



Waterman Boreham
Transport Planning

**SERVICE MANAGEMENT
PLAN**

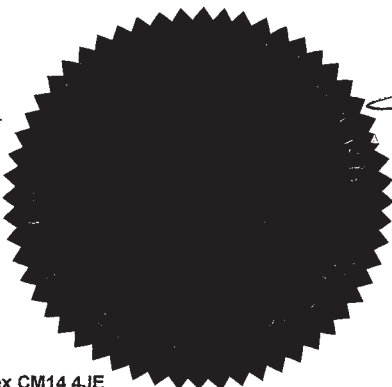
for

**PROPOSED MIXED USE
DEVELOPMENT,
60-72 SHORTS
GARDENS and 14-16
BETTERTON STREET,
COVENT GARDEN**

on behalf of

SPAN GROUP


MAL/anb/D/206494
26th March 2009



FS23721

INVESTOR IN PEOPLE

Title: Service Management Plan
Project: Proposed Mixed Use Development for 60-72 Shorts Gardens
and 14-16 Betterton Street, Covent Garden
Client: Span Group
Issue: Final
Project No. D/206494

Prepared by:  Date ..26/3/2009..

Checked by:  Date ..26/3/2009..

Authorised for issue by  Date..26/3/2009..

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2. Proposed Site Plan
3. Swept Path Analysis
4. TRAVL Data Calculations for Delivery Movements

1. INTRODUCTION

- 1.1 This Service Management Plan has been prepared in support of the planning application for a mixed use development at 60-72 Shorts Gardens and 14-16 Betterton Street, Covent Garden, London. A site location plan is included in *Appendix 1* to this report.
- 1.2 The plan is a revised version of the Service Management Plan (SMP) included in the Transport Statement (TS) that was submitted in support of the above application. This plan has been compiled and agreed with London Borough of Camden.
- 1.3 Within this report details are provided of the predicted number of service vehicles that will access the site, the type of vehicles and from which road they will serve the site from. Details of time restrictions will be covered and within the appendices, details of swept path analysis and proposed layout.
- 1.4 The agreed contents within the Service Management Plan must be compiled with unless otherwise agreed with the Council. The building occupiers shall work with the Council to review this Service Management Plan from time to time when necessary. Any future revised plan must be approved by the Council and compiled with thereafter.

2. DELIVERY ACCESS AND GENERATION

Proposed Site Details

- 2.1 The proposal is to convert existing buildings 60-72 Shorts Gardens and 14-16 Betterton Street from offices to a mixed use development comprising 2,281m² (GEA) office, three ground floor units comprising of A1 (shops), A2 (financial & professional services) and D1 (Non-residential institution) covering a total of 334m² and a basement area covering 1,163sq.m (GIA) the use for this area is not yet known, but could be either B1, D1 or D2 use. For the purposes of this report, the D1 use has been assumed as it requires the most deliveries. Details of the proposed layout is included in *Appendix 2* to this report.
- 2.2 The proposed development will be constructed within the existing building structure with two additional floors on Betterton Street and one additional floor on Shorts Gardens. The ground floor will be used for the three small A1, A2 & D1 units which will include a shop, bank or estate agent and dentist or doctor. The basement will comprise, for this report, of D1 use. Floors 1 to 6 will be occupied by office use.
- 2.3 The office use will be split into two with four storeys of office (1,499 sqm GEA) use having access from Shorts Gardens and six storeys of office (782 sqm GEA) use having access from Betterton Street. The three A1, A2 & D1 units (334 sq.m GEA) will be accessed from Shorts Gardens as well as the basement use (1,163 sqm GIA).

Shorts Gardens

- 2.4 Deliveries to the uses accessed off Shorts Gardens will be able to use the lay-bys proposed along the site frontage. The proposed arrangement includes the provision of a half lay-by along the front of the site which remains at footway level but slightly re-graded so that it has a gradual slope towards the carriageway reducing the height of the kerb. This ensures that vehicles can easily park but also allows the width of the existing footway to be maintained when vehicles are not parked in this area.
- 2.5 The width of the footway when vehicles are parked reduces to 1.8m. This is considered an acceptable width given the predicted pedestrian footfall in this area. The width of the road past the loading bay is 3.25m ensuring that vehicles servicing the development will not affect the through movement along Shorts Gardens. A plan showing this arrangement is included in *Appendix 2* to this report with swept path analysis carried out using the Auto TRACK computer software included in *Appendix 3*.

- 2.6 The number of deliveries predicted to be made to the site is based on the TRAVL database, the results of which are shown in the table below, broken down for each element of the development. Details of the TRAVL information can be found in the Transport Statement submitted as part of this development application.

Table 2.1 – Predicted Service Vehicle Trip Generation for Vehicles on Shorts Gardens

Time Period	Number of Movements to the site		
	Proposed Office Use	Proposed Basement Use	Proposed Retail/ D1 Use
07.00 - 08.00	2	0	2
08.00 - 09.00	1	0	4
09.00 - 10.00	0	2	0
10.00 - 11.00	1	0	0
11.00 - 12.00	0	1	0
12.00 - 13.00	1	0	0
13.00 - 14.00	0	0	0
14.00 - 15.00	0	0	0
15.00 - 16.00	0	0	0
16.00 - 17.00	0	1	0
17.00 - 18.00	0	0	0
18.00 - 19.00	0	0	0
Total	5	4	6

- 2.7 The deliveries shown in the table indicate the total number of daily movements to the site. In assessing the delivery times in more detail, it is shown that throughout the day the maximum number of vehicles that are likely to use the service bay on Shorts Gardens at any one time will be 2. The majority of these deliveries will be made by car/van type vehicles and only on occasion will a larger 7.5ton type vehicle be used. The length of the proposed lay-by is 10.5m in length and as such will be able to accommodate two vehicles at any one time. Details of the delivery movements are provided in *Appendix 4* to this report.

