



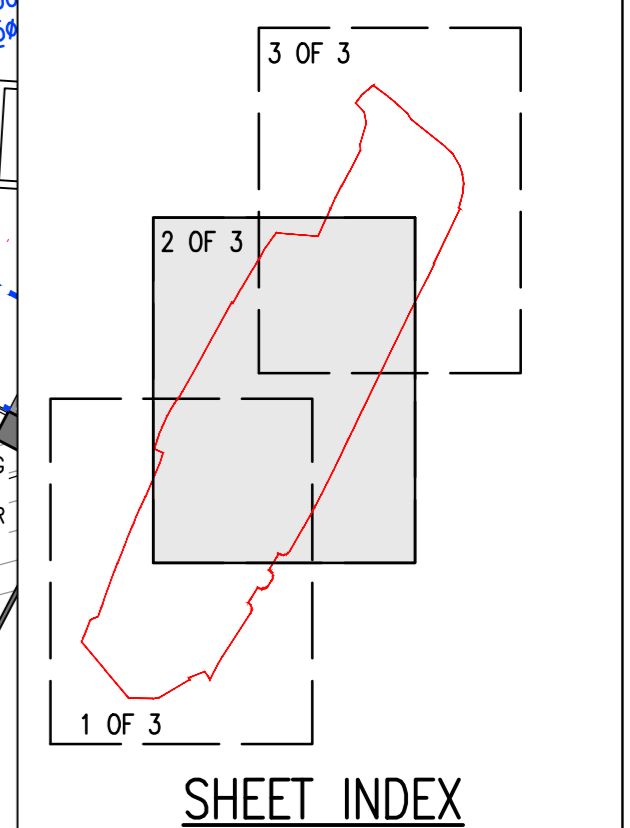
NORTHERN YARD INFILTRATION TANK  
 INFILTRATION TANK  
 315m<sup>2</sup> x 1m DEEP  
 CL: 121.8 - 121.4 m  
 IL: 119.4 m  
 INFILTRATION RATE: 0.5256 m/hr FROM  
 REMADA TEST SA02 (1.46x10<sup>-6</sup> m/s)  
 SAFETY FACTOR: 5.0

**KEY:**  
 PLANNING BOUNDARY - HALLENBEAGLE  
 NOTE: PLANNING BOUNDARY BASED UPON LAND REGISTRY BOUNDARY FROM KEMP SURVEY DRAWING '21-0034-001 & 002 REV A DATED 20/08/2021 OVERLAID WITH LAND REGISTRY BOUNDARY'. CLARKEBOND TAKES NO RESPONSIBILITY FOR THE ACCURACY OF BOUNDARIES SHOWN.

