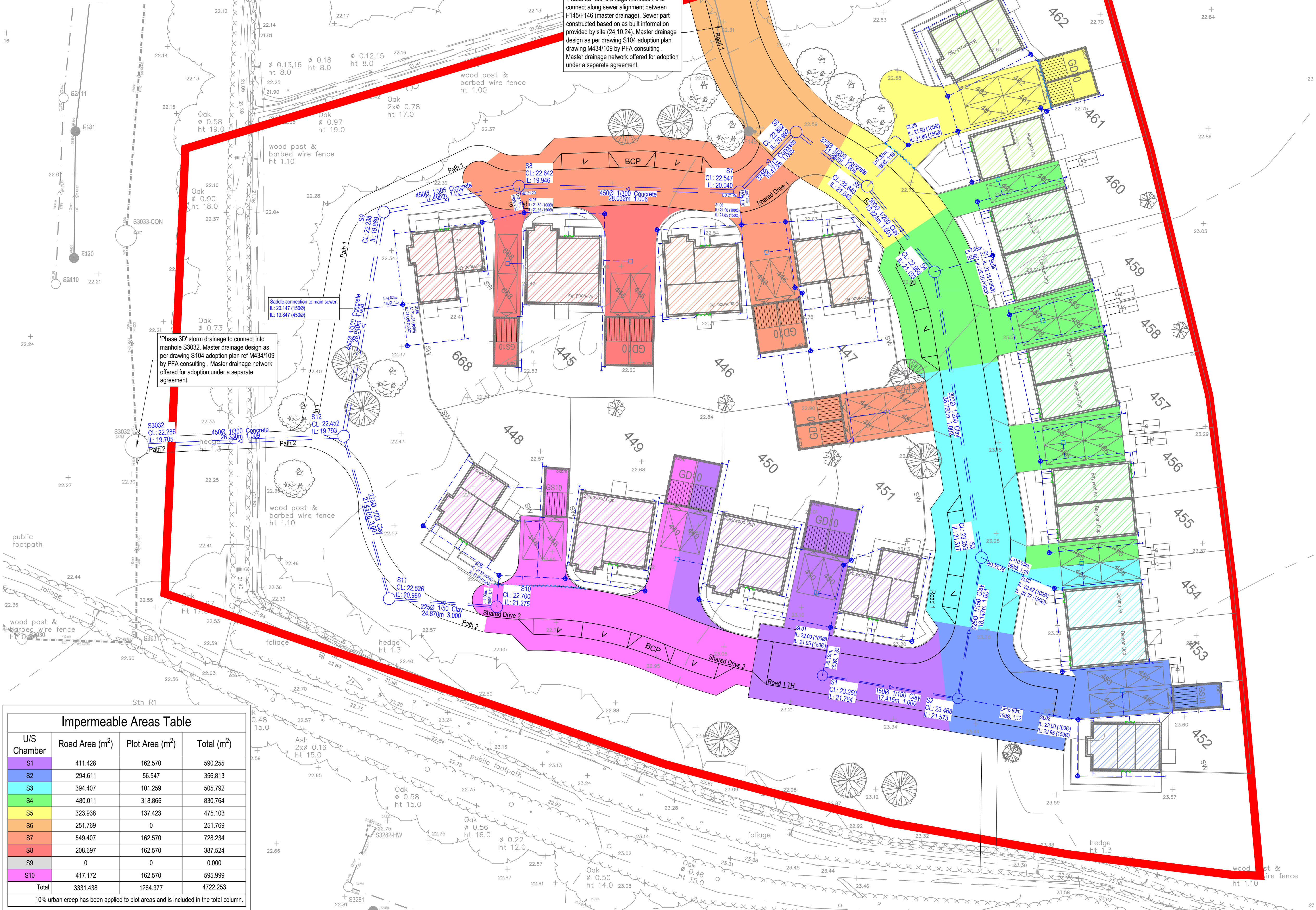


- Site Boundary
Adoptable storm water manhole to ICOSA Water specification
Adoptable storm water sewer to ICOSA Water specification

This drawing should be read in conjunction with all other design drawings and reports. In particular, the following drawings:

49204-ECE-XX-XX-CA-C-0000 - Drainage Calcs
49204-ECE-XX-XX-DR-C-0001 - S104 Layout
49204-ECE-XX-XX-DR-C-0002 - Plot Drainage Layout



Impermeable Areas Table			
U/S Chamber	Road Area (m ²)	Plot Area (m ²)	Total (m ²)
S1	411.428	162.570	590.255
S2	294.611	56.547	356.813
S3	394.407	101.259	505.792
S4	480.011	318.866	830.764
S5	323.938	137.423	475.103
S6	251.769	0	251.769
S7	549.407	162.570	728.234
S8	208.697	162.570	387.524
S9	0	0	0.000
S10	417.172	162.570	595.999
Total	3331.438	1264.377	4722.253
10% urban creep has been applied to plot areas and is included in the total column.			