Betterton Street

- 2.8 Delivery is for the smaller Office use will be via Betterton Street, requiring vehicles to stop on road to load / unload. However, the width of the road along Betterton Street is such that a vehicle parking on road would block the through movement, therefore any delivery vehicles will either use the existing parking bays along Betterton Street or park on Drury Street and use a trolley where required to deliver the goods. This arrangement will be advised to all delivery companies that need to access this side of the development.
- 2.9 As with the deliveries for Shorts Gardens, the number of deliveries predicted to be made by to the Betterton street side of the site is based on the TRAVL database, the results of which are shown in the table below.

Table 2.2 – Predicted Service Vehicle Trip Generation for Vehicles on Betterton Street

Time Period	Number of Movements to the site	
	Proposed Office Use	
07.00 - 08.00	1	
08.00 - 09.00	0	
09.00 - 10.00	1	
10.00 - 11.00	0	
11.00 - 12.00	0	
12.00 - 13.00	1	
13.00 - 14.00	0	
14.00 - 15.00	0	
15.00 - 16.00	0	
16.00 - 17.00	0	
17.00 - 18.00	0	
18.00 - 19.00	0	
Total	3	

- 2.10 The deliveries shown indicate that throughout the day the maximum number of vehicles that will deliver to the Office use on Betterton Street will be 1 at any time. The majority of these deliveries will be made by car/van type vehicles and only on occasion will a larger 7.5ton type vehicle be used. Details of the delivery movements based on the TRAVL Data is included in *Appendix 4*.

Delivery Times

- 2.11 There are delivery times stipulated on Betterton Street with deliveries being permitted between Monday and Saturday between 08:30am and 6.30pm, although on other roads local to the site there are currently no restrictions for deliveries. The TRAVL data suggests that some 30% of deliveries are made prior to 8:30 these are primarily associated with the A1 use proposed on Shorts Gardens which will require earlier deliveries such as fresh produce/ newspapers etc. As such if a restriction on hours is required for the lay-by proposed on Shorts Gardens then it is suggested that the times for deliveries be restricted between Mondays and Saturdays between the hours of 07:00 am – 6:30pm.

3. SERVICING

Refuse Collection

- 3.1 The refuse collection made to the existing site is currently undertaken on a daily basis by a private company called Biffa, it is considered that this arrangement will remain the same for the proposed use.

Bio-Fuel Collection

- 3.2 As part of the proposal, the development will have 10% renewable energy, this will be in the form of Bio Fuel which will be stored in a tank and serviced via Betterton Street.
- 3.3 This vehicle will be similar in size to a 7.5ton Box Van and will need to serve the development once every 1.5 weeks during the winter months and once every 3.5 weeks during the spring/summer months. The operation of this vehicle involves a 40mm pipe being connected from the vehicle to a fill point which will be situated on the front elevation of the building. This filling process takes approximately 30mins per visit.
- 3.4 The arrangement in *Appendix 2* shows an area of footway outside the building frontage which will be slightly re-graded to allow this vehicle to park without obstructing the main through movement. This area will be constructed so that it will be able to accommodate vehicles of this type. The Bio-Fuel tanker will need to be approximately 1m from the building face so that the hose pipe can be accommodated, this also ensures that the emergency access situated on this side of the building is not blocked.
- 3.5 The footpath will be temporarily closed during the filling process (approximately 30mins), pedestrians will therefore be directed to use the footpath on the southern side of Betterton Street whilst this procedure is being carried out. The temporary signage that will be provided will be in accordance with Department for Transport's Traffic Signs Manual, Chapter 8: Roadworks and temporary situations.
- 3.6 In order to demonstrate that this type of vehicle can comfortably manoeuvre into this area and also not obstruct similar type vehicles and emergency vehicles, the AutoTRACK computer programme has been used. Details of which are provided in *Appendix 3*. These drawings illustrate that this vehicle type can be comfortably accommodated without affecting the through movement of vehicles on Betterton Street.

Service Vehicles Delivery Times

- 3.7 As mentioned above, the refuse collection is likely to be made on a daily basis with collections being made from Betterton Street.
- 3.8 For the Bio-fuel servicing, the times most suitable for filling will be out of office hours as the footpath during the filling process will be closed and access out of the site will be slightly restricted. The noise that is expected to be made during the filling process will be only slightly greater than the noise generated by the vehicle idling with its engine running, although with residential properties situated near by the times can not be too early or too late. On this basis it is suggested that for the Bio-fuel servicing, it is restricted Monday to Friday between the hours of 7pm and 9pm and Saturday between the hours of 8:30am and 6:30 pm. If weekday deliveries are restricted, then the frequency of this service during the winter period is likely to increase to once per week and during the summer period once every 3 weeks.