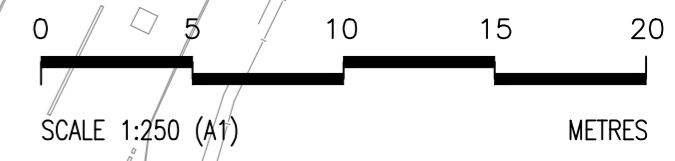
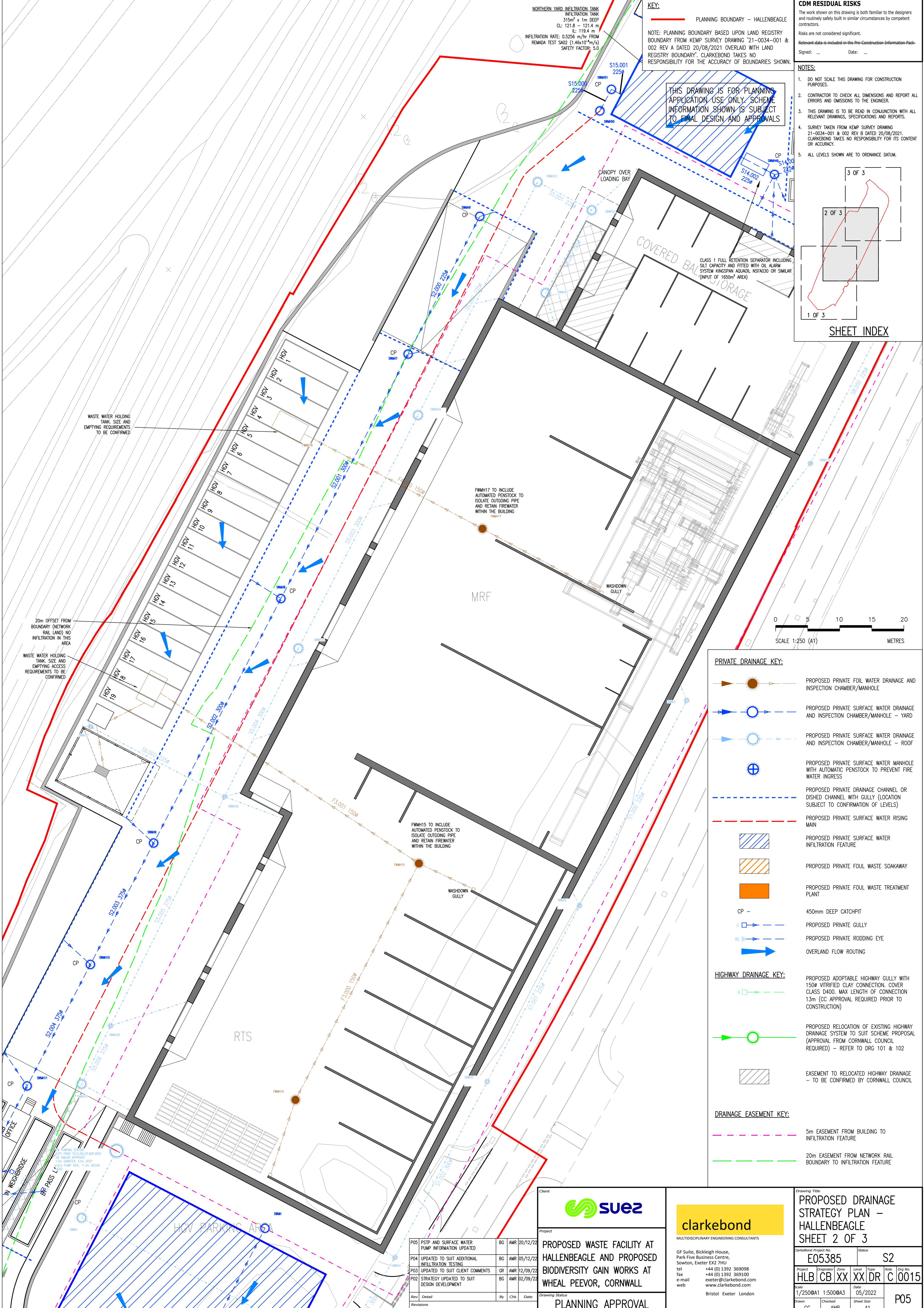
**CDM RESIDUAL RISKS**  
 The work shown on this drawing is both familiar to the designers and routinely safely built in similar circumstances by competent contractors.  
 Risks are not considered significant.  
 Relevant data is included in the Pre-Construction Information Pack.  
 Signed: ... Date: ...

THIS DRAWING IS FOR PLANNING APPLICATION USE ONLY. SCHEME INFORMATION SHOWN IS SUBJECT TO FINAL DESIGN AND APPROVALS

- NOTES:**
- DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.
  - CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ENGINEER.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS, SPECIFICATIONS AND REPORTS.
  - SURVEY TAKEN FROM KEMP SURVEY DRAWING 21-0034-001 & 002 REV B DATED 20/08/2021. CLARKEBOND TAKES NO RESPONSIBILITY FOR ITS CONTENT OR ACCURACY.
  - ALL LEVELS SHOWN ARE TO ORDNANCE DATUM.



