 minutes	10:05	18:20
Remaining bus service from Liberation Bus Station					
1/1a/1g	Gorey Pier	12 minutes	30 minutes	06:58	23:40
2/2a	St Catherine	60 minutes	120 minutes	07:45	19:05
3	Durrell	60 minutes	60 minutes	07:00	23:15
4	Bonne Nuit	120 minutes	-	08:00	19:15
13	Durrell	120 minutes	-	07:30	18:30
16	Le Marais	30 minutes	30 minutes	06:45	19:50
20	Langley Park	120 minutes	-	11:05	15:15
21	Five Oaks	120 minutes	-	07:40	18:25
23	Durrell Wildlife Park	60 minutes	60 minutes	07:35	17:45

7.69 Given the relatively close proximity to Liberation Bus Station (600m), most of the developed areas of Jersey are accessible by bus. However, many of the service

frequencies are relatively low (60-120mins) which is likely to make buses unattractive to those with access to a private car and may deter use. There are also limited services overnight that could be a potential barrier to staff working shifts.

- 7.70 Westaway Court is served by the number 5 and 19 services which combined provide a 30-minute frequency to Liberation Station.

Local Highway Network

- 7.71 The local highway network is illustrated in **Figure 7.7**. This section describes the role and nature of the local highway network in providing access to the hospital site. Jersey General Hospital is currently accessed from numerous priority junctions with Kensington Place, The Parade, Gloucester Street and Newgate Street. Staff parking is accessed from three priority junctions with Gloucester Street and a single junction with Newgate Street. Disabled parking for patients and visitors is accessed via a second access on Newgate Street located directly north-west of the staff car park access. There are also on-street disabled parking spaces located on The Parade.
- 7.72 Ambulances access the emergency department via the northern access off Gloucester Street whilst ambulances and Patient Transport Services also share the access for the disabled parking off Newgate Street.
- 7.73 Vehicular access to the existing doctor and nurse accommodation at Westaway Court is achieved via a priority junction with Savile Street. The junction provides access to approximately 38 parking spaces. Savile Street is a one-way road (north-west bound) that runs between The Parade and the signalised junction with Elizabeth Place, Rouge Bouillon and Parade Road.
- 7.74 Service vehicles utilise the private road located directly west of the hospital, which is accessed, via junctions with Kensington Street, The Parade and Newgate Street. There is an additional service road from The Parade located 65m north of the junction with Gloucester Street, which is used by engineers and shared with Patient Transport Services.
- 7.75 The sensitivity classification for each of the highway links included within the assessment area are presented in Table 7.7 below based on the criteria set out in Table 7.4.

Table 7.7: Sensitivity Classification of Highways

Highway Link	Sensitivity Classification	Links
Gloucester Street	Moderate	8, 13, 18
Newgate Street	Moderate	12

Highway Link	Sensitivity Classification	Links
Patriotic Place	Moderate	10
Patriotic Street	Moderate	11
Esplanade	Minor	4, 5, 6, 7
Victoria Avenue	Minor	3
Kensington Place	Moderate	35, 36
Kensington Street	Moderate	34
Lewis Street	Moderate	37, 38
A1 St Aubin's Road	Minor	1, 2
St Aubin's Road	Minor	31, 32
Peirson Road	Minor	33
Westmount Road	Minor	30
Cheapside	Moderate	25, 27, 29
St John's Road	Moderate	26
Old St John's Road	Moderate	28
The Parade	Moderate	14, 16, 17, 19, 20
Union Street	Moderate	15
Elizabeth Place	Minor	23
Rouge Bouillon	Minor	24
Savile Street	Moderate	22
Parade Road	Moderate	21

Traffic Flows

7.76 The baseline traffic flows for 2016/2017 have been obtained from Manual Classified Turning Count surveys. The surveys were all undertaken on 19th October 2016 aside from the following:

- Esplanade/Kensington Place priority junction was surveyed on 30th November 2016;
- Gloucester Street/Seaton Place/Patriotic Street Signalised Junction was surveyed on 7th February 2017; and
- Turning counts at the accesses into Patriotic Street MSCP were undertaken on 7th February 2017.

7.77 An assessment of the peak hours is included within the TA identifies the peak hours as 07:30-08:30 and 16:30-17:30 for the AM and PM peak hours respectively. The peak hour traffic flows for the local highway network are presented diagrammatically in **Figure 7.8** and **Figure 7.9**, and set out in Table 7.8 below.

Table 7.8: 2016 Base Traffic Flows

Link	Description	AM Peak	PM Peak	Daily
1	A1 St Aubin's Road west of roundabout	1187	1279	19077
2	A1 St Aubin's Road south-east of roundabout	1034	1146	20539
3	A2 Victoria Avenue	3138	2873	56070
4	A1 Esplanade west of the junction with Kensington Place	3840	3658	72276
5	A1 Esplanade east of the junction with Kensington Place	3867	3739	66714
6	A1 Esplanade west of the junction with Gloucester Street	3757	3744	66773
7	A1 Esplanade east of the junction with Gloucester Street	3778	3555	68408
8	Gloucester Street north-east of the junction with Esplanade	967	1246	20751
9	Seaton Place	402	383	7324
10	Patriotic Place	283	130	3858
11	Patriotic Street	82	54	1270
12	Newgate Street	134	218	3382
13	Gloucester Street north-east of the junction with Newgate Street	1275	1212	23099
14	The Parade north-west of the junction with Union Street	56	75	3223
15	Union Street	928	908	17125
16	The Parade south of the junction with Union Street	549	589	10618
17	The Parade south-east of the junction with Gloucester Street	798	856	15482
18	Gloucester Street north-east of the junction with The Parade	244	243	4540
19	The Parade north-west of the junction with Gloucester Street	1258	1084	21846
20	The Parade south-east of the junction with Elizabeth Place	1255	1106	22025
21	Parade Road	184	118	2820
22	Savile Street	188	290	4463
23	Elizabeth Place	888	985	17471
24	Rouge Bouillon	1097	1184	21282
25	Cheapside	1207	1080	21336
26	St John's Road north of the junction with West Park Avenue	544	475	9500

Link	Description	AM Peak	PM Peak	Daily
27	St John's Road south-west of the junction with West Park Avenue	580	530	10355
28	Old St John's Road	56	106	1807
29	St Aubin's Road north-east of the junction with Westmount Road	1189	1249	20077
30	Westmount Road	274	139	3856
31	St Aubin's Road north-east of the junction with Kensington Street	846	1132	18603
32	St Aubin's Road south-west of the junction with Peirson Road	494	750	11645
33	Peirson Road	285	395	1141
34	Kensington Street	279	495	7218
35	Kensington Place south-west of the junction with Kensington Street	213	421	5984
36	Kensington Place north-east of the junction with Esplanade	329	216	5081
37	Lewis Street west of Kensington Place	102	73	1632
38	Lewis Street south of Kensington Street	102	73	1632

Road Traffic Collision Assessment

- 7.78 Information on the location, cause and severity of personal injury accidents has been obtained from DfI Transport Policy for the period January 2012 – February 2017. The accident records are discussed in detail within the TA. In summary, there is no existing road safety concern on the links or junctions assessed.

Assessment of effects

Assessment of effects from construction (Phase 1A and Phase 1B)

Severance

- 7.79 The percentage impact assessment of the net development trips during the construction period at each link is presented in Appendix D-1. The percentage impact assessment has been calculated using the Do Minimum assessment scenario.
- 7.80 The percentage impact assessment considers the increase in vehicles trips at each link as a result of:
- The redistribution of staff and patient trips as a result of the relocation schemes and the parking strategy; and
 - Highway diversions resulting from road closures on Kensington Place and Newgate Street.
- 7.81 It is anticipated that construction workers associated with these proposals would not drive to the development site given the minimal space available on site and the limited spare capacity within public car parks. Construction workers are therefore expected to walk to the site or arrive by bus. It is proposed to provide a private bus service that would operate between temporary accommodation, the compound site and the construction site. The specifics of these proposals would be detailed within the CEMP.
- 7.82 All links with a percentage increase in traffic exceeding 30% are summarised in Table 7.9.