APPENDICES

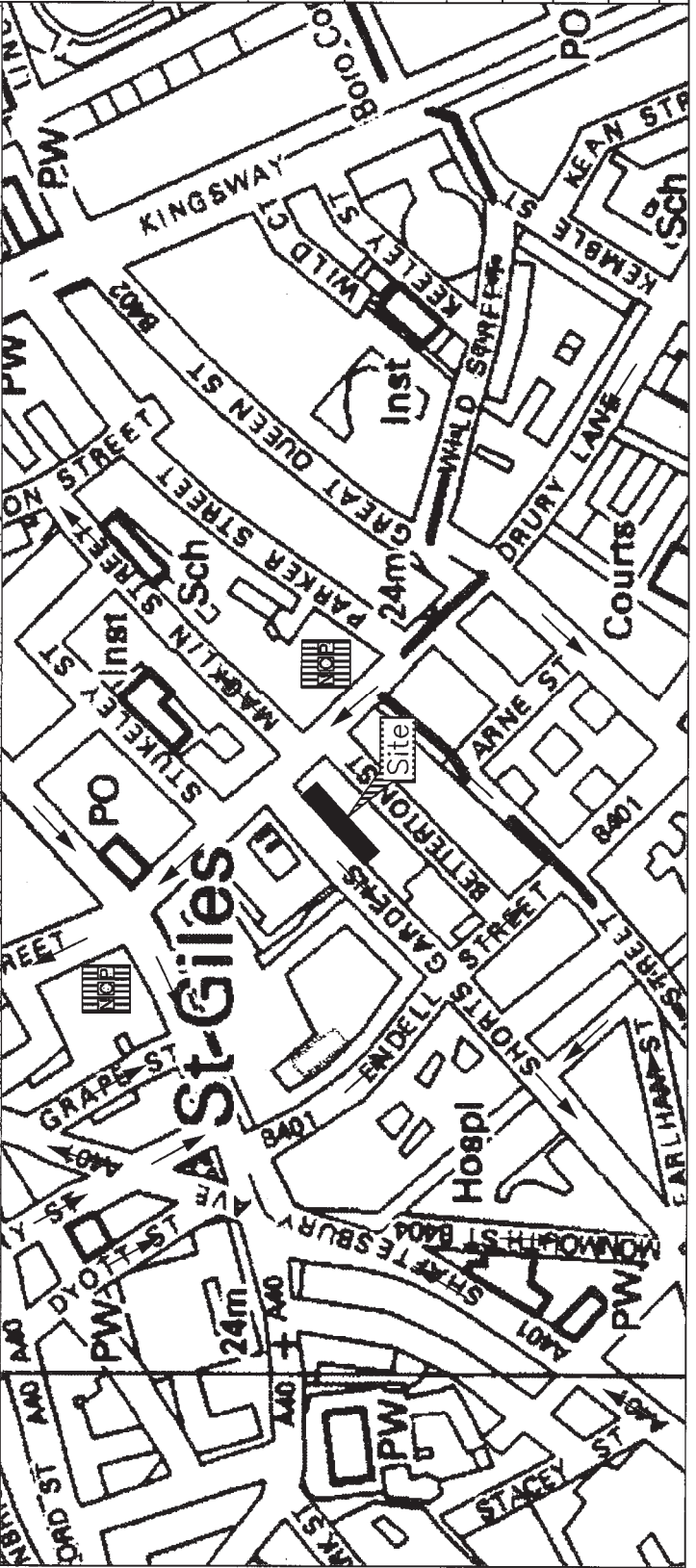
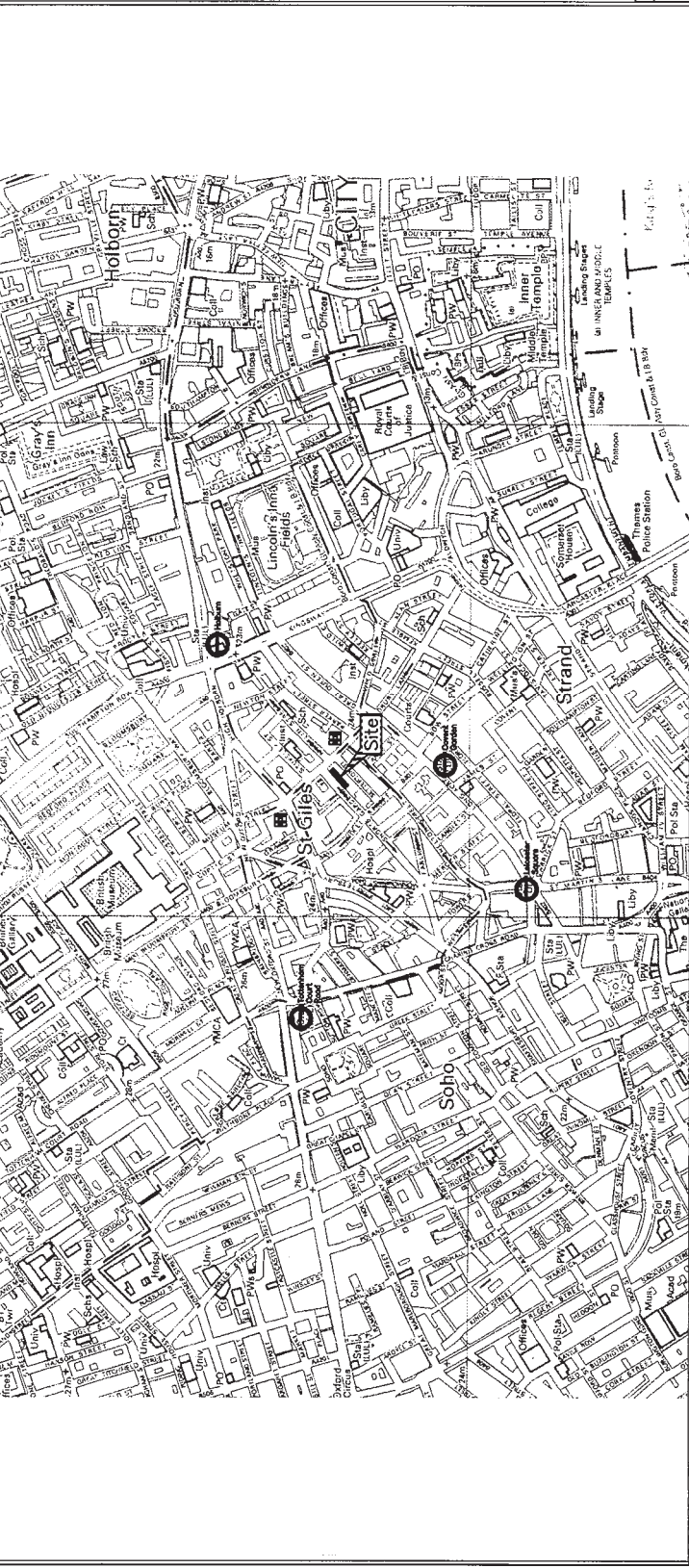
APPENDIX 1

