

Road Safety Assessment Princes Parade, Hythe

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Rev	Date	Description and Purpose of Issue	Prepared	Reviewed	Approved
P1	26/03/18	Preliminary Issue	BWA	P Johnson	

273755 Road Safety Assessment

Princes Parade, Hythe



Overview:

Invvu Construction Consultants were employed by Amey on the 15th March 2018 to complete a Road Safety Assessment for Princes Parade, Hythe.

Invvu Construction Consultants engaged Bruce Woodhams Associates to complete the assessment.

Following the installation of "pay-and-display" ticket machines, we were requested to consider appropriate options for the site, before the machines were commissioned and brought into operation.

The three options are loosely to;

- 1. Leave as it is.
- 2. Move parking bays to the north side of the road so they are adjacent the ticket machines.
- 3. Relocate machines to the promenade and create a few more openings in the sea wall/parapet.

The report was developed as a Road Safety Assessment of the options. The main reason for this is that a Road Safety Audit is not a device for comparing options. Therefore standalone RS1, 2 and 3 are not appropriate approaches. A Road Safety Assessment therefore does not necessarily follow HD 19/15 to the letter.

Timescales on the scheme are extremely tight and therefore a Road Safety Assessment allowed a prompt review of proposals following site visit completed on Tuesday 20th March 2018. The Site Visit was completed by Bruce Woodhams of Bruce Woodhams Associates and Phil Johnson of Invvu construction consultants

The safety implications, risks and mitigation have been considered for each of the options.

273755 Road Safety Assessment

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Conclusion Overview:

Invvu Construction Consultants share the view with Bruce Woodhams Associates that Option 3 is the most suitable arrangement. This finds that the repositioning of the "pay-and display" ticket machines to the beach side of the carriageway and the proposed increase in the number of gaps in the sea wall to be the most suitable outcome.

Machines may be safely installed on the promenade and half turned so that the machine screens face away from the sea.

The Road Safety Assessment attached should be read in its entirety.

273755 Road Safety Assessment

Princes Parade, Hythe



Appendices:

- A) Road Safety AssessmentB) Site PlansC) Print Crash Reports and Plots

Princes Parade, Hythe



A) Road Safety Assessment



Bruce Woodhams Associates

Princes Parade HYTHE



Proposed Parking Layout Options

Road Safety Assessment



Bruce Woodhams Associates

Princes Parade HYTHE

Proposed Parking Layout Options

Road Safety Assessment

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1. INTRODUCTION

- 1.1 Shepway Council have made a decision for reasons given in their Statement of Reasons to make a charge for on-street car parking along the entire length of Princes Parade Hythe. Having advertised the required traffic management orders, it was intended to make the order and bring it into operation on 3 April 2018.
- 1.2 The proposals included "at any time" waiting restrictions along the entire length of Princes Parade on the north side with "paid-for" parking bays on the south side adjacent to the promenade. Payment for the parking charges can be made in one of two ways either using the "pay-by-phone" system or by purchasing a ticket from a "pay-and-display" ticket machine.
- 1.3 To this end work started on installing the signs and equipment required and according to information gleaned from local press articles on-line, there was some strong opposition to the perceived road safety of the proposals.
- 1.4 Installation work appears to have ceased temporarily, the works being substantially complete whilst further advice is sought.
- 1.5 This report considers the various road safety related issues of the options put forward and concludes with advice as to a way forward.

2. HISTORICAL SITUATION

- 2.1 Princes Parade is approximately 2 km long, separated from a promenade and the beach on its south side by a low sea wall. It is a single carriageway road approximately 7.3 metres wide with a single traffic lane in each direction and has a 1.8 metre wide footway on its north side.
- 2.2 For the majority of its length it is subject to a 40 mph speed limit and a 6' 6" width restriction (according to the signs) but there is no physical feature to enforce this; this section is also unlit.
- 2.3 At the western end of Princes Parade to the front of the Hythe Imperial Hotel there is a short section which has street lighting, this is also subject to a 30 mph speed limit.
- 2.4 At either end of Princes Parade there are small "pay-and-display" off-street car parks and another one on the northside towards the eastern end of Princes Parade for the Royal Military Canal and the Canoe Club.
- 2.5 Parking on the north side of Princes Parade has been controlled by an "at any time" waiting restriction for at least ten years. Unrestricted parking has been permitted on the southside adjacent to the low sea wall; worded "KEEP CLEAR" markings are provided across the gaps in this wall to maintain clear access.



