RESIDUAL HAZARD REGISTER
HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS.

HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
3.07	UNDERGROUND SERVICES	EXISTING LIVE SERVICES (SITEWIDE)
5.05	DEEP EXCAVATIONS	DEEP EXCAVATION MORE THEN 3M NEAR EXISTING CULVERT/ NEAR EXISTING FOUNDATION WALL/ ATTENUATION TANK

EX MH6
CL:64.30
IL:59.30
300Ø CONNECTION 60.55
NEW MANHOLE TO BE CONSTRUCTED ON EXISTING CULVERT.
CONNECTION SUBJECT TO LLFA LAND DRAIN CONSENT

1m SURCHARGE LEVEL ABOVE WATERCOURSE SOFFIT LEVEL HAVE BEEN CONSIDERED IN NETWORK CALCULATIONS AS PER ADVISE FROM LLFA FROM 20.07.22

RAINWATER HARVESTING TANK INCLUDED WITHIN CELLULAR STORAGE. DETAILS OF TANK TO BE PROVIDED BY OTHERS FOR REVIEW.

SRH06
FLOW CONTROL LIMITED TO 18.1l/s BY OTHERS
CL:64.34
IL:60.92

ATTENUATION TANK 4
638.4m³ VOLUME
(95%VOID RATIO)
1.60m HEIGHT
420 m² AREA
BASE 60.98
TOP 62.58

LINEAR DRAINAGE TO BE RELAID

RISING MAIN BY OTHERS

EX IL 61.72
(INTERPOLATED)
PROP IL 62.36

EX IL 63.32
(INTERPOLATED)
PROP IL 62.31

3 x 400Ø 1:300

<<<CD3500 D400

7500Ø 1:600

SRH06a
CATCHPIT
CL64.26
IL:62.32

IL:62.29

SRH07
CL: 64.27
IL: 61.10

CP04 CP
HYDROBRAKE FLOW LIMITED TO 5L/S
MD-SHE-0100-5000-1400-5000
CL:64.23
IL:62.54

CP05
CL:64.23
IL:61.78 (TBC)
BD IL 62.51
NEW MANHOLE TO BE CONSTRUCTED ON EXISTING DRAIN.

CP03 CP
CL: 64.25
IL: 62.55

300Ø 1:200

150Ø 1:100

KLARGESTER CLASS 2 FULL RETENTION SEPARATOR NSFA040 (4.75m x 2.01Ø)
BASED ON 1770m2
INLET IL 62.93
OUTLET IL 62.88
BASE LEVEL 60.64 (SUBJECT TO CONFIRMATION FROM SUPPLIER)

CP01
CL: 64.12
IL 62.99

CP02 CP
CL:64.10
IL:62.60

TANK 3
VOLUME 56m³
AREA 70m²
HEIGHT 0.8m
BASE 62.60

W02
CL:64.34
IL:63.04

2250 1:150

150Ø 1:14

150Ø 1:10

NEW CONNECTION TO EXISTING MANHOLE BS4
CL:64.28
IL:61.99
BD:62.13
ALTHON WASTOP 150mm NON RETURN VALVE OSA TO BE FITTED TO NEW INLET PIPE

GULLY CONNECTION TO BE REROUTED TO PROPOSED DRAINAGE NETWORK

EXISTING CABIN BUILDINGS TO BE REMOVED. EXISTING HARDSTANDING TO BE RESURFACED WITH FALLS TOWARDS CHANNELS

C2000Ø D400 >>>

<<<CD3500 D400

DD03
CL: 64.54
IL: 63.37

DD01
CL: 64.20
IL: 63.54

DD02
CL: 64.30
IL: 63.52

64.535m

64.201m

2250 1:380

2250 1:167

FINAL COVER LEVELS FOR WASHDOWN AREA TO BE CONFIRMED. LEVEL DESIGN SUBJECT TO CHANGE

W03
CL:64.17
IL:62.84

W01 CP
CL:64.30
IL:63.17

KLARGESTER CLASS 2 WASHDOWN/SILT SEPARATOR W1/150 (5.435m x 2.075Ø)
BASED ON 50-55 WASHED VEHICLES/ PER DAY,
INLET IL 63.12
OUTLET IL 63.07
BASE LEVEL 61.44 (SUBJECT TO CONFIRMATION FROM SUPPLIER)

