

As per Section 3.14 of the Water Code of Practice, external manifold chambers shall incorporate a supply pipe, meter, and stop valve for each unit. All meters in the manifold shall be tagged to indicate which property is supplied and any unused outlets are to be blanked off. Supply pipe upstream of the manifold is to be sized as per the requirements outlined in Section 3.11 of the Water Code of Practice APPLICABLE TO ALL MANHOLE BOUNDARY BOXES TO MULTI UNIT LOW-RISE UNITS (APARTMENTS AND NEIGHBOURHOOD CENTER)

No domestic property within the Development shall be more than 46m from a hydrant. Shaded Circle shown to represent coverage associate with individual hydrants

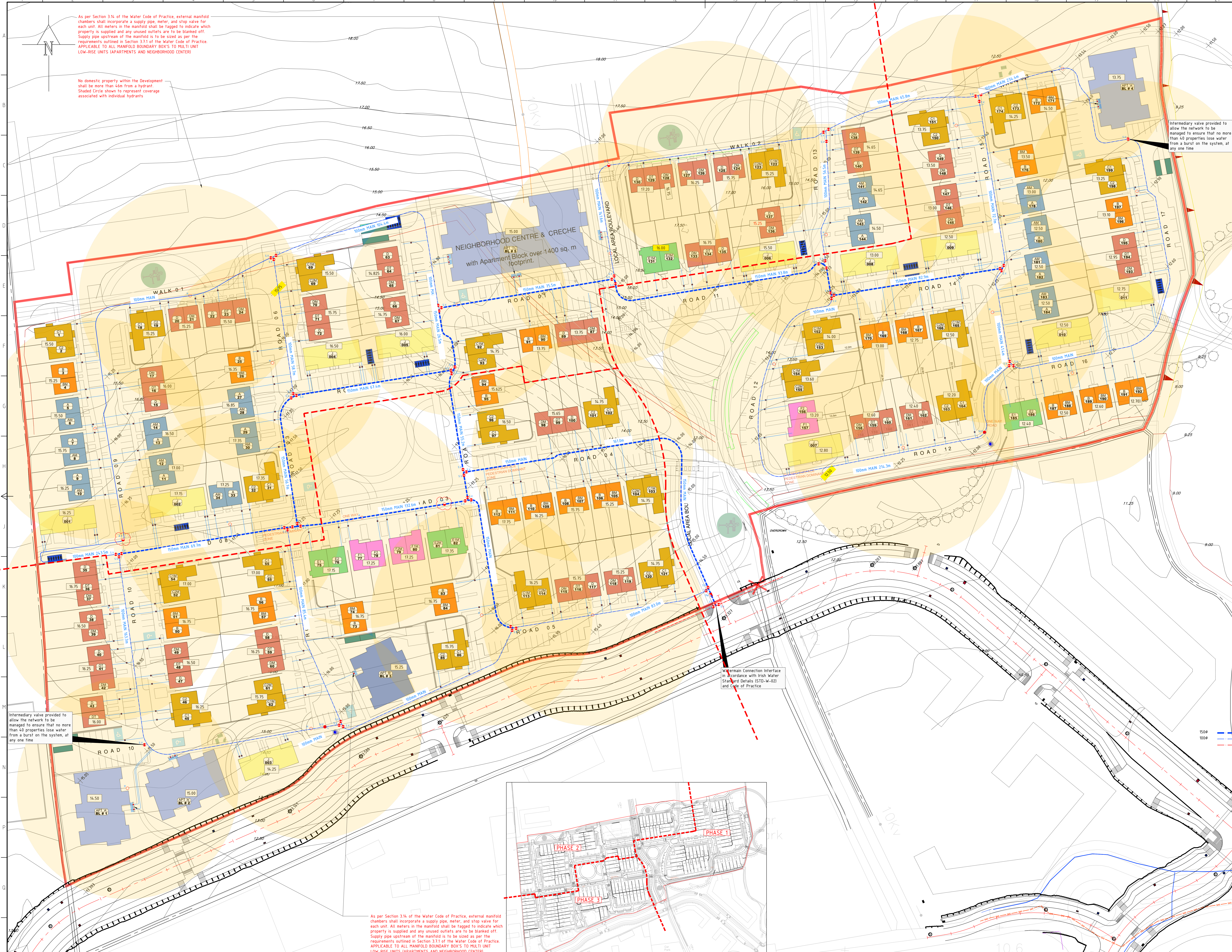
- WATER MAIN LAYOUTS ARRANGED IN LOOPS AVOIDING "DEAD ENDS" OR TERMINAL POINTS.