Table 7.9: Percentage Impact of Total Daily Vehicles (Construction)

Link	Description	Phase 1A	Phase 1B
10	Patriotic Place	-1.2%	67.6%
37	Lewis Street	251.6%	0.0%
38	Lewis Street	441.5%	0.0%

- 7.83 It can be seen that the impact of development trips during construction on all receptors is below 30%, aside from the following:
- Patriotic Place (Phase 1B); and
 - Lewis Street (Phase 1A).

- 7.84 Due to proposed road closures, there is a significant increase in the number of vehicles using Patriotic Place and Lewis Street. Without any mitigation, this is likely to have a **moderate** impact on severance.
- 7.85 The traffic impact at the remaining receptors is below 30% indicating the impact of total vehicles on severance is **negligible**.
- 7.86 It is estimated that a maximum of 84 one-way HGV movements will be generated a day during the construction of JFH, the expansion to Patriotic Street MSCP and the redevelopment of Westaway Court. For the purposes of this assessment, the following construction routes are assumed:
- 7.87 For the demolition and construction associated with Block A of JFH and the works to Patriotic Street MSCP, it is proposed for vehicles to access the site via a combination of the A1 Esplanade and Kensington Place. Some minor works are proposed to the Kensington Place/Esplanade junction to enable construction. To egress the construction site, vehicles will utilise Kensington Street/St Aubin's Road/Esplanade following the implementation of a junction improvement scheme at the Kensington Street/Peirson Road/St Aubin's Road junction.
- 7.88 To construct Block B of JFH, construction vehicles are anticipated to enter the site via a combination of the A1 Esplanade, Patriotic Street and Newgate Street. To enable the left turn from the A1 Esplanade in to Patriotic Street, it is likely that the nearside lane on the Esplanade will need to be closed. This temporary road closure could be restricted to the interpeak and agreed as part of the CEMP.
- 7.89 A percentage impact assessment has been undertaken to calculate the maximum increase in the daily number of HGV movements arising from the construction of the future hospital in Phase 1A and Phase 1B, as presented in Appendix D-1. A summary of the links with percentage impact of HGV trips exceeding 10% is shown in Table 7.10.

Table 7.10: Percentage Impact of Daily HGVS (Construction)

Link	Road Name	Location	Phase 1A	Phase 1B
2	A1 St Aubin's Road	SE of Roundabout	0.0%	12.0%
8	Gloucester Street	South of Patriotic Place	0.0%	14.9%
11	Patriotic Street	South of Patriotic Place	0.0%	2212.4%
32	St Aubin's Road	South of Kensington Street	20.2%	0.0%
34	Kensington Street	East of St Aubin's Road	130.0%	0.0%
35	Kensington Place	South of Kensington Street	171.5%	0.0%
36	Kensington Place	South of Lewis Street	316.8%	0.0%

7.90 As set out in the table above, an increase in HGV movements between 10% and 50% from a low base is forecast at the following links:

- A1 St Aubin's Road south-east of St Aubin's Roundabout;
- Gloucester Street south of Patriotic Place; and
- St Aubin's Road south-west of the junction with Kensington Street;

7.91 Aside from link 32 (St Aubin's Road), increases in HGV trips at the above links will likely have a **minor** impact of severance given the provision of signalised pedestrian crossings and the existing busy nature of the roads. However, the impact of the 20.2% increase in HGV trips in St Aubin's Road south-west of Kensington Street is considered to be **moderate**, particularly given there are limited crossing facilities.

7.92 The following links listed below are forecast to experience over 100% increase in the number of HGV trips:

- Kensington Place;
- Kensington Street; and
- Patriotic Street.

- 7.93 Due to the constraints of the road network, it is not possible to drive a 16.5m HGV on any of the above links in their current form without mitigation. Given there are currently minimal smaller HGVs that operate on these links, the additional HGV 84 trips are considered to have a **significant** impact on severance. However, it should also be noted that road closures are in effect on Kensington Place north-west of the junction with Lewis Street.

Pedestrian delay

- 7.94 During Phase 1A, the following works are considered to impact pedestrian delay:

- Closure of a footway on Kensington Place;
- Traffic impacts resulting from road closures on Kensington Place; and
- Works to Patriotic Street MSCP including the allocation of staff and patient parking and the temporary reduction in overall capacity.

- 7.95 The impact to pedestrian delay on Kensington Place is likely to be low, as a footway will be retained on the northeast side of the road. Therefore, any delay would result from the need to cross the road and therefore the impact is considered **negligible**.

- 7.96 Increased traffic flows are also associated with pedestrian delay. As set out previously in this section, development proposals during the construction phase are anticipated to increase traffic flows by over 30% on Lewis Street. This increase is likely to have a **moderate** impact on pedestrian delay in the absence of any mitigation.

- 7.97 Whilst works are being undertaken to construct one additional half deck on to Patriotic Street MSCP, there is potential that there will be a reduction in public parking provision, impacting JGH staff and other existing users of the MSCP. Whilst staff and patient parking will remain within the MSCP, the public will be required to park in other public car parks with spare capacity.

- 7.98 It is indicated within the TA that Pier Road MSCP has sufficient spare capacity to accommodate the additional demand in public parking. This car park is located over 1,000m walking distance from Patriotic Street MSCP. Whilst some drivers will occupy public car parks closer to Patriotic Street MSCP, it is estimated that a large proportion of the existing users of the car park will utilise Pier Road MSCP. The temporary loss of public parking at the MSCP is therefore likely to have a **moderate** impact on pedestrian delay.

7.99 During Phase 1B, the following works are considered to impact pedestrian delay:

- Closure of a footway on Newgate Street; and
- Removal of existing accesses into Jersey General Hospital from Newgate Street.

7.100 It is proposed to retain the footway on the southwest side of Newgate Street. The closure of the footway on the north-east side of the Newgate Street is therefore considered to be **negligible**.

7.101 The removal of the existing accesses into JGH from Newgate Street will result in a delay for pedestrians travelling to the hospital from Patriotic Street MSCP, the bus stop on the Esplanade and other routes from the south. The alternative existing accesses into JGH for pedestrians (which would continue to be used during Phase 1A of construction) are located on The Parade, adding approximately 250m to a typical journey. This is therefore considered to have a **moderate** impact on pedestrian delay.

7.102 Increased traffic flows are also associated with pedestrian delay. As set out previously in this section, development proposals during the construction phase are anticipated to increase traffic flows on Patriotic Place. This increase is likely to have a **moderate** impact on pedestrian delay in the absence of any mitigation.

Pedestrian amenity

7.103 As set out in Table 7.9, there is a limited percentage increase in traffic flow associated with the proposed development during construction, aside from Lewis Street in Phase 1A and Patriotic Place in Phase 1B. Traffic impacts at these links are a result of proposed road closures on Kensington Place and Newgate Street.

7.104 Given Lewis Street has a moderate sensitivity receptor due to narrow footways, the impact of a 442% increase in traffic flow on Lewis Street could be suggested to have significant impact on pedestrian amenity. However, site observations suggest that pedestrians do not heavily use Lewis Street. Given that the large percentage increase in traffic flows can be principally attributed to low base traffic flows, the impact on pedestrian amenity in the absence of any mitigation is likely to be **moderate**.

7.105 Proposals to make Patriotic Place two-way will result in an increase in traffic flow, as presented in Table 7.9. This increase in traffic flow is considered to have a **minor** impact on pedestrian amenity.

