

24050-06-001

SHB5-BVD-RP-RP-CS-P3-001-Quality Audit

Stage 1 Quality Audit

(Incorporating a DMURS Street Design Audit, and Audits of Accessibility, Cycling, Walking and Road Safety)

for

Malone O'Regan

SEPTEMBER 2024



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DOCUMENT CONTROL SHEET

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1. INTRODUCTION

- 1.1 Roadplan Consulting has been commissioned by Malone O'Regan to carry out a Quality Audit of a proposed development at Basin View, Dublin.
- 1.2 The development consists of the construction of 171 apartments at a site of c.1.64 ha at Basin Street Flats, Basin View, Dublin 8. The site is bounded by Basin Grove and St. James Primary School to the south; Luas light rail line and St. James' Hospital campus to the west, Basin Street Lower/Ewington Lane and Mary Aikenhead House Flats to the north and Basin View Street / Brandon Terrace to the east; which will consist of the following:
- The demolition of four existing Basin Street Flats residential blocks; Building 1 (nos. 20-43), Building 2 (nos. 44-67), Building 3 (nos. 68-91) and Building 4 (nos. 92-115), ancillary structures, boundary walls and railings and site clearance works and renovation of one existing Basin Street Flats block (Building 5 nos. 116-151)
 - Construction of 171 no. apartment units in three apartment blocks (Block A, Block B and Block C) comprising 171 residential units (83 no. 1-bed, 71 no. 2-bed, 13 no. 3-bed and 4 no. 4 beds)
 - Block A ranges from 4- 8 storeys with 48 units (17 no. 1-bed, 28 no. 2-bed, 3 no. 3-bed)
 - Block B ranges from 4 -8 storeys with 81 units (28 no. 1-bed, 39 no. 2-bed, 10 no. 3-bed, 4 no. 4 bed)
 - Block C is 5 storeys (renovation block) with extension to western gable with 42 units (38 no. 1-bed, 4 no. 2-bed)
 - 382 bicycle parking spaces;
 - 55 car parking spaces, which includes provision of 51 residential and 4 non-residential car parking spaces (2 creche and 2 community, arts and cultural car parking spaces);
 - Provision of a childcare facility of 294 sq.m. at ground floor of Block A;
 - Provision of 1114 sq.m. community, cultural and arts space comprising 516 sq.m. internal space at ground floor of Block B and 598 sq.m. external space, which includes a 468 sq.m. amphitheatre and 130 sq.m. space located externally at Block B;
 - Relocation of public open space to a new central area of 3767 sq.m. (in place of Oisín Kelly Park) and 2748 sq.m. of communal open space;
 - Two vehicular access/ egress points are proposed from Brandon Terrace/ Basin View Street and from Basin Street Lower/ Ewington Lane;
 - Existing bollards and line marking fronting Wee Tots Creche Pre-School and Fountain Youth Project at building 2A Basin Lane along Basin View/ Brandon Terrace to be removed and replaced with paving, extension of kerb and flexible bollards;
 - Boundary treatments, landscaping and public realm works, public lighting, site drainage works, new internal road layout, traffic calming raised table and pedestrian crossing points, footpaths, ESB substation and meter rooms, stores, bin and cycle storage, plant rooms; and
 - All ancillary site services and development works above and below ground.
- 1.3 The proposed development comprises a large-scale residential development including dedicated car parking spaces, cycleway and cycle storage with numerous entrances.
- 1.4 Figure 1.1 below is a layout drawing of the development.

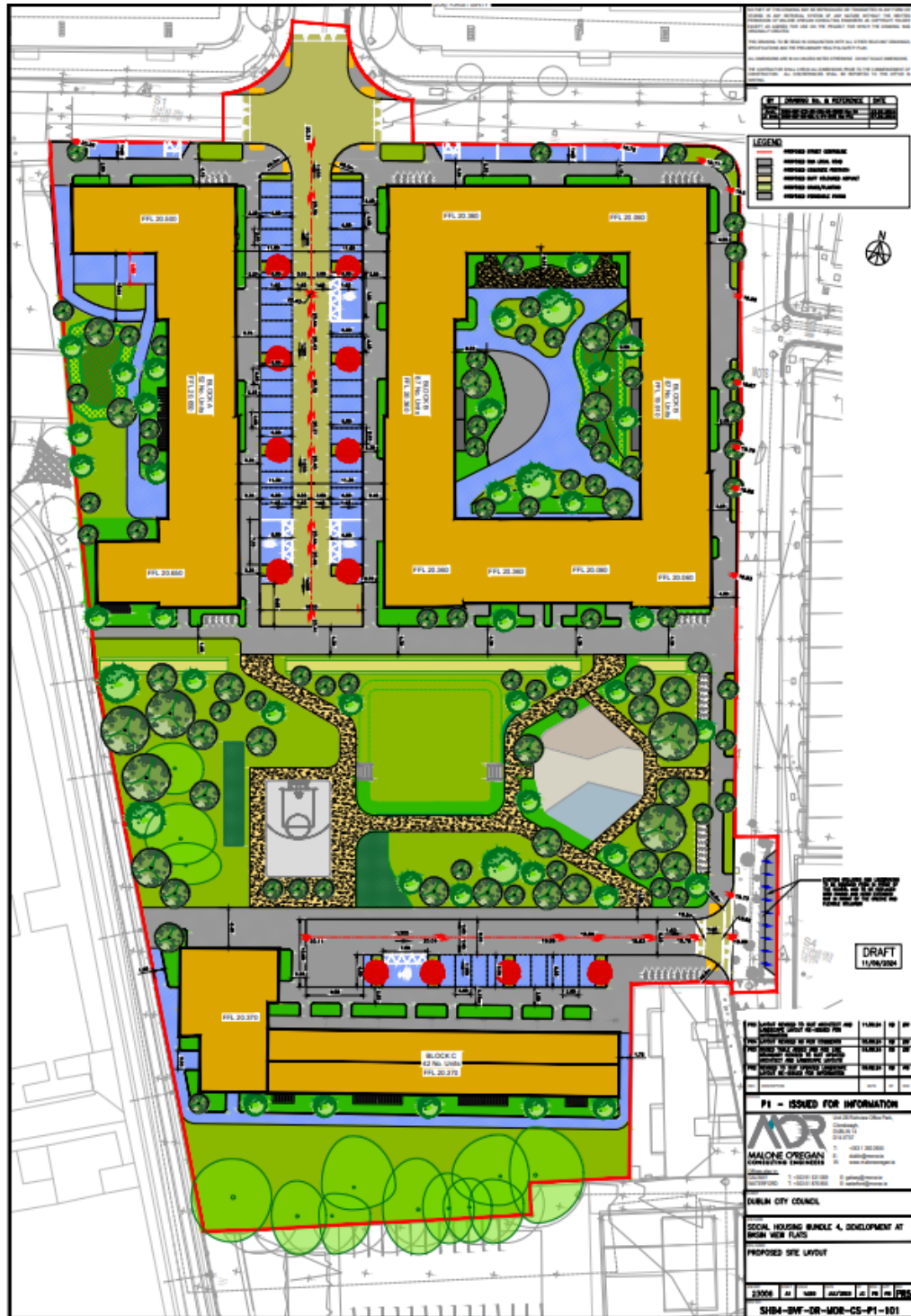


Figure 1.1– Site Location Map and Site Layout for the development

2. QUALITY AUDIT

- 2.1 Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.
- 2.2 Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal visual clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.
- 2.3 Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.
- 2.4 In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.
- 2.5 The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.
- 2.6 DMURS states that Quality Audits should consist of the following parts:
- DMURS Street Design Audit
 - Individual Design Audits
 - Quality Audit Report

In the case of this report the individual design audits comprise an RSA, an Accessibility audit, a Walking audit and a Cycle audit.

3. METHODOLOGY

3.1 The Audit Team was as follows:

- George Frisby, Chartered Engineer MIEI
- Glenn Hingerty, Chartered Engineer MIEI

3.2 Road safety, non-motorised users, visual quality, access for disabled and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- how the scheme is experienced by those entering it and moving around within the street, including how this affects road user behavior; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

3.3 The site visit for this quality audit was carried out on 18th March 2024.

The drawings & documents provided for the audit were:

Drawing Number	Rev	Drawing Title
SHB4-BVF-DR-MOR-CS-P1-101	PR5	Proposed Site Layout
SHB4-BVF-DR-MOR-CS-P1-110	PR7	Swept Path Analysis – Refuse Truck
SHB4-BVF-DR-MOR-CS-P1-111	PR10	Swept Path Analysis – Aerial Platform Special Appliance
SHB4-BVF-DR-MOR-CS-P1-112	PR6	Proposed Sightlines
SHB4-BVF-DR-MOR-CS-P1-114	PR7	Swept Path Analysis – Fire Tender
SHB4-BVF-DR-MOR-CS-P1-130	PR3	Drainage Layout
SHB4-BVF-DR-MOR-CS-P1-140	PR2	Watermain Layout
SHB4-BVF-DR-MOR-CS-P1-150	PR5	Suds Layout
SHB4-BVF-DR-MOR-CS-P1-151	PR1	Suds Drainage Details
SHB5-CVD-SMK-ZZ-SI-DR-E-6000		Development At Basin View, Dublin Illuminance Plot

Documents:

Development at Basin View Lighting Reality Report – Version 1

Operational Waste & Recycling Management Plan - Basin View – Version 1

Copies of these audited drawings & documents are contained in Appendix A.

Details of drainage or road lighting are not provided. It is assumed that adequate layouts will be provided for each.

There is an existing roadside ditch along the west side of the L1532 road. It may be severed by the proposed developments. It is assumed that provision will be made to maintain proper roadside drainage.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on <https://www.dmurs.ie/supplementary-material>) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road

Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.

4. STREET DESIGN AUDIT

CONNECTIVITY			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network 3.2.1 – Movement Function 3.3.1 – Street layouts 3.3.4 - Wayfinding	No Comment	
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts 3.3.3 – Retrofitting ¹	No Comment	
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	No Comment	
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 – Movement Function 3.2.2 – Place Context 3.4.1 – Vehicle Permeability	No Comment	

¹ When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).

SELF-REGULATING STREET ENVIRONMENT			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function 3.2.2 – Place Context 4.1.1 – A Balanced Approach to Speed ²	No Comment	
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces 4.4.9 – On-Street Parking Advice Note 1 – Transitions and Gateways	4.2.1 – No information on building heights is provided within the drawings. 4.2.2 – Landscaped areas are proposed in a number of locations. Street Trees appear to be proposed along most streets. Planting creates a sense of place and unique character to each streetscape. Care should be taken to ensure the street trees do not block visibility splays at the proposed junctions and pedestrian crossings. Their location should not create risk for mobility impaired users with regard to falling leaves or surface rooting trees creating tripping hazards. 4.2.4 – Adequate signage and road markings should be provided according to the TSM and DMURS at all junctions and elsewhere as required. 4.4.2 – Some variety of carriageway material has been proposed which can induce traffic calming. Excessive amounts of variance however may	Building heights indicated on Architect's drawings which accompany planning application. Trees specified as clear stem up to a height of 2m. Signage and road markings will be provided in accordance with TSM and DMURS Carriageway surfacing limited to 2 types – buff coloured macadam and

² Refer also to the National Speed Limit Guidelines
24050-06-001 Section 4

SELF-REGULATING STREET ENVIRONMENT			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
		cause confusion for vision impaired users.	permeable pavements in parking spaces.
A suitable range of design standards/ measures have been applied that are consistent with the applied design speeds.	4.4.1 – Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature 4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	No Comment	

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	No Comment	
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 – Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings	4.2.5 – Segregated footways have been provided and appear to be clear of obstructions which may reduce their effective width. 4.2.5 – Benches may be a useful addition to the landscaped area. This will allow pedestrian with a mobility impairment to rest.	Benches included at Oisín Kelly Park.
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function 3.2.2 – Place Context 4.3.5 - Cycle facilities	4.3.5 – There does not appear to be adequate secured cycle facilities, for standard or cargo cycles, provided. These will be particularly important as terraced dwellings and apartments	Dedicated stores have been provided for each building.

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
		with no rear accesses feature in the proposed development.	
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips 4.2.5 - Street Furniture 4.3.2 - Pedestrian Crossings 4.3.4 - Pedestrianised and Shared Surfaces	4.3.2 – Visibility Splays at some pedestrian crossings should be kept clear of all obstructions including parked vehicles.	Layout amended to offer adequate visibility.

VISUAL QUALITY			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	No Comment	
Street furniture is orderly placed.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips	No comment	
The use of signage and line marking has been minimised.	3.2.1 – Movement Function. 3.2.2 – Place Context.	No comment	

VISUAL QUALITY			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
	4.2.4 - Signage and Line Marking.		
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.6 – Materials and Finishes 4.2.8 – Historic Contexts 4.3.2 – Pedestrian Crossings 4.4.2 – Carriageway Surfaces Advice Note 2 – Materials and Specifications	No comment	

ADDITIONAL COMMENTS

5. ROAD SAFETY

5.1 Issue

Intervisibility between drivers approaching the pedestrian crossing in Figure 5.1 and pedestrians at the crossing may be compromised by vehicles occupying formalised parking due to their proximity to the crossing. This may increase the likelihood of a collision at this location.

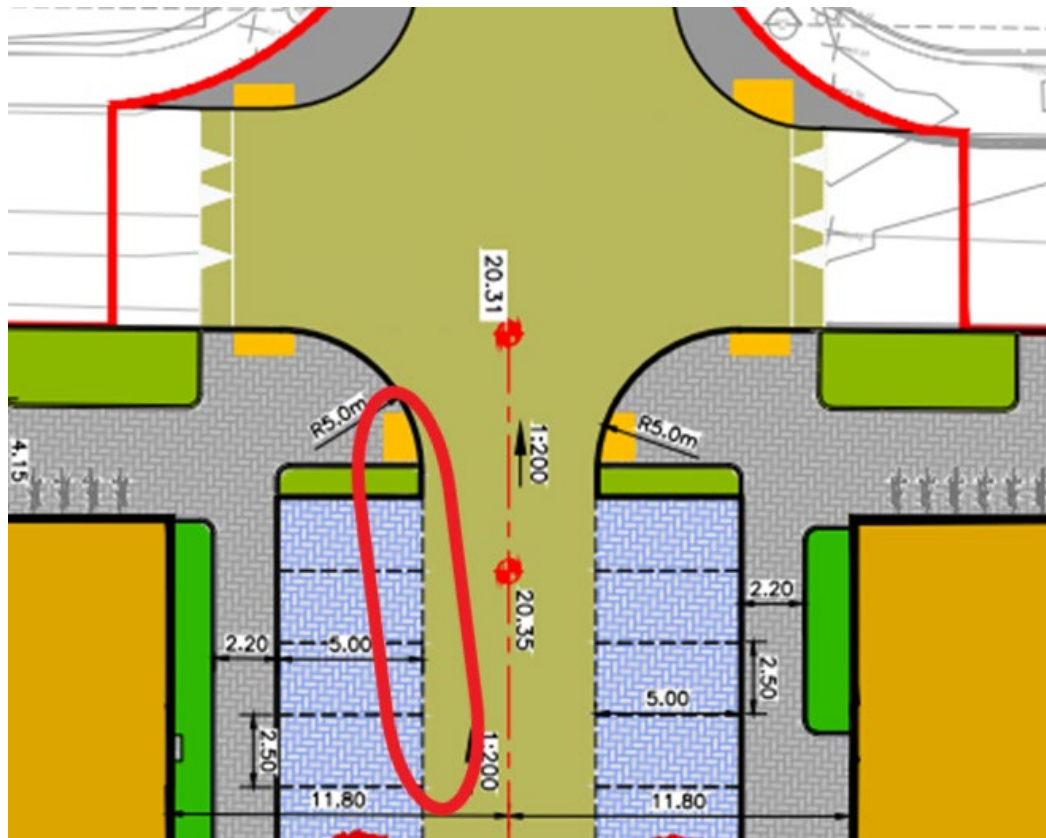


Figure 5.1 – Parking adjacent to priority crossing

Suggestion

Rearrange the proposed parking layout and ensure intervisibility between motorist and pedestrians at all locations.