TANK2
VOLUME 40m³
AREA 52m²
HEIGHT 0.8m
BASE 62.78

W04 CP
CL:64.16
IL:62.77

300Ø 1:250

W05 CP
HYDROBRAKE , FLOW LIMITED TO 5L/S
MD-SHE-0100-5000-1400-5000
CL:64.23
IL:62.73

W06
CL:64.23
IL:62.49
SUB-METER TO BE INSTALLED IN CHAMBER. (BY OTHERS)

SUBJECT TO TRADE AGREEMENT
UNITED UTILITIES ALLOW MAX 5L/S TO BE DISCHARGE TO FOUL WATER SEWER FROM WASHDOWN AREA
S106 AGREEMENT WITH UU REQUIRED.
SURCHARGE LEVEL TAKEN AS 62.275

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ALL DETAILS AND DIMENSIONS ARE TO BE CHECKED BY THE CONTRACTOR. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
3. REFER TO DRAWING HRD-CUR-XX-ZZ-DR-C-92-502 FOR ALL DRAINAGE NOTES

KEY:

- SITE BOUNDARY BASED ON HRD-FRA-00-XX-DR-A-90-0200

EXISTING SERVICES BASED ON CTV SURVEY S17480-U DEC 2018

- FW=B2 — FOUL WATER PIPE
- SW=B2 — SURFACE WATER PIPE
- CW=B2 — COMBINED WATER DRAIN

UNITED UTILITIES RECORDS UUPS-ORD-76950 ALL UU ASSETS ARE SHOWN INDICATIVELY

- SW= B2 — EXISTING UU SURFACE WATER SEWER
- CW= B2 — EXISTING UU COMBINED WATER SEWER
- EXISTING WATERCOURSE
- 8M EASEMENT BASED ON SEWER FOR ADOPTION 6TH EDITION
- SW — ASSUMED SURFACE WATER DRAIN ROUTE
- CW — ASSUMED COMBINED DRAIN ROUTE
- DRAINAGE TO BE ABANDONED

PROPOSED DRAINAGE

- PROPOSED FOUL DRAINAGE
- PROPOSED SURFACE WATER DRAINAGE - BUILDING DRAINAGE (SIPHONIC)
- PROPOSED SURFACE WATER DRAINAGE - WASHDOWN AREA
- PROPOSED SURFACE WATER DRAINAGE - GF CAR PARK
- PROPOSED SURFACE WATER DIVERSION TO EXISTING
- PROPOSED LINEAR DRAINAGE.
- PROPOSED LINEAR DRAINAGE TO WASHDOWN AREA.
- PROPOSED CELLULAR ATTENUATION TANK

LINEAR DRAINAGE IS CASTLOST TREADSAFE OR SIMILAR APPROVED. SIZES AS NOTED.

DP FOUL WATER DOWNPIPE

DRAWING BASED ON:
TOPOGRAPHICAL SURVEY BY SEP S15724-T
GPR SURVEY BY SEP S17480-U DEC 2018 JUNE 2018
CCTV SURVEY BY SEP DRAINAGE SURVEYS LTD DEC 2018 AND AUG 2020
UU RECORDS UUPS-ORD-76950
PROPOSED SITE PLAN HRD-FRA-00-XX-SK-A-90-9006-C02

SAPOFLOW SIPHON SYSTEM 21.02.23
HRD-SAP-01-RL-DR-X-0001C02
HRD-SAP-01-RL-DR-X-0002 C02

Rev:	Description:	Date:	By:	Chkd:
P02	GROUND FLOOR CAR PARK DRAINAGE AMENDED	07.07.23	ATL	MW
P01	ISSUED FOR COMMENTS	16.06.23	KS	MW

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Status: PRELIMINARY

Project: HAMMERSTONE ROAD

Drg Title: WASHDOWN AREA DRAINAGE

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:
068065	A1	02.06.2023	KS	ATL	MW
	Scale: 1:200				

Project Code:	Originator:	Zone:	Level:	Type:	Discipline:	Category / Number:	Rev:
HRD	- CUR - XX - 00 - DR - C -					92-602	-P02

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