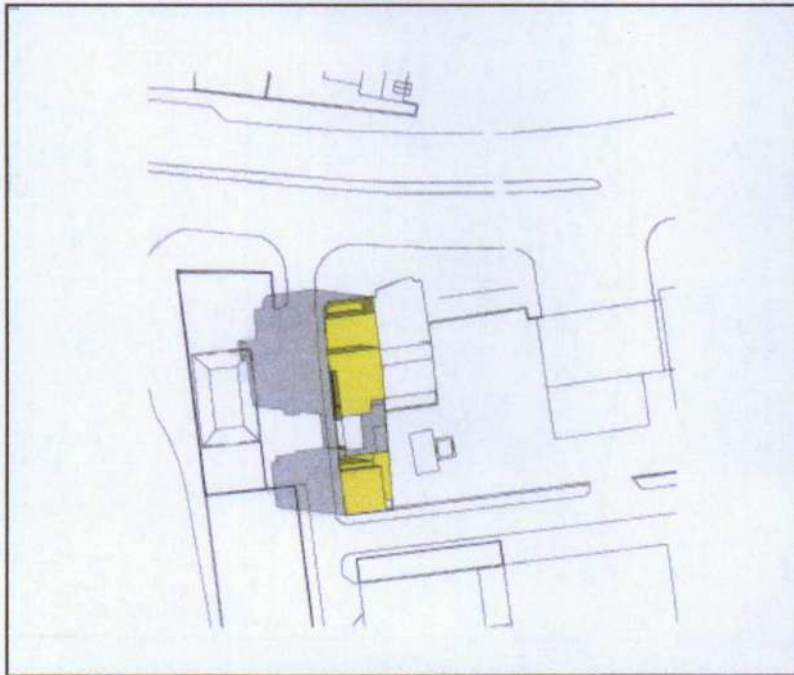
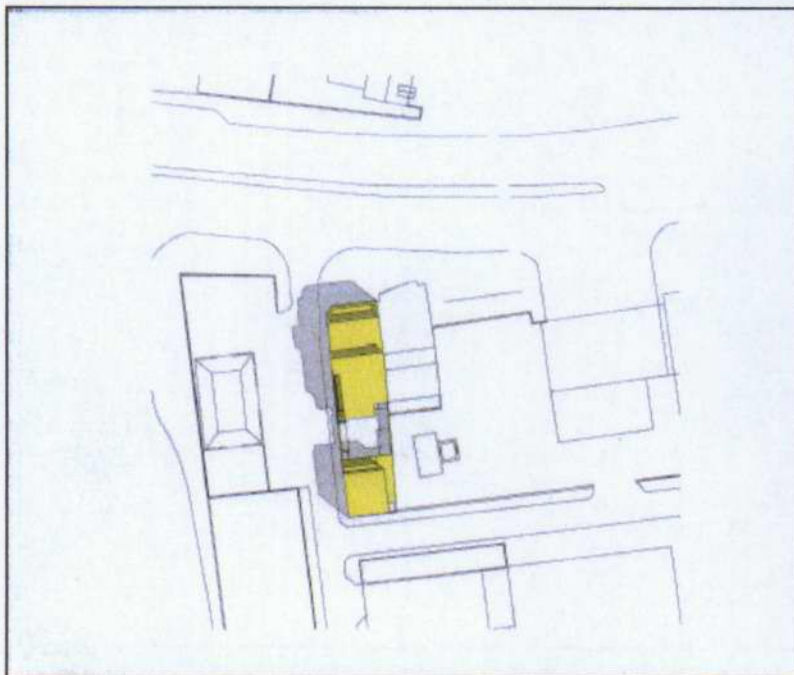


