

NOTES:

- DO NOT SCALE THIS DRAWING.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DESIGNERS, ARCHITECTS AND SPECIALIST DESIGN DRAWINGS AND DETAILS.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- THIS DRAWING IS FOR STRATEGY PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.
- DESIGN BASED ON EXISTING LEVELS AND SUBJECT TO CHANGE WITH EXTERNAL WORKS DESIGN / CONFIRMATION OF FFLS.
- DRAINAGE STRATEGY IS SUBJECT TO AGREEMENT WITH RELEVANT THIRD PARTIES, INCLUDING ENVIRONMENT AGENCY, LOCAL PLANNING AUTHORITY, INTERNAL DRAINAGE BOARD, LEAD LOCAL FLOOD AUTHORITY AND WATER AUTHORITY.
- CONCRETE PROTECTION TO BE PROVIDED TO ANY PIPES WITH LOW COVER.
- THE DRAINAGE STRATEGY WILL NEED UPDATING IF THE LAYOUT IS REVISED.
- DETAILS OF KLARGERSTER BIODISC BF SEWAGE TREATMENT WORKS ON DRAWING NUMBER DS0498P.

KEY

- PROPOSED SURFACE WATER DRAIN
- PROPOSED FOUL DRAIN
- PROPOSED CONCRETE STORM MANHOLE
- PROPOSED CONCRETE FOUL MANHOLE
- POND
- SWALE
- OVERLAND FLOW ROUTE FROM THE DEVELOPMENT
- PROPOSED KLARGERSTER BIODISC BF SEWAGE TREATMENT PLANT

SWALE 2 DETAILS
 DESIGN BASED ON IMPERMEABLE AREA OF 0.241HA.

TOP OF BANK LEVEL = 73.30m
 INVERT LEVEL = 72.60m
 BASE WIDTH = 2.00m
 LENGTH = 60.00m
 MAX DEPTH OF WATER = 0.70m

STORAGE VOLUME OF 100.4m³ IS REQUIRED TO ACCOMMODATE STORAGE FOR ALL STORM EVENTS UP TO AND INCLUDING A 1 IN 100 YEAR RETURN PERIOD WITH A 40% CLIMATE CHANGE ALLOWANCE.

ORIFICE OUTFLOW CONTROL
 DIAMETER = 0.05m
 COEFFICIENT OF DISCHARGE = 0.60
 INVERT LEVEL = 72.50m

WEIR OVERFLOW CONTROL
 COEFFICIENT OF DISCHARGE = 0.54
 WIDTH = 0.5m
 CREST LEVEL = 73.10m

POND 1 DETAILS
 DESIGN BASED ON IMPERMEABLE AREA OF 0.230HA.

POND COVER LEVEL = 75.50m
 INVERT LEVEL = 75.80m
 MAX DEPTH OF WATER = 0.70m
 PLAN AREA = 92.9m²

STORAGE VOLUME OF 42.2m³ IS REQUIRED TO ACCOMMODATE STORAGE FOR ALL STORM EVENTS UP TO AND INCLUDING A 1 IN 100 YEAR RETURN PERIOD WITH A 40% CLIMATE CHANGE ALLOWANCE.

ORIFICE OUTFLOW CONTROL
 DIAMETER = 0.05m
 COEFFICIENT OF DISCHARGE = 0.60
 INVERT LEVEL = 74.70m

WEIR OVERFLOW CONTROL
 COEFFICIENT OF DISCHARGE = 0.54
 WIDTH = 0.5m
 CREST LEVEL = 75.30m

POND 2 DETAILS
 DESIGN BASED ON IMPERMEABLE AREA OF 0.102HA AND DISCHARGE FROM POND 1, SWALE 1 AND SWALE 2.

