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PERMEABLE PAVING PP.03
WITH 275mm DEEP TYPE 3 SUB-BASE WITH 30% VOID CONTENT.
DEPTH TYPE 3 SUB-BASE = 275mm
AREA OF PAVING = 135m²
VOLUME TYPE 3 SUB-BASE = 29.4m³
ATTENUATION VOID CONTENT = 8.8m³
INFILTRATION RATE = 3.4 X 10-5 M/S (0.1224 m/hr)
CATCHMENT AREA = 173m² + 135m² = 308m² (0.0Ha)

SW.21
450Ø Catchpit
CL 116.650
IL 115.900

7.9m 100Ø @1:100

10.6m 150Ø @1:150

PLOT 4
FFL 116.80m

SOAKAWAY SA.03
CELLULAR STORAGE SOAKAWAY SYSTEM.
SDS GEOLIGHT SYSEM (OR SIMILAR PRODUCT)

INFILTRATION RATE = 3.4 X 10-5 M/S (0.1224 m/hr)
CATCHMENT AREA = 140m² (Plot 4) = 140m² (0.018HA)
SIZED TO ACCOMMODATE 1 IN 100 YEAR STORM EVENT PLUS 40% CLIMATE CHANGE.

VOLUME REQUIREMENTS
INTERNAL DIMENSIONS = 1.5m X 5.5m X 1.0m DEEP
CL = 116.820m
IL = 115.805m (INCOMING PIPE)
IL = 114.805m (BOTTOM OF SOAKAWAY)
DEPTH = 2.015m (GROUND LEVEL TO BOTTOM OF SA)
VOLUME REQUIRED = 8.25m³

NOTE EXISTING GROUND WATER LEVEL TO BE A MINIMUM OF 1M BELOW BOTTOM OF SOAKAWAY.

17.2m 150Ø @1:150

10.3m 150Ø @1:150

SA.03
CL 116.77

SW.20
450Ø Catchpit
CL 116.690
IL 115.880

SW.10
450Ø
CL 116.850
IL 116.200

13.7m 150Ø @1:150

SA.02
CL 116.820

5.1m 150Ø @1:150

SW.12
450Ø Catchpit
CL 116.810
IL 116.000

15.7m 150Ø @1:150

SW.11
450Ø
CL 116.820
IL 116.105

RAINWATER PIPE TO DISCHARGE TO ABOVE GROUND WATER BUTT OR SIMILAR PRODUCT. HIGH LEVEL OVER FLOW TO BELOW GROUND SYSTEM

PLOT 3
FFL 117.00m

8.6m 150Ø @1:150

SW.02
450Ø Catchpit
CL 116.92
IL 116.21

RAINWATER PIPE TO DISCHARGE TO ABOVE GROUND WATER BUTT OR SIMILAR PRODUCT. HIGH LEVEL OVER FLOW TO BELOW GROUND SYSTEM

PLOT 2
FFL 117.00m

Garage
SSL 116.90m

8.0m 100Ø @1:100

SW.30
450Ø
CL
IL

PLOT 1
FFL 117.10m

PERMEABLE PAVING AREA 2 [PP.02]

PERMEABLE PAVING AREA 1 [PP.01]

% VOID CONTENT.
M/S (0.1224 m/hr)
0m² = 240m² (0.020Ha)

PERMEABLE PAVING PP.02
WITH 275mm DEEP TYPE 3 SUB-BASE WITH 30% VOID CONTENT.
DEPTH TYPE 3 SUB-BASE = 275mm
AREA OF PAVING = 200m²
VOLUME TYPE 3 SUB-BASE = 55m³
ATTENUATION VOID CONTENT = 16.5m³
INFILTRATION RATE = 3.4 X 10-5 M/S (0.1224 m/hr)
CATCHMENT AREA = 40m² + 40m² + 40m² + 200m² = 320m² (0.032Ha)