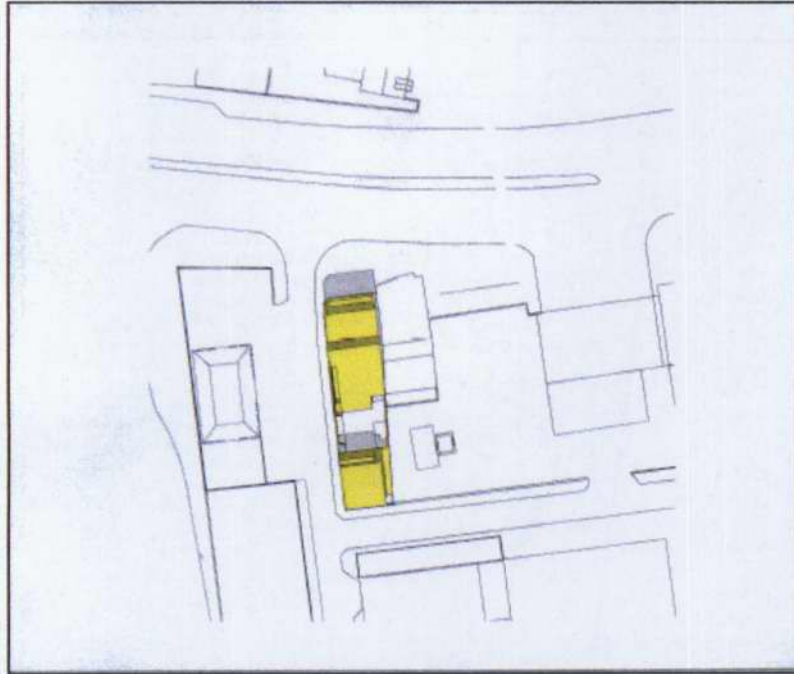
**Shadow Path Analysis**



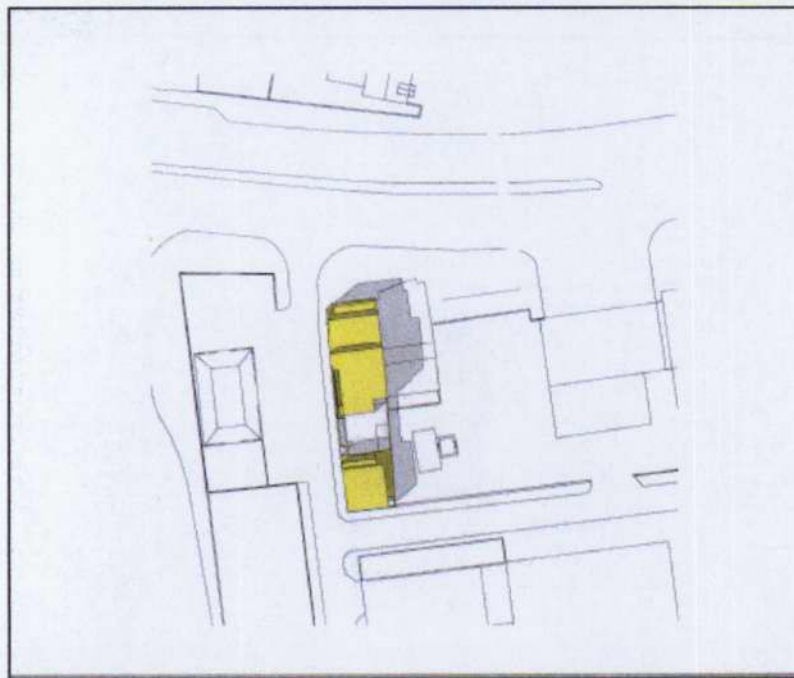
21<sup>st</sup> June 08:00



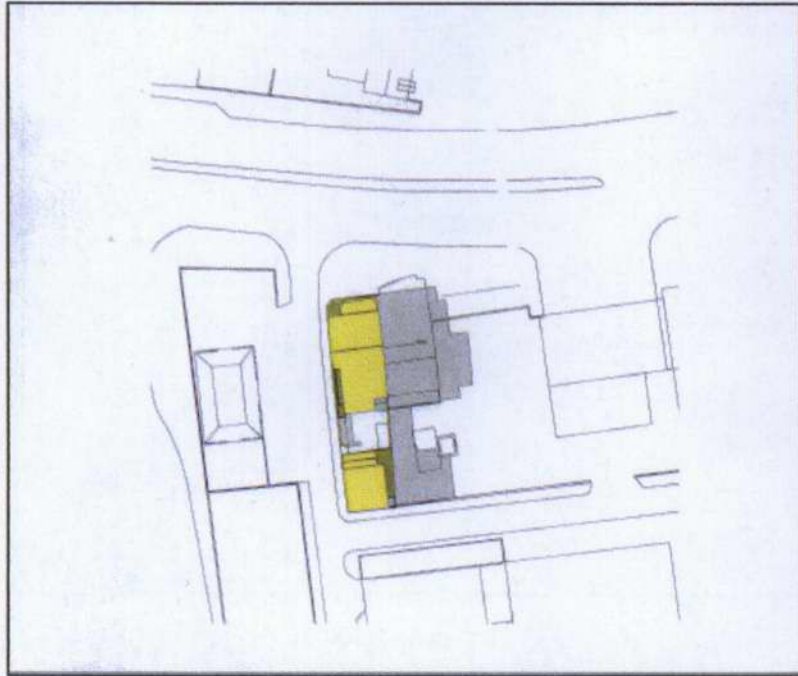
21<sup>st</sup> June 10:00