POND COVER LEVEL = 73.10m
 INVERT LEVEL = 72.10m
 MAX DEPTH OF WATER = 0.70m
 FREEBOARD = 0.30m
 PLAN AREA = 344.0m²

STORAGE VOLUME OF 249.7m³ IS REQUIRED TO ACCOMMODATE STORAGE FOR ALL STORM EVENTS UP TO AND INCLUDING A 1 IN 100 YEAR RETURN PERIOD WITH A 40% CLIMATE CHANGE ALLOWANCE.

POND TO HAVE PERMANENT WATER LEVEL AND DRY BENCH TO MAXIMIZE AMENITY AND BIO-DIVERSITY BENEFITS.

HYDRO-BRAKE OUTFLOW CONTROL
 INVERT LEVEL = 72.00m
 DESIGN FLOW = 5 l/s

SWALE 1 DETAILS
 DESIGN BASED ON IMPERMEABLE AREA OF 0.302HA AND DISCHARGE FROM POND 1.

TOP OF BANK LEVEL = 75.00m
 INVERT LEVEL = 74.20m
 BASE WIDTH = 1.00m
 LENGTH = 60.00m
 MAX DEPTH OF WATER = 0.80m

STORAGE VOLUME OF 114.7m³ IS REQUIRED TO ACCOMMODATE STORAGE FOR ALL STORM EVENTS UP TO AND INCLUDING A 1 IN 100 YEAR RETURN PERIOD WITH A 40% CLIMATE CHANGE ALLOWANCE.

ORIFICE OUTFLOW CONTROL
 DIAMETER = 0.05m
 COEFFICIENT OF DISCHARGE = 0.60
 INVERT LEVEL = 74.10m

WEIR OVERFLOW CONTROL
 COEFFICIENT OF DISCHARGE = 0.54
 WIDTH = 0.5m
 CREST LEVEL = 74.80m

KLARGERSTER BIODISC BF SEWAGE TREATMENT WORKS TO TREAT FOUL FLOWS FROM THE ABLUTION BLOCK, THE STABLE BLOCK AND STORAGE AREAS. CLEAN WATER WILL BE DISCHARGED DIRECTLY INTO THE RIVER EYE. DETAILS OF BIODISC BF DEVICE ON DRAWING NUMBER DS0498P

