FOUL WATER TREATMENT PLANT
WITH INTERGRAL PACKAGE PUMP TO
DISACHRGE TO RIPARIAN DYKE Via
63Ø RISING MAIN

FLOW CONTROL
CHAMBER WITH FLOW
CONTROL DEVICE
RESTRICTING
DISCHARGE RATE TO
2.6l/s

NON-RETURN FLAP
VALVE TO BE FITTED
OVER OUTLET PIPE

9m IDB Easement

FLOW THROUGH REED BED
AND FILTER STONE CHANNEL
TO PROVIDE TREATMENTS
TRAINS FOR HARDSTANDING
RUN-OFF/

TOP OF POND
PROFILE TO BE
FINALISED
DURING DETAILED
DESIGN STAGE

1050m3 VOLUME (1.45m DEEP) ATTENUATION FLOW
THROUGH BASIN TO ACCOMMODATE
1 IN 100 YEAR STORM EVENT PLUS 20% CLIMATE
CHANGE & 10% IMPERMEABLE CREEP.
TOP LEVEL OF 3.800
INVERT LEVEL 2.358
506m² BASE AREA
MAX WATER LEVEL 3.395

FFL
4.140

Package Pump Station.
63Ø Rising Main

1:18
Fall

R15000

⊠G=3.896

R15000

CL = 4.23

CL = 4.30

DRAINAGE STRATEGY

THE PRINCIPLES OF THE DRAINAGE STRATEGY WILL FOLLOW THOSE SET OUT WITHIN THE CIRIA SUDS MANUAL AND SUDS HIERARCHY.

THE SITE IS CONSIDERED UNSUITABLE FOR LARGE SCALE INFILTRATION TECHNIQUES.

1. AS THE IMPERMEABLE AREA IS SUCH A LARGE PERCENTAGE OF THE SITE, AND FROM LOCAL KNOWLEDGE THE INFILTRATION RATE WILL BE POOR AT BEST.
2. AS THE GROUND WATER TABLE IN THE LOCAL AREA IS KNOWN TO RISE TO 1.5M BELOW GROUND LEVEL.

THE ABOVE MAKE THE USE OF AN INFILTRATION METHOD UNVIABLE.

A FLOW THROUGH ATTENUATION BASIN HAS BEEN PROPOSED AS THE MOST EFFECTIVE OPTION WHICH WILL DISCHARGE VIA A FLOW CONTROL DEVICE. INTO THE SOUTH HOLLAND IDB SYSTEM ON THE WEST BOUNDARY OF THE SITE.

THE ALLOWABLE DISCHARGE HAS BEEN LIMITED TO A PRACTICAL MINIMUM BASED UPON THE 1 IN 1 YEAR QBAR RATE 2.6 l/s.

THE FLOW THROUGH BASIN WILL FEATURE SUITABLE FILTRATION TECHNIQUES TO PROVIDE TREATMENT TRAINS FOR THE HARDSTANDING YARD RUN-OFF WATER.

IN SUMMARY OF THE ABOVE THE PROPOSED SW OUTLINE DRAINAGE SCHEME IS INLINE WITH CURRENT PLANNING REQUIREMENTS AND THE SUDS HIERARCHY.

Rev	Revision	Drn	App	Date
P2	PRELIMINARY – FOR APPROVAL	APW	APW	04/21
P1	PRELIMINARY – FOR APPROVAL	APW	APW	04/21

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STRUCTURAL AND CIVIL ENGINEERING

Status: FOR PLANNING

Client: NAYLOR FLOWERS

Project: Proposed Flower Packhouse & Store
Vickers Farm, off A17, Fosdyke

Title: PROPOSED DRAINAGE STRATEGY ARRANGEMENT

Date	Apr. '21	Scale @A1	Drawing No.	Rev
Appr	APW	1:500	21–130–201	P2

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