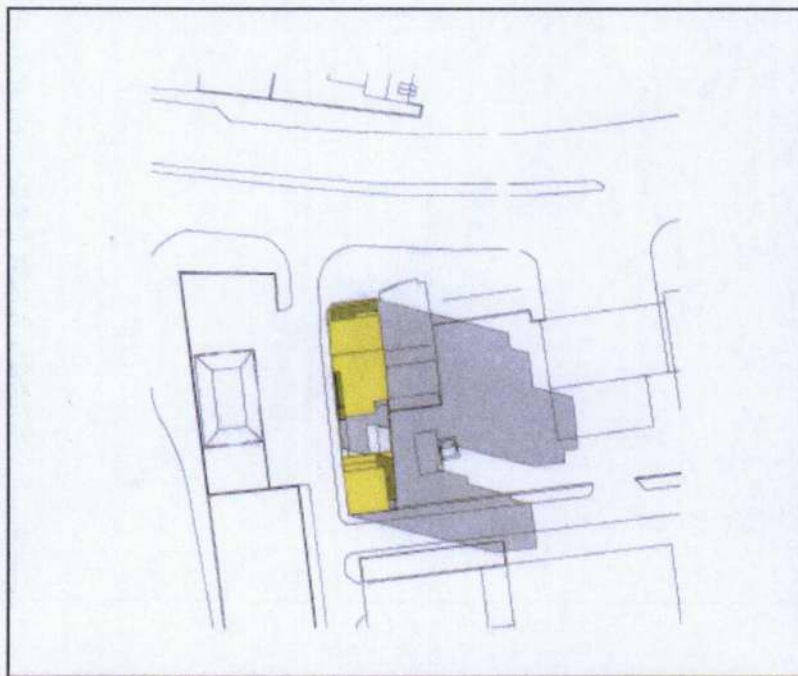
21<sup>st</sup> June 12:00



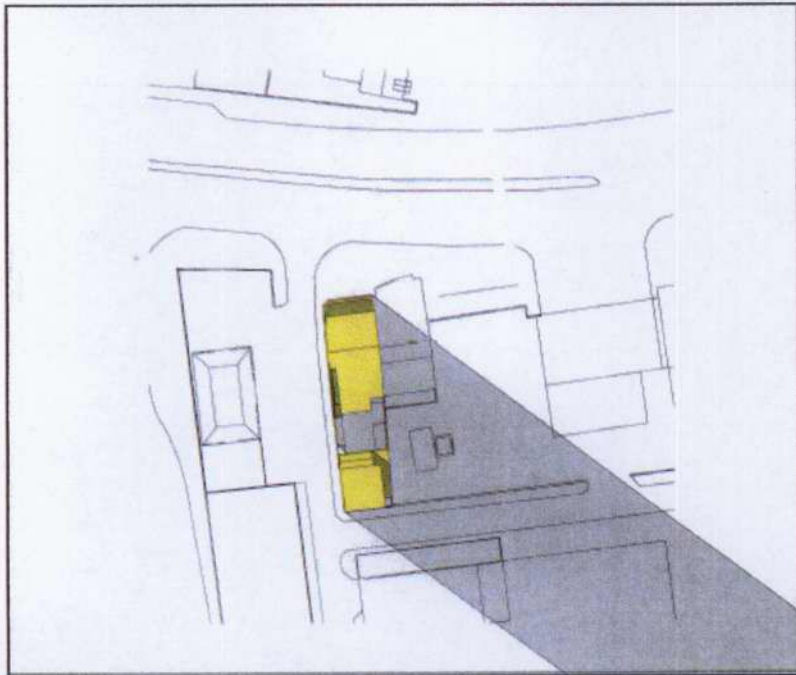
21<sup>st</sup> June 14:00



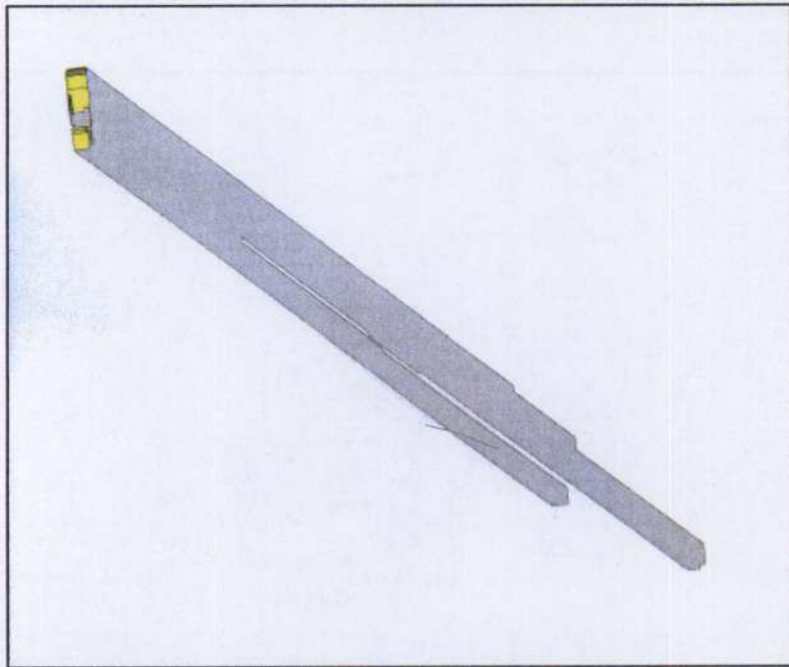
21<sup>st</sup> June 16:00



