



- KEY**
- REDLINE BOUNDARY
 - BLUELINE BOUNDARY
 - EXISTING FOUL WATER DRAINAGE
 - EXISTING SURFACE WATER DRAINAGE
 - EXISTING PRIVATE COMBINED WATER DRAINAGE
 - EXISTING PUBLIC COMBINED WATER SEWER
 - PROPOSED COMBINED SEWER
 - PROPOSED SURFACE WATER DRAINAGE
 - PROPOSED OIL SEPARATOR
 - PROPOSED ATTENUATION TANK
 - PROPOSED PERMEABLE PAVING
 - PROPOSED PERMEABLE PAVING PERFORATED PIPE
 - PROPOSED ACO DRAINAGE LINEAR CHANNEL
 - EXISTING FOUL WATER DRAIN DIVERTED
 - EXISTING SURFACE WATER DRAIN ABANDONED
 - EXISTING LINEAR CHANNEL TO BE RETAINED
 - PROPOSED RAINWATER PIPE
 - PROPOSED SOIL VENT PIPE
 - PROPOSED TRAPPED FLOOR GULLEY
 - PROPOSED YARD GULLEY

This drawing should not be scaled. Dimensions to be verified on site. Any discrepancies should be referred to the Engineer prior to work being put in hand.

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GENERAL NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER, ARCHITECTS OR OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
- ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
- THE CONTRACTOR MUST ENSURE AND WILL BE HELD RESPONSIBLE FOR THE OVERALL STABILITY OF THE BUILDING/STRUCTURE/EXCAVATION AT ALL STAGES OF THE WORK.
- ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND REGULATIONS.
- ALL WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE RELEVANT STATUTORY AUTHORITIES.
- THE PROPOSED ARCHITECTS LAYOUT IS BASED ON THE DESIGN BUREAU'S DRAWING "DB01762-DB02-ENB-00-OR-0650" REV P07 DATED 23.05.2024.
- THE TOPOGRAPHICAL SURVEY INFORMATION IS BASED ON SURVEY SOLUTIONS DRAWING "24422v-01" DATED 24/05/19.
- THE EXISTING UTILITY SURVEY INFORMATION IS BASED ON C.L.B SURVEY LTD'S DRAWING "JAZ3-4882-1" DATED JANUARY 2023.
- THE EXISTING PUBLIC SEWER INFORMATION IS BASED ON SEVERN TRENT'S SEWER RECORD PLAN.
- PROPOSED CATCHMENT AREA IS CALCULATED BASED ON ASSUMED IMPERMEABILITY COEFFICIENT OF 0.95 FOR IMPERMEABLE AREAS. THE APPROXIMATE OVERALL EFFECTIVE IMPERMEABLE AREA FOR THE SITE IS 0.280ha.
- THE PROPOSED OVERALL ATTENUATION STORAGE VOLUME OF 140m³ IS SIZED BASED ON A MAXIMUM ALLOWABLE SURFACE WATER DISCHARGE RATE OF 5 L/S FOR THE 1 IN 100 YEAR CRITICAL STORM RETURN PERIOD WITH 40% ALLOWANCE FOR CLIMATE CHANGE. ALLOWANCE FOR CLIMATE CHANGE.
- THE PROPOSED ATTENUATION IS PROVIDED IN THE FORM OF SUDS FEATURE SUCH AS PERMEABLE PAVING AND BELOW GROUND CELLULAR CRATES/TANK.
- THE PROPOSED SURFACE WATER DRAINAGE STRATEGY IS SUBJECT TO FURTHER SITE INVESTIGATIVE WORKS AND THIRD PARTIES APPROVAL.
- THE PROPOSED SURFACE WATER DRAINAGE STRATEGY IS BASED ON ASSUMED FINISHED FLOOR LEVELS AND EXTERNAL LEVELS THAT WORKS WITH THE DRAINAGE DESIGN DICTATED BY THE OUTFALL INVERT LEVEL OF 118.390.
- SECTION 108 APPLICATION WILL BE REQUIRED FOR BOTH SURFACE WATER AND FOUL WATER CONNECTIONS FROM SEVERN TRENT WATER.
- IMPERMEABLY LINED PERMEABLE PAVING ARE PROVIDED IN PARKING BAYS CONTRIBUTING TO SUSTAINABLE DRAINAGE OF ON-SITE SURFACE WATER RUNOFF.
- PROPOSED PETROL INTERCEPTOR PRODUCT BY KLARGESTER IS DESIGNED TO PROVIDE ON-SITE SURFACE WATER TREATMENT BEFORE RUNOFF IS DISCHARGED TO CELLULAR CRATES/TANK AND THEN TO OUTFALL.
- THE EXISTING ACCESS ROAD TO THE WEST OF THE SITE UP TO THE ENTRANCE INTO THE SITE IS EXCLUDED FROM DRAINAGE DESIGN. IT IS ASSUMED THAT THE EXISTING DRAINAGE SYSTEM WITHIN THE ROAD IS ADEQUATE AS THE TOPO SURVEY INDICATE GULLEYS AND MANHOLE PRESENT IN THE ROAD.
- THE EXISTING LINEAR CHANNEL AT THE ENTRANCE OF THE SITE IS TO BE RETAINED. THE CONTRACTOR TO CONFIRM ON SITE THE OUTFALL CONNECTION OF THIS LINEAR CHANNEL.
- PRIOR TO COMMENCEMENT OF WORKS, CONTRACTOR TO CHECK PRESENCE OF ALL BELOW GROUND SERVICES AND DRAINAGE, AND INFORM THE ENGINEER.
- RWPs AND FOUL DOWN POINTS ARE PROVIDED BY ARCHITECT.
- ALL FOUL DOWN POINTS TO HAVE RODDING ACCESS ABOVE FLOOR SLAB LEVEL FOR MAINTENANCE.

