

HIGHSTEAD ROAD, SITTINGBOURNE

Parking Demand Report

FOR SWALE BOROUGH COUNCIL

23 February 2018

Report no: 2266 P-DEM

Rev-



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Appendix 1 – Original Survey Data



1 Introduction and Brief

This report has been produced to determine the parking demand on the local highway network surrounding Highstead Road, Sittingbourne, Kent.

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2 Existing Site Conditions

The survey area includes the local highway network surrounding Highstead Road, Sittingbourne and comprises Highstead Road (part), Bell Road (part), Kestrel Close, The Finches, Brenchley Road, Capel Road and Grayshott Close. The figure below, shows the extents of the survey area.



Figure 2.1 – Survey Location Plan.

The survey area, while comprising predominantly residential streets does include streets immediately adjacent the Memorial Hospital Sittingbourne and Highstead Grammar School.

Highstead Road

The section of Highstead Road included within the survey is approximately 600m long and runs between the junction with Bell Road and Swantree Avenue. Highstead Road is bound predominately by residential properties, with footpath provision on both sides. Access is also provided to the Memorial Hospital Sittingbourne and Highstead Grammar School.

Sections of Highstead Road are subject to double yellow line parking restrictions, especially at the junctions with Bell Road and Swantree Avenue. Parking is also restricted outside Highstead Grammar School through the use of school 'zig zag' road markings. However, a large part of Highstead Road provides unrestricted kerb space, available for parking.

Bell Road



The section of Bell Road included within the survey is approximately 360m long and runs between the junction with Highstead Road and Brenchley Road/Capel Road. Bell Road (within the extents of the survey) is bound by Highstead Grammar School to the east and the Sittingbourne cemetery to the west, with footpath provision on both sides.

Sections of Bell Road are subject to double yellow line parking restrictions, especially at the junctions with Highstead Road and Brenchley Road/Capel Road. Parking is also restricted outside between the junction with Brenchley Road/Capel Road and the Sittingbourne cemetery through the use of single yellow line road markings. These parking restrictions apply between the hours of 08:00 and 18:30 Monday to Saturday.

Additional double yellow line parking restrictions are also in place on both sides of the carriageway between the junction of Little Glovers and Highstead Road, adjacent the Memorial Hospital Sittingbourne.

Kestrel Close

Kestrel Close is approximately 100m long and is accessed off Highstead Road. Kestrel Close is bound on both sides by residential properties and has no dedicated footpaths. It should also be noted that Kestrel Close is approximately 5.7m wide and therefore would not support parking on both sides of the road. A turning facility is provided at the north end of the road.

The Finches

The Finches is approximately 190m long and is accessed off Kestrel Close. The Finches is bound on both sides by residential properties and has no dedicated footpaths. It should also be noted that The Finches is approximately 5.7m wide and therefore would not support parking on both sides of the road, except in the dedicated area adjacent number 15 and number 17.

A turning facility is provided at the north east end of the road, but on site observations recorded this area as being used as a parking area.

Grayshott Close

Grayshott Close is approximately 140m long and is accessed off Highstead Road. Grayshott Close is bound on both sides by residential properties with footpath provision on both sides. Grayshott Close is approximately 5.7m wide and therefore would not support parking on both sides of the road. A turning facility is provided at the north east end of the road, but on site observations recorded this area as being used as a parking area.



Brenchley Road

The section of Brenchley Road included within the survey is approximately 430m long and runs between the junction with Swantree Avenue/Crocus Drive and Bell Road Road/Capel Road. Brenchley Road (within the extents of the survey) is bound by Highstead Grammar School to the north and residential areas to the south, with footpath provision on both sides. Access is provided to Highstead Grammar School to the western end of Brenchley Road.

The section of Brenchley Road between the roundabouts serving the junctions with Bluebell Drive and Swantree Avenue/Crocus Drive is not subject to any yellow lining and provides unrestricted kerb space for a distance of approximately 120m.

Sections of Brenchley Road are subject to double yellow line parking restrictions, especially at the junction with Bell Road. Parking is also restricted through the use of single yellow line road markings for distance of around 145m from the Bell Road Junction. These parking restrictions apply between the hours of 09:00-09:30 and 14:00-15:30 Monday to Friday. Parking is also restricted outside Highstead Grammar School through the use of school 'zig zag' road markings

Capel Road

Capel Road is approximately 410m long and is bound to the north and south by residential properties for a distance of around 200m from the junction with Bell Road, with footpath provision on both sides. After this, the site is bound by playing fields to the north and Sittingbourne Cemetery to the south.