6. WALKING

6.1 Issue

The existing footpath on the south side of Basin View to the northwest of the proposed development is discontinuous. There are also no pedestrian crossing facilities along Basin View long the front of the proposed development. It is unclear how pedestrians, exiting the proposed development will continue their journey west or east due to a lack of existing or proposed pedestrian facilities.

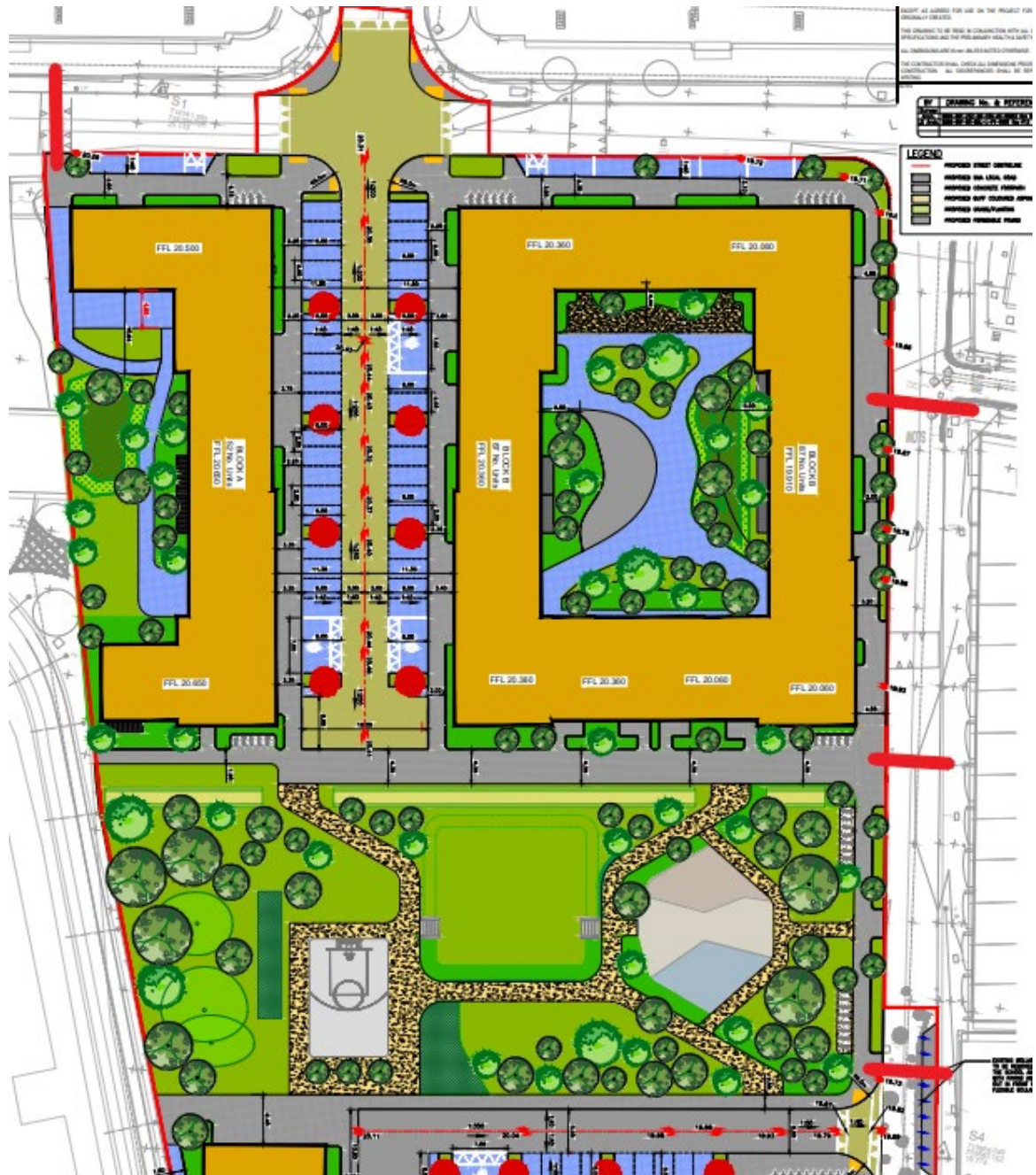


Figure 6.1 – Pedestrian connectivity

Suggestion

Provide adequate pedestrian facilities to ensure safe access to and from the proposed development along the pedestrian desire lines.

7. CYCLING

7.1 Issue

While there is no proposed cycle infrastructure in the development, it is not clear however how the development will tie into the proposed 'Primary Orbital' Cycle Route (red in Figure 7.4), the 'Secondary' Route (blue in Figure 7.4), or the 'Feeder' Route (dashed pink line in Figure 7.4). A lack of coordination may reduce the effectiveness of these schemes, proposed by Dublin City Council and National Transport Authority, and undermine potential to achieve cyclist desire lines.

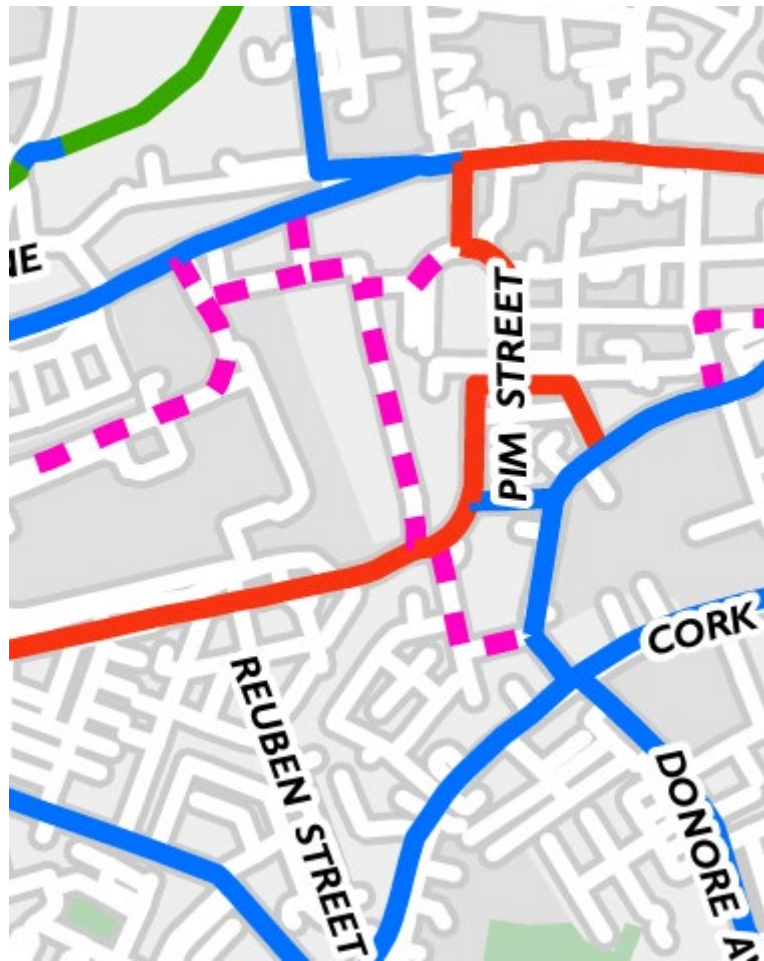


Figure 7.1 – GDA Cycle Network (www.nationaltransport.ie/wp-content/uploads/2023/01/2022-GDA-Cycle-Network.pdf)

Suggestion

Consider wider network impacts of future schemes to support a network of segregated cycleways through the development. Consult with Dublin City Council Active Travel to ensure the development is futureproofed.

7.2 **Issue**

Some outdoor cycle stands are shown to be provided within the proposed development. However, it is unclear from the drawings provided if proposed secure indoor cycle storage will feature in the development for cyclists and cargo cycles. This may cause cyclists to lock cycles to other street furniture, creating a navigation risk and reducing the effective widths of footways, especially for cargo cycle users. Bolted Sheffield Stands may increase risk of cycle theft as they can be easily removed.

Suggestion

Provide adequate volumes of secure indoor storage for cycles and cargo cycles. Sheffield Stands should be concreted into the ground to negate theft.

7.3 **Issue**

It is unclear how cyclists will safely access/exit the proposed cycle parking areas within the proposed development. A lack of an adequate access to / from the cycle parking areas may increase collision risk for cyclists.

Suggestion

Provide adequate measures to allow cyclists to safely access / exit the cycle parking areas.

8. ACCESSIBILITY

8.1 **Issue**

Due to the location of vehicular parking relative to housing units, it is not clear how electric car users will charge their vehicle without running electrical leads across the footways between parking and housing. This may post a tripping hazard for pedestrians, especially those with a vision impairment.

Suggestion

Ensure ample opportunity for motorists to charge electric vehicles without trailing cables. Provide communal electric car chargers. Rearrange parking as required.

8.2 **Issue**

The proposed disabled bays (Figure 8.1 and 8.2) are arranged parallel to the footway. There is no ramped access to the footway and users may have to enter/exit their vehicles from the vehicular carriageway.

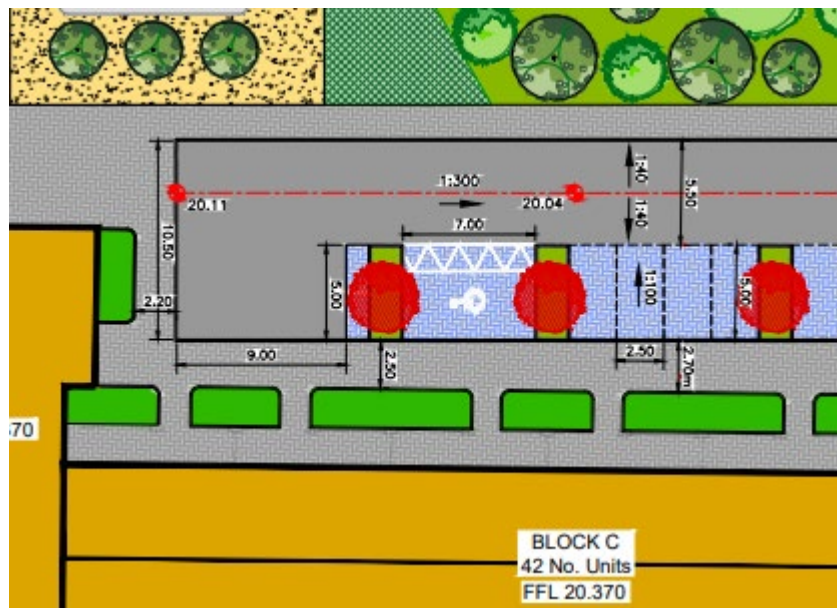


Figure 8.1 – Disabled Bay

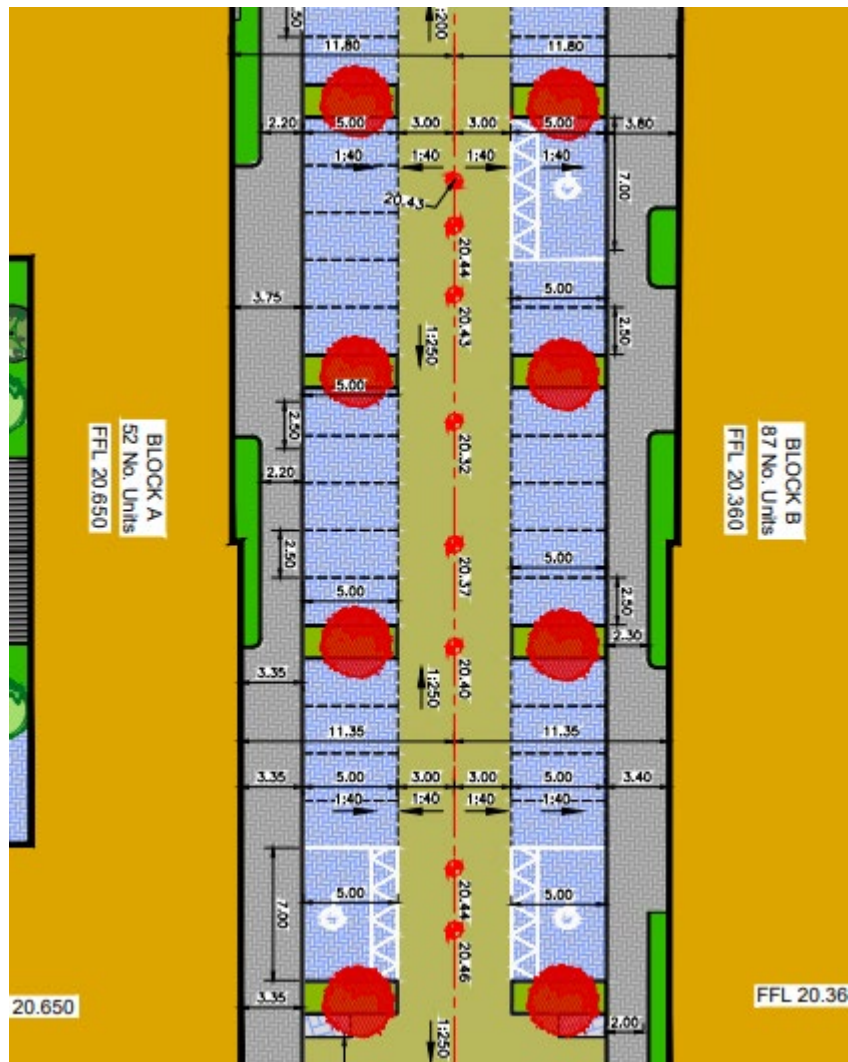


Figure 8.2 – Disabled Bay

Suggestion

Ramped access should be provided to all disabled parking bays.

9. QUALITY AUDIT FEEDBACK FORM

Scheme: Proposed Housing Development at Basin View

Document Number: 24050-06-001

Date Audit Completed: 19th June 2024

Paragraph No. in Safety Audit Report	To Be Completed By Designer			To Be Completed by Audit Team Leader
	Problem accepted (yes/no)	Recommended measure Accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted.	Alternative measures or reasons accepted by auditors (yes/no)
5.1	Yes	Yes	-----	-----
6.1	Yes	Yes	-----	-----
7.1	Yes	Yes	-----	-----
7.2	Yes	Yes	-----	-----
7.3	Yes	Yes	-----	-----
8.1	Yes	Yes	-----	-----
8.2	Yes	Yes	-----	-----

Safety Audit Signed off  **On Behalf of Design Team**

Print NameDouglas Weir..... **Date** ...27/6/2024..

Safety Audit Signed off **Employer**

Print Name **Date**

Safety Audit Signed off  **Audit Team Leader**

Print Name ...George Frisby..... **Date** ...27/6/2024.....