- 2.6 The promenade which is approximately 4.5 metres wide is a shared cycle/footway and this too has been used as such for at least 10 years.
- 2.7 Consequently, these features have attracted holiday makers and day trippers to the beach adjacent to Princes Parade and they have availed themselves of the easy car parking nearby; which during the summer months and at holiday times completely fills its length.
- 2.8 It is understood that last year, parking bay road markings were added along the south side of the road abutting the low sea wall.

3. **PROPOSED SCHEME** (Option 1)

- 3.1 The current proposal is to create a controlled parking zone which includes the entire length of Princes Parade and imposes parking charges in the marked parking bays between the 1 April and the 30 September (both dates inclusive) between 8am and 6pm Sunday to Saturday.
- 3.2 "Pay-and-display" machines have been installed at the back of the footway on the north side of the Princes Parade, from which drivers may obtain a ticket to pay for their chosen length of stay, and the various tariffs are displayed on these machines.
- 3.3 According to the signs that have been installed, there is an option to "pay-by-phone", however it is unclear from the articles in the draft Traffic Management Order whether this is permitted; also, there are no signs showing the tariffs and any convenience payments that may be associated with this method of payment.





3.4 From items in the on-line pages of the local press, it is understood that this proposal has been criticised on road safety grounds because of the need for someone to cross the busy road from the parked vehicle to get a ticket from the "pay-and-display" ticket machines and then to cross back to place the ticket in the vehicle.



4. OTHER OPTIONS TO BE CONSIDERED

- 4.1 Two other options have been suggested for evaluation:
 - 4.1.1 Option 2 To move the parking bays to the northside side of the road and to presumably move the "at any time" waiting restriction to the south side of Princes Parade adjacent to the sea wall and promenade.
 - 4.1.2 Option 3 To keep the parking restrictions as outline in option 1 but relocate the "pay-and-display" machines to the to the south side of the road and create a few more openings in the sea wall.



5. IDENTIFIED HAZARDS FOR EACH OPTION

- 5.1 The following hazards have been identified for Option 1
 - 5.1.1 The need to cross a busy 40 mph road to get to and from the "pay-and-display" machines.
 - 5.1.2 Discharging passengers from parked vehicles into the live carriageway.
 - 5.1.3 Having to walk some distance, often in excess of 100 metres, possibly with young children, wheel chairs and pushchairs in the live traffic lane to get to a gap in the sea wall to access the promenade and beach.
 - 5.1.4 Difficulty in reading the waiting restriction plate without standing in the live traffic lane, as the sign face is not easily seen from the promenade.
- 5.2 The following hazards have been identified for Option 2
 - 5.2.1 The need for all visitors arriving by car and using the parking bay to cross a busy 40 mph road to get to the promenade and beach and back when returning to their vehicle.
 - 5.2.2 Being tempted to take a short cut to the beach by clambering over the sea wall from the live traffic lane, risks falling back from the wall and into the path of live traffic.
 - 5.2.3 Live traffic passing very close to pedestrians when waiting to cross Princes Parade from a gap in the sea wall with the potential for very small children to be masked by the sea wall from an approaching driver's view.
 - 5.2.4 Ice Cream and Food Vendors would not be able to operate as it is understood they currently do, because they cannot park their vehicles adjacent to the sea wall. Therefore, customers will be required to cross the busy road to access these facilities.
- 5.3 The following hazards have been identified for Option 3
 - 5.3.1 Discharging passengers from parked vehicles into the live carriageway.
 - 5.3.2 Having to walk some distance, possibly with young children, wheel chairs and pushchairs in the live traffic lane to get to a gap in the sea wall to access the promenade and beach, albeit these will be closer than in option 1.
 - 5.3.3 Difficulty in reading the waiting restriction plate without standing in the live traffic lane as the sign face is not easily seen from the promenade.