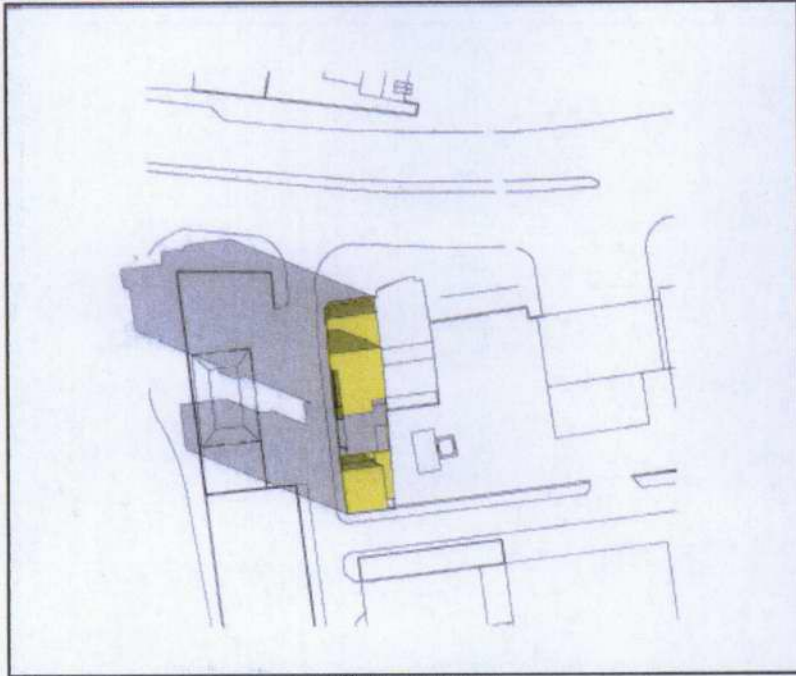
21<sup>st</sup> June 18:00



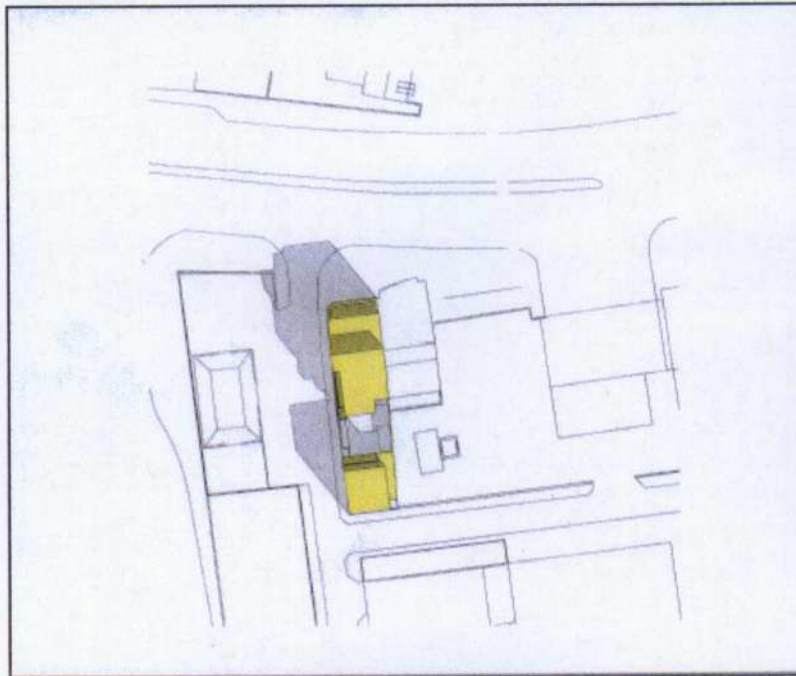
21<sup>st</sup> June 20:00



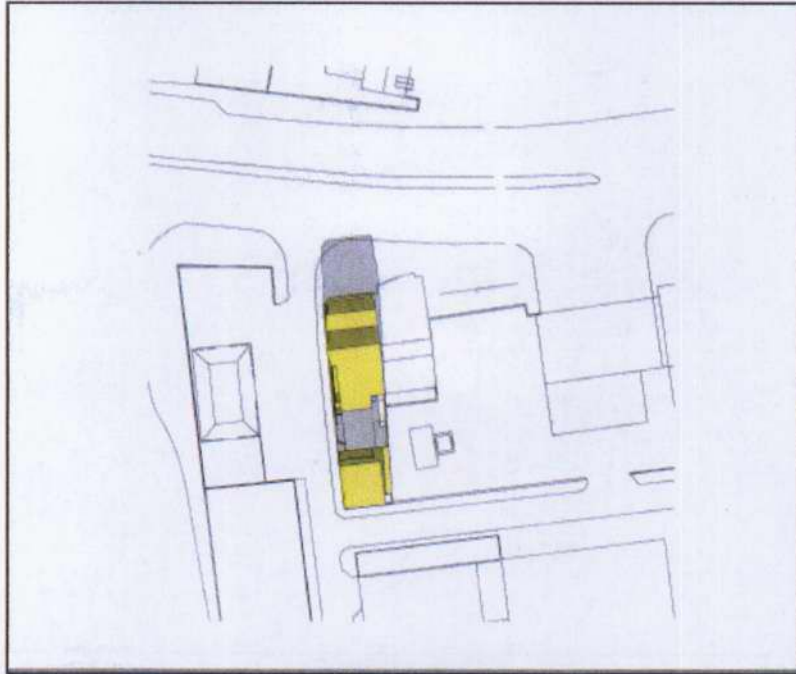
21<sup>st</sup> June 20:00 Full Extent of Shadow