7.106 Footway closures are also proposed on the northeast side of Kensington Place in Phase 1A and the north-east side of Newgate Street in Phase 1B. Whilst footways will remain open on the opposite side of the respective roads, these closures are likely to have a **minor** impact on pedestrian amenity.

Fear and intimidation

7.107 As set out in the methodology, fear and intimidation principally occurs from the increase in the number of HGV movements. Given that the daily HGV trips resulting from the construction of JFH will peak at 84 one-way movements, it is considered that the development proposals will have a **moderate** impact on receptors on Kensington Place and Kensington Street in Phase 1A and Patriotic Street in Phase 1B.

7.108 The additional HGV are trips is also likely to have a **minor** effect on fear and intimidation on St Aubin's Road, south-west of Kensington Street. A **negligible** effect is likely to occur at the remaining links given these are highly trafficked roads consisting of three or more lanes of traffic.

Driver delay

7.109 The construction of JFH is likely to impact driver delay as a result of the following:

- Traffic impacts resulting from the development proposals during construction as per Table 7.9; and
- Reduction in the provision of public parking spaces within Patriotic Street MSCP on JGH staff and the public.

7.110 The traffic impact assessment included within the TA assessed the following scenarios:

- 2016 Base (includes existing trips associated with Jersey General Hospital);
- Do Minimum (Committed Development with Jersey General Hospital);
- Phase 1A: Construction of Block A, Patriotic Street MSCP and Westaway Court (Committed Development with road closures on Kensington Place);
- Phase 1B: Construction of Block B (Committed Development, JGH, Block A and Westaway Court with road closures on Newgate Street); and
- Do Something (Committed Development with Jersey Future Hospital and Westaway Court Final State).

7.111 Junction assessments have been undertaken for each of the scenarios set out above. A comparison of the Do Minimum scenario with the Construction Phase scenario indicates the impact of the development proposals during construction. Table 7.11 below summarises the links where driver delay is forecast to increase by 15 seconds or more.

Table 7.11: Forecast Driver Delay (Construction)

Link	Lane	Description	Phase 1A		Phase 1B	
			AM Peak Hour (seconds)	PM Peak Hour (seconds)	AM Peak Hour (seconds)	PM Peak Hour (seconds)
1	A1 St Aubin's Road	West of Roundabout	-6.14	19.37	-7.23	18.72
32	St Aubin's Road	South of Kensington Street	3.38	14.64	4.48	32.02
33	Peirson Road	South of Kensington Street	10.91	20.64	10.92	21.09
38	Lewis Street	South of Kensington Street	19.56	12.21	0	0

7.113 As set out in Table 7.11 above, driver delay is forecast to increase by over 30 seconds at the St Aubin's Road link north-east of the roundabout. Given that a delay of over 30 seconds is forecast at a single link, the traffic impact of the development in construction is **minor**.

7.114 Increase in delays are also forecast at the Gloucester Street/Seaton Place/Patriotic Place junction in Phase 1B. This forecast increase in delay can be attributed to creating a new junction and introducing traffic signals and the impact is considered to have a **minor** effect on driver delay

7.115 Diversions resulting from road closures on Lewis Street and Newgate Street will also affect driver delay. However, these diversions are very short and anticipated to have a **negligible** impact on driver delay, over and above any traffic impacts set out in Table 7.11.

7.116 The reduction in the provision of public parking with Patriotic Street MSCP is likely to result in driver delay for some JGH staff and other users of the MSCP due to the following:

- The time taken to drive to an alternative public car park; and
- The time taken to look for a parking space within another car park.

7.117 As set out within the Parking Strategy included within the TA, there are 14 public car parks located within the study area (<1,200m from JGH) with an overall capacity of 3263 spaces. It is concluded within the Parking Strategy that there is sufficient capacity within these parking spaces to accommodate the additional demand from Patriotic Street MSCP. However, many of the available parking spaces are located within Pier Road MSCP, 1,000m from Patriotic Street MSCP. The temporary loss of public parking is likely to have a **minor** impact on driver delay.

7.118 The reduction in the overall provision of public parking is anticipated to reduce the amount of available parking within other public car parks. This could potentially increase the time it takes for a driver to find a parking space. However, the States of Jersey website provides live updates on the number of available parking spaces within the MSCPs. Given drivers can find out in advance whether there are available parking spaces, the impact of looking for a parking space on driver delay is considered **negligible**.

Accidents and safety

7.119 An analysis of the Road Traffic Collision data has been undertaken within the study area. As set out in the TA, no correlations were identified between highway layout, design or condition that were considered contributory factors in the pattern of accidents. It is therefore considered that any increases in traffic resulting from the development proposals will have a **negligible** impact on accidents on the links being assessed.

7.120 In addition, it should be noted all highway works being proposed as part of this development would be subject to a Road Safety Audit.

Assessment of effects from operation

Severance

7.121 The percentage impact of development trips at each link associated with JFH when operational is presented in Appendix D-1. The percentage impact assessment has been calculated using the Do Minimum assessment scenario.

7.122 The percentage impact assessment considers the increase in vehicles trips at each link as a result of:

- The impact of the one additional half deck being constructed onto Patriotic Street MSCP; and
- The redistribution of staff and patient trips because of the proposed parking strategy set out in the TA.

7.123 The traffic impact at all links is below 5% and therefore the impact of the development is considered to be **negligible**.

7.124 The proposed development is not anticipated to generate any HGV additional movements once the building is in operation. Whilst the service block has been designed to accommodate a small artic and a 12m rigid, it is anticipated that the development will principally be served by smaller vehicles.

7.125 It is therefore considered that the developments proposals will have a **negligible** impact on severance.

Pedestrian delay

7.126 The percentage impact assessment summarised in Table 7.12 indicates that the development proposals are forecast to result in a traffic impact of less than 5%. The impact on pedestrian delay as a result of the development proposals is considered to be **negligible**.

Pedestrian amenity

7.127 As with pedestrian delay, the forecast growth in traffic at the links identified in Table 7.12 is limited, and therefore considered to have a **negligible** impact on pedestrian amenity.

Fear and intimidation

7.128 As set out previously, it is anticipated that when JFH is operational, it will not generate any additional HGV trips, beyond those currently associated with JGH. The development proposals are therefore likely to have a **negligible** impact on fear and intimidation.

Driver delay

7.129 Traffic impacts associated with the development proposals are likely to be a contributing factor to driver delay.

7.130 The traffic impact assessment included within the TA assessed a number of scenarios including Do Minimum (Committed Development with Jersey General Hospital) and Do Something (Committed Development with Jersey Future Hospital and Westaway Court Final State). A comparison of the junction assessment result for these two scenarios indicates the driver delay forecast as a result of the JFH proposals once operational.

7.131 The impact of the development proposals when JFH is operational on driver delay is set out in Appendix D-2. Table 7.12 below summarises the links where driver delay is forecast to increase by 15 seconds or more.

Table 7.12: Forecast Driver Delay (Operation)

Link	Description	AM Peak Hour (seconds)	PM Peak Hour (seconds)
32	St Aubin's Road south-west of junction with Peirson Road	44.54	18.11

7.132 It can be seen in the above table that driver delay as a result of these development proposals will have a **minor** impact on driver delay on Link 32 (St Aubin's Road south-west of junction with Peirson Road). On all other links, the impact of the development proposals on driver delay is considered to be **negligible**. Nevertheless, mitigation is proposed at a number of junctions, as set out in the TA and summarised in the subsequent chapter.

Accidents and safety

7.133 As set out in the previous section on accidents and safety in the construction phase, the assessment of road traffic collision data did not identify any correlations between highway layout, design or condition that were considered contributory factors in the pattern of accidents. It is therefore considered that any increases in traffic resulting from the development proposals will have a **negligible** impact on accidents on the links being assessed.