6. PERSONAL INJURY COLLISION HISTORY

- 6.1 Personal injury collision data for the entire length of Princes Parade for the latest 36 months period ended 30 November 2017 (this date needs to be checked and corrected as necessary) has been analysed.
 - 6.1.1 During this period there were five personal injury collisions (1 serious and 4 slight) recorded by the Police. These collisions resulted in a total of 8 casualties.
 - 6.1.2 Of the collisions, four occurred at weekends, of which three occurred in July.
 - 6.1.3 There were three collisions that occurred in the evening period, one during the night and the other during the late morning.
 - 6.1.4 There were no personal injury collisions involving pedestrians.
 - 6.1.5 Only one of the five personal injury collisions appear to have involved any parked vehicles, and in that incident the rider of the powered two wheeler claims to have been dazzled by the lights of an approaching vehicle.
 - 6.1.6 All the collisions happened on a dry road surface and there was not an unusually high incidence of collisions happening in the dark.
 - 6.1.7 There were no collisions clusters, and there do not appear to be any common factors evident in the data provided (which did not include contributory factors).
- 6.2 There is no evidence from the personal injury collision data that the existing layout of the parking bay and traffic lanes has resulted in any pedestrians being injured and therefore it is concluded that visitors and users of the beach cope safely with this arrangement.

7. DISCUSSION OF ROAD SAFETY ISSUES FOR EACH OPTION

7.1 **Option 1**

7.1.1 It would be impractical to attempt to provide crossing facilities for pedestrians to use to cross Princes Parade to access the "pay-and-display" ticket machines, because the speed limit of the road would suggest that zebra crossings would not be appropriate and would therefore need to be puffin type crossings. The cost of providing a sufficient number of these, probably at least ten, and



maintaining them would be prohibitively high and unjustifiable. It would also be very difficult to locate them satisfactorily because the pedestrian crossing desire lines are extremely varied and would not be focussed at any given locations.

- 7.1.2 In any event, there is also an expected level of pedestrian personal injury collisions associated with each puffin crossing and providing a number of them will inevitably result in a worse personal injury collision history for this route than is currently the case.
- 7.1.3 The issues of getting in and out of parked vehicles and of walking next to the live traffic lane to get to and from the promenade and beach whilst considered intrinsically hazardous, have not resulted in any personal injury collisions.
- 7.1.4 The problem with being able to read the sign showing the parking bay restriction information, could be overcome by providing additional signs that are readable from the promenade.
- 7.1.5 Ice cream vans and food vendors can operate as they do at present.

7.2 **Option 2**

- 7.2.1 It would be impractical to attempt to provide crossing facilities for pedestrians to use to cross Princes Parade to access the "pay-and-display" ticket machines, because the speed limit of the road would suggest that zebra crossings would not be appropriate and would therefore need to be puffin type crossings. The cost of providing a sufficient number of these, probably at least ten, and maintaining them would be prohibitively high and unjustifiable. It would also be very difficult to locate them satisfactorily because the pedestrian crossing desire lines are extremely varied and would not be focussed at any given locations.
- 7.2.2 In any event there is also an expected level of pedestrian personal injury collisions associated with each puffin crossing and providing a number of them will inevitably result in a worse personal injury collision history for this route than is currently the case.
- 7.2.3 The issues of getting in and out of parked vehicles that exists with option 2 and 3 does not exist to the same extent because there is a footway adjacent to the parking bays with this option. This also means that there is no need to walk in the live traffic lane to get to the access points through the sea wall apart from the actually crossing of the carriageway.
- 7.2.4 It would not be possible for ice cream vans and food vendors to operate as they



do at present, unless they are allowed access to the promenade to specifically designated locations. On carriageway locations adjacent to the sea wall would require additional protection measures which are also likely to mean that the parking bay on the northside of the carriageway would have to be curtailed so as to maintain safe two-way traffic flow.

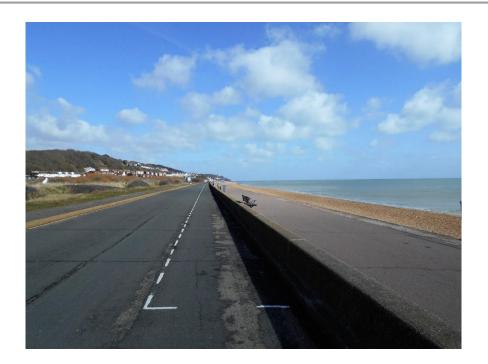
7.3 **Option 3**

- 7.3.1 The issues of getting in and out of parked vehicles and of walking next to the live traffic lane to get to the promenade and beach whilst considered intrinsically hazardous has not resulted in any personal injury collisions.
- 7.3.2 The proposed additional gaps in the sea wall will reduce the distance that has to be walked adjacent to or in the live traffic lane thereby reducing the exposure of pedestrians of all age groups to this hazard
- 7.3.3 The problem with being able to read the sign showing the parking bay restriction information, could be overcome by providing additional signs that are readable from the promenade.
- 7.3.4 Ice cream vans and food vendors can operate as they do at present.