- ALL MAINS LOOPED TO ACCOMMODATE ONE-DIRECTIONAL FLOWING OF THE NETWORK.
- PIPE SIZE SHALL BE 100mm INTERNAL DIAMETER SERVING SECTIONS OF THE DEVELOPMENT WHERE THERE ARE UP TO 100 HOUSES ON THE LOOP.
- PIPE SIZE OF 150mm INTERNAL DIAMETER USED TO SPINE SECTIONS SERVING THE 100mm BRANCH MAINS.
- EVERY PREMISES TO HAVE A SEPARATE SERVICE CONNECTION WITH MANHOLE BOUNDARY BOXES PROVIDED TO MULTI UNIT LOW-RISE UNITS (APARTMENTS AND NEIGHBOURHOOD CENTER).
- SERVICE CONNECTIONS TO BE SHORT AS REASONABLY POSSIBLE.
- LONG SERVICE CONNECTIONS (ON EXCESS OF 15m) WILL NOT BE ALLOWED.
- SERVICE CONNECTIONS SHALL BE A MINIMUM PIPE SIZE OF 25mm OUTSIDE DIAMETER, 20mm INTERNAL DIAMETER.
- WATER MAINS DESIGNED TO PROVIDE THE OPTIMUM CIRCULATION IN THE LOCAL WATER NETWORK.
- VALVES ARRANGED IN SUCH A MANNER TO ALLOW THE NETWORK TO BE MANAGED TO ENSURE THAT NO MORE THAN 40 PROPERTIES LOSE WATER FROM A BURST ON THE SYSTEM, AT ANY ONE TIME.
- NO DOMESTIC PROPERTY TO MORE THAN 46m FROM A HYDRANT. HYDRANT DETAILS AND LOCATIONS SHALL BE SUBJECT TO THE APPROVAL OF THE CORK COUNTY COUNCIL FIRE DEPARTMENT.
- WATER SUPPLY MAINS SHALL BE LAID IN COMMON AREAS AND NOT THROUGH INDIVIDUAL PRIVATE GARDENS OR DRIVEWAYS ETC.
- A THREE-WAY VALVE ARRANGEMENT SHALL BE PROVIDED AT ALL JUNCTIONS, AS A MINIMUM.
- THE WATER MAIN PIPEWORK IS LOCATED AT THE LEFT HAND SIDE OF THE ENTRANCE TO THE DEVELOPMENT FROM A VIEW FACING INTO THE DEVELOPMENT AS PROPERTIES ARE LOCATED TO THE LEFT OF THE SPINE ROAD.
- AIR VALVE LOCATED AT HIGH POINT OF SITE, WHERE AIR IS LIKELY TO BUILD UP.
- THE DEVELOPER IS TO LIAISE WITH THE FIRE SERVICES AUTHORITY IN ORDER TO ENSURE FIRE FLOWS ARE AVAILABLE THROUGHOUT THE DEVELOPMENT.
- BULK FLOW METER TO BE FITTED ADJACENT TO THE SITE ENTRANCE, WITH A FACTORY FITTED AMR AND INSTALLED IN A SUITABLY SIZED CHAMBER.
- WATERMETER TO BE LOCATED IN GRASS VERGE ALONG THE START OF THE SPINE ROAD.
- WATERMANS THROUGHOUT THE REMAINDER OF THE DEVELOPMENT ARE INDICATED 1m FROM THE EDGE OF THE ROAD, TO AVOID CONGESTION WITH UNDER FOOTPATH UTILITIES.