Mitigation and enhancement

7.134 This section of the Traffic chapter of the EIS sets out proposals that are considered to mitigate any significant adverse effects on the environment, as identified in the previous chapter.

Mitigation of effects from construction (Phase 1A and Phase 1B)

Severance

7.135 In Phase 1A, the increase in traffic on Lewis Street in the absence of mitigation is likely to have a moderate impact on severance. However, there is potential that a temporary 20mph speed limit could be implemented on Lewis Street. This is considered to reduce the impact on severance to **minor**.

7.136 In Phase 1B, the two-way running of Patriotic Place is likely to have a moderate impact on severance in the absence of any mitigation. Traffic signals are proposed at the Gloucester Street/Seaton Place/Patriotic Place junction to accommodate the temporary proposals to make the traffic flow on Patriotic Place two-way. A signalised pedestrian crossing is proposed as part of these on the Patriotic Place entry to this junction. This is considered to reduce the impact of the additional traffic on severance to **minor**.

7.137 The increase in the number of HGV trips is considered to have a significant impact on Kensington Place and Kensington Street in Phase 1A and Patriotic Street in Phase 1B. Whilst there are limited opportunities to provide physical works to mitigate this impact, the CEMP will propose the provision of banksmen along the most effected receptors, including Kensington Place, Kensington Street and Patriotic Street to control HGV movements. It is likely that having banksmen in operation will reduce the effects on severance to **moderate**.

7.138 There is also a potential alternative construction route for Phase 1B that utilises the ring road. The use of this alternative construction route could reduce the impact of HGVs on Patriotic Street.

Pedestrian delay

7.139 The increased traffic flows on Lewis Street in Phase 1A and Patriotic Place in Phase 1B are likely to have a moderate impact on pedestrian delay in the absence of any mitigation. However, with the proposals set out above, including a signalised crossing on Patriotic Place and the potential 20mph speed limit on Lewis Street, it is considered that the increase in traffic will have a **minor** impact on pedestrian delay.

7.140 The displacement of public parking from Patriotic Street MSCP to other car parks in St Helier is likely to have a moderate impact on pedestrian delay on existing users of the MSCP. To mitigate this impact, the Travel Plan will explore methods of keeping existing users up to date with construction proposals and improve awareness of the States of Jersey website which provides real time information on the number of car parking spaces available within the MSCPs

7.141 The junction mitigation schemes listed below will involve increasing the cycle time of the traffic signals:

- Rouge Bouillon/Savile Street/Elizabeth Place/Parade Road traffic signals; and
- The Parade/Union Street traffic signals.

7.142 The latter will increase waiting times for pedestrians at the signalised crossings by up to 20 seconds. These mitigation schemes are therefore considered to have a **negligible/minor** impact on pedestrian delay.

Pedestrian amenity

7.143 The potential to reduce traffic speeds from 30mph to 20mph on Lewis Street is being explored, subject to comments from DfI Transport Policy and PoSH. The reduction of traffic speeds will likely improve public amenity that is anticipated to result in an overall **minor** impact in pedestrian amenity.

7.144 The traffic impact of making Patriotic Place two-way running in Phase 1B is considered to have a minor impact on pedestrian amenity. However, as discussed previously in this chapter, a signalised pedestrian crossing is proposed on the Patriotic Place entry to the junction with Gloucester Street and Seaton Place. With the introduction of this crossing, the impact of increased traffic flow on pedestrian amenity at this receptor is likely to be **negligible**.

Fear and intimidation

7.145 The impacts of additional HGV movements on Kensington Place and Kensington Street in Phase 1A and Patriotic Street Phase 1B as a result of the demolition and construction of JFH is anticipated to have a **moderate** impact on the fear and intimidation.

7.146 Whilst there is limited scope to propose any physical works to mitigate this impact, it is envisaged the CEMP will propose a network of banksmen that will operate on Kensington Place, Kensington Street and Patriotic Street to control HGV deliveries. It is likely that having banksmen in operation will reduce the impact on fear and intimidation, and can therefore be considered to have a **minor** effect.

Driver delay

7.147 Whilst the traffic impacts associated with the construction of JFH are considered to have a **negligible** or **minor** impact on driver delay, mitigation is proposed at the following junctions:

- Esplanade/Kensington Place;
- Rouge Bouillon/Savile Street/Elizabeth Place/Parade Road;
- The Parade/Union Street; and
- St Aubin's Road/Kensington Street/Peirson Road.

7.148 The impacts of the development proposals on driver delay during Phase 1A and Phase 1B are **minor, negligible** or positive.

Accidents and safety

- 7.149 The development proposals are likely to a **negligible** impact on accidents and safety during construction and therefore no mitigation is proposed.

Mitigation of effects from operation

Severance

- 7.150 As set out previously, the impacts of JFH when operational on severance is likely to be **negligible**. It is therefore not proposed to provide any mitigation.

Pedestrian delay

- 7.151 Given the limited traffic impacts associated with the development proposals, the effects on pedestrian delay were considered to be negligible. However, the potential junction mitigation scheme at Union Street/The Parade involves increasing the cycle times of the signals, likely resulting in a **negligible/minor** impact on pedestrian delay.
- 7.152 A signalised crossing is proposed on Gloucester Street, directly north of the junction with Newgate Street. There are currently no pedestrian crossings on Gloucester Street between the junctions with The Parade and Seaton Place. This proposed signalised pedestrian crossing is therefore considered to have a positive impact on pedestrian delay.

Pedestrian amenity

- 7.153 As set out previously, the development proposals are anticipated to have a negligible impact on pedestrian amenity. No additional mitigation is proposed, beyond the development proposals detailed in the TA.

Fear and intimidation

- 7.154 When JFH is operational, it is anticipated to have a negligible impact on intimidation and fear without any mitigation. Therefore, no mitigation is specifically proposed to address fear and intimidation.

Driver delay

7.155 As set out previously, the impacts of the developments proposals on driver delay is forecast to be negligible at all links aside from Link 32 (St Aubin's Road south-west of junction with Peirson Road). The impact on driver delay at this link is considered to be minor and given the traffic impact of the development proposals is under 5%, no mitigation is proposed at this location.

7.156 It is proposed to signalise the Gloucester Street/Newgate Street priority junction to provide a signalised pedestrian crossing on Gloucester Street and priority for ambulances exiting Newgate Street. This is forecast to improve the capacity of the junction.

Accidents and safety

7.157 The development proposals are likely to result in a **negligible** impact on accidents and safety during construction and therefore no mitigation is proposed.

Residual effects

7.158 Table 7.13 and Table 7.14 present the residual traffic impacts of the development during construction and once operational respectively.