Please complete and return to: Roadplan Consulting,
7, Ormonde Road
Kilkenny
E-mail: info@roadplan.ie

APPENDIX A – DRAWINGS

DATE: 13 May 2024
DESIGNER:
PROJECT No: 2972
PROJECT NAME: Development at Basin View

**LIGHTING
REALITY**

Social Housing Bundle

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	CENTRAL PLAY AREA/GREEN AR...	282.36	86.21	111.20	43.50	1.64	1.45
2	MAIN APARTMENT BLOCKS & RO...	265.48	127.46	120.00	85.20	1.62	1.61
3	LOWER APARTMENT BLOCK	297.97	53.40	101.26	34.81	1.63	1.45

Luminaires

Luminaire A Data



Supplier	Urbis Schreder
Type	AXIA 2.1 5167 Integrated lenses 16 OSOLON SQUARE GIANT@760mA
Lamp(s)	16 OSOLON SQUARE GIANT@760mA NW 74 0 230V 00-36-648
LampFlux(klm)/Colour	5.20 NW 4000K/70
File Name	AXIA 2.1 5167 16 OSOLON SQUARE GIANT 760mA NW 740 39W 434362 Integrated lens...
Maintenance Factor	0.84
Imax70,80,90(cd/klm)	1162.3, 202.9, 3.0
No. in Project	13

Luminaire B Data



Supplier	Urbis Schreder
Type	AXIA 2.1 5167 Integrated lenses 16 OSOLON SQUARE GIANT@500mA
Lamp(s)	16 OSOLON SQUARE GIANT@500mA NW 74 0 230V 00-36-648
LampFlux(klm)/Colour	3.66 NW 4000K/70
File Name	AXIA 2.1 5167 16 OSOLON SQUARE GIANT 500mA NW 740 26W 434362 Integrated lens...
Maintenance Factor	0.84
Imax70,80,90(cd/klm)	1162.3, 202.9, 3.0
No. in Project	23

Luminaire D Data



Supplier	Urbis Schreder
Type	AXIA 2.1 5167 Integrated lenses 16 OSOLON SQUARE GIANT@300mA
Lamp(s)	16 OSOLON SQUARE GIANT@300mA NW 74 0 230V 00-36-648
LampFlux(klm)/Colour	2.31 NW 4000K/70
File Name	AXIA 2.1 5167 16 OSOLON SQUARE GIANT 300mA NW 740 16W 434362 Integrated lens...
Maintenance Factor	0.84
Imax70,80,90(cd/klm)	1162.3, 202.9, 3.0
No. in Project	4

Layout

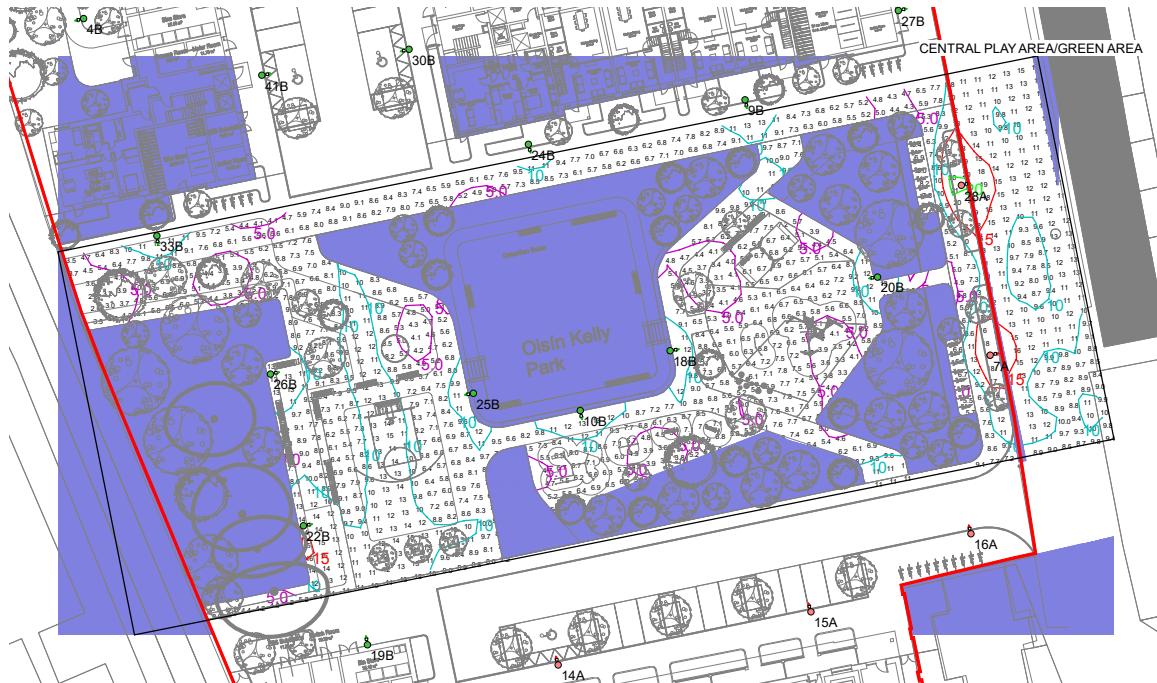
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	265.71	201.90	6.00	104.00	0.00	0.00	0.60			
2	A	313.52	211.48	6.00	100.00	0.00	0.00	0.60			
3	A	338.02	216.26	6.00	100.00	0.00	0.00	0.60			
4	B	276.68	154.82	6.00	194.00	0.00	0.00	0.60			
5	B	262.74	177.07	6.00	65.00	0.00	0.00	0.60			
6	B	302.89	200.62	6.00	200.00	0.00	0.00	0.60			
7	A	377.62	117.34	6.00	13.00	0.00	0.00	0.60			
8	B	286.43	197.34	6.00	13.00	0.00	0.00	0.60			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
9	B	350.31	145.78	6.00	284.00	0.00	0.00	0.60			
10	B	331.99	111.18	6.00	281.00	0.00	0.00	0.60			
11	B	309.22	59.55	6.00	280.00	0.00	0.00	0.60			
12	B	369.52	73.28	6.00	12.00	0.00	0.00	0.60			
14	A	329.50	82.85	6.00	103.00	0.00	0.00	0.60			
15	A	357.68	88.77	6.00	108.00	0.00	0.00	0.60			
16	A	375.48	97.45	6.00	104.00	0.00	0.00	0.60			
18	B	342.00	117.84	6.00	11.00	0.00	0.00	0.60			
19	B	308.30	85.12	6.00	101.00	0.00	0.00	0.60			
20	B	365.09	126.04	6.00	188.00	0.00	0.00	0.60			
21	B	299.53	71.18	6.00	204.00	0.00	0.00	0.60			
22	B	301.16	98.36	6.00	10.00	0.00	0.00	0.60			
23	B	339.91	65.49	6.00	282.00	0.00	0.00	0.60			
24	B	326.22	140.81	6.00	284.00	0.00	0.00	0.60			
25	B	320.09	113.11	6.00	191.00	0.00	0.00	0.60			
26	B	297.51	115.26	6.00	12.00	0.00	0.00	0.60			
27	B	367.38	155.72	6.00	12.00	0.00	0.00	0.60			
28	A	374.41	136.27	6.00	13.00	0.00	0.00	0.60			
29	B	292.26	169.24	6.00	9.00	0.00	0.00	0.60			
30	B	312.91	151.39	6.00	194.00	0.00	0.00	0.60			
31	D	332.58	195.92	6.00	283.00	0.00	0.00	0.60			
32	D	341.58	181.74	6.00	196.00	0.00	0.00	0.60			
33	B	284.85	130.63	6.00	278.00	0.00	0.00	0.60			
34	D	326.23	166.25	6.00	337.00	0.00	0.00	0.60			
35	D	348.15	170.85	6.00	249.00	0.00	0.00	0.60			
36	A	365.83	181.23	6.00	13.00	0.00	0.00	0.60			
37	A	362.29	198.78	6.00	13.00	0.00	0.00	0.60			
38	A	358.44	217.67	6.00	19.00	0.00	0.00	0.60			
39	A	369.61	161.98	6.00	13.00	0.00	0.00	0.60			
40	A	288.74	206.71	6.00	105.00	0.00	0.00	0.60			
41	B	296.54	148.51	6.00	13.00	0.00	0.00	0.60			
42	B	308.71	172.70	6.00	191.00	0.00	0.00	0.60			

Horizontal Illuminance (lux)

CENTRAL PLAY AREA/GREEN AREA

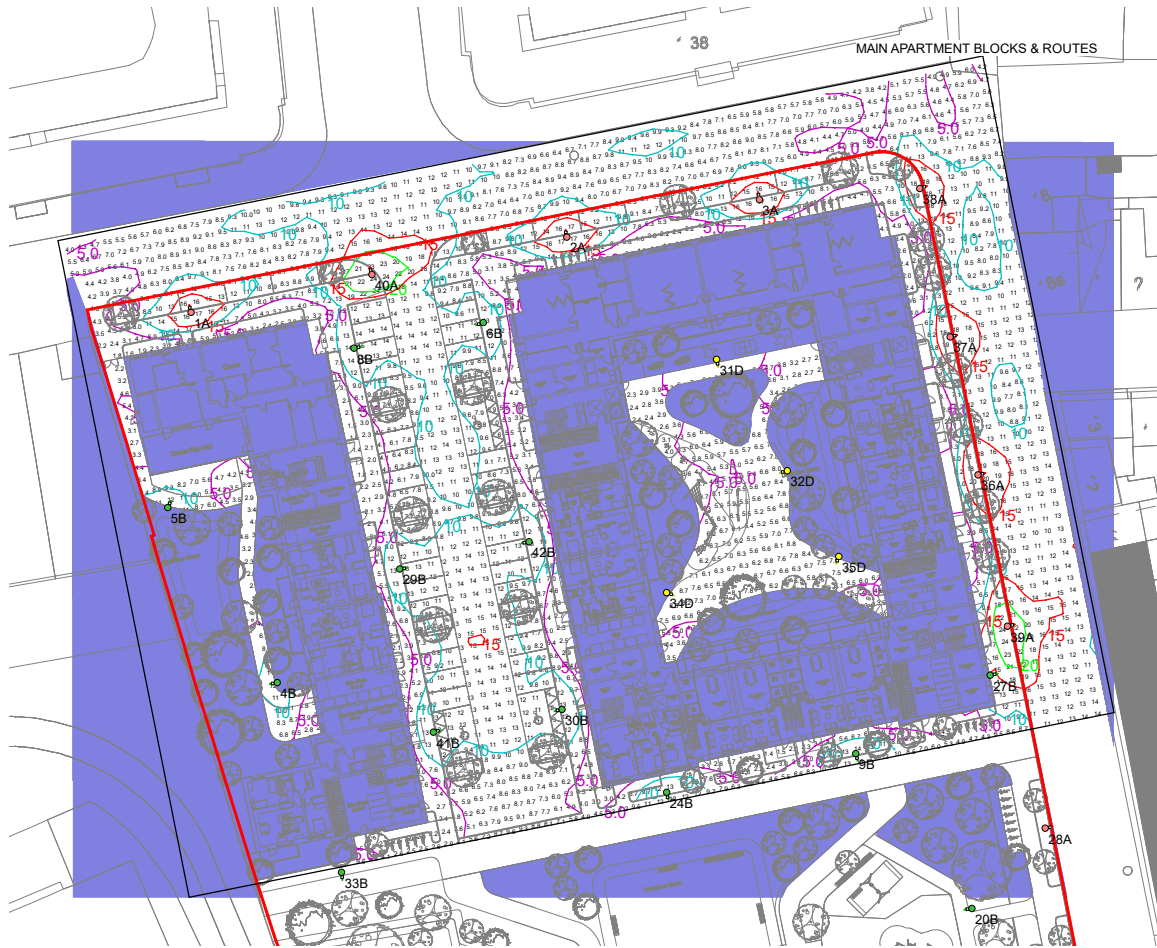


Results

Eav	8.21
Emin	1.30
E _{max}	19.65
Emin/E _{max}	0.07
Emin/Eav	0.16

Horizontal Illuminance (lux)

MAIN APARTMENT BLOCKS & ROUTES

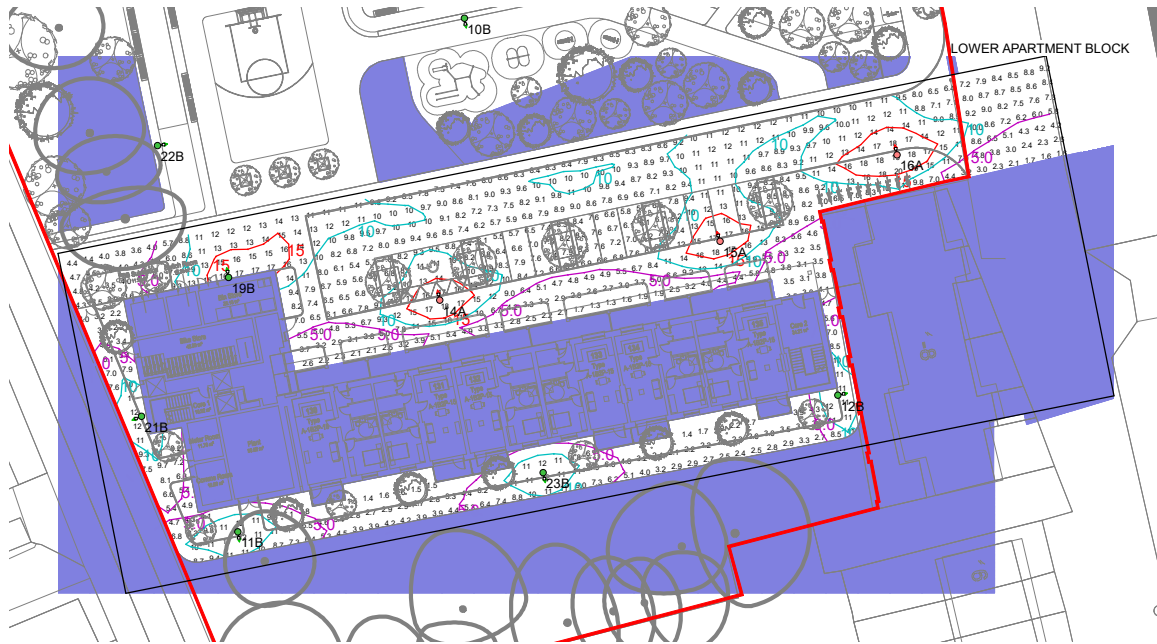


Results

Eav	8.21
Emin	1.30
E _{max}	19.65
E _{min} /E _{max}	0.07
E _{min} /E _{av}	0.16

Horizontal Illuminance (lux)

LOWER APARTMENT BLOCK



Results

Eav	8.21
Emin	1.30
E _{max}	19.65
E _{min} /E _{max}	0.07
E _{min} /E _{av}	0.16

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NOTES

BY	DRAWING No. & REFERENCE	DATE
Survey	S1	
Arch.	SHB4-BVF-DR-CO1-MO-05603 Rev 04	23.05.2024
LS Arch.	SHB5-BVF-DR-MAL-L-P1-0101 Rev P12	07.08.2024

LEGEND

- PROPOSED STREET CENTRELINE
- PROPOSED SMA LOCAL ROAD
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BUFF COLOURED ASPHALT
- PROPOSED GRASS/PLANTING
- PROPOSED PERMEABLE PAVING



EXISTING BOLLARDS AND LINEMARKING TO BE REMOVED FROM IN FRONT OF THE SCHOOL AND TO BE REPLACED WITH PAVING AND KERB EXTENDED OUT IN FRONT OF THE CRECHE AND FLEXIBLE BOLLARDS