Capel Road Is subject to various single and double yellow line road markings between the junction Bell Road and Whitehall Road. The remainder of Capel Road is largely unrestricted with dedicated parking bays provided in some sections.



3 Parking Survey

G M Traffic Consultants were commissioned by Considine Ltd to carry out the parking survey on our behalf. Measurements of the roads within the survey extents were taken and the length of unrestricted kerb space recorded. This was then divided in to 6.0m bays, giving the roads potential parking capacity.

Two hour counts were then carried out between 06:00 and 22:00 and the number of parked cars recorded. The results of the survey have been provided below on a road by road basis.



Highstead Road

The section of Highstead Road included within the survey was recorded as having a maximum parking capacity of 66 spaces. This is a combination of available parking space on both the north and south sides of the road.

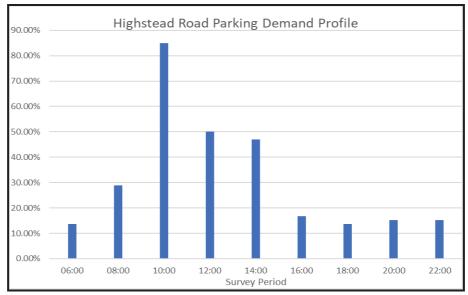


Figure 3.1 – Highstead Road Parking Survey Results

The peak parking demand was recorded between the survey period of 10:00-12:00. A maximum number of 31 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 46.97%. It can be seen from the above, that the parking demand started to increase from 08:00 and returned 'normal' levels by 16:00.

As seen in Figure 3.2, the typical parking profile for the parking demand in this road is typically in the range of 2 hours.

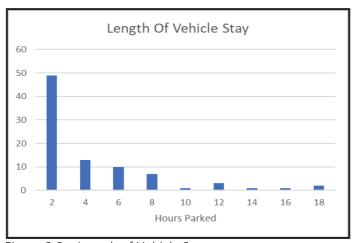


Figure 3.2 – Length of Vehicle Stay



Bell Road

The section of Bell Road included within the survey was recorded as having a maximum parking capacity of 18 spaces. This is a combination of available parking space on both the north and south sides of the road.

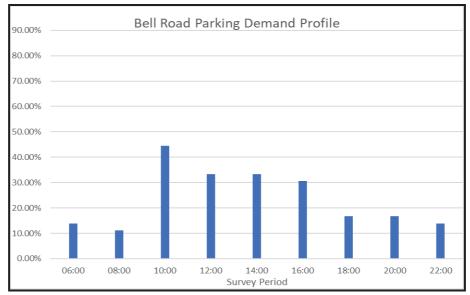


Figure 3.3 – Bell Road Parking Survey Results

The peak parking demand was recorded between the survey period of 10:00 - 12:00. A maximum number of 16 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 44.44%. It can be seen from the above, that the parking demand increased rapidly between 08:00 - 10:00 and returned to 'normal' levels by 18:00.

As seen in Figure 3.4, the typical parking profile for the parking demand in this road is typically in the range of 2 hours.

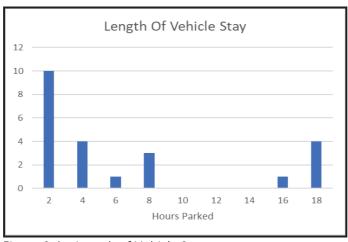


Figure 3.4 – Length of Vehicle Stay



Kestrel Close

Kestrel Close was recorded as having a maximum parking capacity of 34 spaces, however on-site observations have confirmed the road is not wide enough to support parking on both sides. We have therefore reduced the maximum parking capacity by 50% for each direction and rounded down (16).



Figure 3.5 – Kestrel Close Parking Survey Results

The peak parking demand was recorded between the survey period of 10:00 - 14:00. A maximum number of 9 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 26.47%. It can be seen from the above, that the parking demand increased between 06:00 - 10:00 and returned to 'normal' levels by 20:00.

As seen in Figure 3.6, the typical parking profile for the parking demand in this road is typically in the range of 2 hours.

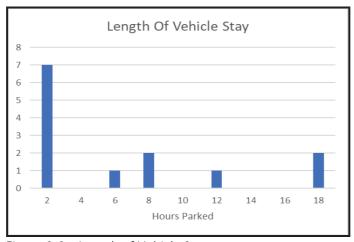


Figure 3.6 – Length of Vehicle Stay



The Finches

The Finches was recorded as having a maximum parking capacity of 34 spaces, however on-site observations have confirmed the road is not wide enough to support parking on both sides. We have therefore reduced the maximum parking capacity by 50% for each direction and rounded down (16).