Table 7.13: Residual Construction Traffic Impacts

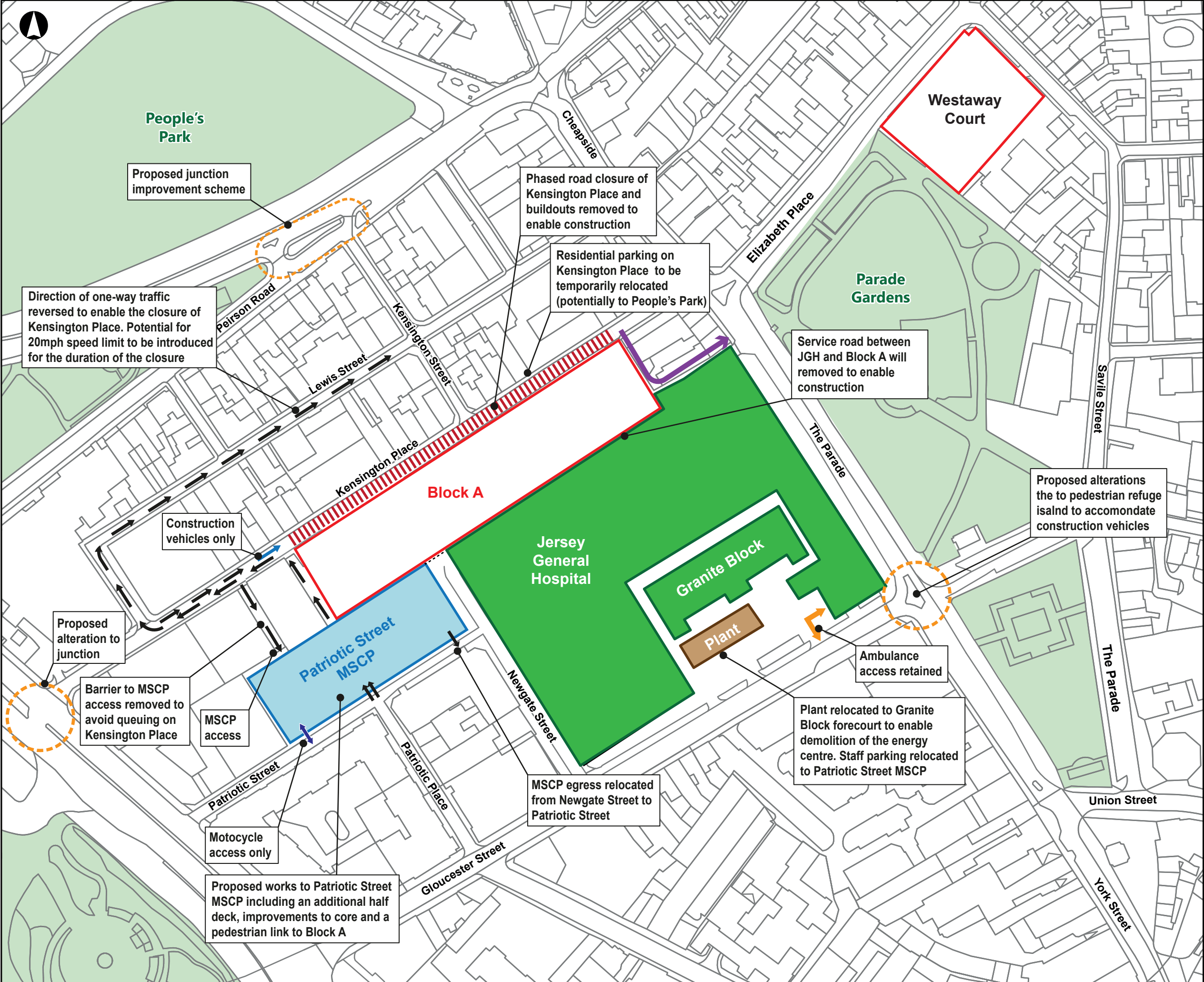
Potential Impact	Significance of Impact	Mitigation Measure	Residual Impact after Mitigation
Severance	Moderate/significant	Reduce speed limit at locations described above, introduce crossing, CEMP	Minor/Moderate
Pedestrian delay	Moderate	Reduce speed limit at locations described above, introduce crossings, Travel Plan	Negligible/Minor
Pedestrian amenity	Minor/Moderate	Reduce speed limits at locations described above, pedestrian crossings	Negligible/Minor
Fear and intimidation	Moderate	CEMP	Minor
Driver Delay	Negligible/minor	Junction mitigation	Negligible
Accidents and safety	Negligible	No mitigation necessary	Negligible

Table 7.14: Residual Operational Traffic Impacts

Potential Impact	Significance of Impact	Mitigation Measure	Residual Impact after Mitigation
Severance	Negligible	No mitigation necessary	Negligible
Pedestrian delay	Negligible	No mitigation necessary	Negligible/Minor
Pedestrian amenity	Negligible	No mitigation necessary	Negligible
Fear and intimidation	Negligible	No mitigation necessary	Negligible
Driver Delay	Negligible	Traffic signals at Newgate Street/Gloucester Street junction	Negligible
Accidents and safety	Negligible	No mitigation necessary	Negligible

7.159 Construction will have a short-term impact (approximately five years) on the surrounding highway network, with some localised impacts having a moderate effect. Mitigation measures are proposed for all effects considered to be moderate which would result in residual effects of **minor** or **negligible** significance.

7.160 Once the future hospital is operational, overall it is considered to have a negligible/minor effect on the surrounding highway network. Further mitigation is proposed providing benefit to driver delay.



- Legend**
- Operational Hospital
 - Demolition & Construction Site
 - Plant
 - Service Road
 - Ambulance Access
 - Direction of Traffic
 - Junction Works

02	10-04-2018	BOS	AW	BP
01	23-03-2018	BOS	AW	BP
Issued For Approval				
Issue	Date	By	Chkd	Appd

ARUP

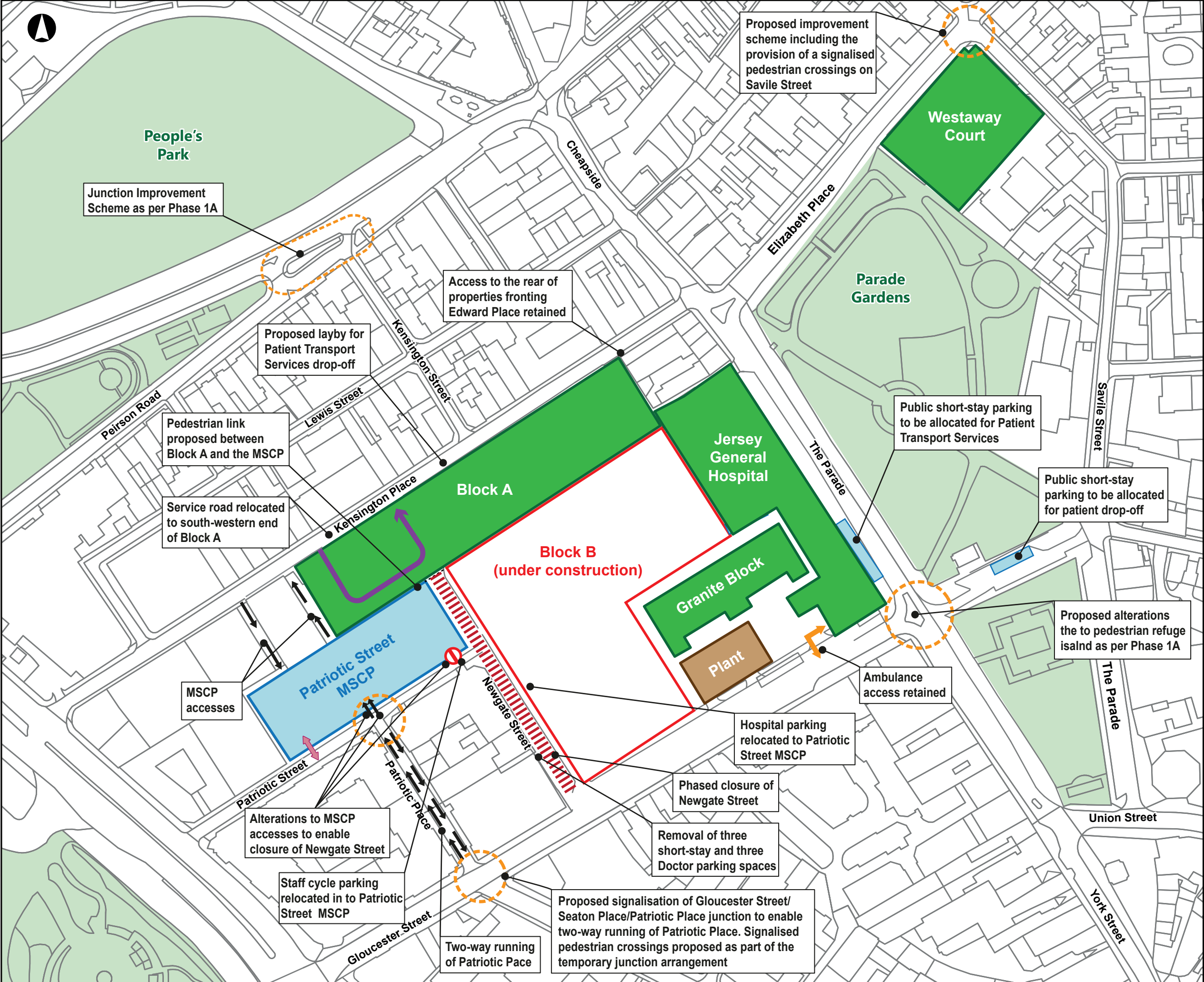
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Client
Department for Infrastructure