S4
713866.049
733653.152
19.774

DRAFT
11/06/2024

REV	DESCRIPTION	DATE	BY	CHK
PR5	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KD	DW
PR4	LAYOUT REVISED AS PER COMMENTS	05.06.24	KD	DW
PR3	RAISED TABLE ADDED AND RED LINE BOUNDARY REVISED TO SUIT UPDATED ARCHITECT AND LANDSCAPE LAYOUTS	04.06.24	KD	DW
PR2	REVISED TO SUIT UPDATED LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	09.02.24	KD	PB

STATUS: **P1 - ISSUED FOR INFORMATION**

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 WATERFORD T: +353 51 876 855 E: waterford@mor.ie

CLIENT: **DUBLIN CITY COUNCIL**

JOB NAME: **SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS**

DRG. NAME: **PROPOSED SITE LAYOUT**

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	1:250	JULY 2023	JC	PB	PB	PR5

DRG. NO.: **SHB4-BVF-DR-MOR-CS-P1-101**

DONT FORGET SAFETY

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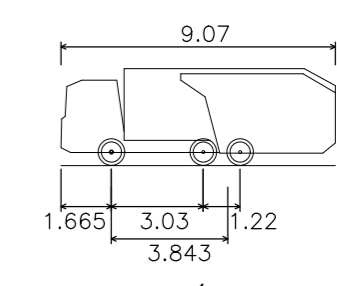
NOTES

BY	DRAWING No. & REFERENCE	DATE
Survey		
Arch.	SHB4-BVF-DR-CS-M-05603 Rev 04	23.05.2024
LS Arch.	SHB5-BVF-DR-MAL-L-P1-0101 Rev P12	07.06.2024

VEHICLE SWEEP PATH LEGEND

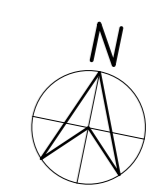
- SATISFACTORY: SWEEP PATH WORKS WITH CURRENT LAYOUT
- FEASIBLE: SLIGHT DIFFICULTIES BUT SWEEP PATH COULD WORKS WITH MINOR LAYOUT MODIFICATIONS
- NOT ACCEPTABLE: SWEEP PATH NOT POSSIBLE WITH LAYOUT AND SIGNIFICANT ALTERATION REQUIRED
- SOLID HATCH INDICATES FORWARD MOTION OF THE VEHICLE
- LINED HATCH INDICATES REVERSE MOTION OF THE VEHICLE

*N.B. COLOUR OF SOLID/LINED HATCHES IN LEGEND TO MATCH RELEVANT COLOUR OF THE AUTO-TRACK IN THE DRAWING (i.e. IF SWEEP PATH IS A SATISFACTORY GREEN THEN SO WILL HATCHES BE SHOWN AS ABOVE)



PHOENIX 2 (WITH ELITE 2 6X2ML CHASSIS)

OVERALL LENGTH	9.070m
OVERALL WIDTH OVERALL	2.530m
BODY HEIGHT	3.211m
MIN BODY GROUND	0.416m
CLEARANCE TRACK WIDTH	2.530m
LOCK-TO-LOCK TIME	4.00s
CURB TO CURB TURNING RADIUS	7.800m



LINE INDICATES APPROXIMATELY THE CURRENT AREA OF UNOFFICIAL ON ROAD RESIDENTIAL PARKING IN FRONT OF HOUSES

DRAFT
11/06/2024

EXISTING BOLLARDS AND LINEMARKING TO BE REMOVED FROM IN FRONT OF THE SCHOOL AND TO BE REPLACED WITH PAVING AND KERB EXTENDED OUT IN FRONT OF THE CRECHE AND FLEXIBLE BOLLARDS

PR7	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KD	DW
PR6	LAYOUT REVISED AS PER COMMENTS	05.06.24	KD	DW
PR5	RAISED TABLE ADDED AND RED LINE BOUNDARY REVISED TO SUIT UPDATED ARCHITECT AND LANDSCAPE LAYOUTS	04.06.24	KD	DW
PR4	REVISED TO SUIT UPDATED LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	09.02.24	KD	PB
PR3	REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT ISSUED FOR INFORMATION	08.02.24	KD	PB
PR2	ARCH LAYOUT UPDATED AND SITE LAYOUT AND SWEEP PATHS REVISED TO SUIT	31.01.24	KD	PB
PR1	ISSUED FOR INFORMATION	08.01.24	JC	PB
PR	ISSUED FOR INFORMATION	07.07.23	KD	PB
REV	DESCRIPTION	DATE	BY	CHK

STATUS
P1 - ISSUED FOR INFORMATION

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CLIENT
DUBLIN CITY COUNCIL

JOB NAME
SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS

DRG NAME
**SWEEP PATH ANALYSIS
REFUSE TRUCK**

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	1:250	JULY 2023	KD	PB	PB	PR7

DRG NO.
SHB4-BVF-DR-MOR-CS-P1-110

DONT SCALE DIMENSIONS

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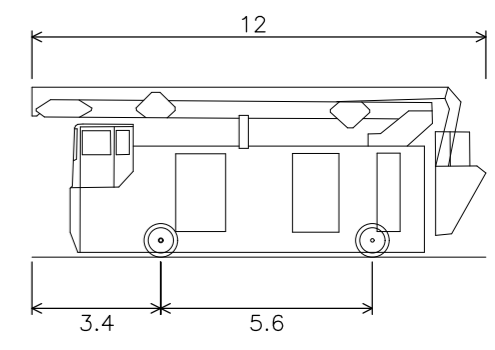
NOTES

BY	DRAWING No. & REFERENCE	DATE
Survey	SHB4-BVF-DR-CS-MO-0603 Rev 04	23.05.2024
Arch	SHB4-BVF-DR-CS-MO-0603 Rev 04	23.05.2024
LS Arch	SHB5-BVF-DR-MAL-L-P1-0101 Rev P12	07.06.2024

VEHICLE SWEEP PATH LEGEND

- SATISFACTORY: SATISFACTORY: SWEEP PATH WORKS WITH CURRENT LAYOUT
- FEASIBLE: FEASIBLE: SLIGHT DIFFICULTIES BUT SWEEP PATH COULD WORKS WITH MINOR LAYOUT MODIFICATIONS
- NOT ACCEPTABLE: NOT ACCEPTABLE: SWEEP PATH NOT POSSIBLE WITH LAYOUT AND SIGNIFICANT ALTERATION REQUIRED
- SOLID HATCH INDICATES FORWARD MOTION OF THE VEHICLE
- LINED HATCH INDICATES REVERSE MOTION OF THE VEHICLE

*N.B. COLOUR OF SOLID/LINED HATCHES IN LEGEND TO MATCH RELEVANT COLOUR OF THE AUTO-TRACK IN THE DRAWING (i.e. IF SWEEP PATH IS A SATISFACTORY GREEN THEN SO WILL HATCHES BE SHOWN AS ABOVE)



AERIAL PLATFORM / TURNABLE LADDER / SPECIAL APPLIANCE

OVERALL LENGTH	12.000M
OVERALL WIDTH OVERALL	2.550M
BODY HEIGHT	4.500M
MIN BODY GROUND CLEARANCE	0.130M
TRACK WIDTH	2.550M
LOCK-TO-LOCK TIME	4.005
CURB TO CURB TURNING RADIUS	13.750M



LINE INDICATES APPROXIMATELY THE CURRENT AREA OF UNOFFICIAL ON-ROAD RESIDENTIAL PARKING IN FRONT OF HOUSES

1.75m Approx.

1.75m Approx.

1.75m Approx.

EXISTING BOLLARDS AND LINEMARKING TO BE REMOVED FROM IN FRONT OF THE SCHOOL AND TO BE REPLACED WITH PAVING AND KERB EXTENDED OUT IN FRONT OF THE CRECHE AND FLEXIBLE BOLLARDS

DRAFT
11/06/2024

PR10	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KD	DW
PR9	LAYOUT REVISED AS PER COMMENTS	05.06.24	KD	DW
PR8	RAISED TABLE ADDED AND RED LINE BOUNDARY REVISED TO SUIT UPDATED ARCHITECT AND LANDSCAPE LAYOUTS	04.06.24	KD	DW
PR7	REVISED TO SUIT UPDATED LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	09.02.24	KD	PB
PR6	REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT ISSUED FOR INFORMATION	08.02.24	KD	PB
PR5	ARCH LAYOUT UPDATED AND SITE LAYOUT AND SWEEP PATHS REVISED TO SUIT	31.01.24	KD	PB
PR4	SWEEP PATH REVISED	11.01.24	KD	PB
PR3	SITE LAYOUT UPDATED	08.01.24	JC	PB
PR2	SWEEP PATHS REVISED AS PER COMMENTS	16.08.23	KD	PB
PR1	SITE LAYOUT REVISED AND SWEEP PATHS RE-RAN TO NEW LAYOUT	15.08.23	KD	PB
PR	ISSUED FOR INFORMATION	07.07.23	KD	PB
REV	DESCRIPTION	DATE	BY	CHK

STATUS
P1 - ISSUED FOR INFORMATION

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CLIENT
DUBLIN CITY COUNCIL

JOB NAME
SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS

DRG NAME
SWEEP PATH ANALYSIS
AERIAL PLATFORM SPECIAL APPLIANCE

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV.
23006	A1	1:250	JULY 2023	JC	PB	PB	PR10

DRG NO.
SHB4-BVF-DR-MOR-CS-P1-111

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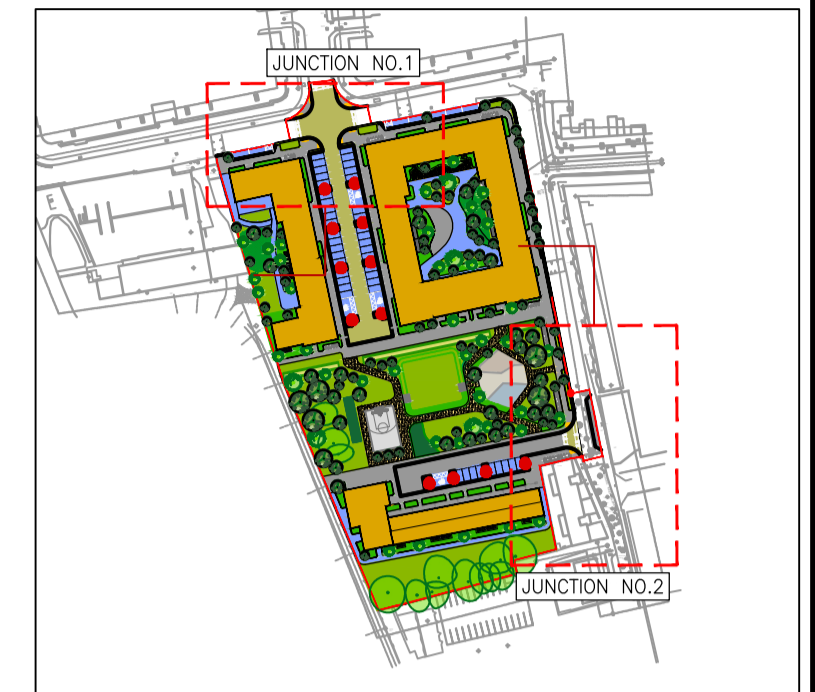
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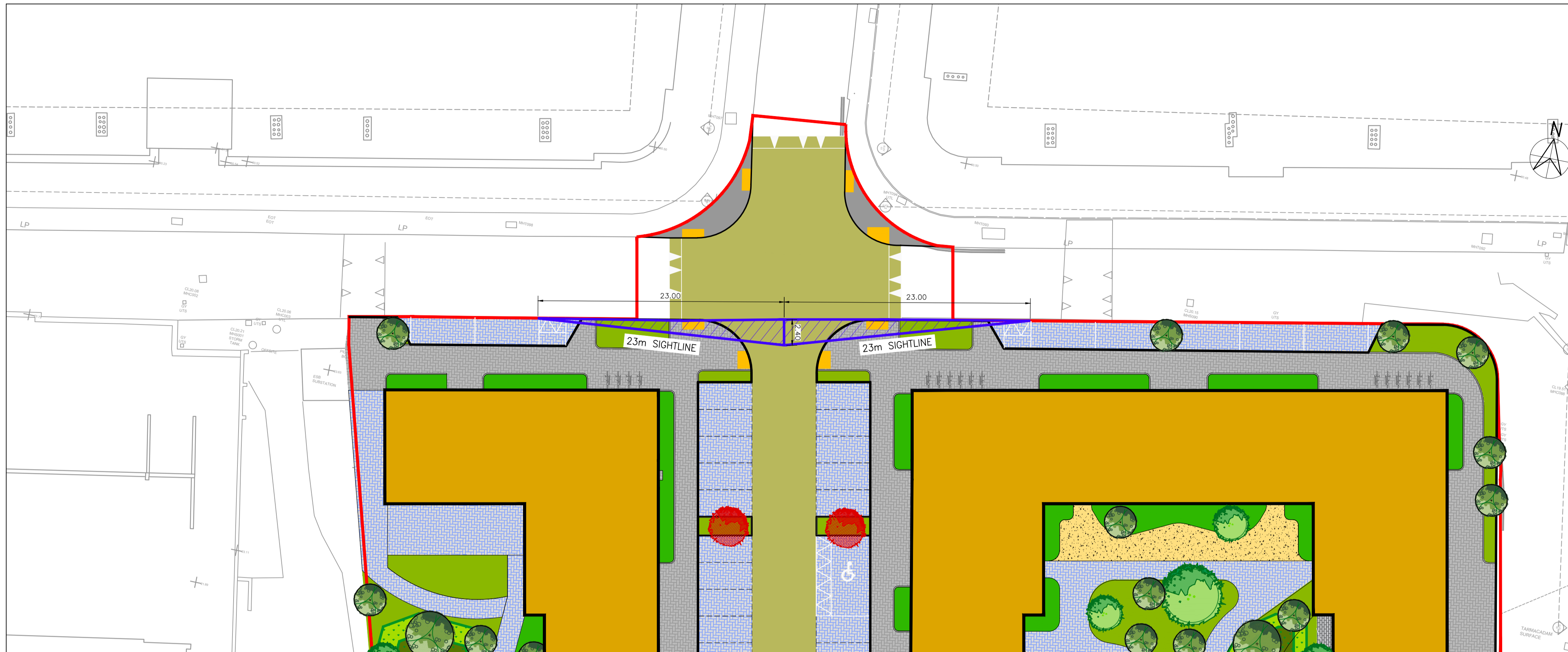
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NOTES