C07	02.04.25	INVERTS UPDATED	DP	DP
C06	20.02.25	SW MH IL UPDATED	TY	DP
C05	16.12.24	DRAINAGE MANHOLES UPDATED	SM	PE
C04	21.06.24	MH DIAMETER UPDATED	TY	PE
C03	14.06.24	FW SVPS UPDATED	AS	SS
C02	31.05.24	SW CONNECTION PIPE MOVED TO FOOTPATH	AS	SS
C01	30.05.24	STAGE 4 ISSUE	AS	SS
A02	08.08.23	REDLINE BOUNDARY AND SITE LAYOUT UPDATED	AS	R8
A01	02.06.23	FIRST ISSUE	RL	R8
Rev	Date	Description	By	Chk

Amendments

Project
HINCKLEY CDC AND ENDOSCOPY

Title
PROPOSED SURFACE WATER AND FOUL WATER DRAINAGE STRATGEY

Client
DARWIN GROUP



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Work Stage
STAGE 4
Technical Design

Subsidiary
WIE19849

Designed By
RB
Director
SS
Waterman Ref
WIE19849

Drawn By
RL
Date
JUNE 2023
Scales @ A1
1:200

Project | Originator | Functional | Spatial | Form | Discipline | Number | Revision
19849-WIE-ZX-XX-DR-D-92-001
C07

PROPOSED ATTENUATION TANK:

- STORAGE VOLUME: 140m³
- DEPTH OF TANK: 1.000m
- TANK DIMENSION: 20x7x1.0 (m)
- COVER LEVEL OF GROUND: VARIES WITH MINIMUM 1053mm COVER
- INVERT LEVEL OF BASE OF TANK: 118.677m
- PRODUCT: HYDRO INTERNATIONAL'S STORMBLOC EXTRA OR SIMILAR APPROVED

NOTE:
EXISTING COMBINED DRAINAGE RUN TO BE RETAINED. THE CONTRACTOR TO CONFIRM THE COVER LEVEL AND INVERT LEVELS OF THE EXISTING COMBINED DRAINAGE MANHOLES/RUN ON SITE.
THE CONTRACTOR ALSO NEED TO MAKE SURE THAT THE EXISTING COMBINED DRAINAGE DOWNSTREAM RUN OF MH22 HAS ADEQUATE DRAINAGE NETWORK IN PLACE.

PROPOSED MANHOLE WITH FLOW CONTROL DEVICE (HYDROBRAKE) DISCHARGE RATE TO RESTRICT SURFACE WATER FLOW TO 5L/S.