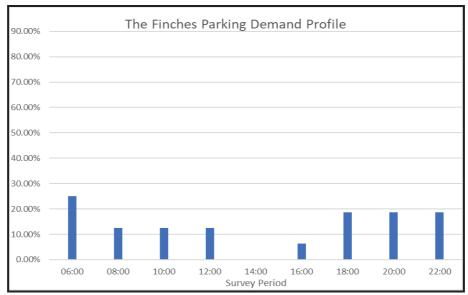


Figure 3.7 – The Finches Parking Survey Results

The peak parking demand was recorded between the survey period of 06:00 - 08:00. A maximum number of 6 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 17.65%. It can be seen from the above, that the parking demand remains relatively consistent throughout the day with a reduction in parking demand between 12:00 and 18:00.

As seen in Figure 3.8, the typical parking profile for the parking demand in this road is typically in the range of 2 hours.

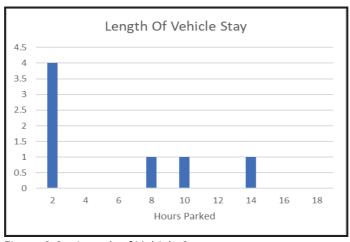


Figure 3.8 – Length of Vehicle Stay



Grayshott Close

Grayshott Close was recorded as having a maximum parking capacity of 44 spaces, however on-site observations have confirmed the road is not wide enough to support parking on both sides. We have therefore reduced the maximum parking capacity by 50% (22).

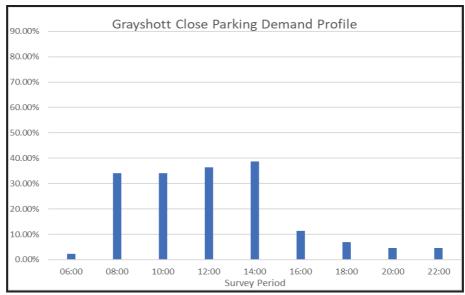


Figure 3.9 – Grayshott Close Parking Survey Results

The peak parking demand was recorded between the survey period of 14:00 - 16:00. A maximum number of 17 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 38.64%. It can be seen from the above, that the parking demand increased rapidly between 06:00 and 08:00 with a steady increase between 08:00 and 16:00 where parking demand reduced returning to 'normal' levels at 20:00.

As seen in Figure 3.10, the typical parking profile for the parking demand in this road is typically in the range of 2 hours or 8 hours.

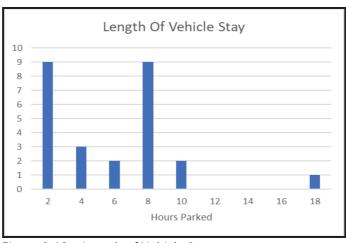


Figure 3.10 – Length of Vehicle Stay



Brenchley Road

The section of Brenchley Road included within the survey was recorded as having a maximum parking capacity of 22 spaces. This is a combination of available parking space on both the north and south sides of the road.

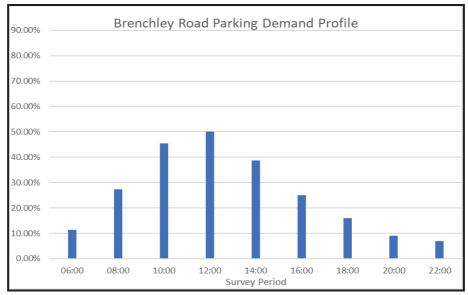


Figure 3.11 – Brenchley Road Parking Survey Results

The peak parking demand was recorded between the survey period of 12:00 - 14:00. A maximum number of 16 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 36.36%. It can be seen from the above, that the parking demand follows an approximate bell-curve with a return to 'normal' levels at 20:00.

As seen in Figure 3.12, the typical parking profile for the parking demand in this road is typically in the range of 2 hours.

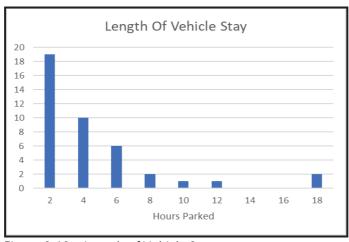


Figure 3.12 – Length of Vehicle Stay



Capel Road

The section of Capel Road included within the survey was recorded as having a maximum parking capacity of 33 spaces. This is a combination of available parking space on both the north and south sides of the road.