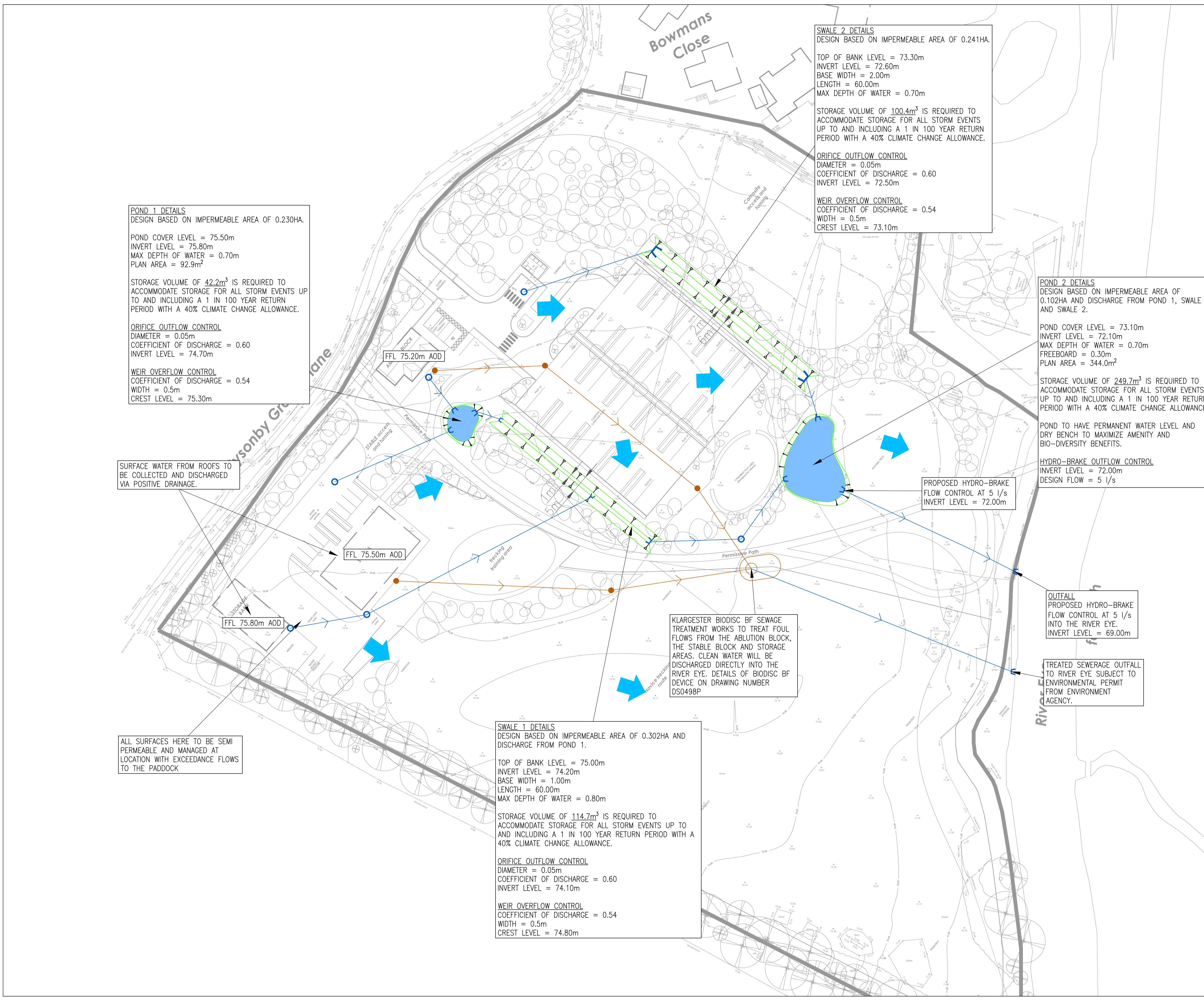
PROPOSED HYDRO-BRAKE FLOW CONTROL AT 5 l/s
 INVERT LEVEL = 72.00m

OUTFALL PROPOSED HYDRO-BRAKE FLOW CONTROL AT 5 l/s INTO THE RIVER EYE.
 INVERT LEVEL = 69.00m

TREATED SEWAGE OUTFALL TO RIVER EYE SUBJECT TO ENVIRONMENTAL PERMIT FROM ENVIRONMENT AGENCY.

SURFACE WATER FROM ROOFS TO BE COLLECTED AND DISCHARGED VIA POSITIVE DRAINAGE.

ALL SURFACES HERE TO BE SEMI PERMEABLE AND MANAGED AT LOCATION WITH EXCEEDANCE FLOWS TO THE PADDOCK



E	NEW SITE LAYOUT	RC	HR	TR	10.02.21
D	CHANGES TO SEWER NETWORK AND DETAILS ON KLARGERSTER SEWAGE TREATMENT PLANT	RC	HR	TR	09.02.21
C	UPDATED SWALE 1 INVERT	HR	HR	TR	28.05.20
B	REVISED FOUL PUMPING & FLOOR LEVELS	HR	HR	TR	27.05.20
A	SITE LAYOUT REVISED	VP	HR	TR	19.05.20
-		RC	HR	TR	21.04.20
REV:	AMENDMENTS:	DRN:	CHK:	APP:	DATE:

PROJECT: LEISURE DEVELOPMENT SYSONBY GRANGE LANE MELTON MOWBRAY

DRAWING TITLE: PROPOSED DRAINAGE STRATEGY

CLIENT: EDREN HOMES LIMITED

DRAWING NUMBER: 25605_01_070_01

REVISION:	SHEET SIZE:	SCALE:
E	A1	1:500

STATUS: FOR INFORMATION / APPROVAL

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