- ELECTRIC FOOTING COUPLING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
- ALL BENDS, TEES, DEAD ENDS, ETC. OF PIPELINES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. STD-W-28. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- BUTT FUSION WELDING AND ELECTRO FUSION JOINTING OF PIPES SHALL ONLY BE CARRIED OUT BY TRAINED OPERATIVES IN POSSESSION OF A CURRENT TRAINING CERTIFICATE USING FULLY AUTOMATIC APPROVED JOINTING MACHINE/RIGS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE IDENTITY OF THE PE PIPELINE MANUFACTURER SHALL BE MADE KNOWN TO IRISH WATER PRIOR TO COMMENCEMENT OF THE INSTALLATION. CERTIFICATION AND TESTING INCLUDING INDEPENDENT THIRD PARTY CERTIFICATION SHALL BE PROVIDED TO CONFIRM QUALITY ASSURANCE COMPLIANCE. EACH JOINT SHALL BE CLEARLY MARKED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. A PRINTOUT OF THE JOINT DETAILS, WITH A GPS LOCATION OF EACH JOINT, SHALL BE PROVIDED AND RETAINED FOR QUALITY ASSURANCE PURPOSES.
- CONNECTING TO EXISTING MAINS IS TO BE CARRIED OUT BY IRISH WATER OR AN APPROVED IRISH WATER AGENT.
- WHEN EXISTING WATERMANS ARE PRESENT A SPECIFIC METHOD STATEMENT SHALL BE SUBMITTED TO IRISH WATER PRIOR TO WORK TAKING PLACE AND SUBJECT TO WRITTEN APPROVAL, DETAILING THE PROTECTION TO BE PUT IN PLACE TO EXISTING MAINS, METHOD OF REMOVAL OF EXISTING AC, METHOD OF DISPOSAL OF EXISTING AC AND METHOD OF CONNECTION TO EXISTING AC.
- PIPE MATERIAL REFERENCES AS FOLLOWS:
 D - DUCTILE IRON
 C - CAST IRON
 PE - POLYETHYLENE
 UPVC - UNREINFORCED POLY VINYL CHLORIDE
 ST - STEEL
 OTHER - REFERS TO ALL EXISTING PIPE MATERIALS OTHER THAN PE (TYPICAL AC, DL, UPVC & ST)
- SLUICE VALVE CHAMBERS TO BE IN ACCORDANCE WITH STD-W-16 AND STD-W-15 (PEI CHAMBERS NOT SHOWN FOR CLARITY).
- ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. STD-W-28. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- A HIGH LEVEL OF HEALTH & SAFETY PROCEDURES IS REQUIRED.

- BOUNDARY BOX NOTES:**
- THE BOUNDARY BOX IS TO BE IN ACCORDANCE WITH THE IRISH WATER SPECIFICATION, INCORPORATING A G15 MANHOLE, STOP-TAP, FROST PLUG & NON-RETURN VALVE.
 - THE BOUNDARY BOX SHALL BE POSITIONED IN PUBLIC SPACE & AS CLOSE AS POSSIBLE TO THE PROPERTY BOUNDARY BUT NO PART OR FITTING TO BE WITHIN 25mm OF THE PROPERTY LINE.
 - THE BOUNDARY BOX SHALL BE LOCATED WHERE IT IS SAFE TO OPEN THE COVER & ACCESS THE STOP TAP OR VISUALLY READ THE METER, i.e. ON A FOOTPATH OR VERGE, & NOT IN A CARRIAGEWAY.
 - THE SURFACE BOX COVER ON THE BOUNDARY BOX SHOULD BE NOT LESS THAN GRADE C (BS 5842-2010), & THE BOUNDARY BOX SHOULD BE LOCATED SUCH THAT HEAVIER GRADES OF COVER WOULD NOT BE REQUIRED.
 - THE SHAFT OF THE BOUNDARY BOX IS TO BE INSTALLED VERTICALLY, & THE SURFACE BOX/COVER INCLINED TO MATCH THE SURFACE GRADIENT.