15
CL: 120.900m
Depth: 2.263m
IL: 118.637m
Diam.: 1.200m

14
CL: 120.400m
Depth: 1.248m
IL: 119.152m
Diam.: 1.200m

DIVERSION MANHOLE 4
CL: TBC
IL: TBC

8
CL: 120.030m
Depth: 1.250m
IL: 118.780m
Diam.: 1.200m

27
CL: 120.050m
Depth: 1.050m
IL: 119.000m
Diam.: 450mm

28
CL: 120.100m
Depth: 1.141m
IL: 118.959m
Diam.: 450mm

29
CL: 120.200m
Depth: 1.379m
IL: 118.821m
Diam.: 450mm

17
CL: 120.250m
Depth: 1.829m
IL: 118.421m
Diam.: 1.200m

NON-RETURN VALVE TO BE INSTALLED IN THIS MANHOLE.

PROPOSED SW & FW CONNECTION MANHOLE:

PROPOSED SURFACE WATER AND FOUL WATER DRAINAGE CONNECTION TO EXISTING FOUL WATER MANHOLE.

THIS MANHOLE AND THE ASSOCIATED OUTGOING PIPE TO BE REINSTATED TO A COMBINED DRAINAGE SYSTEM.

EX MH18
CL: 120.070m
Depth: 1.680m
IL: 118.390m
Diam.: 1.200m

6
CL: 120.500m
Depth: 1.133m
IL: 119.362m
Diam.: 1.200m

25
CL: 119.980m
Depth: 1.112m
IL: 118.768m
Diam.: 450mm

NOTE:
THE TWO SVPS TO BE CONNECTED TO PROPOSED INSPECTION CHAMBER AT THE PROPOSED LOCATION SUBJECT TO FOUNDATION PLAN. THE SVPS TO RUN PARALLEL TO AVOID CLASH WITH FOUNDATION.

24
CL: 119.980m
Depth: 1.100m
IL: 118.880m
Diam.: 450mm

23
CL: 119.980m
Depth: 0.948m
IL: 119.032m
Diam.: 450mm

22
CL: 119.980m
Depth: 0.917m
IL: 119.063m
Diam.: 450mm

21
CL: 119.980m
Depth: 0.851m
IL: 119.129m
Diam.: 450mm

1
CL: 120.125m
Depth: 1.127m
IL: 118.998m
Diam.: 1.200m

20
CL: 119.98m
Depth: 0.669m
IL: 119.311m
Diam.: 450mm

EX MANHOLE 08
THE CONTRACTOR TO CONFIRM THAT THIS MANHOLE DOES NOT SERVE ANYTHING UPSTREAM OUTSIDE REDLINE BOUNDARY. CCTV SURVEY INDICATES RUN ENDS HERE DUE TO DEBRIS IN MH.

13
CL: 121.530m
Depth: 1.051m
IL: 120.479m
Diam.: 1.200m

DIVERSION MANHOLE 3
CL: 121.65m
Depth: IL: TBC

12
CL: 121.650m
Depth: 1.532m
IL: 120.118m
Diam.: 1.200m

THE CONTRACTOR TO CONFIRM MANHOLE DETAILS FOR EXISTING MANHOLES MH05 & MH09 ON SITE AND COORDINATE DIVERSION WITHIN THE REDLINE BOUNDARY TO MH09. THE CONTRACTOR TO CONFIRM THAT THE DOWNSTREAM DRAINAGE NETWORK FROM MH09 IS ADEQUATE AND CONNECTED TO AN OUTFALL CONNECTION.

PROPOSED PETROL INTERCEPTOR KLARGESTER'S AQUAOL BYPASS MDPE & FULL RETENTION SEPARATOR. (PRODUCT REFERENCE NSBP003) OR SIMILAR APPROVED.