8. CONCLUSION

Having carefully considered the evidence that has been made available option 3 seems to have the greatest merit. Much of the existing situation remains unchanged and it appears that the visiting public is able to cope safely with this situation. The repositioning of the "pay-and-display" ticket machines to the beach side of the carriageway avoids the need for any increase in pedestrian crossing movements across Princes Parade and the proposed increase in the number of gaps in the sea wall will give more opportunities for pedestrians to more easily access the promenade and the beach area with all the attendant safety benefits of not being exposed to the live traffic for longer than necessary.







APPENDIX

LIST OF DRAWINGS AND DOCUMENTS EXAMINED IN THIS ASSESSMENT:

Drawings

Drawing No.	Scale	Title
Drawings produced by:	Shepway	District Council
Unnumbered	NTS	Princes Parade - Pay and Display
01	NTS	Princes Parade Parking Parking Meter Locations
22-ATGEN-43-GA-HA1-031 rev 2	1:500 @A1	22-TIDWORTH-ATEGEN Infrastructure Road Markings Sheet 1 of 1

Documents

Documents		Date
Document produced by:	Shepway District Council	
D-Print Crash Reports and	Plots	15 March 2018

Various documents on regarding the advertised Traffic Management Order for the Princes Parade CPZ

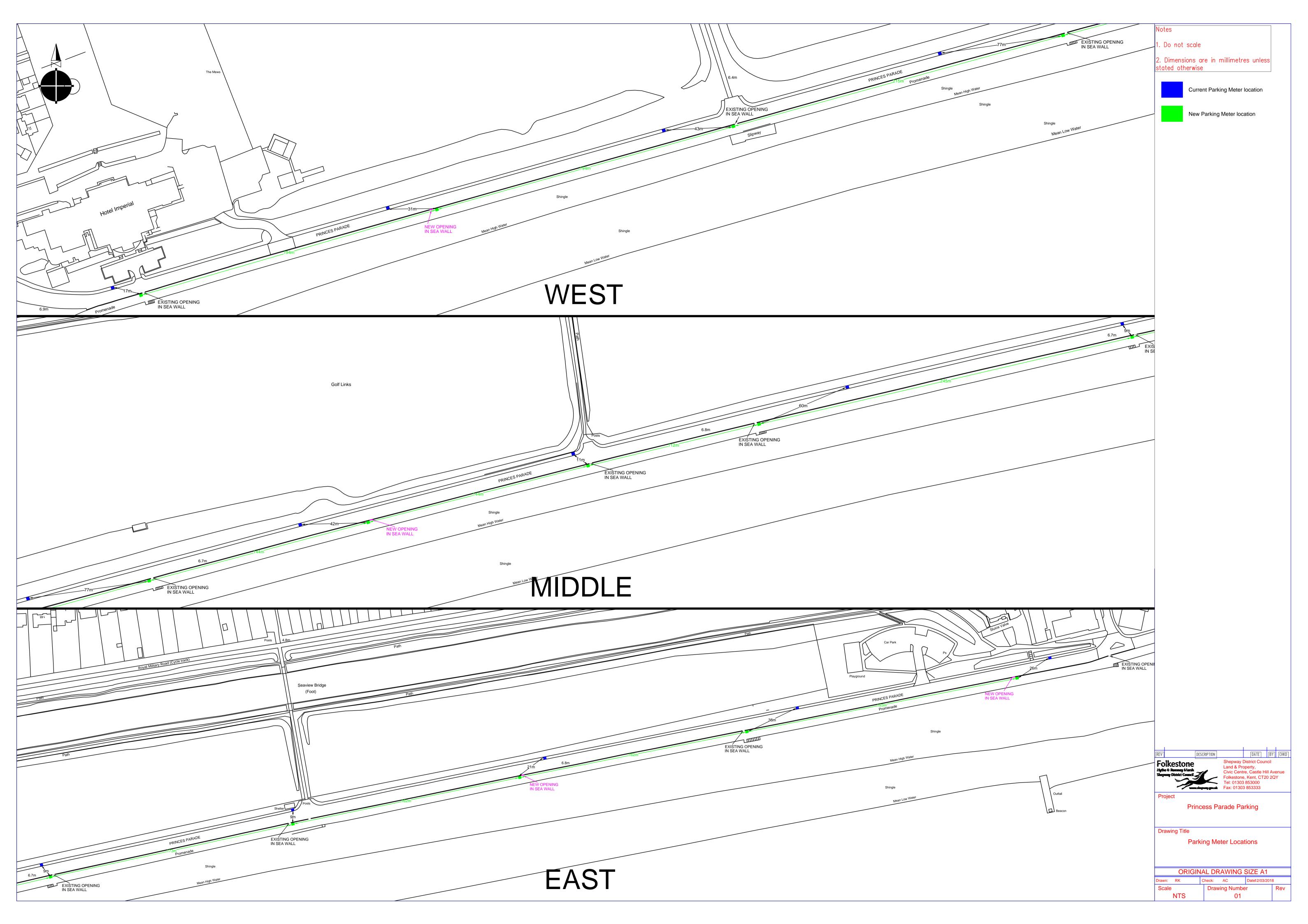
Princes Parade, Hythe



B) Site Plans

Princes Parade - Pay and Display 617000 619000 **Folkestone** Contains Ordnance Survey data Hythe & Romney Marsh © Crown copyright and database right Shepway District Council Shepway District Council 100019677 - 2017

