# 2026 BLOCK E1 PLANNING AMENDMENT
## Reg. Ref. 5050/26
## STATUS : GRANTED

ATTENUATION FACILITY 2.2:

CONCRETE TANK PROVIDING 1:100 YEAR (1% AEP) ATTENUATION VOLUME REQUIREMENTS

PROVIDED VOLUME: 145m³

TWL: 39.1m
IL: 38.1m

TEMPORARY PHASE 1 ARRANGEMENT FOR ACCESS FOR BLOCK E2 TO BE DIVERTED INTO PROPOSED PHASE 2 SURFACE WATER NETWORK

TAKING IN CHARGE BOUNDARY

PROPOSED PUBLIC OUTFALL TO BE RELAID DUE TO POOR FLOW CONDITIONS OF EXISTING MANHOLES

DIVERTED OUTFALL TO BE CONSTRUCTED AS PART OF SURFACE WATER NETWORK CONNECTION APPLICATION AS PART OF PHASE 1 COMPLIANCE SUBMISSION

FLOW CONTROL MANHOLE (HYDROBRAKE OPTIMUM OR SIMILAR)

DESIGN FLOW: 6.1 l/s
DESIGN HEAD: 1.3m

EX-MH212M
CL37.490
IL35.615

TIE-IN
CL 38.294
IL 38.044

EX 375Ø SW

SB0
CL 39.600
IL 37.672

SB0-1
CL 39.900
IL 37.790

SB1-1 (TANK 2-1A)
CL 40.250
IL 37.800

SB1
CL 40.600
IL 38.005

SB1-2
CL 40.000
IL 38.362

SB1-3
CL 41.025
IL 39.350

SB1-4
CL 42.000
IL 39.463

SB1-5 (TANK2-1B)
CL 42.000
IL 39.500

SB1-6
CL 42.000
IL 40.063

SB1-7
CL 42.000
IL 40.183

SB1-8
CL 42.000
IL 40.303

SB1-9
CL 42.000
IL 40.585

ATTENUATION FACILITY 2.1A: CONCRETE TANK

TANK PROVIDING 1:100 YEAR (1% AEP) ATTENUATION VOLUME REQUIREMENTS

PROVIDED VOLUME: 90m³

TWL: 39.1m
IL: 37.8m

FLOW CONTROL MANHOLE (HYDROBRAKE OPTIMUM OR SIMILAR)

DESIGN FLOW: 2.4 l/s
DESIGN HEAD: 1.535m

ATTENUATION FACILITY 2.1B: CONCRETE TANK

TANK PROVIDING 1:100 YEAR (1% AEP) ATTENUATION VOLUME REQUIREMENTS

PROVIDED VOLUME: 140m³

TWL: 40.8m
IL: 39.6m

SB2
CL 41.600
IL 39.960

SB3
CL 41.000
IL 40.063

SB4
CL 41.807
IL 39.160

SB4 TANK 2-2
CL 41.000
IL 38.100

SB5
CL 42.500
IL 40.627

SB6
CL 42.500
IL 40.927

SB7
CL 42.500
IL 41.227

SB8
CL 42.500
IL 41.527

SB9
CL 42.500
IL 41.500

SC0
CL 42.564
IL 40.600

SC1
CL 42.917
IL 41.050

SC2
CL 42.469
IL 41.500

SA0
CL 42.308
IL 40.311

SA1
CL 42.523
IL 40.340

SA2
CL 42.524
IL 40.507

SA3
CL 42.518
IL 40.491

SA4
CL 42.500
IL 40.525

SA4-1
CL 42.500
IL 40.804

SA5
CL 42.500
IL 40.812

SA6
CL 42.500
IL 40.627

SA6-1
CL 42.500
IL 40.927

SA7
CL 42.500
IL 41.227

SA7-1
CL 42.500
IL 40.928

SA7-2
CL 42.500
IL 41.003

SA8
CL 42.500
IL 40.885

SA8-1
CL 42.500
IL 40.962

SA8-2
CL 42.500
IL 41.088

SA9
CL 42.500
IL 41.066

SA10
CL 42.500
IL 41.100

PROPOSED PROPERTY BOUNDARY/TIC EXTENT

PROPOSED BASEMENT BOUNDARY

PROPOSED TREEPIT SYSTEM

ACO CHANNEL GRATING SYSTEM TO INTERCEPT ADDITIONAL SURFACEWATER

PROPOSED FILTER DRAIN COLLECTORS FOR PERMEABLE PAVING

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ATTENUATION FACILITY: CONCRETE TANK