21<sup>st</sup> March 08:00



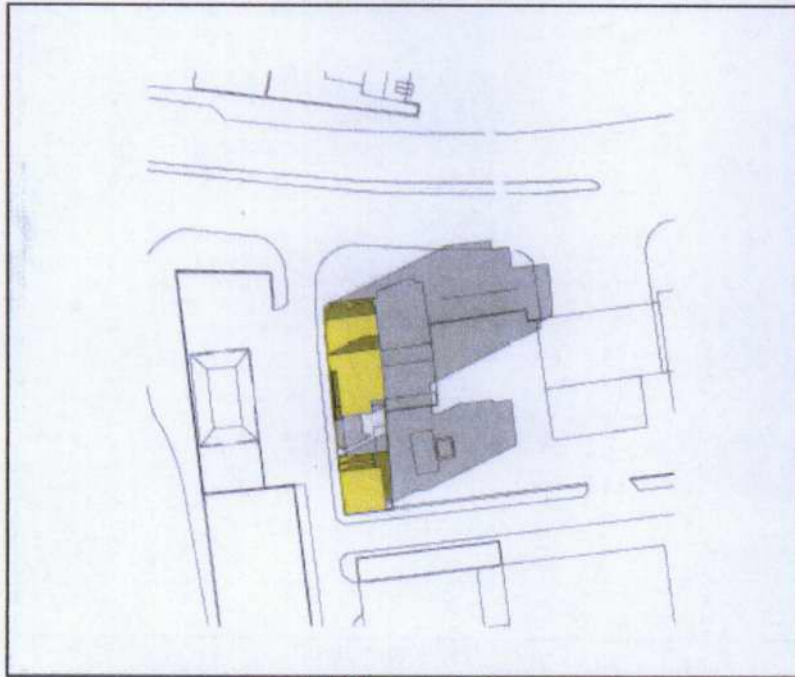
21<sup>st</sup> March 10:00



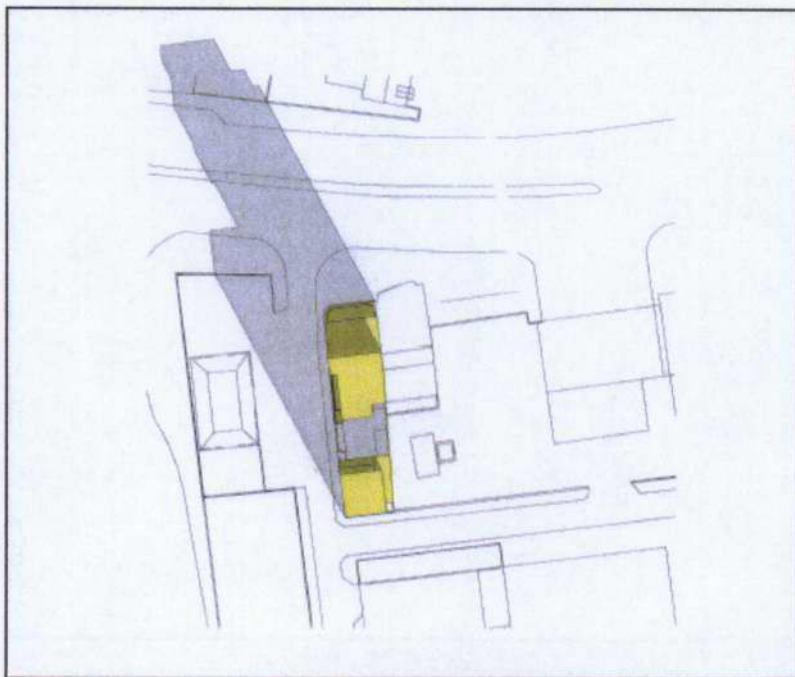
21<sup>st</sup> March 12:00



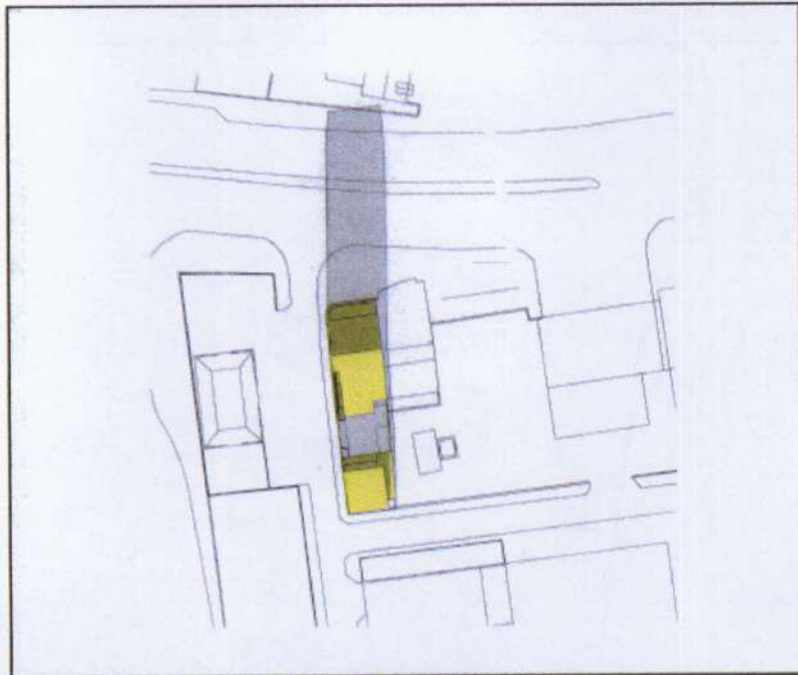
21<sup>st</sup> March 14:00



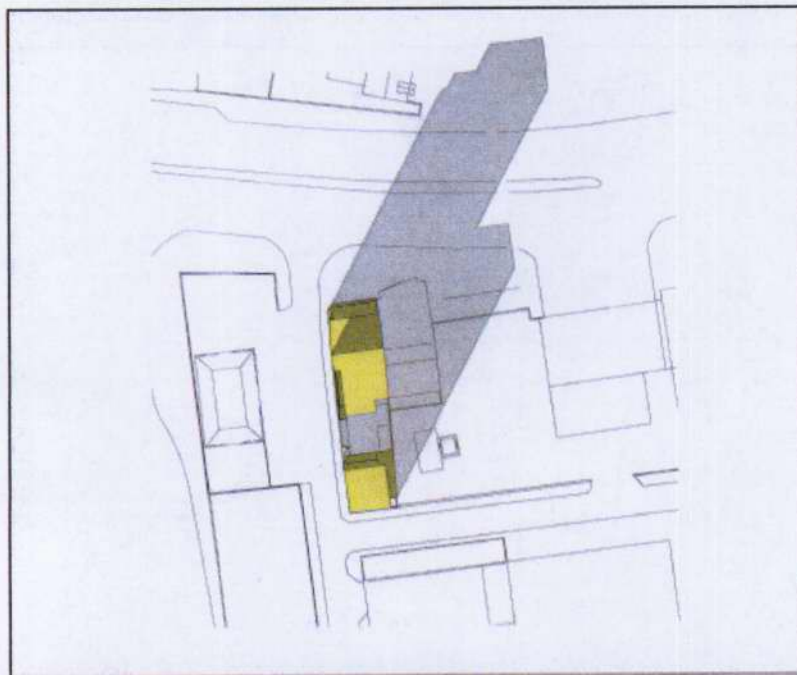
21<sup>st</sup> March 16:00



21<sup>st</sup> December 10:00



21<sup>st</sup> December 12:00



21<sup>st</sup> December 14:00



**Appendix 2**  
***Daylight to Existing and Proposed Residential Buildings***

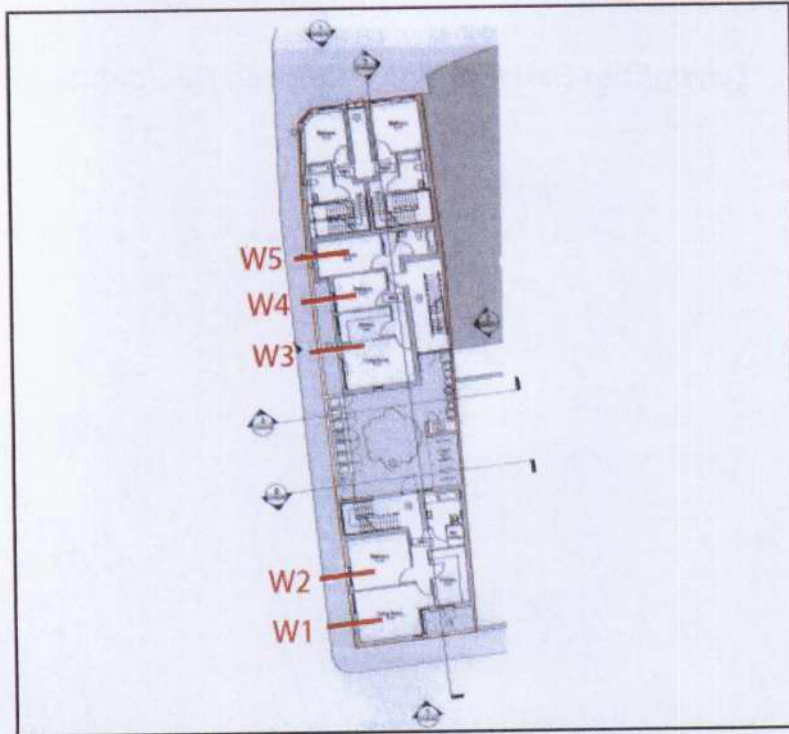


Figure 3 Window location plan for sunlight/daylight assessments to proposed buildings.

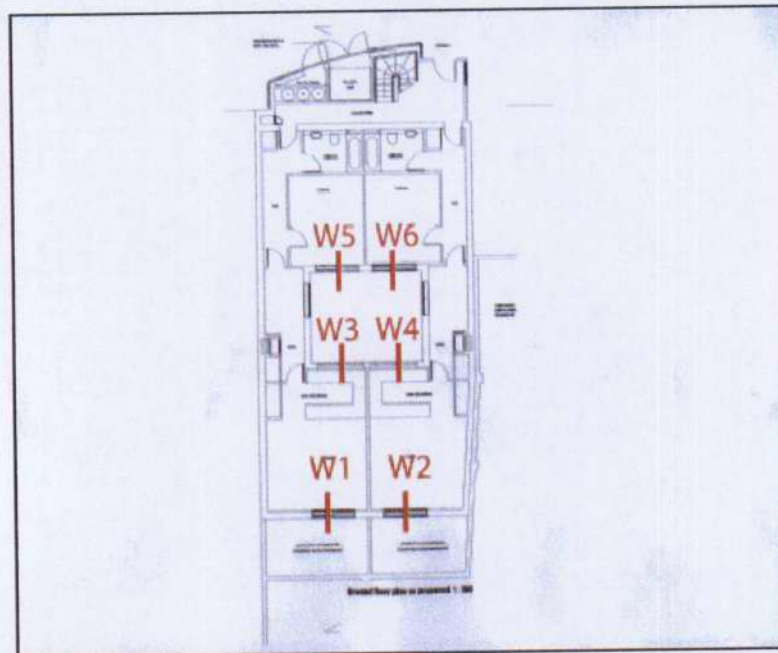