Site Location Plan

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- Key:
-  NCP parking
 -  Underground Station
 -  One way route



REV	DATE	AMENDMENTS	DRAWN	CHK	APP
<p>Waterman Boreham Ltd Regent House Hubert Road Brentwood Essex CM14 4JE Telephone: (01277) 238 100 Facsimile: (01277) 238 150 Email: enquiries@waterman-boreham.com</p>					
<p>Waterman Boreham Transport Planning</p>					
<p>Client: INVESTOR IN PEOPLE</p>					
<p>Project: Span Group</p>					
<p>Project: Shorts Gardens</p>					
<p>Title: Site Location Plan</p>					
Team	Drawn	Checked	Approved		
E	AJ	MAJ	MAJ		
Scale @ A3	NTS	Date	Dec-06		
Project No.	Drawing No.	Rev			
206494	1	-			
<p>Purpose of Issue: <input checked="" type="checkbox"/> Preliminary <input type="checkbox"/> For Tender <input type="checkbox"/> For Construction</p> <p><input type="checkbox"/> For Information <input type="checkbox"/> For Approval <input type="checkbox"/> As Built</p>					
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APPENDIX 2

Proposed Site Plan

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Key



Site



Setts on Footway to Delineate Loading/Parking Bays

Existing residential permit holder bays

DURLEY
No. 52 & 54
Proposed Height: 37.61
Ridge Height: 44.31

Shorts Gardens

No. 52 & 54
Max. Height: 42.50

Dropped kerbs to be removed

No. 56 & 58
Proposed Height: 33.85
Ridge Height: 35.87

No. 28 to 30
Proposed Height: 37.11
Ridge Height: 38.25

No. 24
Proposed Height: 37.43
Ridge Height: 38.40

No. 22
Proposed Height: 37.43
Ridge Height: 38.40

No. 18 & 20
Proposed Height: 35.76
Ridge Height: 36.76

Moat House Hotel
Max. Height: 54.04

Moat House Hotel
Max. Height: 58.80

Moat House Hotel
Max. Height: 40.28

Moat House Hotel
Max. Height: 43.30

BT

One way

Site

LE GROUP PROPERTY
For further information



Example of surface treatment

Extended Cross-Over

Betterton Street

BETTERTON STREET

One way

REV	DATE	AMENDMENTS	DRAWN	CHK	APP
C	18/02/09	Layout amended	SG	MAL	MAL
B	18/11/08	The Addition of Vehicles	KH	MAL	MAL
A	18/11/08	The Addition of Road Width Measurement and Extended Cross-Over Area	KH	MAL	MAL

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IBS
INVESTOR IN PEOPLE

Span Group

Shorts Gardens

Proposed Loading Bay and Parking Arrangement

Item	Drawn	Checked	Approved
D	KH	MAL	MAL
Scale @ A3	1:250	17.11.08	17.11.08
Project No.	206494	Date	17-Nov-08
Drawing No.	11	Rev	C