Job Title
Jersey Future Hospital

Phase 1A: Overview of Proposals

Scale at A3	Role
NTS	Civil
Job No	Suitability
237035-00	Approval
Drawing No	Issue
Figure 7.1	02



Legend

- Operational Hospital
- Demolition & Construction Site
- Plant
- Service Road
- Ambulance Access
- Direction of Traffic
- Motorcycle Parking
- Junction Improvements
- Hospital Allocated Parking

02	10-04-2018	BOS	PA	PT
01	23-03-2018	BOS	PA	PT
Issued For Approval				
Issue	Date	By	Chkd	Appd

ARUP

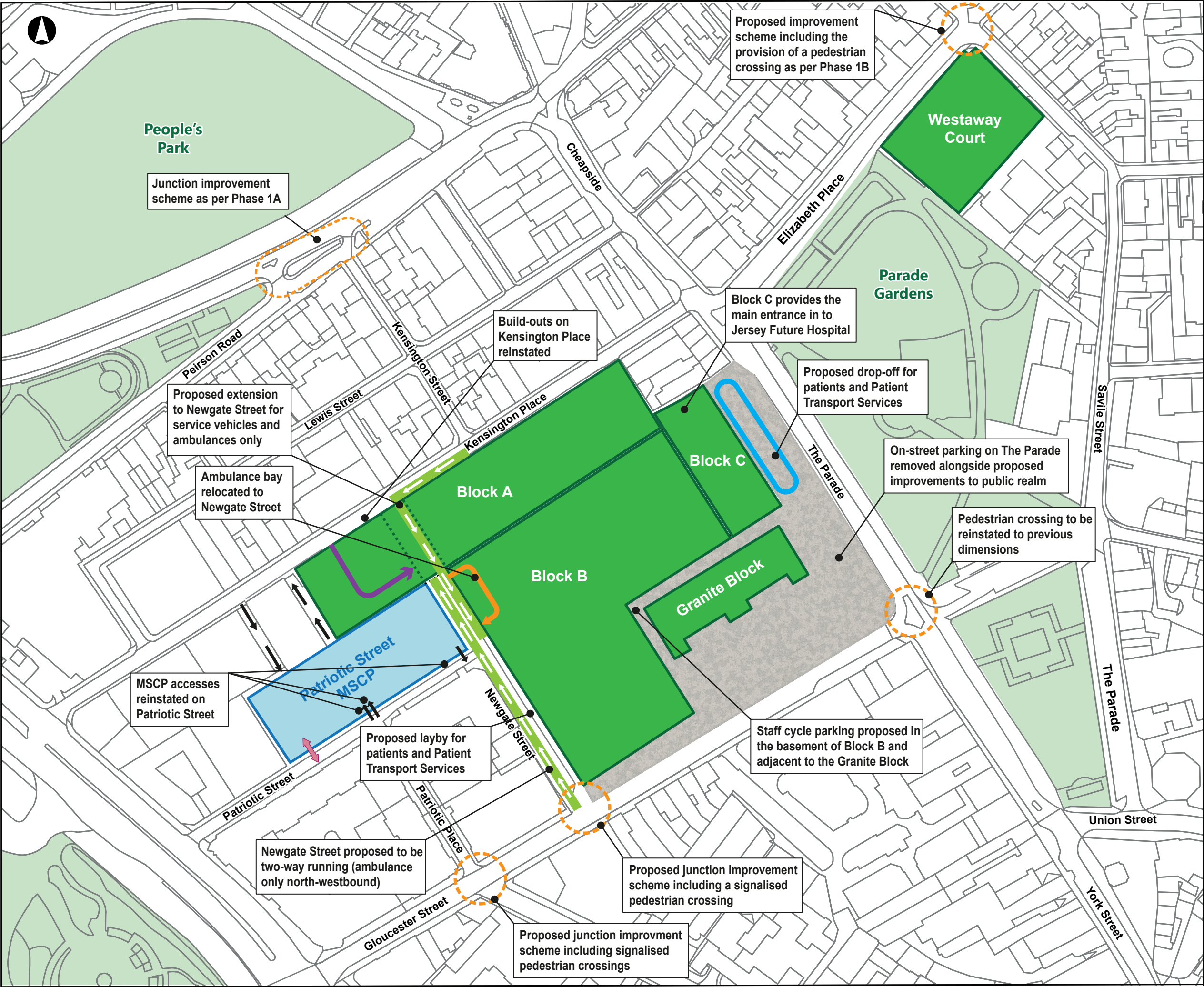
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Client
Department for Infrastructure

Job Title
Jersey Future Hospital

Phase 1B - Overview of Proposals

Scale at A3 NTS	Role Civil
Job No 237035-00	Suitability Approval
Drawing No Figure 7.2	Issue 02



- Legend**
- Operational Hospital
 - Service Road
 - Ambulance Access
 - Direction of Traffic
 - Junction Improvements
 - Ambulance Only Lane
 - Motorcycle Parking

02	10-04-2018	BOS	AW	BP
01	23-03-2018	BOS	AW	BP
Issued For Approval				
Issue	Date	By	Chkd	Appd