SHEET INDEX



- PRIVATE DRAINAGE KEY:**
- PROPOSED PRIVATE FOUL WATER DRAINAGE AND INSPECTION CHAMBER/MANHOLE
  - PROPOSED PRIVATE SURFACE WATER DRAINAGE AND INSPECTION CHAMBER/MANHOLE - YARD
  - PROPOSED PRIVATE SURFACE WATER DRAINAGE AND INSPECTION CHAMBER/MANHOLE - ROOF
  - PROPOSED PRIVATE SURFACE WATER MANHOLE WITH AUTOMATIC PENSTOCK TO PREVENT FIRE WATER INGRESS
  - PROPOSED PRIVATE DRAINAGE CHANNEL OR DISHED CHANNEL WITH GULLY (LOCATION SUBJECT TO CONFIRMATION OF LEVELS)
  - PROPOSED PRIVATE SURFACE WATER RISING MAIN
  - PROPOSED PRIVATE SURFACE WATER INFILTRATION FEATURE
  - PROPOSED PRIVATE FOUL WASTE SOAKAWAY
  - PROPOSED PRIVATE FOUL WASTE TREATMENT PLANT
  - 450mm DEEP CATCHPIT
  - PROPOSED PRIVATE GULLY
  - PROPOSED PRIVATE RODDING EYE
  - OVERLAND FLOW ROUTING
- HIGHWAY DRAINAGE KEY:**
- PROPOSED ADOPTABLE HIGHWAY GULLY WITH 150# VITRIFIED CLAY CONNECTION. COVER CLASS D400. MAX LENGTH OF CONNECTION 13m (CC APPROVAL REQUIRED PRIOR TO CONSTRUCTION)
  - PROPOSED RELOCATION OF EXISTING HIGHWAY DRAINAGE SYSTEM TO SUIT SCHEME PROPOSAL (APPROVAL FROM CORNWALL COUNCIL REQUIRED) - REFER TO DRG 101 & 102
  - EASEMENT TO RELOCATED HIGHWAY DRAINAGE - TO BE CONFIRMED BY CORNWALL COUNCIL
- DRAINAGE EASEMENT KEY:**
- 5m EASEMENT FROM BUILDING TO INFILTRATION FEATURE
  - 20m EASEMENT FROM NETWORK RAIL BOUNDARY TO INFILTRATION FEATURE

WASTE WATER HOLDING TANK SIZE AND EMPTYING REQUIREMENTS TO BE CONFIRMED

20m OFFSET FROM BOUNDARY (NETWORK RAIL LAND) NO INFILTRATION IN THIS AREA

WASTE WATER HOLDING TANK SIZE AND EMPTYING ACCESS REQUIREMENTS TO BE CONFIRMED

FWMH17 TO INCLUDE AUTOMATED PENSTOCK TO ISOLATE OUTGOING PIPE AND RETAIN FIREWATER WITHIN THE BUILDING

FWMH15 TO INCLUDE AUTOMATED PENSTOCK TO ISOLATE OUTGOING PIPE AND RETAIN FIREWATER WITHIN THE BUILDING

COVERED BALCONY STORAGE  
 CLASS 1 FULL RETENTION SEPARATOR INCLUDING SILT CAPACITY AND FITTED WITH OIL ALARM SYSTEM KINGSPLAN AQUADIL NSF4030 OR SIMILAR (INPUT OF 1650m<sup>2</sup> AREA)

OFFICE  
 BP PASS L  
 MICHELLE BRIDGE

HGV PARKING AREA

Client: **suez**

Project: **clarkebond**  
 MULTIDISCIPLINARY ENGINEERING CONSULTANTS

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 fax +44 (0) 1392 369100  
 e-mail exeter@clarkebond.com  
 web www.clarkebond.com  
 Bristol Exeter London

Proposed Waste Facility at Hallenbeagle and Proposed Biodiversity Gain Works at Wheal Peevor, Cornwall

PLANNING APPROVAL

PO5	PSTP AND SURFACE WATER PUMP INFORMATION UPDATED	BG	AMR	20/12/22
PO4	UPDATED TO SUIT ADDITIONAL INFILTRATION TESTING	BG	AMR	05/12/22
PO3	UPDATED TO SUIT CLIENT COMMENTS	GR	AMR	12/09/22
PO2	STRATEGY UPDATED TO SUIT DESIGN DEVELOPMENT	BG	AMR	02/09/22

Drawing Title: **PROPOSED DRAINAGE STRATEGY PLAN - HALLENBEAGLE SHEET 2 OF 3**

ClarkeBond Project No: **E05385** Status: **S2**

Project	Originator	Zone	Level	Type	Rule	Org No.
HLB	CB	XX	XX	DR	C	0015

Scale: 1/250@A1 1:500@A3 Date: 05/2022

Drawn	Checked	Sheet Size	Drawn
GG	AMR	A1	PO5

DWG INFO: HLB/E05385/E05385 - HALLENBEAGLE\_SHEET01 - INFILTRATION DRAWINGS STAGE 2 DESIGN/E05385\_HLB\_CB\_XX\_XX\_CB\_014\_016 - PROPOSED DRAINAGE STRATEGY