Purpose of Issue

Preliminary For Tender For Construction

For Information For Approval As Built

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APPENDIX 3

Swept Path Analysis

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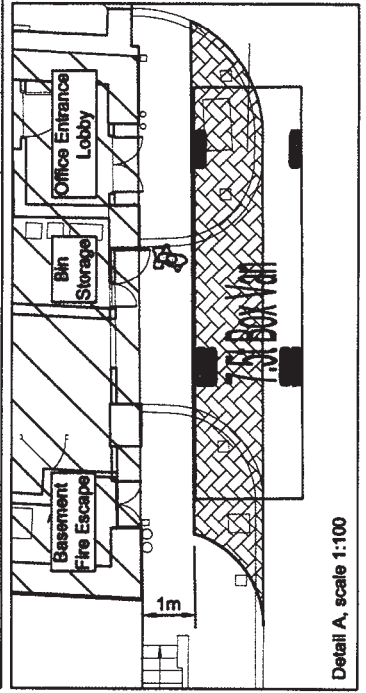
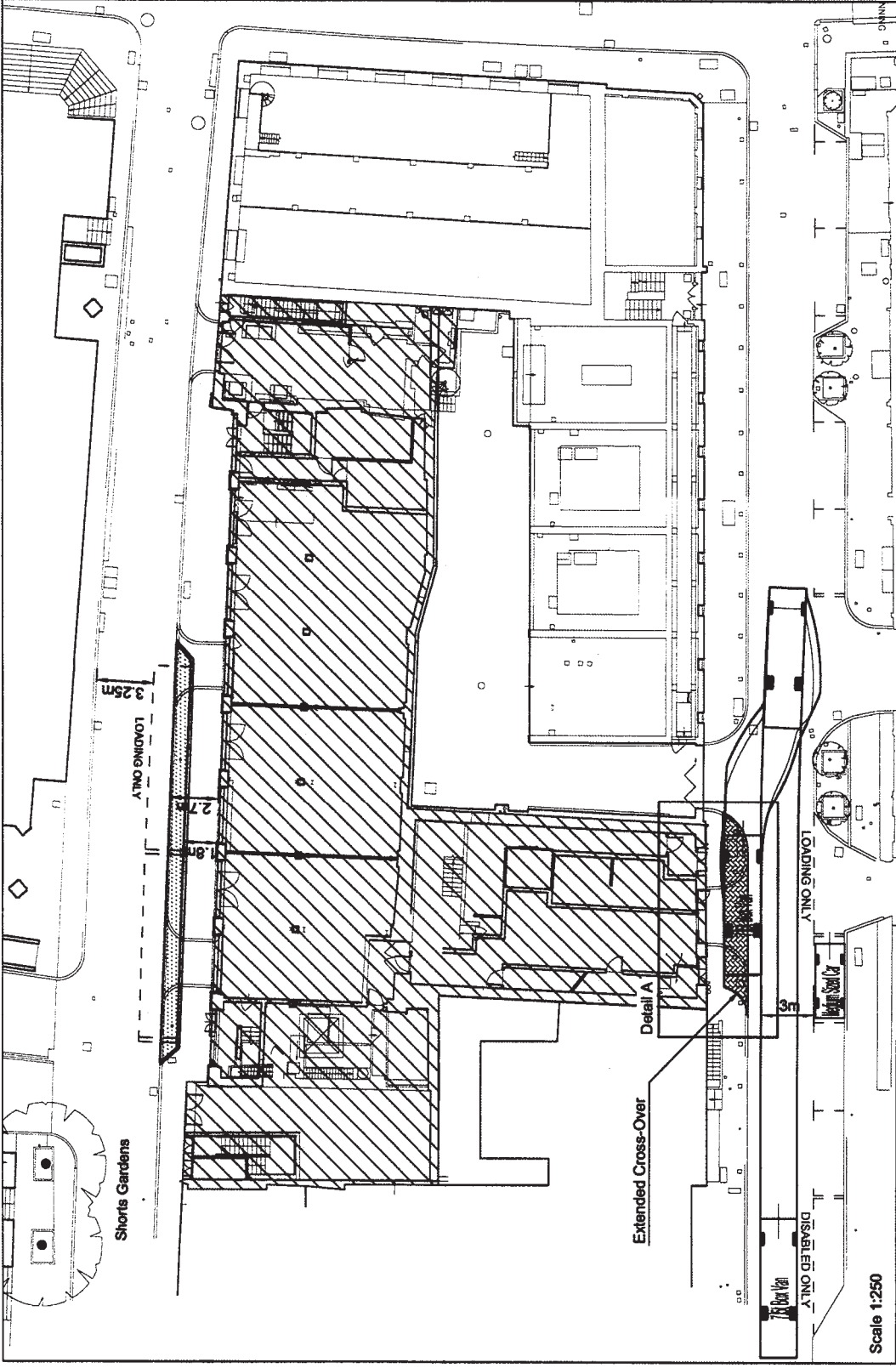
Key:



Site Location



Setts on Footway to Delineate Loading/Parking Bays



Detail A, scale 1:100

REV	DATE	AMENDMENTS	DRAWN	CHK	APP
D	16/03/09	Tad bay removed and site amended	SG	MAL	MAL
C	04/03/09	Size of vehicle changed	SG	MAL	MAL
B	03/03/09	Layout amended	SG	MAL	MAL
A	16/11/08	Updated layout inserted	KH	MAL	MAL

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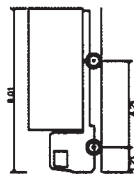
Shorts Garden