DIVERSION MANHOLE 2
CL: 122.515m
Depth: 1.759m
IL: 120.756m
IL OUT: 119.950

DIVERSION MANHOLE 1
CL: 123.400m
Depth: 2.400m
IL: 120.980m
BACK DROP 1.5M

EX MANHOLE
CL: 123.310m
Depth: 0.710m
IL: 122.600m

11
CL: 122.255m
Depth: 1.355m
IL: 120.900m
Diam.: 1.200m

9
CL: 121.700m
Depth: 2.204m
IL: 119.496m
Diam.: 1.200m

10
CL: 120.770m
Depth: 1.805m
IL: 118.962m
Diam.: 1.200m

2
CL: 118.794m
Depth: 1.192m
IL: 117.602m
Diam.: 1.200m

3
CL: 120.030m
Depth: 1.198m
IL: 118.832m
Diam.: 1.200m

3A
CL: 119.988m
Depth: 1.192m
IL: 118.794m
Diam.: 1.200m

4
CL: 118.710m
Depth: 1.270m
IL: 117.440m
Diam.: 1.200m

5
CL: 118.710m
Depth: 1.270m
IL: 117.440m
Diam.: 1.200m

6
CL: 118.710m
Depth: 1.270m
IL: 117.440m
Diam.: 1.200m

7
CL: 118.855m
Depth: 1.032m
IL: 118.823m
Diam.: 1.200m

8
CL: 120.030m
Depth: 1.250m
IL: 118.780m
Diam.: 1.200m

9
CL: 121.700m
Depth: 2.204m
IL: 119.496m
Diam.: 1.200m

10
CL: 120.770m
Depth: 1.805m
IL: 118.962m
Diam.: 1.200m

11
CL: 122.255m
Depth: 1.355m
IL: 120.900m
Diam.: 1.200m

12
CL: 121.650m
Depth: 1.532m
IL: 120.118m
Diam.: 1.200m

13
CL: 121.530m
Depth: 1.051m
IL: 120.479m
Diam.: 1.200m

14
CL: 120.400m
Depth: 1.248m
IL: 119.152m
Diam.: 1.200m

15
CL: 120.900m
Depth: 2.263m
IL: 118.637m
Diam.: 1.200m

16
CL: 118.855m
Depth: 1.273m
IL: 118.576m
Diam.: 1.200m

17
CL: 120.250m
Depth: 1.829m
IL: 118.421m
Diam.: 1.200m

18
CL: 120.070m
Depth: 1.680m
IL: 118.390m
Diam.: 1.200m

19
CL: 119.980m
Depth: 0.600m
IL: 119.480m
Diam.: 450mm

20
CL: 119.98m
Depth: 0.669m
IL: 119.311m
Diam.: 450mm

21
CL: 119.980m
Depth: 0.851m
IL: 119.129m
Diam.: 450mm

22
CL: 119.980m
Depth: 0.917m
IL: 119.063m
Diam.: 450mm

23
CL: 119.980m
Depth: 0.948m
IL: 119.032m
Diam.: 450mm

24
CL: 119.980m
Depth: 1.100m
IL: 118.880m
Diam.: 450mm

25
CL: 119.980m
Depth: 1.112m
IL: 118.768m
Diam.: 450mm

26
CL: 119.980m
Depth: 1.124m
IL: 118.644m
Diam.: 450mm

27
CL: 120.050m
Depth: 1.050m
IL: 119.000m
Diam.: 450mm

28
CL: 120.100m
Depth: 1.141m
IL: 118.959m
Diam.: 450mm

29
CL: 120.200m
Depth: 1.379m
IL: 118.821m
Diam.: 450mm

30
CL: 120.500m
Depth: 1.878m
IL: 118.622m
Diam.: 600mm

31
CL: 120.125m
Depth: 1.127m
IL: 118.998m
Diam.: 1.200m

32
CL: 119.980m
Depth: 0.851m
IL: 119.129m
Diam.: 450mm

33
CL: 119.980m
Depth: 0.917m
IL: 119.063m
Diam.: 450mm

34
CL: 119.980m
Depth: 0.948m
IL: 119.032m
Diam.: 450mm

35
CL: 119.980m
Depth: 1.100m
IL: 118.880m
Diam.: 450mm

36
CL: 119.980m
Depth: 1.112m
IL: 118.768m
Diam.: 450mm

37
CL: 119.980m