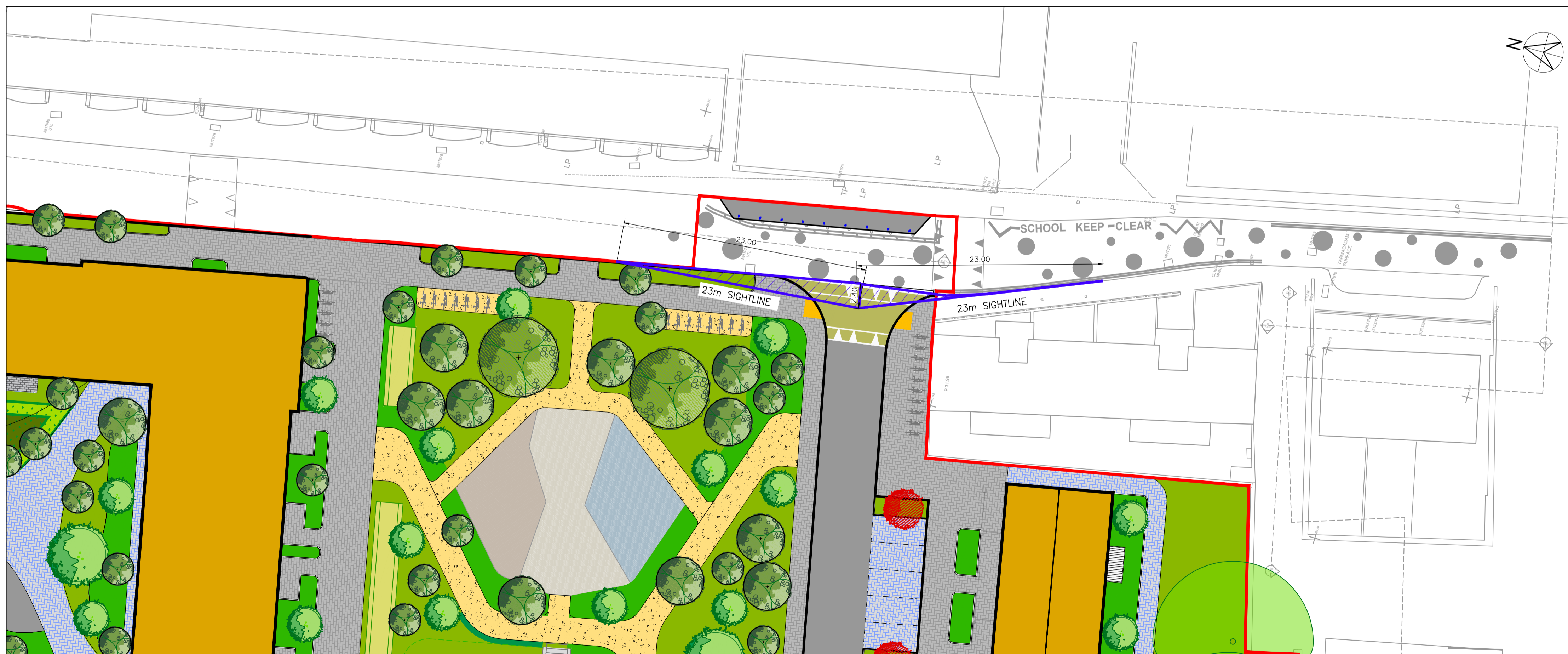
BY	DRAWING No. & REFERENCE	DATE
Survey		
Arch.	SHB4-BVF-DR-MOR-CS-P1-0101 Rev 04	23.05.2024
S. Arch.	SHB4-BVF-DR-MOR-CS-P1-0101 Rev P12	07.06.2024



KEYPLAN
SCALE: N.T.S.



PLAN OF SIGHTLINES FOR JUNCTION NO.1
SCALE: 1:250



PLAN OF SIGHTLINES FOR JUNCTION NO.2
SCALE: 1:250

DRAFT
11/06/2024

PR6	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KD	DW
PR5	LAYOUT REVISED AS PER COMMENTS	05.06.24	KD	DW
PR4	RAISED TABLE ADDED AND RED LINE BOUNDARY REVISED TO SUIT UPDATED ARCHITECT AND LANDSCAPE LAYOUTS	04.06.24	KD	DW
PR3	REVISED TO SUIT UPDATED LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	09.02.24	KD	PB
PR2	REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT ISSUED FOR INFORMATION	08.02.24	KD	PB
PR1	ISSUED FOR INFORMATION	08.01.24	JC	PB
PR	ISSUED FOR INFORMATION	07.07.23	KD	PB
REV	DESCRIPTION	DATE	BY	CHK

STATUS

P1 - INFORMATION

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WATERFORD T: +353 51 876 855 E: waterford@morce.ie

CLIENT

DUBLIN CITY COUNCIL

JOB NAME

SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS

DRG. NAME

PROPOSED SIGHT LINES

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	1:250	JULY'2023	KD	PB	PR	PR6

DRG. NO.

SHB4-BVF-DR-MOR-CS-P1-112

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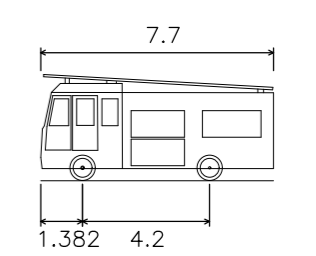
NOTES

BY	DRAWING No. & REFERENCE	DATE
Survey	SHB4-BVF-DR-CS-MOR-05603 Rev 04	23.05.2024
Arch	SHB4-BVF-DR-CS-MOR-05603 Rev 04	23.05.2024
LS Arch	SHB4-BVF-DR-MAL-L-P1-0101 Rev P12	07.06.2024

VEHICLE SWEEP PATH LEGEND

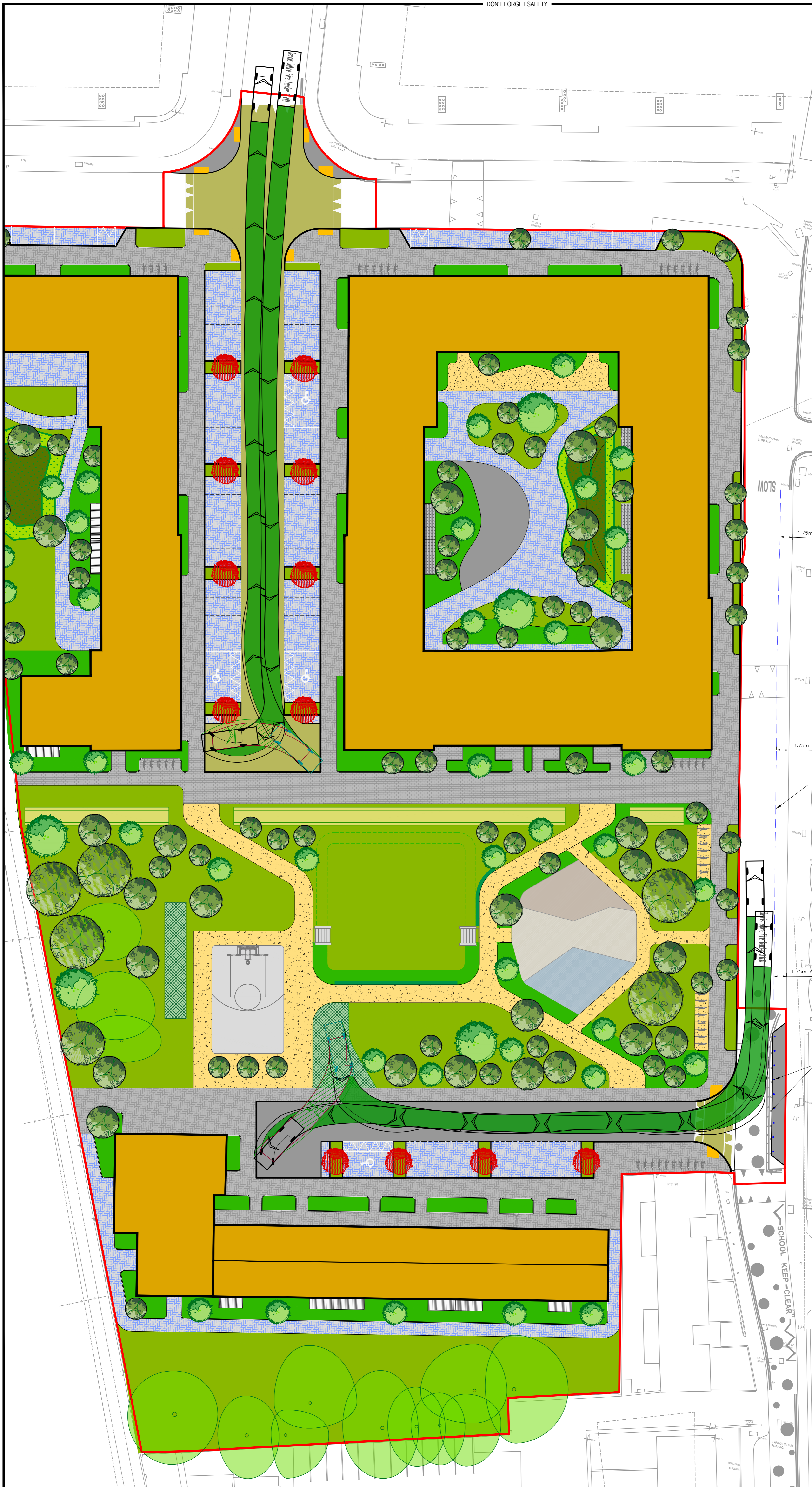
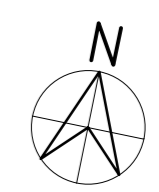
- SATISFACTORY: SWEEP PATH WORKS WITH CURRENT LAYOUT
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DENNIS SABRE FIRE TENDER (LWB)

OVERALL LENGTH	7.700m
OVERALL WIDTH OVERALL	2.430m
BODY HEIGHT	3.512m
MIN BODY GROUND CLEARANCE	0.397m
CLEARANCE TRACK WIDTH	2.380m
LOCK-TO-LOCK TIME	5.00s
CURB TO CURB TURNING RADIUS	7.400m



LINE INDICATES APPROXIMATELY THE CURRENT AREA OF UNOFFICIAL ON ROAD RESIDENTIAL PARKING IN FRONT OF HOUSES

1.75m Approx.

1.75m Approx.

1.75m Approx.

1.75m Approx.

1.75m Approx.

1.75m Approx.

EXISTING BOLLARDS AND LINEMARKING TO BE REMOVED FROM IN FRONT OF THE SCHOOL AND TO BE REPLACED WITH PAVING AND KERB EXTENDED OUT IN FRONT OF THE CRECHE AND FLEXIBLE BOLLARDS

DRAFT
11/06/2024

REV	DESCRIPTION	DATE	BY	CHK
PR7	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KD	DW
PR6	LAYOUT REVISED AS PER COMMENTS	05.06.24	KD	DW
PR5	RAISED TABLE ADDED AND RED LINE BOUNDARY REVISED TO SUIT UPDATED ARCHITECT AND LANDSCAPE LAYOUTS	04.06.24	KD	DW
PR4	REVISED TO SUIT UPDATED LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	09.02.24	KD	PB
PR3	REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT ISSUED FOR INFORMATION	08.02.24	KD	PB
PR2	ARCH LAYOUT UPDATED AND SITE LAYOUT AND SWEEP PATHS REVISED TO SUIT	31.01.24	KD	PB
PR1	ISSUED FOR INFORMATION	09.01.24	JC	PB
PR	ISSUED FOR INFORMATION	17.08.23	KD	PB

STATUS
P1 - ISSUED FOR INFORMATION

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WATERFORD T: +353 51 876 855 E: waterford@mor.ie

CLIENT
DUBLIN CITY COUNCIL

JOB NAME
SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS

DRG. NAME
SWEEP PATH ANALYSIS
FIRE TENDER

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV.
23006	A1	1:250	AUG'2023	KD	PB	PB	PR7

DRG. NO.
SHB4-BVF-DR-MOR-CS-P1-114

DRAINAGE NOTES

1. ALL FOUL WORKS TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE DOCUMENT IW-CDS-5030-03 AND IRISH WATER STANDARD DETAILS IW-CDS-5030-01.
2. ALL FOUL WATER DRAINAGE RUNS ARE TO A GRADE OF 1:150 AND PIPE SIZE OF 225 UNLESS OTHERWISE STATED.
3. ALL SURFACE WATER DRAINAGE RUNS ARE TO A GRADE OF 1:200 AND PIPE SIZE OF 225 UNLESS OTHERWISE STATED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT JUNCTION BOXES, CHAMBERS, MANHOLES, GULLIES TO ENSURE NO CLASHES WITH SERVICE DUCTS AND PIPES.
5. ALL LEVELS ARE IN METRES ABOVE MALIN HEAD DATUM UNLESS OTHERWISE NOTED.
6. ALL COVER LEVELS ARE INDICATIVE ONLY.
7. ALL DRAINAGE WORK TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTE WATER INFRASTRUCTURE AND STANDARD DETAILS.
8. MANHOLES, MANHOLE COVERS AND ROAD GULLY GRATINGS TO STANDARD SPECIFICATION.
9. ALL PIPE DIAMETERS ARE NOMINAL.
10. THE CONTRACTOR MUST SATISFY HIMSELF IN RESPECT TO THE LOCATION OF ALL EXISTING SERVICES.
11. ALL FOUL PIPEWORK TO BE UPVC IN ACCORDANCE WITH SECTION 3.1.3 AND 3.1.4 OF IRISH WATER CODE OF PRACTICE FOR WASTE WATER INFRASTRUCTURE.
12. ALL ROAD GULLY DRAINS ARE 150mm Ø.
13. 600mm MAX LENGTH ROCKER PIPES ARE TO BE PROVIDED ON SEWERS WHERE:
 - A PIPE ENTERS A MANHOLE OR PUMPING STATION
 - A PIPE LEAVES A MANHOLE
 - A PIPE ENTERS CONCRETE ENCASMENT
 - A PIPE LEAVES CONCRETE ENCASMENT
 - ANY OTHER LOCATION AS DIRECTED BY THE ENGINEER
14. ALL SEWER ROCKER PIPES ARE TO BE FORMED BY CUTTING AND TRIMMING A LENGTH OF SPIGOT & SOCKET PIPE TO ENCASE A SPIGOT AT THE CUT END, THEREBY FORMING SPIGOT & SOCKET JOINTS AT BOTH ENDS OF THE ROCKER PIPE.
15. ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED MANHOLE, PUMPING STATION, CONCRETE ENCASED SECTION OR VALVE CHAMBER.
16. ALL MANHOLE COVERS LOCATED IN TRAFFICKED AREA ARE TO BE SKID RESISTANT.
17. ALL GULLY DRAINS ARE TO BE MIN. CLASS D400 TO IS EN 124 AND ARE TO BE LOCKABLE.
18. WHERE COVER TO PIPE IS LESS THAN 900mm UNDER GRASSED AREAS OR LESS THAN 1200mm UNDER ROADWAYS THE PIPE SHOULD BE SURROUNDED IN CONCRETE.
19. EXTERNAL FACE OF PROPOSED MANHOLE CHAMBERS LOCATED AT LEAST 0.5m FROM KERB LINES, EXTERNAL FACE OF SEWERS TO BE LOCATED AT LEAST 1m FROM KERB LINES.
20. EXTERNAL FACE OF SEWERS TO BE A MINIMUM OF 5m FROM EXTERNAL FACE OF DEVELOPMENT OR EQUIVALENT DISTANCE TO THE DEPTH OF SEWER BELOW THE FOUNDATION (WHICHEVER IS GREATER).
21. EXTERNAL FACE OF FOUL MANHOLE CHAMBERS TO BE LOCATED AT LEAST 0.5m FROM KERBLINES, EXTERNAL FACE OF FOUL SEWER PIPEWORK TO BE LOCATED AT LEAST 1.0m FROM KERBLINES.
22. ALL WASTEWATER INSPECTION CHAMBERS SHOULD BE IN COMPLIANCE WITH THE IRISH WATER CODE OF PRACTICE AND STD-WW-02 & 03.
23. SEPARATION DISTANCES FROM OTHER SERVICES, BOUNDARY WALLS, TREES, ETC. TO BE IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS STD-WW-05, STD-WW-06, STD-WW-06A.