Not to scale





C) Print Crash Reports and Plots

Date: 15-March-2018

Time: 10:48:11

Title: Princes Parade - 3 year crashes (1)

Requested output: **D - Print Crash Report**

Date: 15-March-2018

There were 2 reported crashes resulting in injury

D-PRINT CRASH REPORT

Princes Parade - 3 year crashes (1)

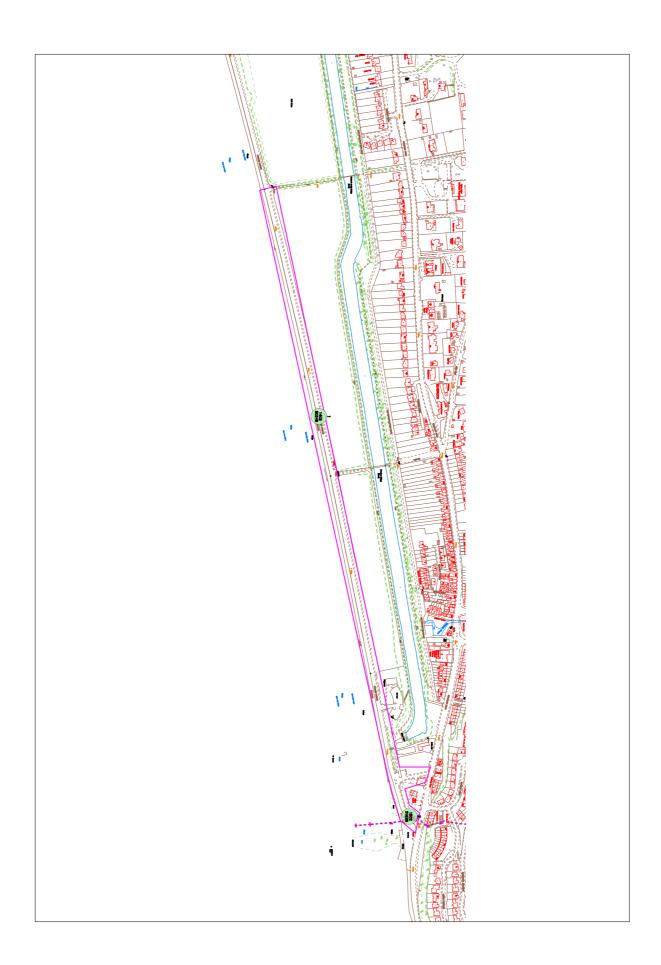
No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
1	Road No F1423 Grid 618233 Section 142 Ref 134723		01/12/2014	2	17:46	DRK NSL	Dry	Fine					
	Princes Parade, by Hythe Bus	Shelter, Folkesto	one, Kent						Shepway				
	V1 was Travelling Towards Hythe, as Passing Parked Vehicles on It's Near-Side, Oncoming Vehicle Dazzled Driver. V1 Moved Clipping Wing Mirror of V2 and Hitting Front Off-Side of V3.							Veh1, car, NE -> SW Veh2, car, NE -> SW Veh3, car, NE -> SW			Casua Vehic		1 3
2	Road No A259 Grid 618978 Section 231 Ref 134898		04/01/2015	1	10:40	L	Dry	Fine		R.TURN			M/C
	Princes Parade 10 Metres Sou	n of A259 Seab	rook Road, Hy	the, k	Cent				Shepway				
	V2 Has Pulled into Princes Parade from the A259 from the Folkestone Direction. V1 Has Entered Princes Parade Also but from the Hythe Direction. V2 Has Indicated to Enter the Garage and Started to Perform the Manoeuvre to Enter, V1 Has Not Seen the Indicator and Hit the Back of V2.						Veh1, m/cycle <= 50cc, NE -> SW Veh2, car, NE -> SW			Casua Vehic		2 2	