Depth: 1.124m
IL: 118.644m
Diam.: 450mm

38
CL: 119.980m
Depth: 1.136m
IL: 118.512m
Diam.: 450mm

39
CL: 119.980m
Depth: 1.148m
IL: 118.364m
Diam.: 450mm

40
CL: 119.980m
Depth: 1.160m
IL: 118.216m
Diam.: 450mm

41
CL: 119.980m
Depth: 1.172m
IL: 118.068m
Diam.: 450mm

42
CL: 119.980m
Depth: 1.184m
IL: 117.920m
Diam.: 450mm

43
CL: 119.980m
Depth: 1.196m
IL: 117.772m
Diam.: 450mm

44
CL: 119.980m
Depth: 1.208m
IL: 117.624m
Diam.: 450mm

45
CL: 119.980m
Depth: 1.220m
IL: 117.476m
Diam.: 450mm

46
CL: 119.980m
Depth: 1.232m
IL: 117.328m
Diam.: 450mm

47
CL: 119.980m
Depth: 1.244m
IL: 117.180m
Diam.: 450mm

48
CL: 119.980m
Depth: 1.256m
IL: 117.032m
Diam.: 450mm

49
CL: 119.980m
Depth: 1.268m
IL: 116.884m
Diam.: 450mm

50
CL: 119.980m
Depth: 1.280m
IL: 116.736m
Diam.: 450mm

51
CL: 119.980m
Depth: 1.292m
IL: 116.588m
Diam.: 450mm

52
CL: 119.980m
Depth: 1.304m
IL: 116.440m
Diam.: 450mm

53
CL: 119.980m
Depth: 1.316m
IL: 116.292m
Diam.: 450mm

54
CL: 119.980m
Depth: 1.328m
IL: 116.144m
Diam.: 450mm

55
CL: 119.980m
Depth: 1.340m
IL: 115.996m
Diam.: 450mm

56
CL: 119.980m
Depth: 1.352m
IL: 115.848m
Diam.: 450mm

57
CL: 119.980m
Depth: 1.364m
IL: 115.700m
Diam.: 450mm

58
CL: 119.980m
Depth: 1.376m
IL: 115.552m
Diam.: 450mm

59
CL: 119.980m
Depth: 1.388m
IL: 115.404m
Diam.: 450mm

60
CL: 119.980m
Depth: 1.400m
IL: 115.256m
Diam.: 450mm

61
CL: 119.980m
Depth: 1.412m
IL: 115.108m
Diam.: 450mm

62
CL: 119.980m
Depth: 1.424m
IL: 114.960m
Diam.: 450mm

63
CL: 119.980m
Depth: 1.436m
IL: 114.812m
Diam.: 450mm

64
CL: 119.980m
Depth: 1.448m
IL: 114.664m
Diam.: 450mm

65
CL: 119.980m
Depth: 1.460m
IL: 114.516m
Diam.: 450mm

66
CL: 119.980m
Depth: 1.472m
IL: 114.368m
Diam.: 450mm

67
CL: 119.980m
Depth: 1.484m
IL: 114.220m
Diam.: 450mm

68
CL: 119.980m
Depth: 1.496m
IL: 114.072m
Diam.: 450mm

69
CL: 119.980m
Depth: 1.508m
IL: 113.924m
Diam.: 450mm

70
CL: 119.980m
Depth: 1.520m
IL: 113.776m
Diam.: 450mm

71
CL: 119.980m
Depth: 1.532m
IL: 113.628m
Diam.: 450mm

72
CL: 119.980m
Depth: 1.544m
IL: 113.480m
Diam.: 450mm

73
CL: 119.980m
Depth: 1.556m
IL: 113.332m
Diam.: 450mm

74
CL: 119.980m
Depth: 1.568m
IL: 113.184m
Diam.: 450mm

75
CL: 119.980m
Depth: 1.580m
IL: 113.036m
Diam.: 450mm

76
CL: 119.980m
Depth: 1.592m
IL: 112.888m
Diam.: 450mm

77
CL: 119.980m
Depth: 1.604m
IL: 112.740m
Diam.: 450mm

78
CL: 119.980m
Depth: 1.616m
IL: 112.592m
Diam.: 450mm

79
CL: 119.980m
Depth: 1.628m
IL: 112.444m
Diam.: 450mm

80
CL: 119.980m
Depth: 1.64