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**PRIVATE DRAINAGE KEY:**

- PROPOSED PRIVATE FOUL WATER DRAINAGE AND INSPECTION CHAMBER/MANHOLE
- PROPOSED PRIVATE SURFACE WATER DRAINAGE AND INSPECTION CHAMBER/MANHOLE - YARD
- PROPOSED PRIVATE SURFACE WATER DRAINAGE AND INSPECTION CHAMBER/MANHOLE - ROOF
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- PROPOSED PRIVATE DRAINAGE CHANNEL OR DITCHED CHANNEL WITH GULLY (LOCATION SUBJECT TO CONFIRMATION OF LEVELS)
- PROPOSED PRIVATE SURFACE WATER RISING MAIN
- PROPOSED PRIVATE SURFACE WATER INFILTRATION FEATURE
- PROPOSED PRIVATE FOUL WASTE SOAKAWAY
- PROPOSED PRIVATE FOUL WASTE TREATMENT PLANT
- CP - 450mm DEEP CATCHPIT
- PROPOSED PRIVATE GULLY
- PROPOSED PRIVATE RODDING EYE
- OVERLAND FLOW ROUTING

**HIGHWAY DRAINAGE KEY:**

- PROPOSED ADOPTABLE HIGHWAY GULLY WITH 150mm VITRIFIED CLAY CONNECTION, COVER CLASS D400. MAX LENGTH OF CONNECTION 13m (CC APPROVAL REQUIRED PRIOR TO CONSTRUCTION)
- PROPOSED RELOCATION OF EXISTING HIGHWAY DRAINAGE SYSTEM TO SUIT SCHEME PROPOSAL (APPROVAL FROM CORNWALL COUNCIL REQUIRED) - REFER TO DRG 101 & 102
- EASEMENT TO RELOCATED HIGHWAY DRAINAGE - TO BE CONFIRMED BY CORNWALL COUNCIL

**DRAINAGE EASEMENT KEY:**

- 5m EASEMENT FROM BUILDING TO INFILTRATION FEATURE
- 20m EASEMENT FROM NETWORK RAIL BOUNDARY TO INFILTRATION FEATURE

**KEY:**

- PLANNING BOUNDARY - HALLENBEAGLE
- NOTE: PLANNING BOUNDARY BASED UPON LAND REGISTRY BOUNDARY FROM KEMP SURVEY DRAWING '21-0034-001 & 002 REV A DATED 20/08/2021 OVERLAID WITH LAND REGISTRY BOUNDARY'. CLARKEBOND TAKES NO RESPONSIBILITY FOR THE ACCURACY OF BOUNDARIES SHOWN.

NOTE: ASSESSMENT OF EXISTING GULLY CATCHMENT / HIGHWAY DRAINAGE SYSTEM TO BE UNDERTAKEN TO ENSURE ADEQUATE GULLY SPACING AND REVIEW IMPACTS OF INCREASED IMPERMEABLE CATCHMENT AREA

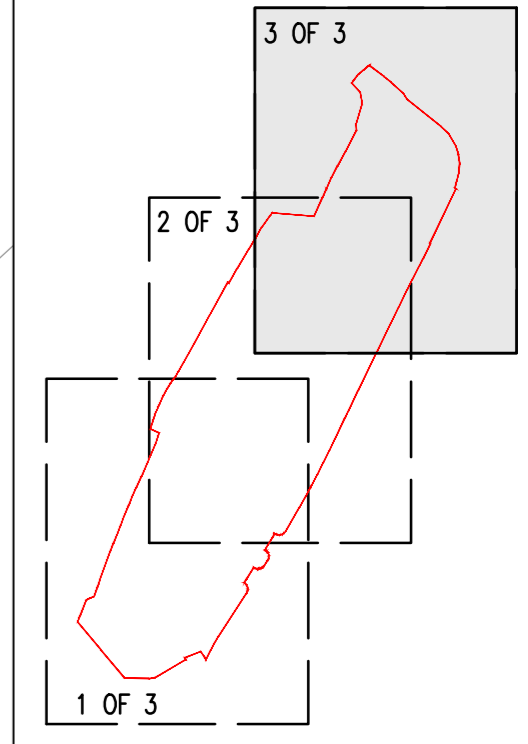
NOTE: NO ADJUSTMENT TO EXISTING ADOPTABLE HIGHWAY / EXISTING DRAINAGE TO BE UNDERTAKEN WITHOUT CORNWALL COUNCIL APPROVAL