INFORMATION WITHIN THIS DRAWING IS NOT NECESSARILY PRODUCED TO SCALE.
ALWAYS USE FIGURED DIMENSIONS AND CO-ORDINATES - IF IN DOUBT, ASK.

NOTES

- All pipes shall be either:
 - PVC to have BSI kitemark status (certified to WIS 4-35-01 and to BS EN 13476) Polypropylene. Maximum pipe length to be 3m. Plastic channel sections in manholes are not acceptable, clay channel sections shall be used. Icosas Water accept the use of plastic pipes in adoptable sewers, provided they comply with the following standards:
 - Solid Wall PVC-U to BS EN 1401
 - Spiral Wound Welded HDPE to EN 13476 Parts 1 & 2
 - Structure-wall Thermoplastic to EN 13476 Parts 1 & 3
 - Polypropylene to BS EN 1852Please note that where plastic pipes are installed into the ground prior to obtaining approval, then the Developer will have to provide a Light-line survey and report of the prospectively adoptable sewers, which will be at the Developer's expense.
 - OR
 - Vitrified clay to BS EN 285 with a minimum crushing strength as follows:
 - 150 dia. - 40 kN/m
 - 225 dia. - 45 kN/m
 - 300 dia. - 72 kN/mOR
 - Class 120 concrete to EN 1916 / BS 5911-1:2002.
- Pipes of 375mmØ or greater shall be concrete conforming to BS5911 Part 100.
- Where plastic pipes are proposed for adoptable sewers, structural calculations for the plastic pipes and a site investigation report to prove that the ground condition is suitable for the plastic pipes are to be produced.
- All pipes are to be laid such that they are at least 100mm below the finished ground level unless noted otherwise.
- All adoptable sewer works and materials to be in accordance with "DCG", the relevant British/European standards and Icosas Water standards/requirements/addendum and be kitemarked.
- Manhole covers shall have a clear square opening of 675 and shall be class D400 to BS EN 124 with 150 deep frames in highways. Covers to have closed keyways and are to be bedded on steel shims with 1.3 mortar haunching.
- Pipes entering manholes and road gullies shall have a flexible joint within 600 of the inside the manhole or gully joining with a short Rocker pipe.
- Plastic channel sections in manholes are not acceptable and dayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the benching.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- Sewers must have 5m clearance from trees and hedges (Icosas Technical Requirement WW-PO-002 for tree planting requirements).
- Sewers to be laid on a class S bedding (150mm granular bed and surround). Where depth of cover to top of sewer is less than 1.2m in highways and verges (or less than 0.9m in non-vehicular access areas), a concrete slab is to be provided above the granular bed and surround.
- All trenches in roads and paved areas shall be backfilled with Type 1 DTF granular sub-base material, or other granular material approved by the highway authority.
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of Icosas Water before any sewer works are carried out.
- Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- The invert levels at the proposed points of connection to existing public sewers shall be checked before any new drains or sewers are constructed. Any variation to the levels shown on the drawing shall be notified to Eastwood CE.
- The chamber size of manholes with more than one connection in them may need to be increased by an increment to accommodate the connections and bends.
- Cover levels are indicative only. Covers to be set to suit camber/gradient of existing and proposed roads.
- No land drainage is to connect to the public sewers, either directly or indirectly.
- Cover slabs must carry the BSI Kitemark or will be rejected by the Icosas Water inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a load bearing slab should be fitted above the cover slab to bring the size down to 675x675, refer to CPSSA Technical Bulletin issued autumn 2004 for Kitemarked cover slab opening sizes.
- Demarcation chambers to be a min. 450mmØ chamber for 150mmØ foul and surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for health and safety reasons. The maximum depth of demarcation chamber to be 2.0m, where depth exceeds 2m, manhole to be constructed as a Type B manhole.
- Any connection into an existing Icosas Water Sewer should only be made following the submission of a completed application form and method statement for Icosas approval. This must be provided giving 21 days notice of the intention to connect to the public sewer.
- Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.

P03	Drawing title amended. Updated to suit revised site layout received on 20.11.24.	MA	CB	02/12/2024
P02	Updated to suit revised site layout received on 10.10.24	MA	CB	31/10/2024
P01	First issue.	MA	CB	10/10/2024
REV	DESCRIPTION	SIG	CHK	DATE

MILLER HOMES

BOORLEY GRDENS PHASE 3D,
WINCHESTER ROAD, BOORLEY
GREEN, HAMPSHIRE

IMPERMEABLE AREAS PLAN



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ECE PROJECT No	SCALE AT A1	STATUS	SUITABLE FOR
49204	1:250	S3	Comment
DRAWING NUMBER			
49204 - ECE - 92 - XX - DR - C - 0003	REV		
Project	Originator	Zone	Level
	Type	Role	Number