Swept Path Analysis for Bio-fuel Tanker
 Betterton Street

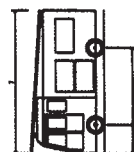
Team	D	Drawn	SH	Checked	MAL	Approved	MAL
Scale @ A3	As shown		Date	19.11.08		19.11.08	
Project No.	206494		Drawing No.	08		Rev	
Purpose of Issue		<input checked="" type="checkbox"/> Preliminary		<input type="checkbox"/> For Tender		<input type="checkbox"/> For Construction	
		<input type="checkbox"/> For Information		<input type="checkbox"/> For Approval		<input type="checkbox"/> As Built	

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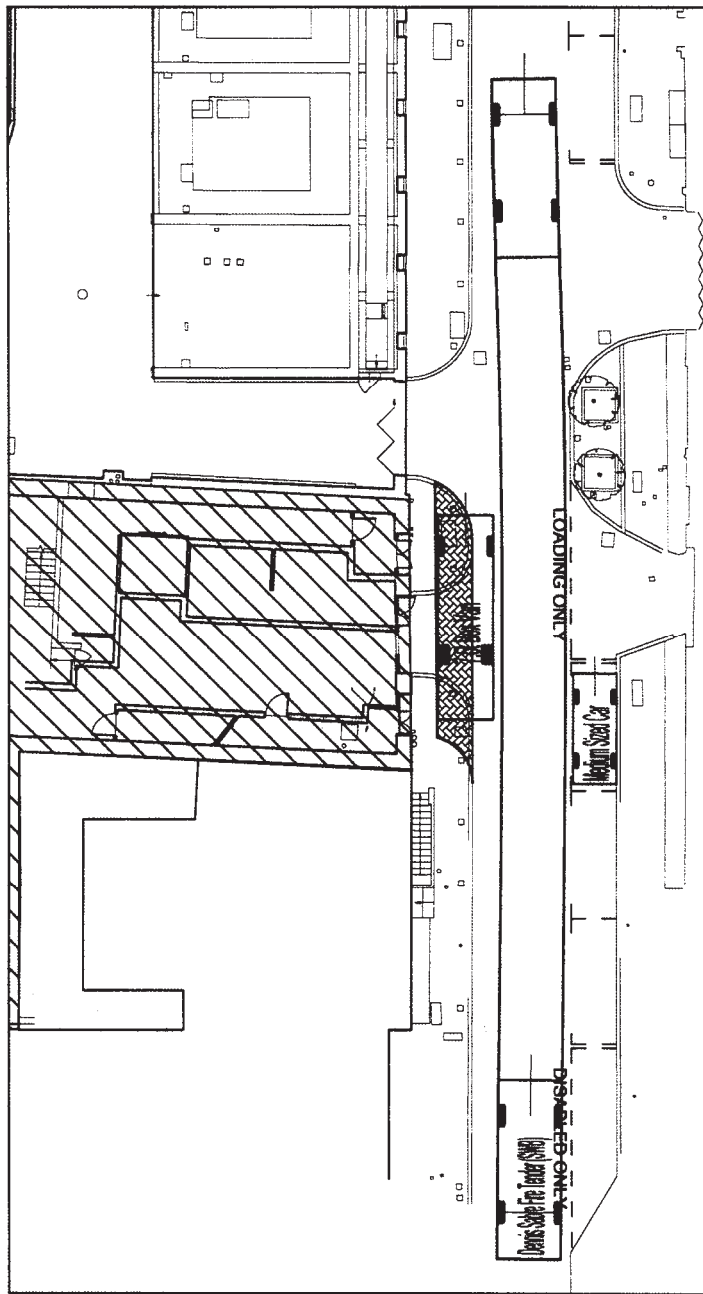
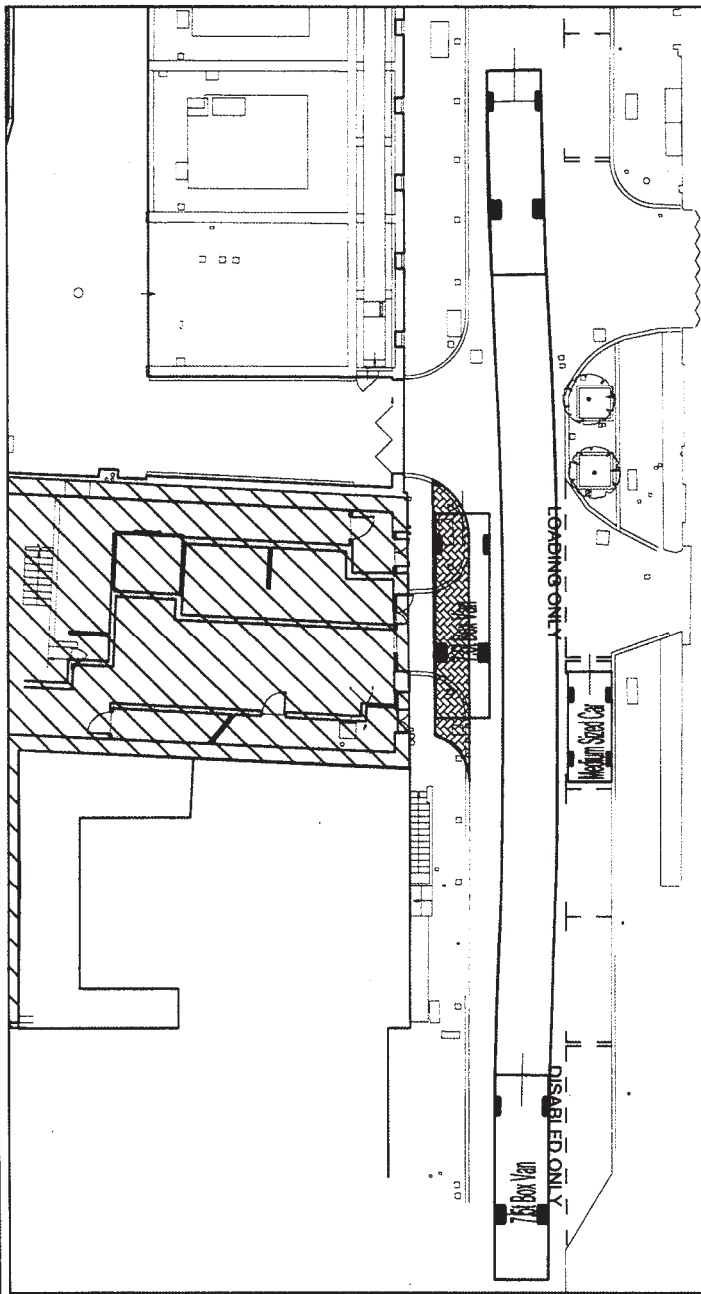
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7.5t Box Van:
 Overall Length 8.010m
 Overall Width 2.100m
 Overall Body Height 3.556m