Figure 4 Window location plan for sunlight/daylight assessments to existing buildings.

## Average Daylight Factor Assessment to Existing Buildings

**Project:** The Shakespeare Lower Richmond Road

30/10/2009

**Existing - After Development**

**Average Daylight Factor Assessment**

**Assessment taken from:** Ground Floor

**Window:** 1

room width	3.72
room depth	5.272
room height	2.4

$$df = \frac{T}{A(1-R2)} \times \frac{Aw}{d^2} \times \%$$

T	0.7
Aw	3.34
d	60
A	82.38528
R	0.5

$df$  is 2.3 % **Minimum  $df$  for Kitchen/Living Room = 2.0%**

**Window:** 2

room width	3.54
room depth	5.272
room height	2.4

$$df = \frac{T}{A(1-R2)} \times \frac{Aw}{d^2} \times \%$$

T	0.7
Aw	3.34
d	60
A	79.62336
R	0.5

$df$  is 2.3 % **Minimum  $df$  for Kitchen/Living Room = 2.0%**

**Window:** 3

room width	3.72
room depth	5.272
room height	2.4

$$df = \frac{T}{A(1-R2)} \cdot \frac{Aw}{A} \cdot v^2 \cdot \%$$

T	0.7
Aw	2.275
v	31
A	82.38528
R	0.5

$$df \text{ is } 0.8 \% \text{ Minimum } df \text{ for Kitchen/Living Room} = 2.0\%$$

Window: 4

room width	3.54
room depth	5.272
room height	2.4

$$df = \frac{T}{A(1-R2)} \cdot \frac{Aw}{A} \cdot v^2 \cdot \%$$

T	0.7
Aw	2.275
v	31
A	79.62336
R	0.5

$$df \text{ is } 0.8 \% \text{ Minimum } df \text{ for Kitchen/Living Room} = 2.0\%$$