Key	Involved	
	PED	Pedestrian
	HGV	Heavy Goods Vehicle
	GV	Goods Vehicle
	M/C	Motor Cycle
	P/C	Pedal Cycle
	PSV	Bus/Coach

Street Ligh	<u>nting</u>
L	Daylight
STL	Street Lights
USL	Street Lights Unlit
NSL	No Street Lights
STU	Street Lights Unknown

FACTORS +VE R.TURN O/TAKE S.VEH	Positive Breath Test Right Turn Manoeuvre Overtaking Manoeuvre Sinale Vehicle
S.VEH	Single Vehicle

Special Conditions					
ATS OUT	Traffic Lights Not Working				
ATS DEF	Traffic Lights Defective				
SIGNS	Road Signs Defective or Obscurred				
RD WRKS	Road Works				



Date: 15-March-2018

Time: 10:55:21

Title: Princes Parade - 3 year crashes (2)

Requested output: **D - Print Crash Report**

Date: 15-March-2018

There were 3 reported crashes resulting in injury

D-PRINT CRASH REPORT

Princes Parade - 3 year crashes (2)

No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
1	Road No F1423 Grid 61709 Section 142 Ref 13445	-	04/07/2015	7	18:35	L	Dry	Fine					M/C
	Princes Parade, Hythe, Kent	Mapped to 61709	0 / 134400)						Shepway				
	V1 was Parked by the Roadside, Driver of the Car Performed a U-Turn, as They Began to Reverse Back They Saw a Moped Sliding Towards Their Car, the Moped then Struck the Passenger Side of the Car.						Veh1, car, SW -> NE Veh2, m/cycle <= 50cc, SW -> NE			Casua Vehicl		1 2	
2	Road No F1423 Grid 61702 Section 142 Ref 1344	· =	04/07/2015	7	00:38	DRK NSL	Dry	Fine					
	Princess Parade, Hythe, Kent	(Mapped to 6170	20 / 134410)			•			Shepway				
	V1 Has Made Contact with V2 Substational Rear Damage	. V1 Has Substat	ional Front Da	mage	. V2 Has	S	Veh1, car, W -> E Veh2, car, W -> E				Casua Vehicl		3 2
3	Road No U Grid 61733 Section Ref 13445	5E 7N SLIGHT	23/07/2016	7	19:18	L	Dry	Fine		R.TURN			M/C
	PRINCES PARADE AT LAYBY NEXT TO CANNONGATE BRIDGE FOOTPATH (MAPPED TO Shepway DESCRIPTION)												
	V 2 was stationary indicating to turn right off Princes Parade into a Parking area. As V2 did so V1 collided with V2 on its offside. Causing minor damage. V1 rider suffered minor injuries and taken to WHH.							Veh1, m/cycle 125 - 500cc, E -> W Veh2, car, E -> W			Casua Vehicl		1 2

Key	Key <u>Involved</u>			<u>ighting</u>	<u>FACTORS</u>		Special Conditions		
	PED	Pedestrian	L	Daylight	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working	
	HGV	Heavy Goods Vehicle			R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective	
	GV	Goods Vehicle	STL	Street Lights	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred	
	M/C	Motor Cycle	USL	Street Lights Unlit	S.VEH	Single Vehicle	RD WRKS	Road Works	
	P/C	Pedal Cycle	NSL	No Street Lights		-	Surface	Road Surface Defective	
	PSV	Bus/Coach	STH	Street Lights Unknown					