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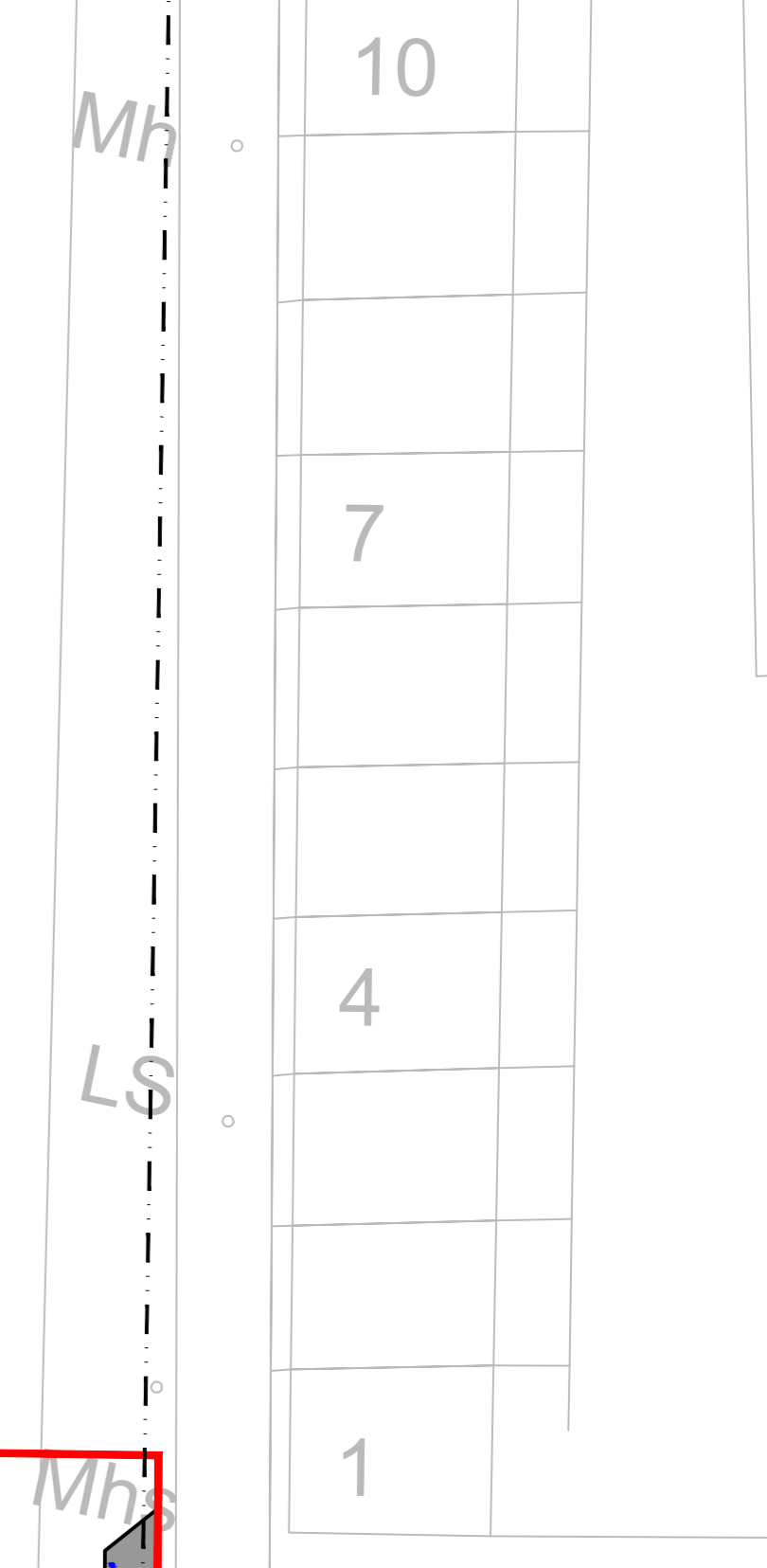
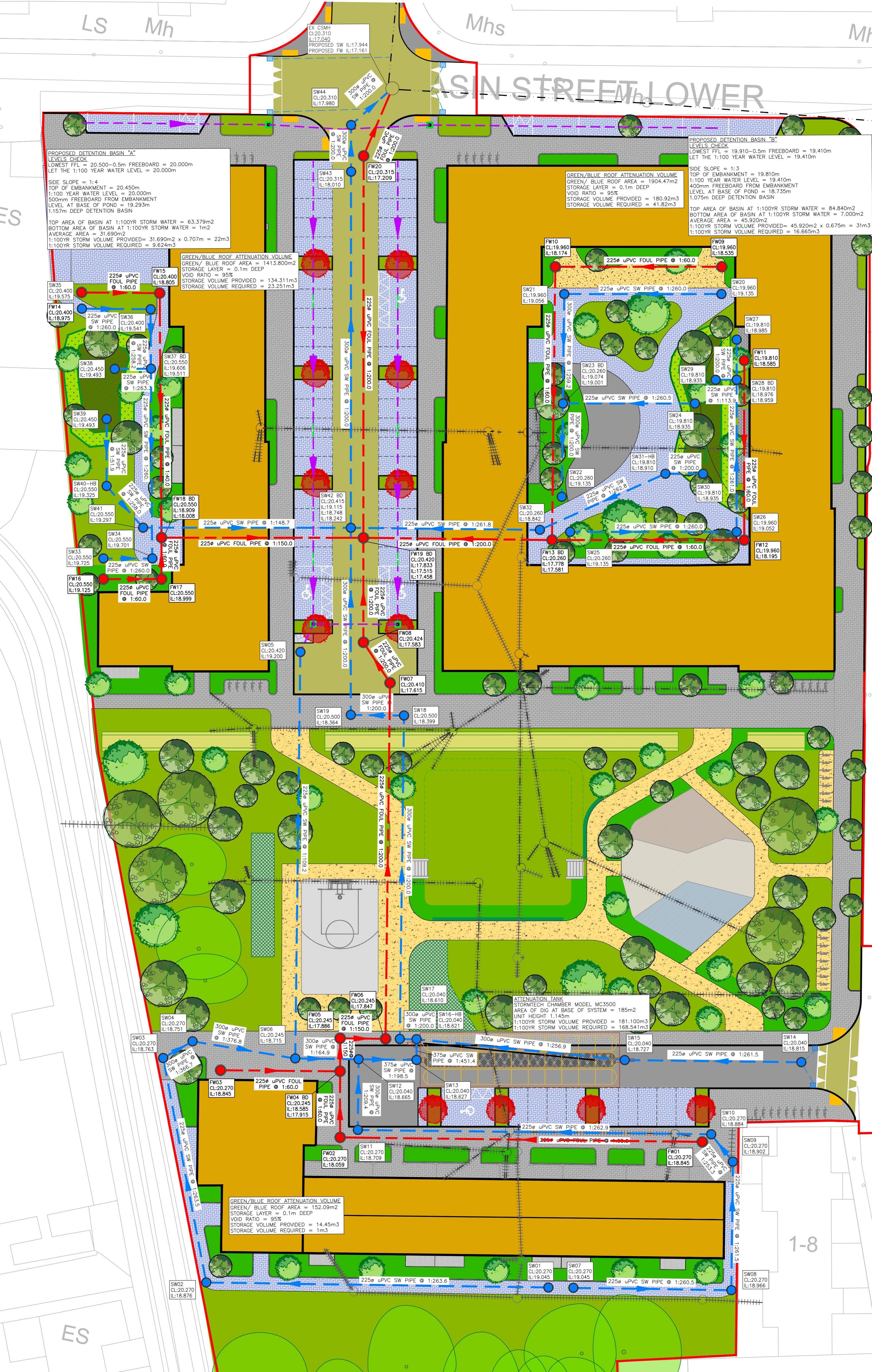
BY	DRAWING No. & REFERENCE	DATE
Survey	SHB4-BVF-DR-CO-M-0603 Rev 04	23.05.2024
Arch	SHB4-BVF-DR-MAL-L-P1-0101 Rev P12	07.05.2024

DRAINAGE LEGEND

- PROPOSED FOUL DRAINAGE LINE
- PROPOSED FOUL MANHOLE
- PROPOSED FOUL ARMSTRONG JUNCTION
- EXISTING FOUL DRAINAGE LINE
- EXISTING FOUL MANHOLE
- EXISTING FOUL ARMSTRONG JUNCTION
- PROPOSED SURFACE DRAINAGE LINE
- PROPOSED SURFACE MANHOLE
- PROPOSED SURFACE ARMSTRONG JUNCTION
- PROPOSED SURFACE ROAD GULLY
- EXISTING SURFACE DRAINAGE LINE
- EXISTING SURFACE MANHOLE
- EXISTING SURFACE ARMSTRONG JUNCTION
- EXISTING SURFACE ROAD GULLY
- INDICATES SERVICES TO BE REMOVED/DEVERTED
- PROPOSED TREE PIT
- PERMEABLE PAVING
- SWALE AREA
- GRATED MANHOLE
- RAIN GARDEN AREA
- PERMEABLE PAVING UNDERDRAIN 150Ø
- SWALE/RAIN GARDEN UNDERDRAIN 150Ø
- TREE PIT UNDERDRAIN 150Ø
- DROPPED KERB AT 5m C/C
- INSPECTION CHAMBER

IRISH WATER APPLICABLE DETAILS (NON-EXHAUSTIVE LIST) WASTE WATER DETAILS - TABLE

STD-WW-01	WASTEWATER SERVICES CONNECTION MAINTENANCE RESPONSIBILITY
STD-WW-03	DRAIN & SERVICE CONNECTION PIPEWORK
STD-WW-04	TYPICAL SEWER/SERVICE PIPE CONNECTION
STD-WW-05	TYPICAL SERVICE LAYOUT INDICATING SEPARATION DISTANCES
STD-WW-05A	WASTEWATER SERVICE CONNECTION VERTICAL SEPARATION DISTANCES
STD-WW-06	RESTRICTIONS ON WASTEWATER INFRASTRUCTURE WORKS ADJACENT TO TREES
STD-WW-06A	RESTRICTIONS ON NEW TREES / SHRUBS PLANTING ADJACENT TO SEWERS
STD-WW-07	TRENCH BACKFILL AND BEDDING
STD-WW-08	CONCRETE BED, HAUNCH AND SURROUND TO WASTEWATER PIPES
STD-WW-10	PRE-CAST CONCRETE MANHOLE WITH CAST IN-SITU BASE
STD-WW-10A	PRE-CAST CONCRETE MANHOLE WITH PRECAST BASE
STD-WW-12	BACKDROP AND CASCADE MANHOLES
STD-WW-36	MARKER POST/PLATES



DRAFT
11/06/2024

PR3	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KA	DW
PR2	ISSUED FOR INFORMATION	12.02.24	KA	PB
PR1	REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	09.02.24	KD	PB
PR	ISSUED FOR INFORMATION	10.01.24	KA	PB

STATUS: **P1 - ISSUED FOR INFORMATION**

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CLIENT: **DUBLIN CITY COUNCIL**

JOB NAME: **SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS**

DRG. NAME: **DRAINAGE LAYOUT**

JOB REF	SHEET	SCALE	DATE	BY	APP	ENG	REV
23006	A1	1:250	JAN '24	KA	KA	PB	PR3

DRG. NO.: **SHB4-BVF-DR-MOR-CS-P1-130**

DONT SCALE DIMENSIONS

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NOTES

BY	DRAWING No. & REFERENCE	DATE
Survey	SHB4-BVF-DR-CO-MOR-CS-0503 Rev. 04	23.05.2024
Arch.	SHB4-BVF-DR-CO-MOR-CS-0503 Rev. 04	23.05.2024
LS Arch.	SHB4-BVF-DR-MAL-L-P1-0101 Rev. P12	07.06.2024



WATERMAIN LEGEND

- PROPOSED WATERMAIN LINE
- PROPOSED HYDRANT
- ▽ PROPOSED AIR VALVE
- ▽ PROPOSED SLUICE VALVE
- ⊙ PROPOSED WATER METER
- ⊙ PROPOSED THRUST BLOCK
- EXISTING WATERMAIN LINE
- EXISTING HYDRANT
- ⊙ EXISTING WATER METER
- ||||| INDICATES WATERMANS TO BE REMOVED/DEVERTED

WATERMAIN NOTES

1. ALL WORKS TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE DOCUMENT IW-CDS-5020-03 AND IRISH WATER STANDARD DETAILS IW-CDS-5020-01.
2. ALL WATERMANS (EXCEPT AS NOTED BELOW) TO BE HDPE (PE-100) WITH SDR-17 RATING AND SHALL COMPLY WITH SECTION 3.9 OF IRISH WATER CODE OF PRACTICE.
3. CONCRETE ANCHOR BLOCKS AT DEAD ENDS, TEES, BOTH SIDES OF SLUICE VALVES AND AT ALL BENDS OVER 22.5°.
4. MIN. COVER TO WATERMAIN TO BE 900MM.
5. WATERMANS TO BE PRESSURE TESTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WATER INFRASTRUCTURE SECTION 4.10.3.
6. PRIOR TO COMMISSIONING THE WATERMAIN SHALL BE SWABBED AND DISINFECTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WATER INFRASTRUCTURE.
7. SEE MANUFACTURER'S DETAILED INSTRUCTIONS PRIOR TO THE INSTALLATION OF WATER METER.
8. CHECK THAT FLOW ARROW DIRECTION IS POINTING IN THE SAME DIRECTION AS THE FLOW IN THE WATERMAIN.
9. DRAW-WIRES TO BE LEFT IN ALL DUCTS.
10. DF SPACER AND S.V. TO BE THE SAME Ø AS METER.
11. SEPARATION DISTANCES FROM EXISTING PLANTING SHALL COMPLY WITH IRISH WATER STANDARD DETAIL STD-W-12.
12. CONCRETE THRUST BLOCKS AT DEAD ENDS, TEES, BOTH SIDES OF SLUICE VALVES AND AT ALL BENDS OVER 22.5°. THRUST BLOCKS TO BE PROVIDED IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-W-28 (12-15 BAR TEST PRESSURE).
13. NO HYDRANTS OR SLUICE VALVES ARE TO BE LOCATED WITHIN TRAFFICKED AREAS.
14. SEPARATION DISTANCES FROM OTHER SERVICES, BOUNDARY WALLS, TREES, ETC. TO BE IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS STD-W-11, STD-W-12, STD-W-12A.