Window: 5

room width	3.43
room depth	4.025
room height	2.4

$$df = \frac{T}{A(1-R2)} \cdot \frac{Aw}{A} \cdot v^2 \cdot \%$$

T	0.7
Aw	4
v	35
A	63.3955
R	0.5

**df** is **2.1 %** **Minimum df for Bedroom = 1%**

Window: 6

room width	3.54
room depth	4.025
room height	2.4

**df**  $\frac{I}{A(1-R2)}$  **Aw**  $v^2$  %

T	0.7
Aw	4
$v^2$	33
A	64.809
R	0.5

**df** is **1.9 %** **Minimum df for Bedroom = 1%**

## Average Daylight Factor Assessment to Proposed Building

**Project:** 5651/The Shakespeare Lower Richmond Rd

**Date:** 23-11-09

**Proposed**

**Average Daylight Factor Assessment**

**Assessment taken from:** GF/2m

**Room 1**

**Window:** R1W1

room width	3.7
room depth	4.6
room height	2.7

$$df = \frac{I}{A(1-R2)} \quad \frac{Aw}{A} \quad \%$$

T	0.7	
Aw	1.62	
v	33	-15
A	78.86	
R	0.5	

**df** is **0.6 %**

**Window:** R1W2

room width	3.7
room depth	4.6
room height	2.7

$$df = \frac{I}{A(1-R2)} \quad \frac{Aw}{A} \quad \%$$

T	0.7	
Aw	1.1	
v	50	
A	78.86	
R	0.5	

**df** is **0.7 %**

**Window:** R1W3

room width	3.7
room depth	4.6
room height	2.7

$$df = \frac{T}{A(1-R2)} \frac{Aw}{A} \frac{v}{v_0} \%$$

T	0.7
Aw	2.76
v	50
A	78.86
R	0.5

$$df \text{ is } 1.6 \%$$

Total Adf = 2.9%

Minimum df for Living Room = 1.5%

Room 2

Window:

R2W1 (Amend)

room width	3.7
room depth	4.6
room height	2.7

$$df = \frac{T}{A(1-R2)} \frac{Aw}{A} \frac{v}{v_0} \%$$

T	0.7
Aw	1.62
v	58
A	78.86
R	0.5

$$df \text{ is } 1.1 \%$$

Minimum df for Bedroom = 1.0%

Room 3

Window:

R3W1

room width	5.6
room depth	5.1
room height	2.7

$$df = \frac{I}{A(1-R^2)} \frac{Aw}{v} \%$$

T	0.7
Aw	1.1
v	40
A	114.9
R	0.5

$$df \text{ is } 0.4 \%$$

Window:

R3W2

room width	5.6
room depth	5.1
room height	2.7

$$df = \frac{I}{A(1-R^2)} \frac{Aw}{v} \%$$

T	0.7
Aw	4.2
v	28
A	114.9
R	0.5

$$(v = 64 - 36 = 28)$$

$$df \text{ is } 1.0 \%$$

Total Adf = 1.9%

Minimum df for Living Room = 1.5%

Window:

R3W3

room width	5.6
room depth	5.1
room height	2.7

$$df = \frac{I}{A(1-R^2)} \frac{Aw}{v} \%$$

T	0.7
Aw	1.8
v	26
A	114.9
R	0.5

$$(v = 62 - 36 = 26)$$

$$df \text{ is } 0.4 \%$$



Minimum *df* for Kitchen = 2.0%

Room 4

Window:

R4W1

room width	2.6
room depth	3.95
room height	2.7

*df*       $\frac{I}{A(1-R2)}$        $\frac{Aw}{A}$        $\frac{v}{v}$       %

T	0.7		
Aw	1.8		
v	19	(v = 55 - 36 = 19)	
A	55.91		
R	0.5		

*df* is 0.6 %  
Minimum *df* for Bedroom = 1.0%

Room 5

Window:

R5W1

room width	2.6
room depth	4.9
room height	2.7

*df*       $\frac{I}{A(1-R2)}$        $\frac{Aw}{A}$        $\frac{v}{v}$       %

T	0.7		
Aw	1.1		
v	37	(v = 55 - 36 = 19)	
A	65.98		
R	0.5		

*df* is 0.6 %  
Minimum *df* for Bedroom = 1.0%

Window:

R5W2

room width	2.6
room depth	4.9
room height	2.7

*df*       $\frac{I}{A(1-R2)}$        $\frac{Aw}{A}$        $\frac{v}{v}$       %

A(1-R2)

T	0.7
Aw	1.1
v	46
A	65.98
R	0.5

(v = 55 - 36 = 19)

df is 0.7 %  
Minimum df for Bedroom = 1.0%

Last page.