 - THE BOUNDARY BOX IS TO BE INSTALLED AT A MINIMUM DEPTH OF 600mm (i.e. 25mm) TO THE CROWN OF THE INLET & OUTLET FITTINGS ON THE OUTSIDE OF THE BOX.
 - THE SERVICE CONNECTION PIPE SHALL NOT BE WRAPPED AROUND THE SHAFT OF THE BOUNDARY BOX OR BENT IN ANY RADII LESS THAN THAT APPROVED BY THE MANUFACTURER.
 - THE PIPE FITTINGS TO THE BOUNDARY BOX SHALL BE APPROVED BY THE BOUNDARY BOX MANUFACTURER.
 - THE BOUNDARY BOX SHALL BE INSTALLED HYGIENICALLY & LEFT CLEAN & FREE OF CONSTRUCTION WASTE OR DIRT FOR LATER METER INSTALLATION BY IRISH WATER.
 - BOX TO BE FOUND ON 100mm DEPTH OF C12/75 CONCRETE AND SURROUNDED WITH CLAUSE 808 GRANULAR MATERIAL.
 - MINIMUM COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF A SERVICE CONNECTION SHALL BE 750mm WITH AN ABSOLUTE MINIMUM DEPTH OF 600mm FOR SHORT DISTANCES (SUBJECT TO IRISH WATER AGREEMENT). THE DESIRABLE MAXIMUM COVER FOR A SERVICE CONNECTION PIPE SHOULD BE 1200mm, WHERE PRACTICABLE.
 - CUSTOMER'S DISTRIBUTION PIPEWORK WITHIN THE PREMISES SHOULD BE SUITABLY SIZED TO ACCOMMODATE FLOW FROM 20mm INTERNAL DIAMETER SERVICE PIPE.
 - THE BOUNDARY BOX ACCOMMODATES DN15, DN20 & DN25 CONCENTRIC METERS. A G12 MANHOLE IS TO BE USED FOR DN15 & DN20 METERS. A G2 MANHOLE IS TO BE USED FOR DN25 METERS.

- WATER SUPPLY SERVICES - LEGEND**
- 1500 - New Watermain pipe, MDPE material PE80 SDR-11 to conform to IS EN 12201: Part 1 & 2 and IS EN 12201-3