Dennis Sabre Fire Tender (SWB):
 Overall Length 7.000m
 Overall Width 2.430m
 Overall Body Height 3.512m



REV	DATE	AMENDMENTS	DRAWN	CHK	APP
B	10/03/09	Title Amended	SG	MAL	MAL
A	04/03/09	Signs amended Size of vehicle parked changed	SG	MAL	MAL

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 Transport Planning

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Client: **Span Group**

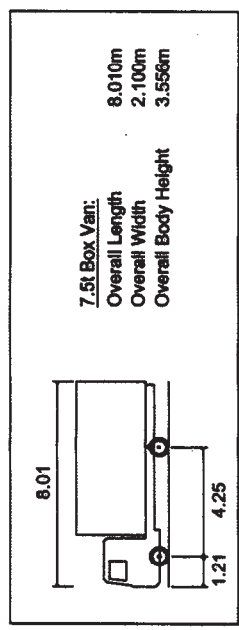
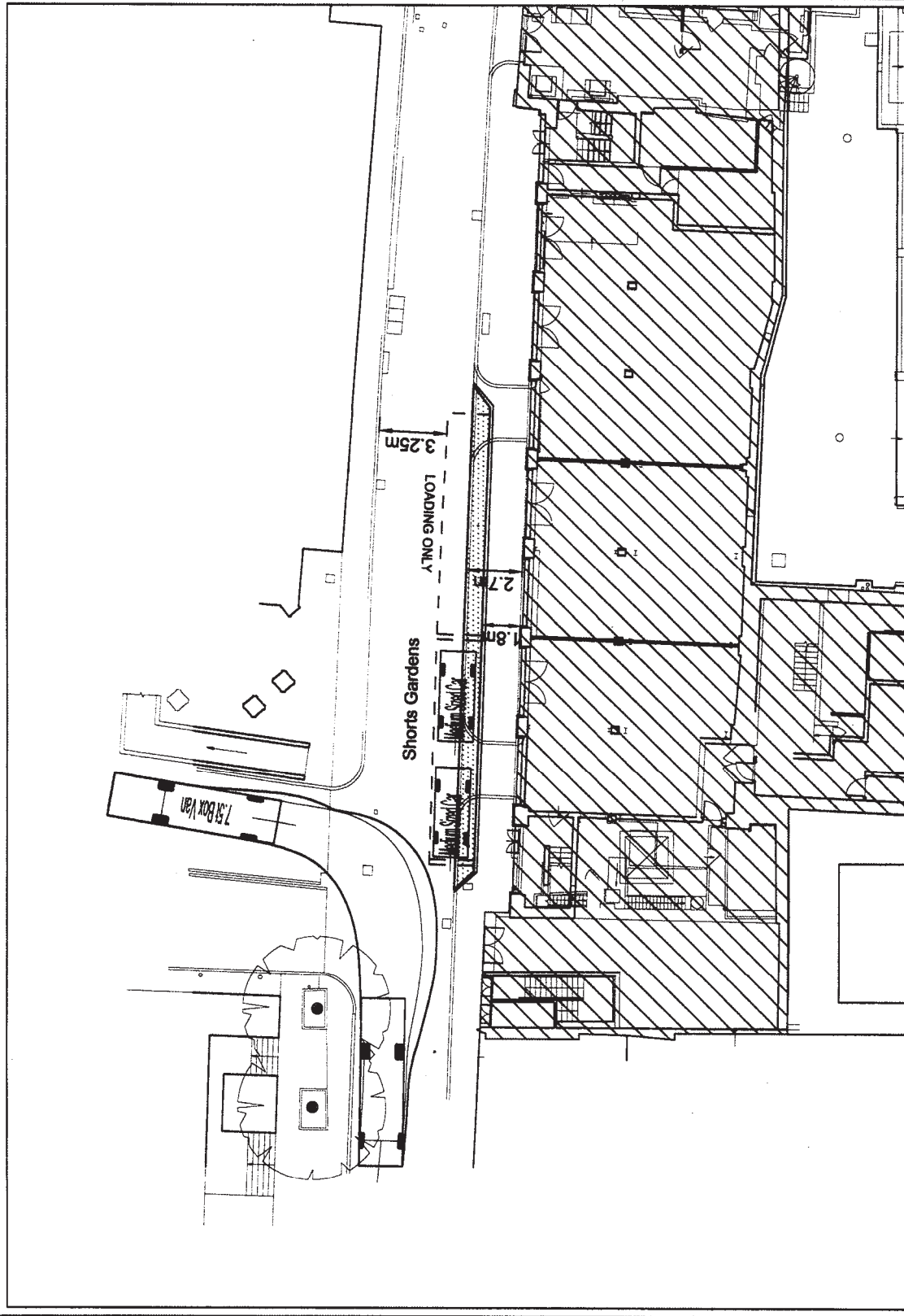
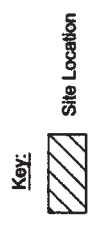
Project: **Shorts Garden**