TANK PROVIDING 1:100 YEAR (1% AEP) ATTENUATION VOLUME REQUIREMENTS
PROVIDED VOLUME: 295m³
TWL: 41.607m
IL: 40.507m

FUTURE PHASE 3 BUILDING EDGE

INTEGRATED RAIN GARDEN SYSTEM TO DRAIN DIRECTLY INTO ATTENUATION TANK

TAKING IN CHARGE BOUNDARY

PROPOSED PRIVATE RAINGARDEN TO COLLECT FRONT COURTYARD WITH PUBLIC OUTFALL CHAMBER

FLOW CONTROL MANHOLE (HYDROBRAKE OPTIMUM OR SIMILAR)
DESIGN FLOW: 6.8 l/s
DESIGN HEAD: 1.32m

WM Ø18" AC

MATCH LINE

MATCH LINE

N
W E
S

### SERVICES LEGEND

- APPLICATION BOUNDARY
- TAKING IN CHARGE BOUNDARY
- EXISTING SURFACE WATER SEWER (S1 CL 99.99 IL 99.99)
- SURFACE WATER SEWER AND MANHOLE (PRIVATE) (S1 CL 99.99 IL 99.99)
- SURFACE WATER SEWER AND BLOCK BUILT MANHOLE (PUBLIC) (S1 CL 99.99 IL 99.99)
- BLOCK BUILT (600X600mm INTERNAL) SURFACE WATER OUTFALL MANHOLE & 150mm CLAYWARE CONNECTION
- 150mmØ SURFACE WATER COLLECTOR DRAIN SN8 UPVC & INSPECTION CHAMBER (PRIVATE AREA ONLY)
- SURFACE WATER FILTER DRAIN WITH 150 DIA PERFORATED TWINWALL PIPE (PRIVATE AREA ONLY)
- PUBLIC SURFACE WATER FILTER DRAIN WITH 150Ø PERFORATED VITRIFIED CLAY PIPE
- ROAD GULLY & 150Ø CLAYWARE LEADER
- PEDESTRIAN GULLY & 150Ø CLAYWARE LEADER
- PROPOSED SUDS CONNECTION TO TREE PIT (SC)
- ACO MULTIDRAIN M100D 0.0 WITH 110mm Ø OUTLET PIPE
- ACO MULTIDRAIN M100D 10.0 WITH 110mm Ø OUTLET PIPE
- ACO MULTIDRAIN M150D 10.0 WITH 160mm Ø OUTLET PIPE
- PROPOSED CONCRETE ATTENUATION TANK
- DRY SWALE WITH GRATED BLOCK BUILT MANHOLE INLET CHAMBER
- PROPOSED LEVELS (X.XX)
- FINISHED FLOOR LEVEL
- BASEMENT EXTENTS

ORDNANCE SURVEY IRELAND LICENCE
No CYAL50276885
© ORDNANCE SURVEY IRELAND
GOVERNMENT OF IRELAND

ON ORIGINAL
0 5 10 15 20 30 40 50mm

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NOTES:

GENERAL NOTES:

1. ALL DRAWINGS TO BE CHECKED BY CONTRACTOR ON SITE AND ENGINEER INFORMED OF DISCREPANCIES BEFORE WORK COMMENCES.
2. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF EXISTING DRAINAGE AND OUTFALL LEVELS AND LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS ON SITE.
3. ALL DIMENSIONS AND LEVELS ARE IN METERS AND ARE RELATED TO ORDINANCE DATUM. CO-ORDINATES RELATE TO IRISH TRANSVERSE MERCATOR.
4. ALL FOUL SEWERS, MANHOLES AND CONNECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE AND IRISH WATER WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
5. ALL PUBLIC SURFACE WATER SEWERS TO BE MINIMUM 225 DIA. CLASS H CONCRETE TO EN1916 & IS 6 2004.
6. SURFACE WATER CONNECTIONS TO BE MINIMUM 150mm VITRIFIED CLAY PIPES AND FITTINGS TO I.S./EN 295-1/2/3:1992 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS. ALL CONNECTIONS TO BE SURROUNDED IN MINIMUM 150MM ST4 CONCRETE.
7. ALL COVER LEVELS TO MATCH FINISHED ROAD/ VERGE/ FOOTPATH/ CYCLETRACK LEVELS UNLESS OTHERWISE STATED.
8. CONTRACTOR TO INCLUDE FOR CCTV SURVEY OF ALL SEWERS UPON COMPLETION OF SAME.
9. ALL FOUL SEWERS AND MANHOLES TO BE AIR TESTED IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
10. WHERE COVERS ARE LOCATED IN GRASS AREAS THEY SHALL BE SURROUNDED BY A CONCRETE PLINTH, 200MM ALL ROUND AND 100mm DEEP FORMED WITH C20/25 CONCRETE, 20MM AGGREGATE SIZE. BEDDED IN CLAUSE 808 MATERIAL.
11. ALL FOUL SEWERS PIPE MATERIAL TO BE TO SECTION 3.13 OF WASTEWATER CODE OF PRACTICE.

| rev | date | description | by | chkd. |
|---|---|---|---|---|
| P02 | 15/09/26 | LRD STAGE 3 | PV | GPH |
| P01 | 18/06/26 | PLANNING ISSUE | PJC | GPH |

client approval
A - Approved
B - Approved with comments
C - Do not use

suitability: S3 - REVIEW & COMMENT
issue purpose: PLANNING

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project ref.
LDA ROYAL LIVER PHASE 2

drawing title
PROPOSED SURFACE WATER DRAINAGE LAYOUT

client
LAND DEVELOPMENT AGENCY

| designed by | author | scale | sheet size |
|---|---|---|---|
| GPH | PV | 1:500 | A1 |

drawing no.: X-91-Z00-DTM-DR-DBFL-CE-1330
revision: P02