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**SHEET INDEX**

NOTE: HIGHWAY BOUNDARIES (HIGHWAYS MAINTAINABLE AT PUBLIC EXPENSES) AND HIGHWAY DRAINAGE RECORDS/DETAILS REQUIRED TO CONFIRM PROPOSAL



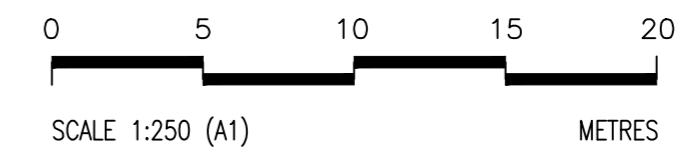
**SOAKAWAY FOR FOUL WASTE**  
SUBJECT TO PERMITTING ALLOWING DISCHARGE TO GROUND WITHOUT A DRAINAGE FIELD. CONFIRMATION FROM EA REQUIRED.  
APPROX. 42m<sup>2</sup> x 0.5m DEEP BASED UPON 0.15 l/s - BRITISH WATER FLOWS AND LOADS-4 (2013) WITH PEAKING OF 3 (TO ONE PEAK FLOWS OF 0.45 l/s) SUEZ M&E CONSULTANT TO CONFIRM FOUL FLOWS.

**NORTHERN AREA INFILTRATION TANK**  
INFILTRATION TANK  
228m<sup>2</sup> x 1m DEEP  
CL: 122.6 - 122.0 m  
IL: 119.9 m  
INFILTRATION RATE: 0.28188 m/hr FROM RSK-TP01 TEST 1 (7.83x10<sup>-6</sup>m/s)  
SAFETY FACTOR: 5.0

**NORTHERN YARD INFILTRATION TANK**  
INFILTRATION TANK  
315m<sup>2</sup> x 1m DEEP  
CL: 121.8 - 121.4 m  
IL: 119.4 m  
INFILTRATION RATE: 0.5256 m/hr FROM REMADA TEST SA02 (1.46x10<sup>-6</sup>m/s)  
SAFETY FACTOR: 5.0

INFILTRATION RATE: 0.0060 m/hr FROM REMADA TEST SA01 (1.66x10<sup>-6</sup>m/s)  
SAFETY FACTOR: 5.0

**CLASS 1 FULL RETENTION SEPARATOR INCLUDING SILT CAPACITY AND FITTED WITH OIL ALARM SYSTEM KINGSSPAN AQUADUL NSFA030 OR SIMILAR (INPUT OF 1650m<sup>2</sup> AREA)**



SCALE 1:250 (A1)

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  MULTIDISCIPLINARY ENGINEERING CONSULTANTS GF Suite, Bickleigh House, Park Five Business Centre, Sowton, Exeter EX2 7HU tel +44 (0) 1392 369098 fax +44 (0) 1392 369100 e-mail exeter@clarkebond.com www.clarkebond.com Bristol Exeter London	Client Project <b>PROPOSED WASTE FACILITY AT HALLENBEAGLE AND PROPOSED BIODIVERSITY GAIN WORKS AT WHEEL PEEVOR, CORNWALL</b>	Drawing Title <b>PROPOSED DRAINAGE STRATEGY PLAN - HALLENBEAGLE SHEET 3 OF 3</b>
	Drawing Status <b>PLANNING APPROVAL</b>	Drawing No. <b>E05385</b>
Rev Detail Revisions By Chk Date	Project Originator <b>HLB CB XX XX DR C 0016</b>	Date <b>05/2022</b>
Rev Detail Revisions By Chk Date	Scale <b>1/250@A1 1:500@A3</b>	Sheet Size <b>A1</b>

DWG INFO: HLB\B1191\105385 - HALLENBEAGLE\_SHEET3\_01 - WPA\DR\_DRAINAGE\STAGE 2 DESIGN\105385\_HLB\_CB\_XX\_XX\_DR\_C\_014\_016 - PROPOSED DRAINAGE STRATEGY

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