Title: **Swept Path Analysis
 7.5 Box Van & Fire Tender
 Betterton Street**

Team	D	Drawn	SG	Checked	MAL	Approved	MAL
Scale @ A3	1:200		Date	03/03/09		03/03/09	
Project No.	206494		Drawing No.	13		Rev B	
Purpose of Issue		<input checked="" type="checkbox"/> Preliminary <input type="checkbox"/> For Information <input type="checkbox"/> For Approval <input type="checkbox"/> As Built		<input type="checkbox"/> For Tender <input type="checkbox"/> For Construction		<input type="checkbox"/> For Approval <input type="checkbox"/> As Built	

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REV	DATE	AMENDMENTS	DRAWN	CHK	APP

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Waterman Boreham
 Transport Planning

INVESTOR IN PEOPLE

Span Group

Shorts Garden

Title

Swept Path Analysis
7.5 Box Van Exiting Hotel
via Shorts Gardens

Team	D	Drawn	SG	Checked	MAL	Approved	MAL
Scale @ A3	1:200		Date	March-09			
Project No.	206494		Drawing No.	14			
Purpose of issue		<input checked="" type="checkbox"/> Preliminary	<input type="checkbox"/> For Tender	<input type="checkbox"/> For Construction			
		<input type="checkbox"/> For Information	<input type="checkbox"/> For Approval	<input type="checkbox"/> As Built			

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APPENDIX 4

**TRAVL Data Calculations
for Delivery Movements**

Deliveries **Proposed**

All Uses serviced via Shorts Gardens

	ARRIVAL	DEPARTURES
	No. Trips	No. Trips
07:00 - 07:15	1	1
07:15 - 07:30	1	0
07:30	1	0
07:45	1	0
08:00	0	2
08:15 - 08:30	0	1
08:30	1	0
08:45 - 09:00	2	0
09:00	1	2
09:15	1	3
09:30 - 09:45	0	0
09:45	0	0
09:45	0	0
10:00 - 10:15	1	0
10:15 - 10:30	0	0
10:30	0	0
10:45	0	0
11:00	0	0
11:15 - 11:30	1	0
11:30	0	1
11:45	0	0
12:00 - 12:15	1	0
12:15	0	0
12:30	0	0
12:45	0	0
13:00	0	0
13:15	0	0
13:30	0	0
13:45	0	0
14:00	0	0
14:15 - 14:30	0	0
14:30	0	0
14:45	0	0
15:00	0	0
15:15	0	0
15:30	0	0
15:45	0	0
16:00	1	0
16:15 - 16:30	1	0
16:30	0	0
16:45	0	0
17:00	0	1
17:15	0	0
17:30	0	0
17:45	0	0
18:00	0	0
18:15	0	0
18:30 - 18:45	0	0
18:45	0	0
	14	15

Deliveries **Proposed**

GFA 782

Office 2 - Betterton Street

OFFICE

Time Period Start time	ARRIVAL		DEPARTURES	
	TR	No. Trips	TR	No. Trips
07:00 - 07:15	0.078	1.00	0.078	1
07:15 - 07:30	0.026	0.00	0.026	0
07:30				
07:45				
08:00				
08:15 - 08:30	0.026	0.00	0.026	0
08:30				
08:45 - 09:00	0.026	0.00	0.026	0
09:00				
09:15				
09:30 - 09:45				
09:45				
10:00 - 10:15	0.026	1.00	0.026	0
10:15 - 10:30	0.026	0.00	0.026	0
10:30				
10:45				
11:00				
11:15 - 11:30	0.026	0.00	0.026	0
11:30				
11:45				
12:00 - 12:15	0.026	1.00	0.026	0
12:15				
12:30				
12:45				
13:00				
13:15				
13:30				
13:45				
14:00				
14:15 - 14:30	0.026	0.00	0.026	0
14:30				
14:45				
15:00				
15:15				
15:30				
15:45				
16:00				
16:15 - 16:30	0.026	0.00	0.026	0
16:30				
16:45				
17:00				
17:15				
17:30				
17:45				
18:00				
18:15				
18:30 - 18:45	0.026	0.00	0.026	0
18:45				
		3	3	