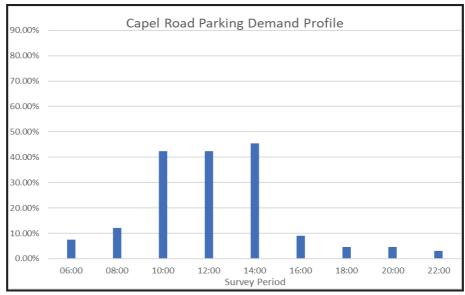


Figure 3.13 – Capel Road Parking Survey Results

The peak parking demand was recorded between the survey period of 14:00 - 16:00. A maximum number of 15 vehicles were recorded in this survey period, resulting in a maximum recorded parking stress of 22.73%. It can be seen that the parking demand increased rapidly between 06:00 and 10:00 with an increase between 10:00 and 16:00 where parking demand rapidly reduced, returning to 'normal' levels at 18:00.

As seen in Figure 3.14, the typical parking profile for the parking demand in this road is typically in the range of 6 hours.

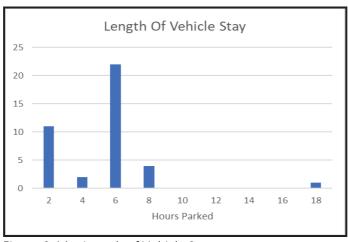


Figure 3.14 – Length of Vehicle Stay



4 Summary

The combined parking demand data has been collated in Figure and appears to indicate a general trend towards increased parking demand between 06:00 and 18:00 during the surveyed times.

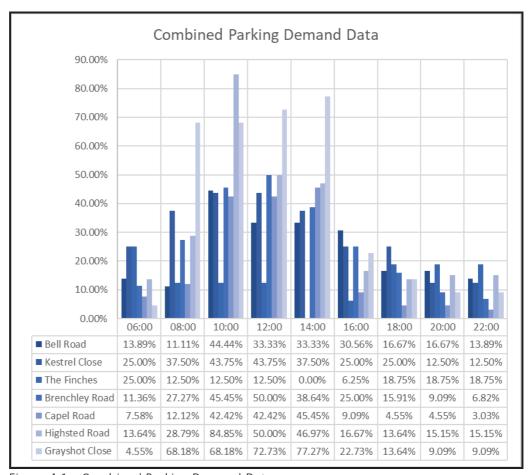


Figure 4.1 – Combined Parking Demand Data

During the assessment it was noted that The Finches does not follow the general trend within the data set with a comparable drop in parking demand during the middle of the day. This may be due to reduced carriageway widths and open front gardens which may limit public parking. Figure 4.2 indicates the average parking demand for the surveyed roads both including and excluding The Finches from the data set. Trendlines have been applied to aid visual clarity of the periods of increased parking demand.



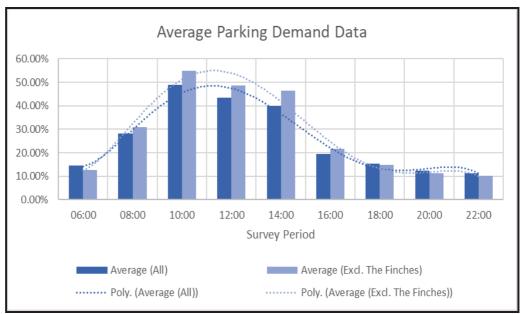


Figure 4.2 – Average Parking Demand Comparison

The comparison indicates that evening and overnight parking (typically 18:00 to 08:00) is consistent between 10-15%. Between the hours of 08:00 and 16:00 parking demand increases with an average peak between 10:00 and 12:00.

There are a number of amenities within the area that are open during these times. Table 4.1 provides indicative times that these locations are officially open/closed as well as indicative open/closed times (denoted by a *) in the case of schools, etc.

Location	Open	Close
Fulston Manor School	08:00*	16:00*
Highsted Grammar School	08:00*	16:00*
Sittingbourne Cemetery	00:00*	00:00*
Frank Lloyd Unit	10:00	20:00
Memorial Medical Centre (GP)	08:30	18:30
Memorial Pharmacy	09:00	18:00
Memorial Hospital	09:00	21:00

Table 4.1 – Local Amenity Open/Close Times

It is reasonable to assume that the rise in parking demand between the hours of 08:00 and 16:00 is directly influenced the local amenities listed in Table 4.1. This is further compounded by evidence that the car park for the Hospital and associated facilities is typically heavily used. It is believed that visitors may be parking on the surrounding roads.