IRISH WATER APPLICABLE DETAILS (NON-EXHAUSTIVE LIST) WATERMAIN DETAILS - TABLE

STD-W-04	GENERAL PIPE CONNECTIONS (SHEET 1 OF 7)
STD-W-05	GENERAL PIPE CONNECTIONS (SHEET 2 OF 7)
STD-W-06	GENERAL PIPE CONNECTIONS (SHEET 3 OF 7)
STD-W-07	GENERAL PIPE CONNECTIONS (SHEET 4 OF 7)
STD-W-08	GENERAL PIPE CONNECTIONS (SHEET 5 OF 7)
STD-W-09	GENERAL PIPE CONNECTIONS (SHEET 6 OF 7)
STD-W-10	GENERAL PIPE CONNECTIONS (SHEET 7 OF 7)
STD-W-13	TRENCH BACKFILL & BEDDING & REDUCED COVER TO PROTECTION SLAB DETAIL
STD-W-14	SLUICE VALVE FOR DUCTILE (D.I.) PIPE (<350mm DIA) (SHEET 1 OF 2)
STD-W-15	SLUICE VALVE FOR POLYETHYLENE (P.E.) PIPE (<350mm DIA) (SHEET 2 OF 2)
STD-W-16	ON-LIN HYDRANT FOR DUCTILE IRON (D.I.) PIPES (SHEET 1 OF 4)
STD-W-17	OFF-LINE HYDRANT FOR DUCTILE IRON (D.I.) PIPES (SHEET 2 OF 4)
STD-W-18	ON-LINE HYDRANT FOR POLYETHYLENE (P.E.) PIPES (SHEET 3 OF 4)
STD-W-19	OFF-LINE HYDRANT FOR POLYETHYLENE (P.E.) PIPES (SHEET 4 OF 4)
STD-W-27	MARKER POST/PLATES
STD-W-28	WATER MAIN THRUST & SUPPORT BLOCKS

DRAFT
11/06/2024

PR2	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KD	DW
PR1	REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT ISSUED FOR INFORMATION	09.02.24	KD	PB
PR	ISSUED FOR INFORMATION	09.01.24	KD	PB
REV	DESCRIPTION	DATE	BY	CHK

STATUS
P1 - ISSUED FOR INFORMATION

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CLIENT
DUBLIN CITY COUNCIL

JOB NAME
SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS

DRG. NAME
WATERMAIN LAYOUT

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	1:250	JAN 2024	KD	PB	PB	PR2

DRG. NO.
SHB4-BVF-DR-MOR-CS-P1-140

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1A-38A

1-38

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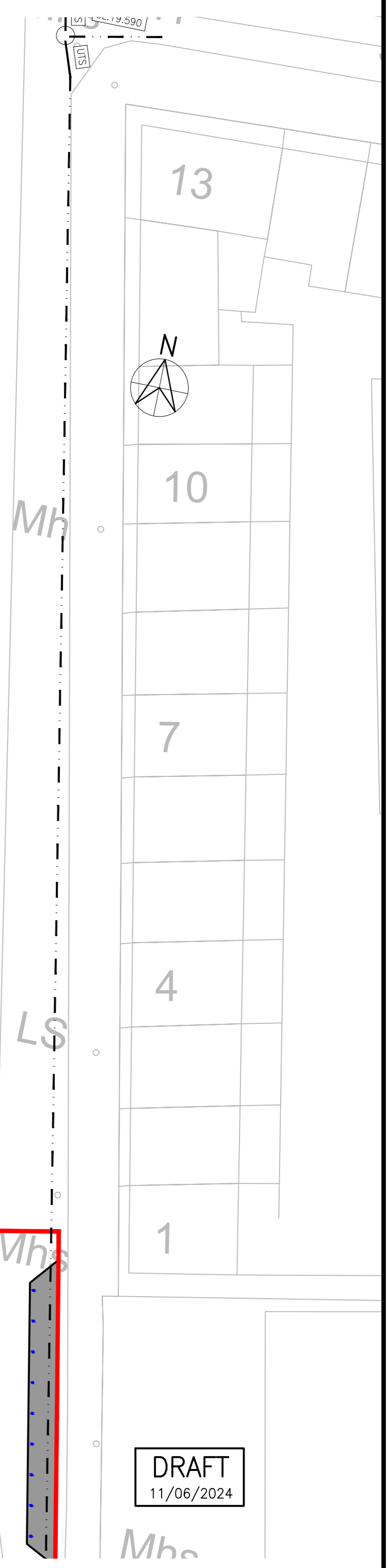
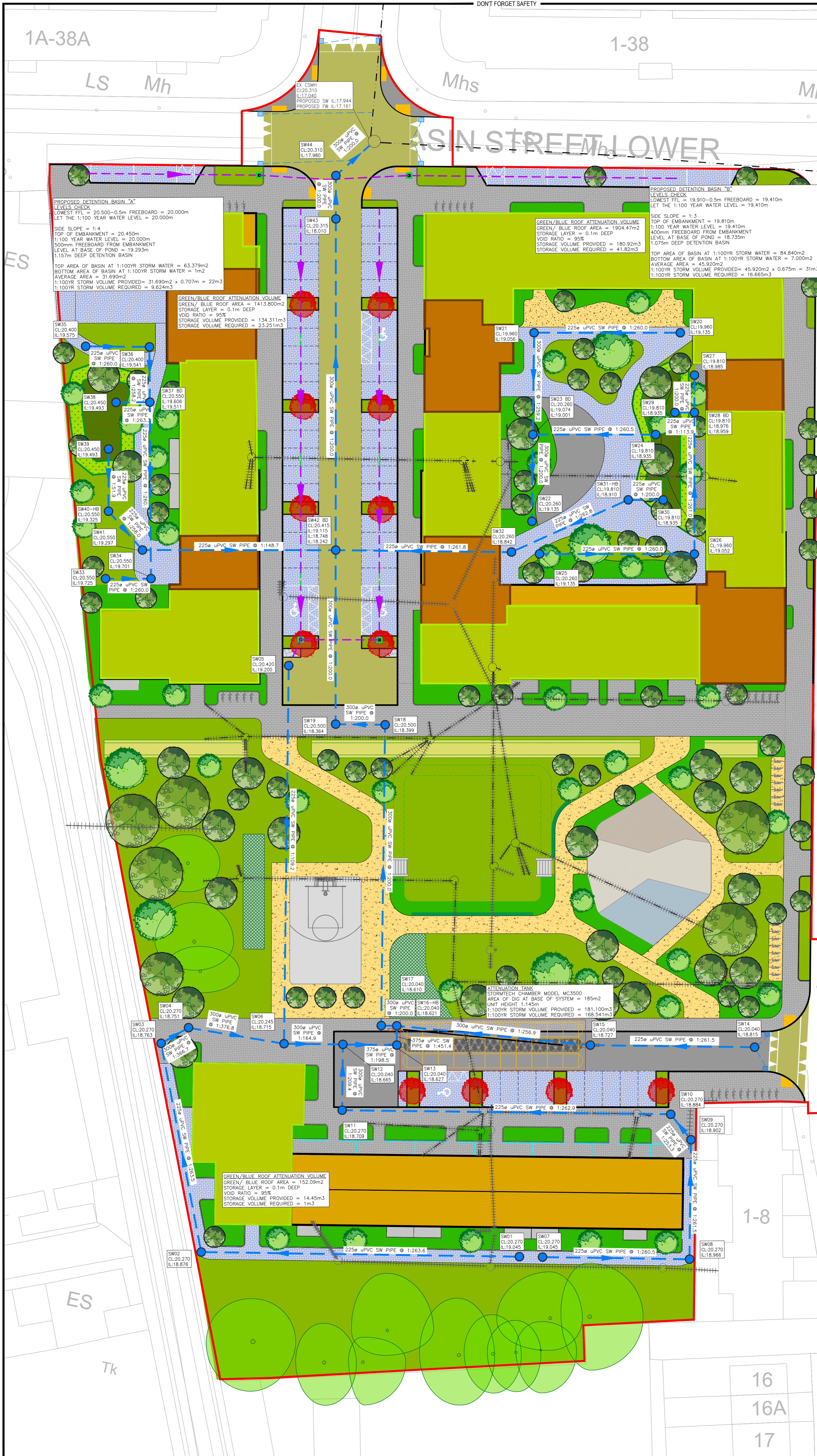
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NOTES

BY	DRAWING No. & REFERENCE	DATE
Survey		
Arch	SHB4-BVF-DR-CS-MOR-0503 Rev 04	23.05.2024
LS Arch	SHB5-BV-DR-MAL-L-P1-0101 Rev P12	07.06.2024

LEGEND	
	EXISTING SURFACE DRAINAGE LINE
	EXISTING SURFACE MANHOLE
	EXISTING SURFACE ARMSTRONG JUNCTION
	EXISTING SURFACE ROAD GULLY
	PROPOSED SURFACE DRAINAGE LINE
	PROPOSED SURFACE MANHOLE
	PROPOSED SURFACE ROAD GULLY
	PROPOSED TREE PIT
	PERMEABLE PAVING
	SWALE AREA
	GRATED MANHOLE
	RAIN GARDEN AREA
	PERMEABLE PAVING UNDERDRAIN 150mm
	SWALE/RAIN GARDEN UNDERDRAIN 150mm
	TREE PIT UNDERDRAIN 150mm
	DROPPED KERB AT 5m C/C
	INSPECTION CHAMBER
	INDICATES SERVICES TO BE REMOVED/DIVERTED



REV	DESCRIPTION	DATE	BY	CHK
PR5	LAYOUT REVISED TO SUIT ARCHITECT AND LANDSCAPE LAYOUT RE-ISSUED FOR INFORMATION	11.06.24	KA	DW
PR4	BLUE/GREEN ROOF REMOVED FROM BLOCK C	22.03.24	KA	PB
PR3	ISSUED FOR INFORMATION	12.02.24	KA	PB
PR2	SURFACE DRAINAGE AMENDED TO SUIT REVISED SITE LAYOUT	09.02.24	KA	PB
PR1	ISSUED FOR INFORMATION	10.01.24	KA	PB
PR	WORK IN PROGRESS - ISSUED FOR INFORMATION	09.01.24	KA	PB

STATUS
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CLIENT
DUBLIN CITY COUNCIL