ARUP

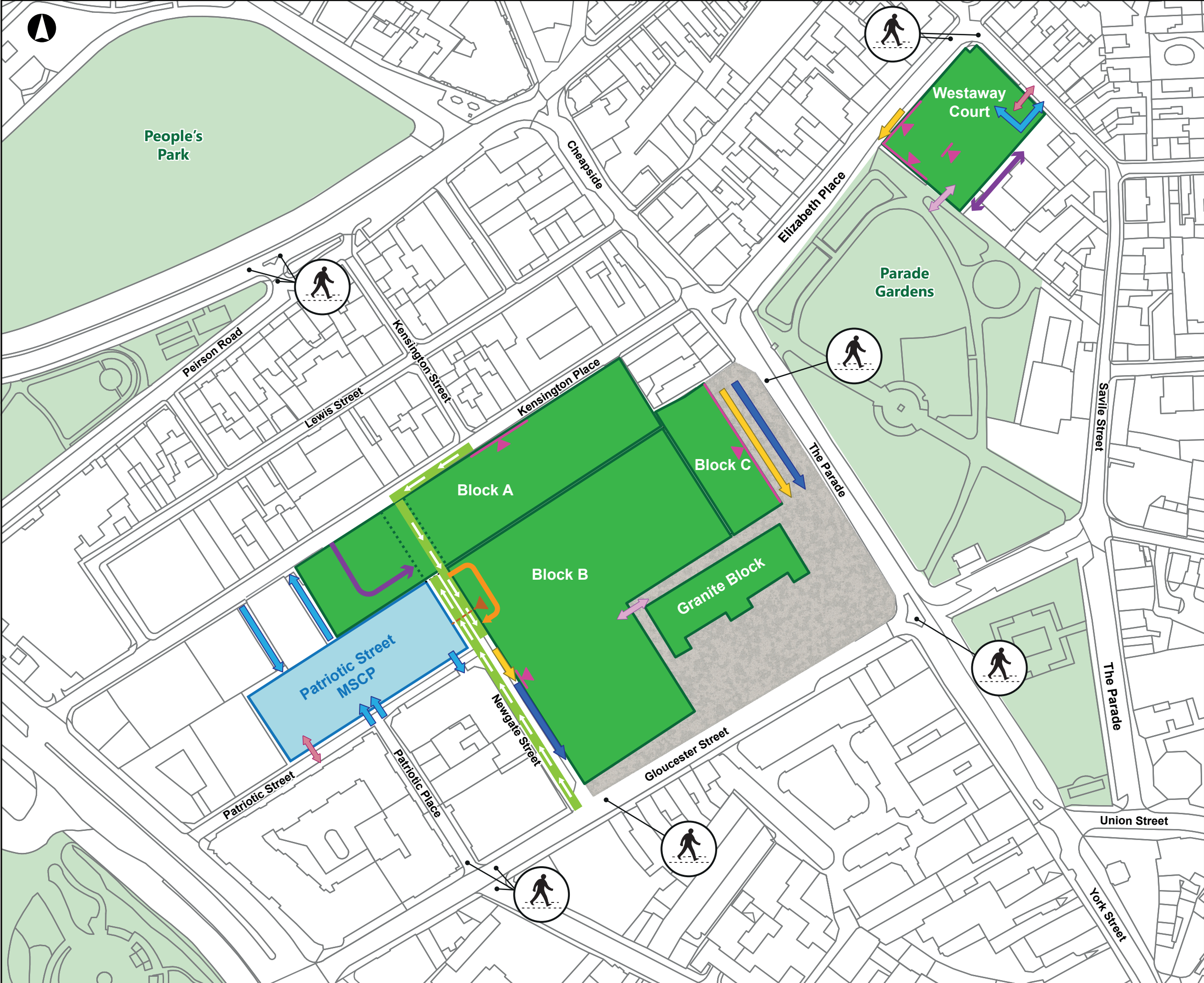
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Client
Department for Infrastructure

Job Title
Jersey Future Hospital

**Overview of Proposals:
Phase 2 Final State**

Scale at A3	Role
NTS	Civil
Job No	Suitability
237035-00	Approval
Drawing No	Issue
Figure 7.3	02



- Legend**
- Operational Hospital
 - Service Road
 - Ambulance Access
 - Patient Drop-off
 - PTS Drop-off
 - Motorcycle Parking
 - Car Parking
 - Cycle Parking
 - Ambulance Only Lane
 - Pedestrian Crossing Facility
 - Pedestrian Entrance Proposed Within Zone Shown
 - Upper Floor Pedestrian Entrance and Proposed Footbridge

02	10-04-2018	BOS	AW	BP
01	23-03-2018	BOS	AW	BP
Issue				
Issue	Date	By	Chkd	Appd

ARUP

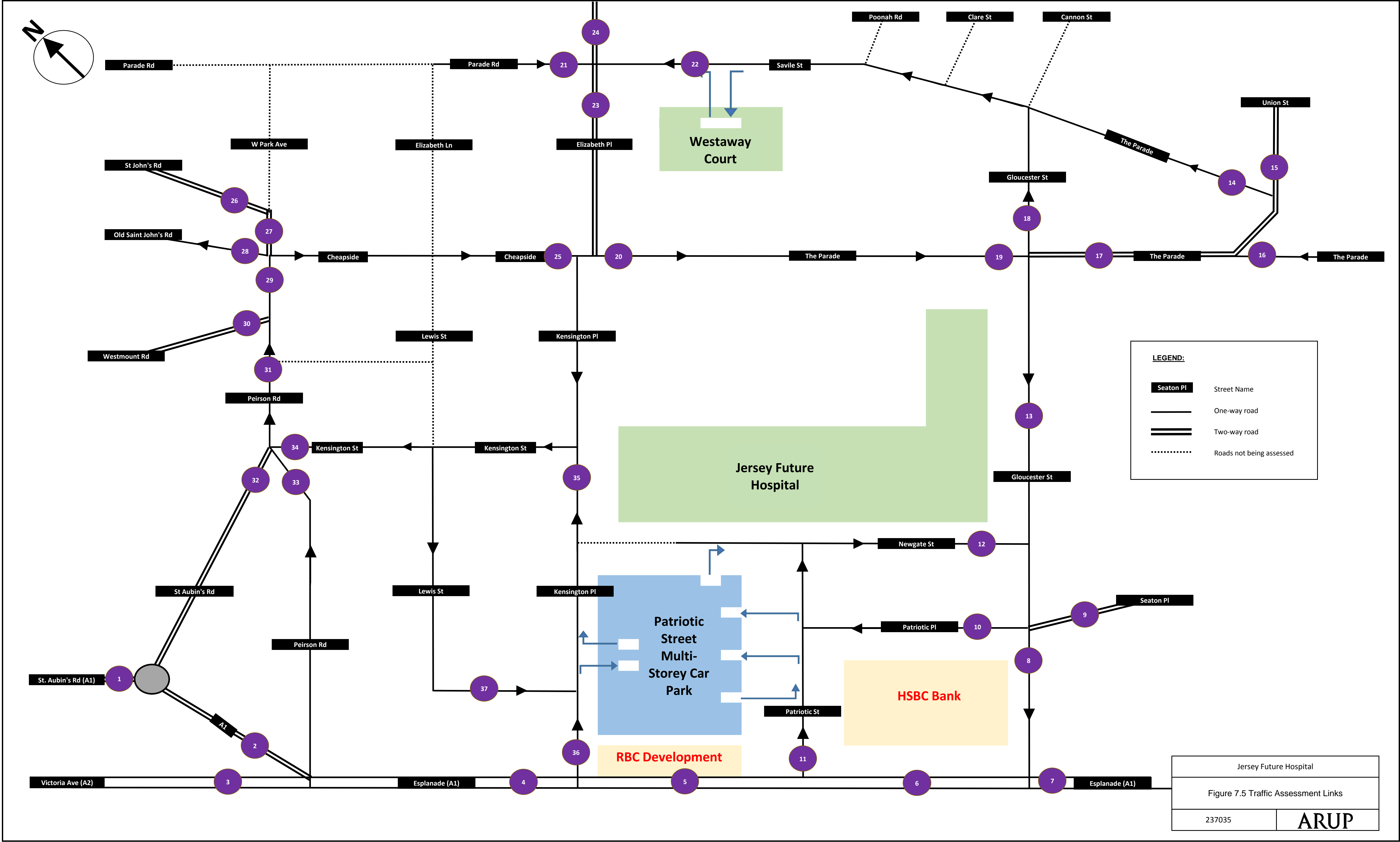
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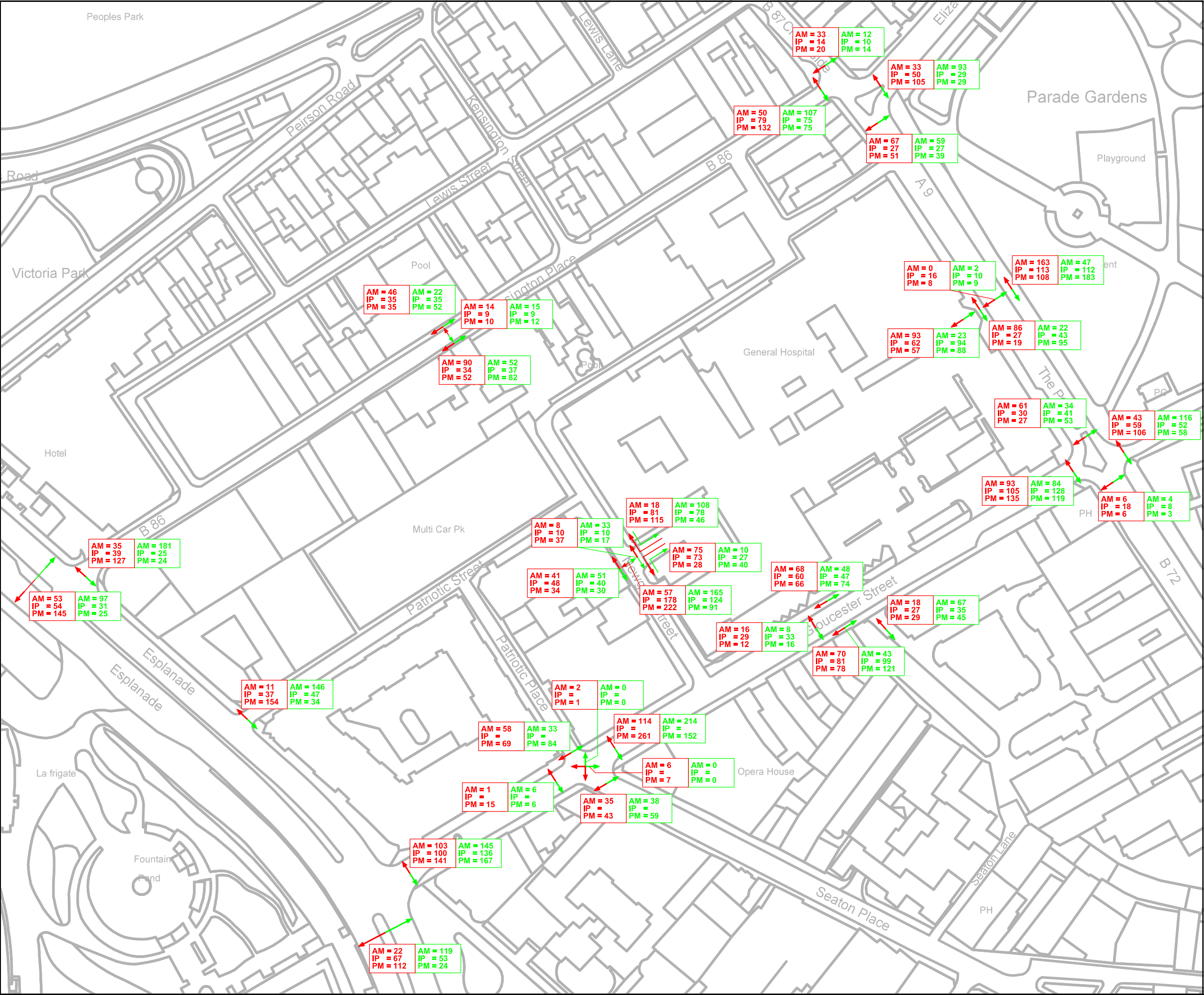
Client
Department for Infrastructure