5m building offset

KEY

- RWP — RAIN WATER PIPE
- WB.RWP — RAIN WATER PIPE & WATER BUTT. RWP CONNECTION WITH OVER FLOW TO STORM WATER BELOW GROUND SYSTEM
- RE — RODDING EYE
- PROPOSED PRIVATE STORM DRAIN
- PRIVATE STORM WATER 300Ø/ 450Ø / 600Ø PPIC NOTE CATCHPIT WHERE REFERENCED TO HAVE MIN. 300MM SUMP
- SO — SUB-BASE OUTLET DIFFUSER POLYPIPE RAINWATER DIFFUSER UNIT 708MM X 354MM X 150MM DEPTH OR SIMILAR
- 5m OFFSET FROM DWELLING. MINIMAL DISTANCE FROM BUILDING TO SITE SOAKAWAY
- CELLULAR STORAGE
- PERMEABLE DRIVEWAY CONSTRUCTION. TO CONTAIN MINIMUM 350MM TYPE 3 SUB-BASE (OR 63-10MM STONE) WITH 30% VOID CONTENT TO UTILISE STORM WATER ATTENUATION.

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Notes:

1. This drawing is to be read in conjunction with relevant Architects, Engineers and specialist manufacturers drawings, reports and specifications.
2. All levels are shown in metres above Ordnance Datum (m AOD) unless otherwise shown.
3. Any ambiguities or discrepancies within this drawing and any other information given elsewhere must be reported to K-Ten for clarification before pricing / works commence.
4. Do not scale from this drawing for construction purposes.
5. It is recommended that all sewers and drains be laid starting from the downstream connection to the existing sewer/drain and working upstream to the new development.
5. All private drainage to comply with current Building Regulations, BS EN-752 Drain and Sewer systems outside Buildings and other relevant British Standards and Codes of Practices.
6. Connections to existing sewers in accordance with the Local Water Authority guidelines & approval.
7. Connections to existing river or watercourse in accordance with the Local Authority and E.A guidelines & approval.
8. Sewers and drains of different diameters should be laid soffit to soffit unless shown otherwise in the drawing. Outfall chamber outgoing pipe where a vortex control device is fitted to be installed at lowest incoming invert level.
9. All access chambers covers and frames to be installed to BS EN 124.
10. Drainage Pipe work routes under building footprint will require Co-ordination with foundations.
11. Cover levels shown on this drawing refer to approximate surface levels. It is the contractors responsibility to ensure that access covers and frames are set at the final surface levels.
12. Where possible the contractor is to orientate manhole biscuits and covers to locate them parallel to kerbs and paving.
13. The Contractor should comply with hs(g) 47 "Avoiding Danger from Underground Services" when excavating around existing services.
14. It is the contractors responsibility to determine the location and depth of all existing services, mains and cables prior to construction.
15. The pipe diameters cover and invert levels of any existing manholes are to be verified on site prior to the commencement of the works.
16. All external non-perforated drainage within trafficked areas with less than 1.2m cover to have concrete protection. All external non-perforated drainage within landscaped areas with cover less than 0.6m to have concrete protection. All drainage with greater cover than the minimum required to have type S bed and surround.
11. Foul drainage pipe connection to public sewer to be plastic twin-walled/ribbed pipe constructed to Water Industry Standard (WIS)-4-35-01.
15. All drainage in highway to be installed in accordance with Sewers Sector Guidance.
16. All access chambers covers and frames to be installed to BS EN 124.
17. All drainage to be installed in accordance with Civil Engineering Specification for the Water industry 7th Edition.
18. Prior to commencing the works the contractor is to confirm details of the existing drainage system as noted on the drawing.
19. This drawing is for information only for planning submission. This is not to be used for construction purposes.
20. Drainage outfall connections and strategy to be agreed with the relevant authorities.
21. Gutters to have down-pipe leaf guards and rainwater down-pipes to have rodding access
22. All existing invert levels shown are indicative and to be checked by the contractor prior to starting works.

Rev	Date	Details	Drawn
B	18.11.25	Site plan updated and catchment areas	GJ
A	03.09.25	Preliminary issue	GJ

K-Ten Consulting

CLIENT:
MOWLES

PROJECT:
THE ELMS
SHERSTON

TITLE:
DRAINAGE LAYOUT
SHEET 2

SCALE @ A1:	DATE:	STATUS:	
1:100	28.07.2025	INFORMATION	
JOB NO:		DRAWING NO:	REVISION:
24-2090		C022	B