



ALL END WASH OUTS TO BE POSITIONED NO MORE THAN 1m PAST THE LAST SERVICE, IF THE LAST SERVICE CONNECTION POSITION CHANGES FURTHER THAN THIS THE DEVELOPER MUST CONTACT INFRASTRUCTURE GATEWAY FOR ADVICE

PLEASE NOTE - BIN STORE CONNECTIONS MUST HAVE DOUBLE CHECK VALVES INSTALLED BY THE DEVELOPER AND TAPS MUST BE IN LOCKABLE BOXES OR LOCKED AREAS INACCESSIBLE TO NON-HOMEOWNERS. IF THE TAPS ARE IN AREAS OPEN TO THE PUBLIC THERE MUST BE AN AIR BREAK VIA A TANK AS IT CONSTITUTES A CATEGORY 5 HIGH RISK FLUID.

SOIL ANALYSIS HAS CONFIRMED THAT BARRIER PIPE IS NOT REQUIRED ON THIS SITE.

ONSITE PIPE SIZE (mm)	LENGTH (m)
90	2571
125	202
OFFSITE PIPE SIZE (mm)	LENGTH (m)
125	51
TOTAL LENGTH	2824

PE & Barrier Pipe
Up to and including 63mm PE80 (MDPE), SDR11 (Light Blue)
90mm up to 315mm PE100 (HPE) SDR17.6 (Dark Blue)

Ductile Iron
Conform with designer before ordering

All joints and services must be laid using an approved PE or PE Barrier pipe. When using PE Barrier pipe all joints & fittings must be wrapped in accordance with manufacturers instruction to prevent ingress of oxygen. All PE Barrier pipe underground must be covered with a minimum 150mm flexible iron couplings.

All manholes (other than 32mm/20mm services) must be installed by 'RSP' reserved personnel only.

And mains installed by non-approved personnel will not comply with water / HSE regulations and will need to be replaced.

All external pipes and internal plumbing must comply with the Water Supply (Water Fittings) Regulations 1999 Schedule 2 and the Water Supply (Water Quality) Regulations 2001

Water Pipe External Diameter	Duct Inside Diameter
25mm & 32mm	100mm
63mm	150mm
60mm, 110mm & 125mm	200mm
160mm & 180mm	300mm
225mm & 315mm	450mm

BS6437 - 1964; BS6572 - 1985; BS6730 - 1966; BS5306: Part 2 - 1999;
WIS 4-24-01 - 1998; WIS 4-32-03 - Issue 3: April 2002;
WIS 4-32-14 - 1995; WIS 4-32-15 - 1995; WIS 4-32-17 - Issue 2 - 2001; DIN8074 - 1999; DIN8075 - 1999;
DIN16963 Part 1 - 1980; ISO4427-1996; BS EN 12201; BS EN 13244; UNI 10910:2001

Should the land on which the development is taking place to be contaminated, all underground pipes and fittings installed in conjunction with water mains and service connection will need to be of suitable material to meet the manufacturers specifications which are not adversely affected by the geotechnical conditions. The developer will ensure that the service pipe material and fittings used on site are fit for purpose and suitable for use within contaminated land.

In the event that contaminated land is discovered during construction then work should be stopped until the nature of the contamination is identified and alternative protective coated materials provided to allow continuation of main laying.

This plan shows those pipes owned by ESP. Any third party apparatus indicated on these drawings is shown for indicative purposes only. The developer should contact the third party direct for confirmation of their location or to agree any possible disconnection or abandonment works. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. No liability of any kind whatsoever is accepted by the company, its agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HSE/G47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on this site.

Developers Responsibility

When the main has been sold it becomes the responsibility of the developer to ensure its protection, therefore backfilling should be carried out as soon as possible. Any damage or theft of any item once delivered to site is the responsibility of the developer. Replacement and repair, including administrative costs will be fully recharged to the developer, irrespective of who the responsible party was. It will be the developer's responsibility to recover the costs from the third parties.

Proposed Services
Developer to pre-install all services up to & including 320mm at a depth of 750mm deep and not greater than 1350mm from finished surface level.
Where laying in contaminated land using barrier pipe or ductile iron, corresponding service pipe must also be of a barrier type.