Job Title
Jersey Future Hospital

**Access Strategy:
Phase 2 Final State**

Scale at A3 NTS	Role Civil
Job No 237035-00	Suitability Approval
Drawing No Figure 7.4	Issue 02





Legend

Pedestrian Movment

AM = 07:30 - 08:30
IP = 12:45 - 13:45
PM = 16:30 - 17:30

01	23-03-2018	MK	AW	BP
Issue	Date	By	Chkd	Appd

ARUP

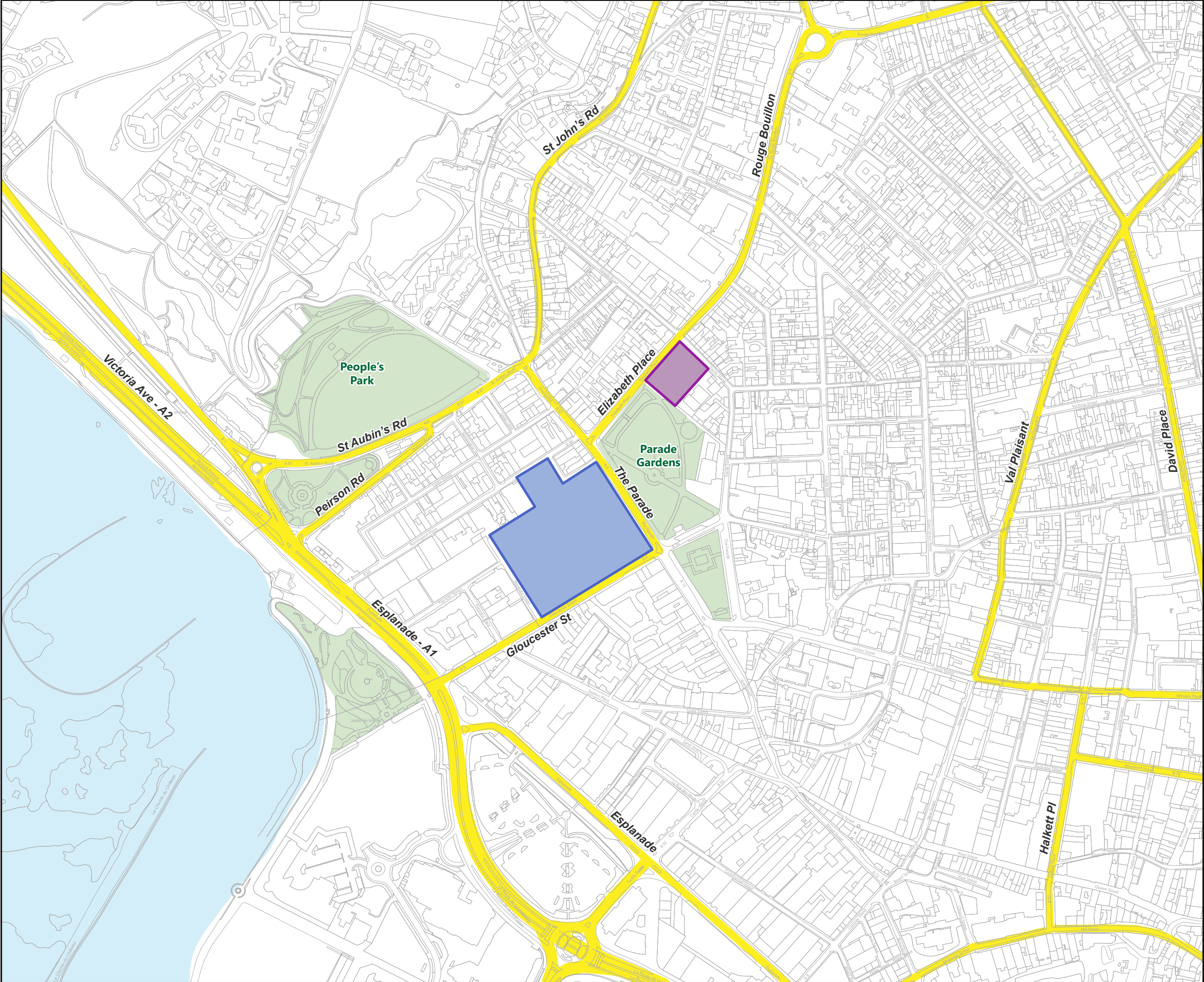
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www.arup.com

Client
Department for Infrastructure

Job Title
Jersey Future Hospital

Pedestrian Peak Period Analysis

Scale at A3 1:1250	Role Civil
Job No 237035-00	Suitability Illustrative Only
Drawing No Figure 7.6	Issue 01



Legend

Jersey General Hospital

Westaway Court

01	23-03-2018	MK	AW	BP
Issue	Date	By	Chkd	Appd

ARUP

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Client

Department for Infrastructure

Job Title

Jersey Future Hospital

Local Highway Network

Scale at A3	Role
NTS	Civil
Job No	Suitability
237035-00	Illustrative Only
Drawing No	Issue
Figure 7.7	01