It is also reasonable to assume that staff / students for the Hospital and schools may also contribute to the parking demand of the surveyed roads. It is noted that whilst there are a number of car parks located within the grounds of the two schools and the hospital, these may not have been designed to accommodate students, visitors or other additional parking demands which are associated with these locations.



Figure 4.3 shows the comparison of the length of stay of vehicles parked per surveyed road.

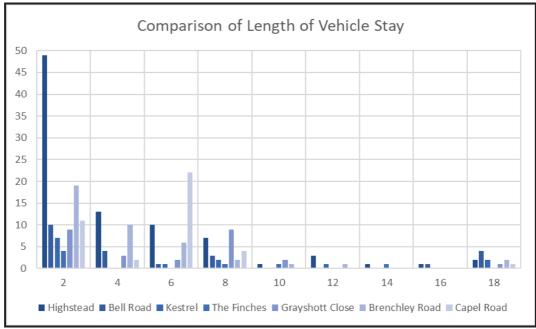


Figure 4.3 – Comparison of Length of Vehicle Stay

Figure 4.4 averages the vehicle length of stay for the surveyed roads to determine the average length of stay and the percentage of this for the area surveyed.

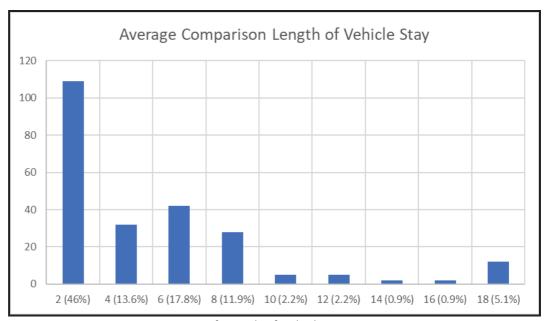


Figure 4.4 – Average Comparison of Length of Vehicle Stay

Therefore Figures 4.3 and 4.4 indicate that the area accommodates a significant number of short term parking with an average 59.6% being within the 2 - 4 hour period. This



would further support the parking demand being influenced by the local amenities during the peak demand times.

It is important to note that whilst reasonable assumptions can be made, accurate statements cannot be made with the data gathered. Further sampling including, but not limited to surveys, interviews and driver movement tracking (ie following them from their parked vehicle to their destination), may be required.

In addition, whilst the survey has noted parking demand every 2 hours this will not account for fluctuations within these periods. Statistically the parking demand will follow general trends however there may be additional peaks or troughs in demand not seen within this assessment. This is also applicable to overnight parking demand between the hours of 22:00 and 06:00.



Appendix 1

Original Survey Data

22:00	SOUTH						УWН							PKM	FKE		OMR	HGK	
	NORTH																		Ц
20:00	SOUTH						УWН							PKM	FKE		OMR	HGK	
7(NORTH								XHG										
18:00	SOUTH						УWН	JPO						PKM	FKE		OMR	HGK	
18	NORTH																		
16:00	SOUTH						УWН	JPO	FBK			209	XXD	PKM	FKE	BNE	OMR	HGK	PFK
16	NORTH																		
14:00	SOUTH					VTT	ΥWΗ	JPO	FBK		EFZ	dZſ	XXD	PKM	FKE	BNE	OMR	HGK	
14	NORTH																		
12:00	SOUTH		TPX			VTT	У МН	JPO	FBK		WJO	JZP	XXD	PKM	FKE		OMR	HGK	
12:	NORTH																		
10:00	SOUTH	PFO	TPX	SHG	UFT		YWH		FBK	YFX	WJO	JZP	XXD	PKM	FKE		OMR	HGK	ZSY
10:	NORTH										ABN								
00	SOUTH						НМА								FKE		OMR	HGK	
08:00	NORTH																		
00	SOUTH						ΥМН							PKM	FKE		OMR	HGK	
00:90	NORTH																		

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12:00	WEST											DXO	HZN	Call
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08:00	WEST											DXO	HZN	Call
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22:00	SOUTH										
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18:	NORTH			LPP		WDS		BGU			
16:00	SOUTH										
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14:00	SOUTH										
14:	NORTH										
12:00	SOUTH										SPW
12:	NORTH			LPP							
10:00	SOUTH									DMY	ADV
10:	NORTH										
00	SOUTH										
08:00	NORTH			LPP				BGU			
00	SOUTH										
00:90	ORTH			LPP		WDS		BGU			