Proposed Mains
All mains to be laid in pre-excavated trench to 900mm cover, provided by the developer. Road crossings to be continuous plastic duct or drainage pipe sized to accommodate the mains shown on this drawing, at 900mm.

Drawing Key		Colour	Proposed	As-Laid
Water Pipe		Dark Blue		
Services (Communication Pipe)	25mm	Light Blue		
	30mm	Blue		
	63mm	Purple		
	25mm	Light Green		
Services (Supply Pipe)	32mm	Orange		
	63mm	Red		
	Asset Boundary	Yellow		
Water Mains (Incumbent)		Dark Green		

PE Polyethylene	BP Barrier Pipe	D Ductile Iron
UPVC Ducts	Black	
Water Connection Points	Green	
Wash Out Hydrant (Fixed Jumper)		
Temporary Wash Out (Fixed Jumper)		
Suction Valve		
Air Valve		
Pressure Reducing Valve		
Fire Hydrant (Fixed Jumper)		
Stop Tap		
Mixer		
Change of Pipe Size/Material		
Multi Port Box (With Number of Meters)		
Cut Metal Manifold & Chamber (With Number of Meters)		
Non-Return Valve		



ALL VALVES TO BE
CLOCKWISE
CLOSE

Rev	Date	Description	ID	CHK	A

Asset Owner:
First Floor Kings Court, 41-51 Kingston Road, Leatherhead, Surrey, KT22 7SL
tel. 01372 587000
e-mail: waterdesign@esd.com

OS Ref: 536928,240657

Drawing Title: Patchy Water Design

NWGE25-6009	ESPN037442
Type:	Revision

Drawing Number: _____

Scale:	Sheet Size:	Drawn:	Chk'd:	Apvd:	Date:
1:500	A0	JC	AD	BB	26/06/

1.500	A0	JC	AD	BB	26/06/
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NUMBER OF DOMESTIC PLOT CONNECTIONS

PLEASE NOTE: ALL SERVICES TO BE 25mm MDPE / BARBIER
INCH CONCENTRIC METER IN A TRADITIONAL MANIFOLD
UNLESS OTHERWISE SPECIFIED ON THE ORDER

HYDRANT SCHEDULE		
HOUSE NO.	STREET	HYDRANT NO.
1	1st	1
2	2nd	2
3	3rd	3
4	4th	4
5	5th	5
6	6th	6
7	7th	7
8	8th	8
9	9th	9
10	10th	10
11	11th	11
12	12th	12
13	13th	13
14	14th	14
15	15th	15
16	16th	16
17	17th	17
18	18th	18
19	19th	19
20	20th	20
21	21st	21
22	22nd	22
23	23rd	23
24	24th	24
25	25th	25
26	26th	26
27	27th	27
28	28th	28
29	29th	29
30	30th	30
31	31st	31
32	32nd	32
33	33rd	33
34	34th	34
35	35th	35
36	36th	36
37	37th	37
38	38th	38
39	39th	39
40	40th	40
41	41st	41
42	42nd	42
43	43rd	43
44	44th	44
45	45th	45
46	46th	46
47	47th	47
48	48th	48
49	49th	49
50	50th	50
51	51st	51
52	52nd	52
53	53rd	53
54	54th	54
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56	56th	56
57	57th	57
58	58th	58
59	59th	59
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62	62nd	62
63	63rd	63
64	64th	64
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67	67th	67
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73	73rd	73
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88	88th	88
89	89th	89
90	90th	90
91	91st	91
92	92nd	92
93	93rd	93
94	94th	94
95	95th	95
96	96th	96
97	97th	97
98	98th	98
99	99th	99
100	100th	100

NUMBER	ADOPT Y/N	COMMENT
1	Y/N	
2	Y/N	
3	Y/N	
4	Y/N	
5	Y/N	
6	Y/N	
7	Y/N	
8	Y/N	
9	Y/N	
10	Y/N	
11	Y/N	
12	Y/N	
13	Y/N	
14	Y/N	

NUMBER OF FITTINGS	
WASHOUTS	14
SLUICE VALVES	16