 - 1000 - Main Water supply pipe being installed under Water-Rock LHAIF initiative
 - 6No. SLUICE VALVE AND CHAMBER, NEW TO BE IN ACCORDANCE WITH STD-W-15
 - 3No. AIR VALVE AND CHAMBER, NEW
 - 2No. SCOUR VALVE AND CHAMBER, NEW
 - 22No. HYDRANT AND CHAMBER, NEW
 - 1No. WATER METER AND CHAMBER, NEW
 - 24No. CUSTOMER CONNECTION AND BOUNDARY BOX, NEW DWELLINGS AND HAISINETTES
 - MANHOLE BOUNDARY BOX TO MULTI UNIT LOW-RISE UNITS (APARTMENTS AND NEIGHBOURHOOD CENTER)
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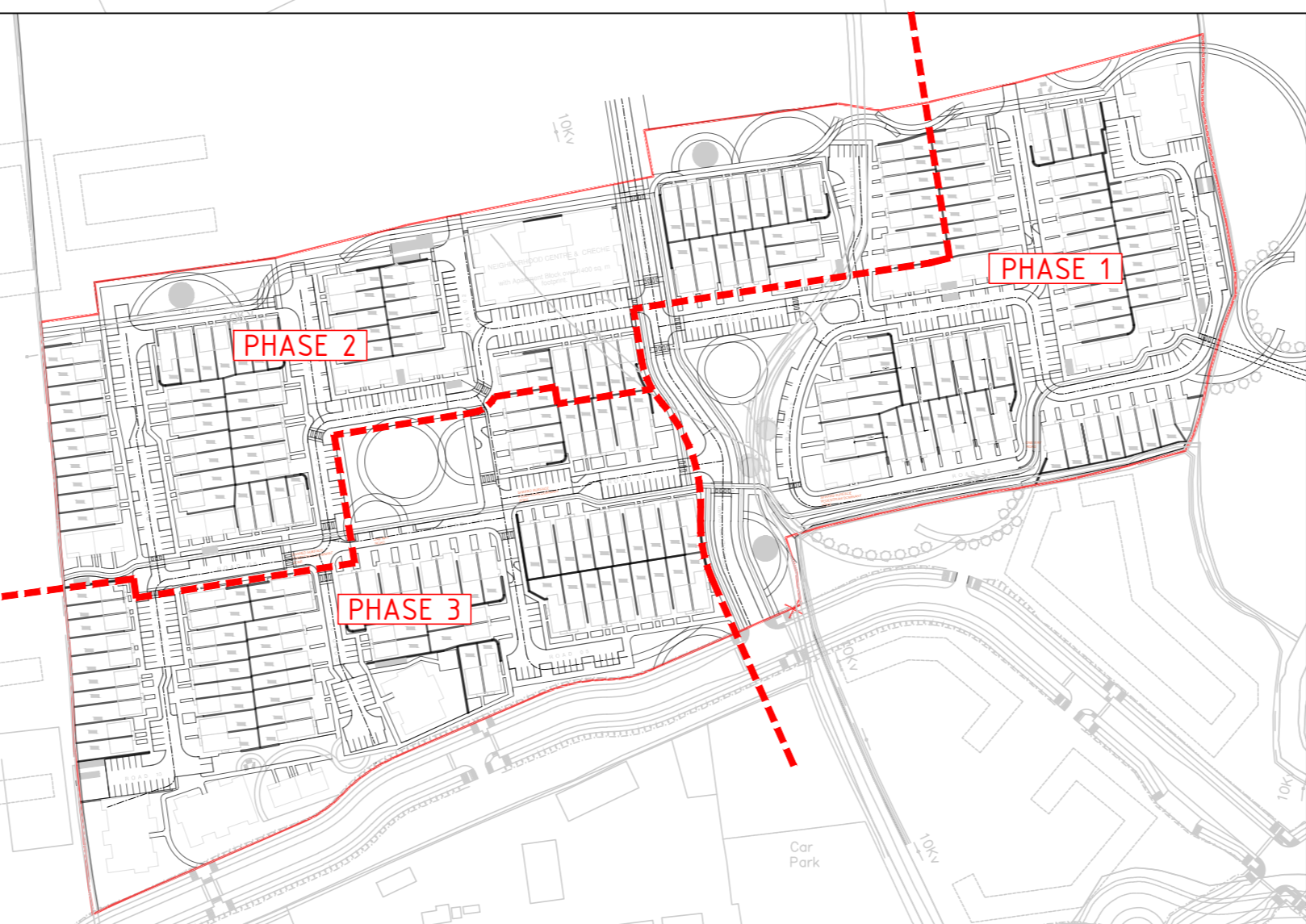
- WATER SUPPLY SERVICES - CONSTRUCTION**
 WATER SUPPLY SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS:
- IRISH WATER CODE OF PRACTICE FOR WATER INFRASTRUCTURE DESIGN AND CONSTRUCTION REQUIREMENTS FOR SELF-LAY DEVELOPMENTS JULY 2020 (REVISION 2).
 - IRISH WATER CONNECTION AND DEVELOPER SERVICES - WATER INFRASTRUCTURE STANDARD DETAILS (CONSTRUCTION REQUIREMENTS FOR SELF-LAY DEVELOPMENTS DECEMBER 2017 REVISION 03)

NO.	DATE	BY	REVISION
06	07/22	EX	Updated information issued for the pre-construction application
05	06/22	EX	Issued for the Planning/Architects Layout
04	05/22	EX	Issued for the Planning/Architects Layout
03	03/22	EX	Issued for the Planning/Architects Layout
02	02/22	EX	Issued for the Planning/Architects Layout



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1 Proposed Watermain Layout
Scale: 1:500



2 Phasing Key Plan
Scale: 1:2500