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20:00	WEST										OXS					SVP			NZY	ROK	
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18:00	WEST								ONL							SVP	CVB		NZY	ROK	NN
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00	EAST		ZXF	ADU																	
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10:00	WEST	OAL	ORZ	NSN	VJO	NTK	FOH	J3	UFX	WTG	AMK	WNA	WHA	WPD	JZA	SVP	CVB			ROK	NN
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00	EAST																								ONX							
16:00	WEST								RMY					XSO											EBJ			MGL	XJK			
00	EAST																			MKJ	NCW				ONX							
14:00	WEST	GHV	ZDA	UKK	NXN	EKE	NDL	UUR	RMY	KMO	MJN	XDO	NWN	XSO	WRK	VBG	YKN	ENM	UED	JYR			RKK	WJZ	EBJ			MGL	XJK	ZFV	ALE	TAY
00	EAST																								ONX							
12:00	WEST		ZDA	UKK	nxn	EKE	NDL	UUR	RMY	KMO	MJN	OOX	NWU	XSO	WRK	VBG	YKN	ENM	UED	JYR			RKK	WJZ	EBJ			MGL	XJK	ZFV	ALE	TAY
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10:00	WEST	GHV	ZDA	UKK	NXN	EKE	NDL	UUR	RMY	KMO	MJN	XDO	NWU	XSO	WRK	VBG	YKN	ENM	UED	JYR			RKK	WJZ	EBJ			MGL	XJK	ZFV	ALE	TAY
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20:00	SOUTH			Γ			Γ		Г			KOP	XGS	WZP	Г		RYD	HCD	EOA		Г								Г		TWN	Г		
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18:00	NORTH																									PHG						NNZ		
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16:00	NORTH																									DHI						NNZ		
00	SOUTH			FBD		X9Z			λλZ	VBL		WTY	MNL	WZP	VGE		RYD	HCD	WD	OXP	XSZ	XLY	ZBL	NZG	BXB	MLK	KFA							
14:00	NORTH																		CYE	FNG		DFN	NKD	UPA	EXD	PHI		PXJ	NFZ			NNZ	DOO	BEO
00	SOUTH					X9Z	UBJ		UTP	VBL			MNL	WZP	NGE	HHO	RYD	EOA	WD	HCD		XLY	ZBL	NZG	BXB	MLK	KFA							
12:00	NORTH							VXB				γTW	MKR				MZP		XEM	VLR		DFN	NKD	UPA	EXD	THG		YLM	NFZ				ZNN	BEO
00	SOUTH	НОА	ZZP	OBE	ENN	X9Z	RXH	66f	YTG	VBL	GEJ	NYS	YTC	MNL	WZP	VGE	RYD	EAO	VVB	JKX	XSZ	XLY	ZBL	9ZN	BXB	MLK	KFA)ZG		LKP	YSB	DWZ	ZRV	WTX
10:00	NORTH					WVE	NN	TOD	KNN	MHM	NJK		MKR	WD	WR	XWS	MZP	PPU	XEM	VLR		DFN	NKD	UPA	EXD	PHG		YLM	NFZ			ΛΩΛ	NNZ	BEO
00	SOUTH																				WZP	NGE	RYD	EAD	HCB	VVD	JKX		ΧΓΥ	ZBL	9Z/	BXB		KFA
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16	WEST							VAA			PYG		LNK	RWL		HNA				
00	EAST																			
14:00	WEST			LEJ	MZD	M/MX	UXP	VAA	XDG	NMU	PYG	VVO	LNK	RWL	ΓCI	WUX	UBR	THX	HLD	DET
12:00	EAST																			
12:	WEST			LEJ		WWX	TGY	VAA	SDCX	CYE	PYG	VVO	LNK	RWL	ΓCI	WUX	BKZ	THX	HLD	DET
10:00	EAST					Г	Γ	Г		Γ										
10:	WEST			LEJ		XWW	Γ	VAA	XDG	CYE	PYG	VVO	NMU	RWL	ΓCI	WUX	BKZ	THX	HLD	DET
00	EAST																			
00:80	WEST			LEJ		wwx	VXB	VAA	XDG		PYG	VVO	NMU	RWL	ΓCI	WUX	GND	XHI	HLD	DET
00	EAST																			
00:90	/EST							VAA												