JOB NAME
SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS

DRG. NAME
SUDDS LAYOUT

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	1:250	JAN '24	KA	KA	PB	PR5

DRG. NO.
SHB4-BVF-DR-MOR-CS-P1-150

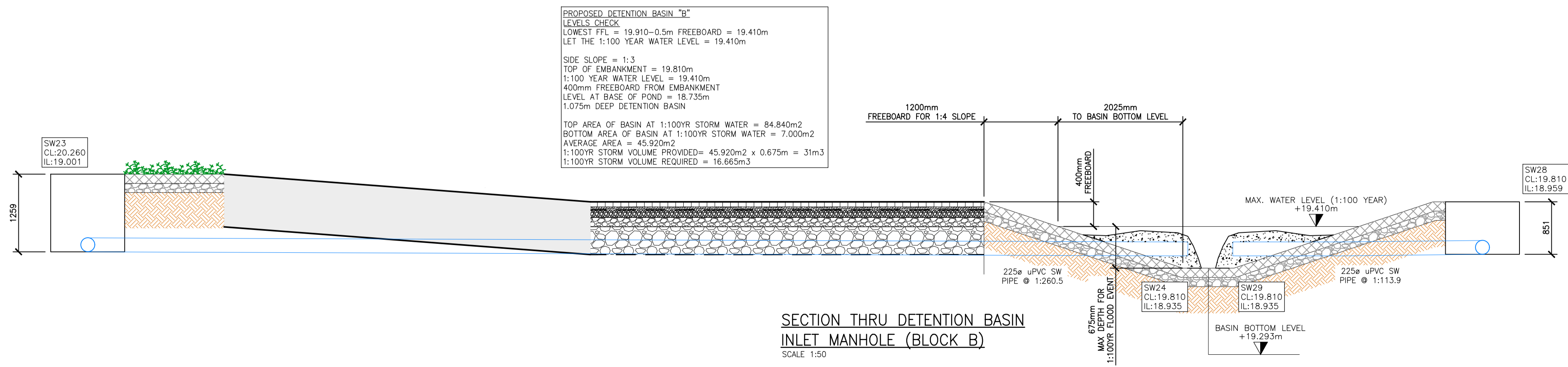
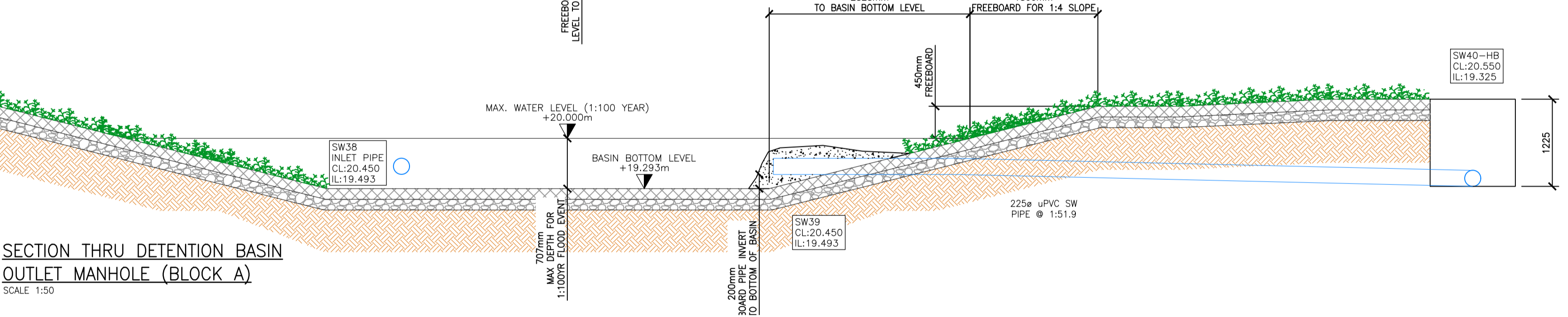
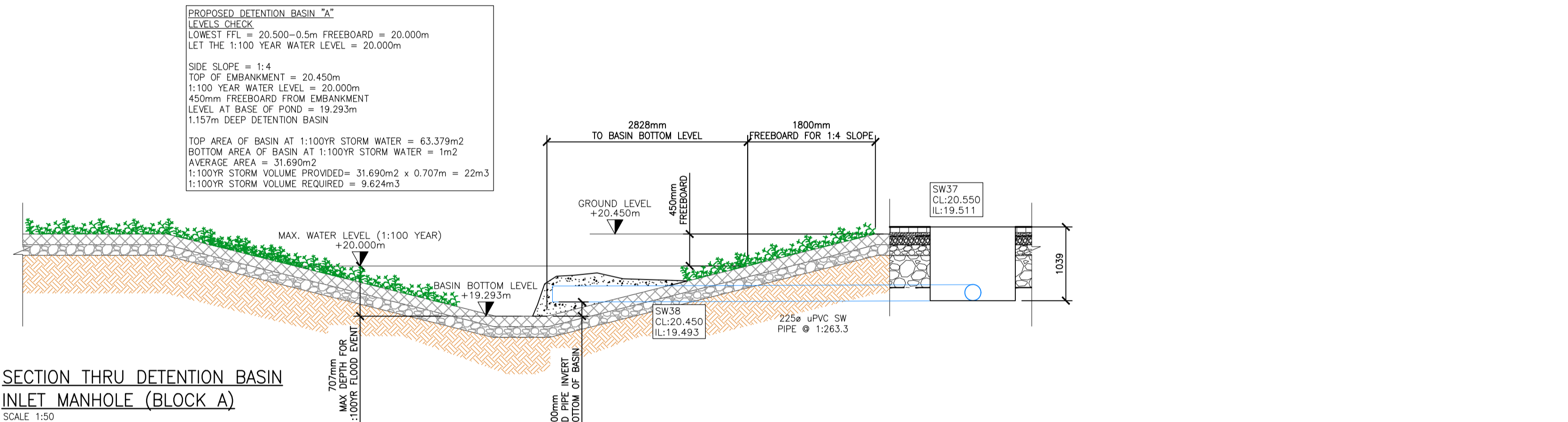
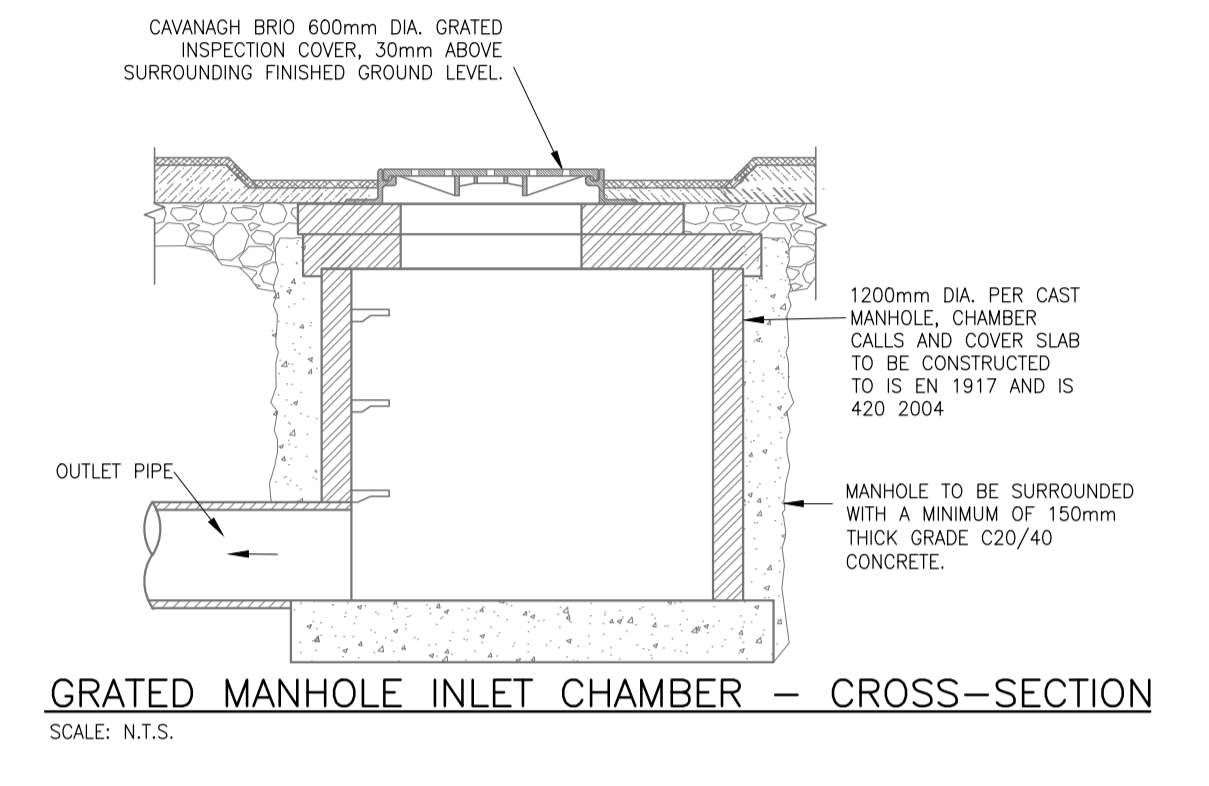
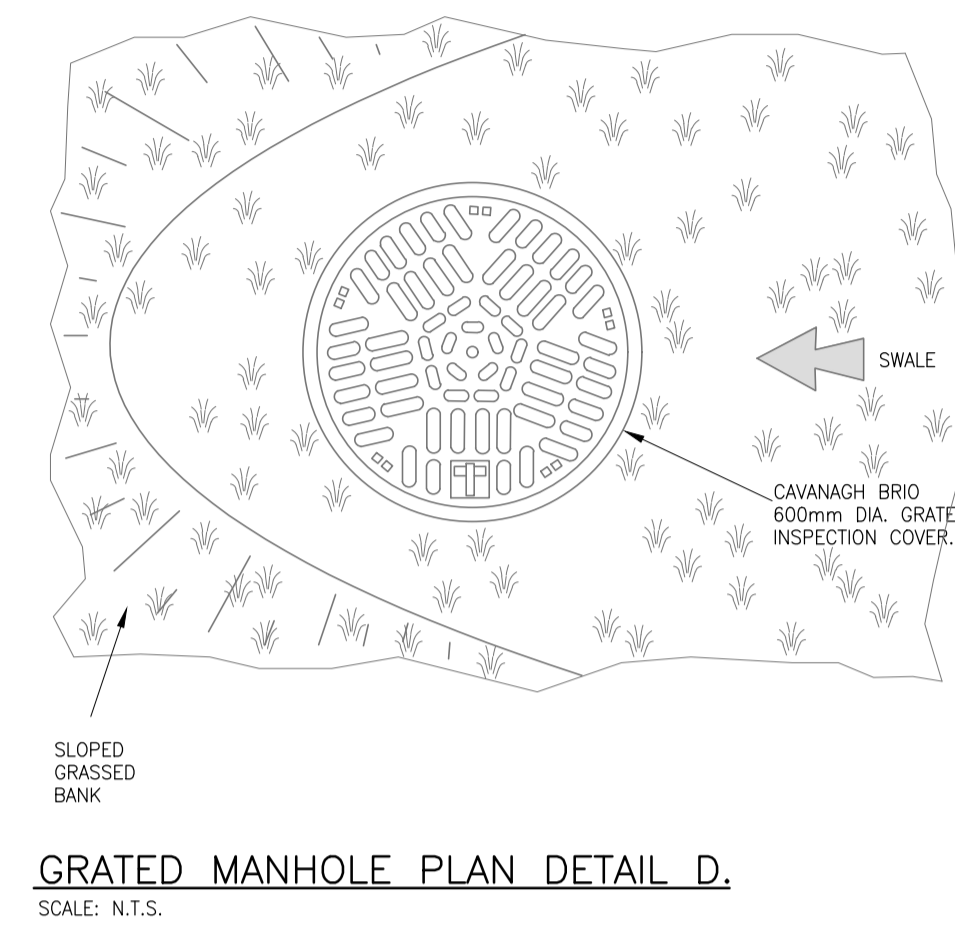
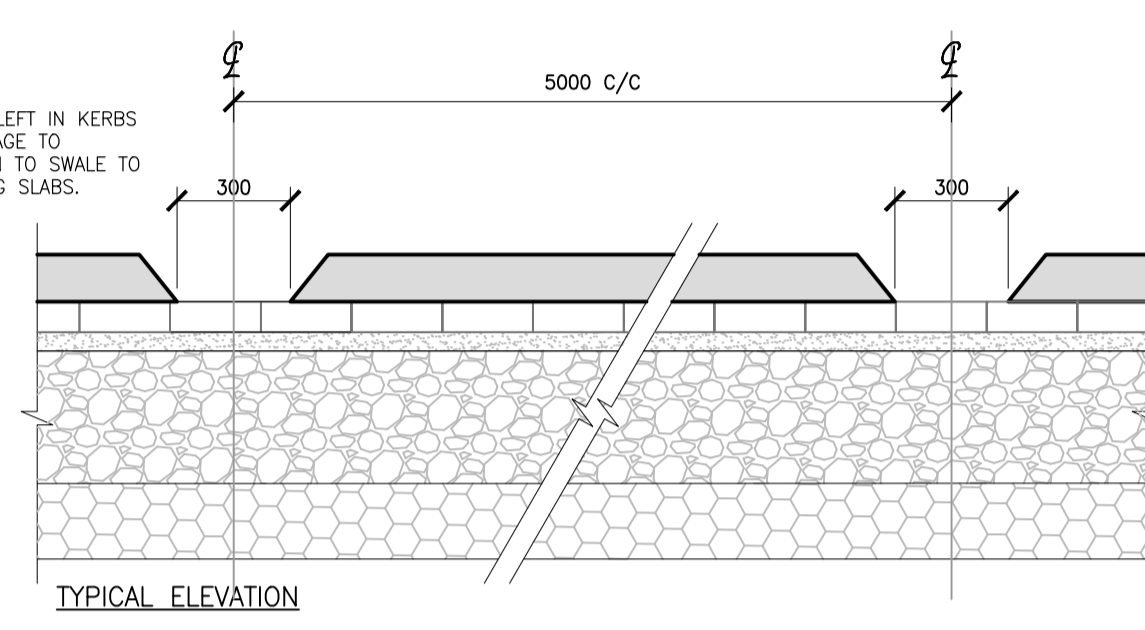
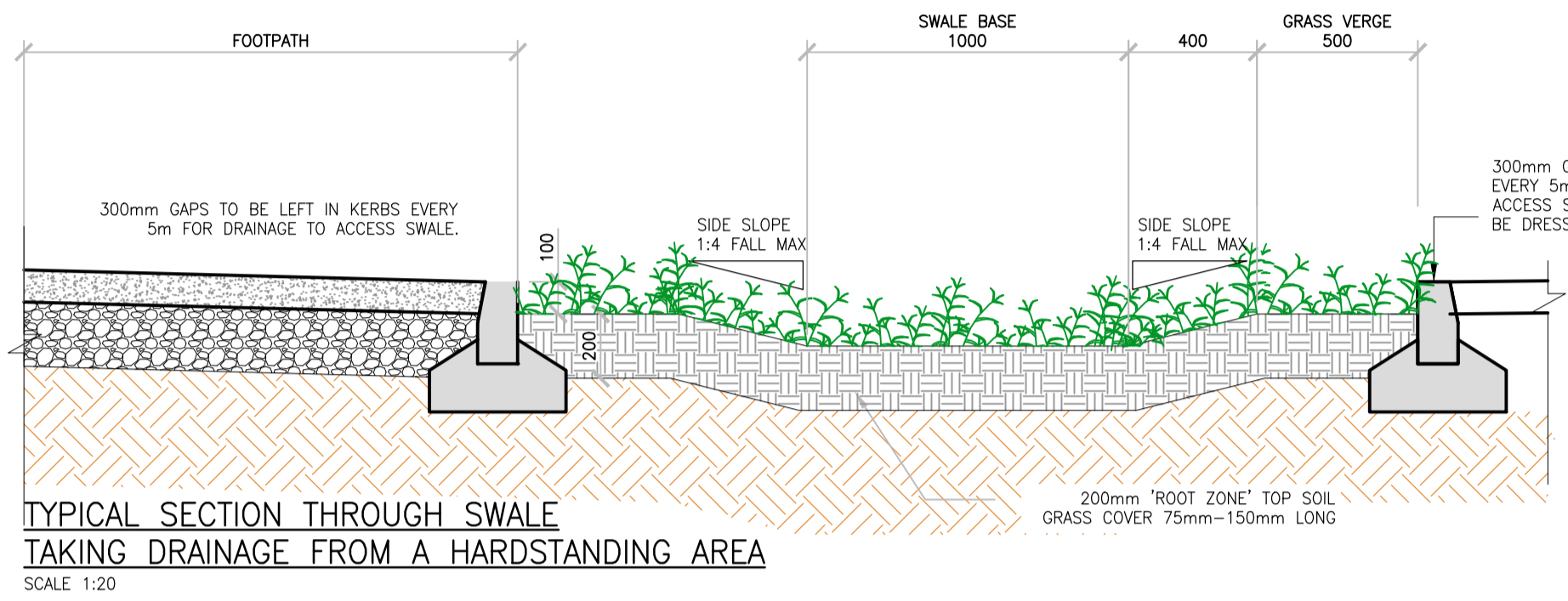
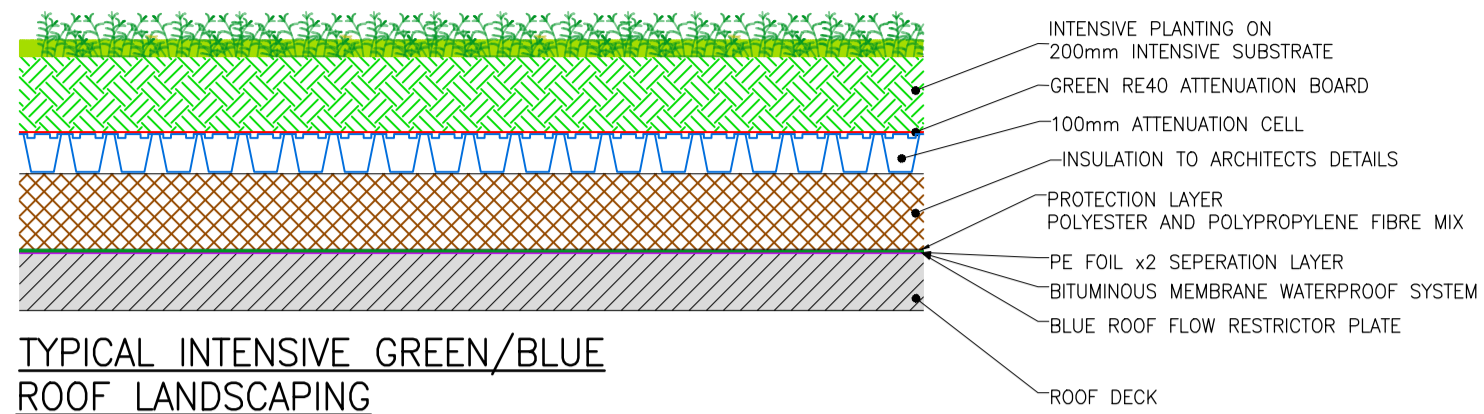
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NOTES



PR1	ISSUED FOR INFORMATION	11.06.24	KA	DW
PR	ISSUED FOR INFORMATION	10.01.24	KA	PB
REV	DESCRIPTION	DATE	BY	CHK
STATUS				
P1 - INFORMATION				
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CLIENT DUBLIN CITY COUNCIL				
JOB NAME SOCIAL HOUSING BUNDLE 4, DEVELOPMENT AT BASIN VIEW FLATS				
DRG. NAME SITE DEVELOPMENT DETAILS SHEET 1 SUDS DRAINAGE DETAILS				
JOB REF	SHEET	SCALE	DATE	BY
23006	A1	SHOWN	JAN '24	KA
APP	REV.			
PR1				
DRG. NO. SHB4-BVF-DR-MOR-CS-P1-151				



CENTRAL PLAY AREA/GREEN AREA
 Results - Horizontal Illuminance (lux)
 Eav= 8.50
 Emin= 2.65
 Emax= 20.68
 Emin/Emax= 0.13
 Emin/Eav= 0.31
 Emax/Eav= 2.43

MAIN APARTMENT BLOCKS & ROUTES
 Results - Horizontal Illuminance (lux)
 Eav= 8.93
 Emin= 1.34
 Emax= 24.00
 Emin/Emax= 0.06
 Emin/Eav= 0.15
 Emax/Eav= 2.69

LOWER APARTMENT BLOCK
 Results - Horizontal Illuminance (lux)
 Eav= 8.21
 Emin= 1.30
 Emax= 19.65
 Emin/Emax= 0.07
 Emin/Eav= 0.16
 Emax/Eav= 2.39

Luminaire Data
 Luminaire A AXIA 2.1 5167 Integrated lenses 16 DSLDN SQUARE GIANT@760mA
 Lamp 16 DSLDN SQUARE GIANT@760mA NW 740 230V 00-36-648 MF 0.84
 Luminaire B AXIA 2.1 5167 Integrated lenses 16 DSLDN SQUARE GIANT@500mA
 Lamp 16 DSLDN SQUARE GIANT@500mA NW 740 230V 00-36-648 MF 0.84
 Luminaire D AXIA 2.1 5167 Integrated lenses 16 DSLDN SQUARE GIANT@300mA
 Lamp 16 DSLDN SQUARE GIANT@300mA NW 740 230V 00-36-648 MF 0.84

- Key**
- Luminaire A Column
 - Luminaire B Column
 - Luminaire D Column
 - Beam Aiming Target
 - Photometric Centre

All Dimensions in metres

P01 PRELIMINARY ISSUE FOR REVIEW/COMMENT	DMcD	SF	15.05.2024
REV DESCRIPTION	DRN	CKD	DATE

ISSUE **PLANNING STAGE**



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PROJECT TITLE
 SOCIAL HOUSING BUNDLE 4

DRAWING TITLE
 DEVELOPMENT AT BASIN VIEW, DUBLIN
 ILLUMINANCE PLOT

DRAWING REFERENCE	DRN	SCALE
SHB5-CVD-SMK-ZZ-SI-DR-E-6000	DMcD	A1 1:350