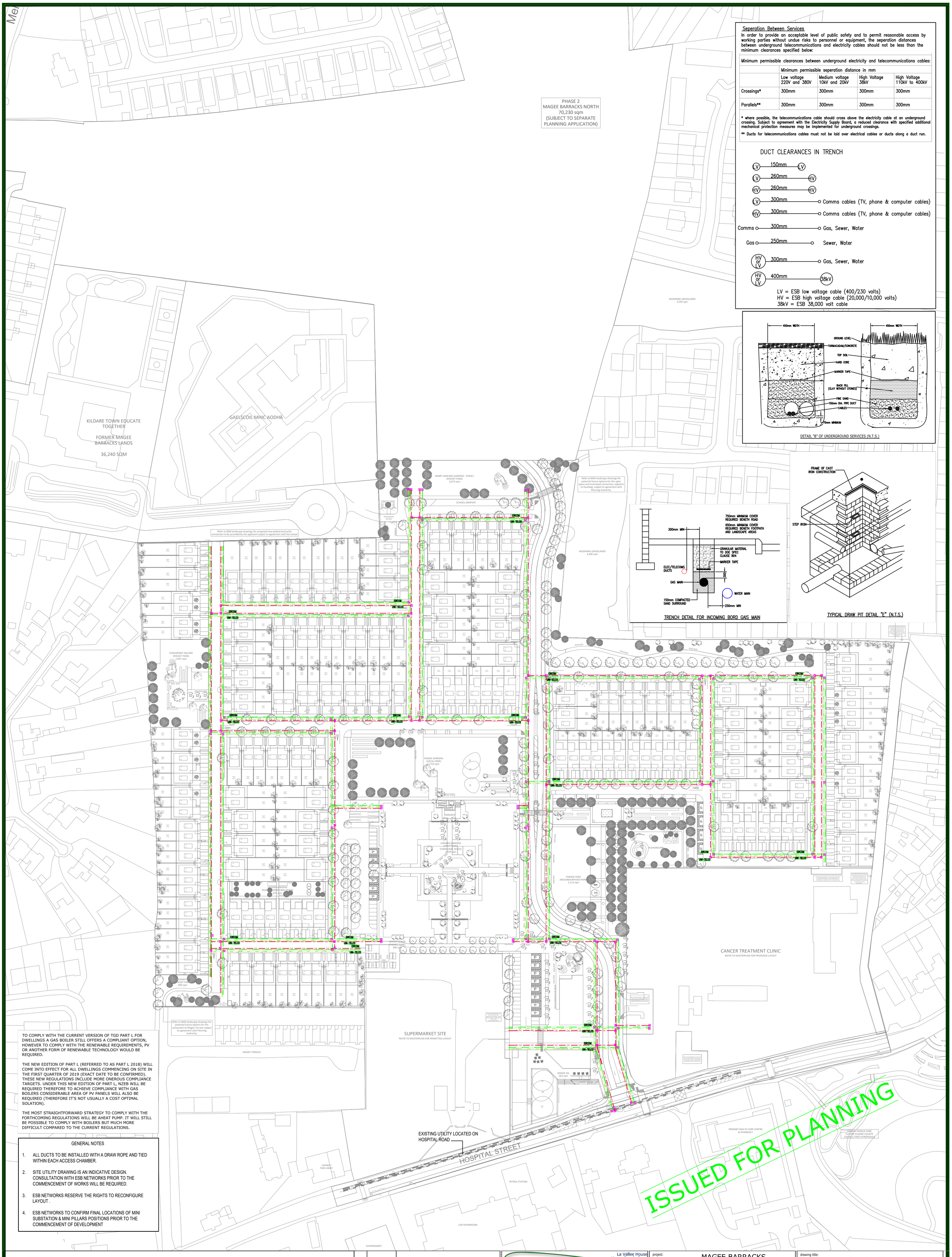

Seperation Between Services

In order to provide an acceptable level of public safety and to permit reasonable access by working parties without undue risks to personnel or equipment, the seperation distances between underground telecommunications and electricity cables should not be less than the minimum clearances specified below:

Minimum permissible clearances between underground electricity and telecommunications cables:

	Minimum permissible seperation distance in mm			
	Low voltage 220V and 380V	Medium voltage 10kV and 20kV	High Voltage 38kV	High Voltage 110kV to 400kV
Crossings*	300mm	300mm	300mm	300mm
Parallels**	300mm	300mm	300mm	300mm

* where possible, the telecommunications cable should cross above the electricity cable at an underground crossing. Subject to agreement with the Electricity Supply Board, a reduced clearance with specified additional mechanical protection measures may be implemented for underground crossings.

** Ducts for telecommunications cables must not be laid over electrical cables or ducts along a duct run.

DUCT CLEARANCES IN TRENCH

- LV — 150mm — LV
- LV — 260mm — HV
- HV — 260mm — HV
- LV — 300mm — Comms cables (TV, phone & computer cables)
- HV — 300mm — Comms cables (TV, phone & computer cables)
- Comms — 300mm — Gas, Sewer, Water
- Gas — 250mm — Sewer, Water
- HV or LV — 300mm — Gas, Sewer, Water
- HV or LV — 400mm — 38kV

LV = ESB low voltage cable (400/230 volts)
HV = ESB high voltage cable (20,000/10,000 volts)
38kV = ESB 38,000 volt cable

DETAIL "B" OF UNDERGROUND SERVICES (N.T.S.)

TRENCH DETAIL FOR INCOMING BORD GAIS MAIN

TYPICAL DRAW PIT DETAIL "E" (N.T.S.)

TO COMPLY WITH THE CURRENT VERSION OF TGD PART L FOR DWELLINGS A GAS BOILER STILL OFFERS A COMPLIANT OPTION, HOWEVER TO COMPLY WITH THE RENEWABLE REQUIREMENTS, PV OR ANOTHER FORM OF RENEWABLE TECHNOLOGY WOULD BE REQUIRED.

THE NEW EDITION OF PART L (REFERRED TO AS PART L 2018) WILL COME INTO EFFECT FOR ALL DWELLINGS COMMENCING ON SITE IN THE FIRST QUARTER OF 2019 (EXACT DATE TO BE CONFIRMED). THESE NEW REGULATIONS INCLUDE MORE ONEROUS COMPLIANCE TARGETS. UNDER THIS NEW EDITION OF PART L, NZEB WILL BE REQUIRED THEREFORE TO ACHIEVE COMPLIANCE WITH GAS BOILERS CONSIDERABLE AREA OF PV PANELS WILL ALSO BE REQUIRED (THEREFORE IT'S NOT USUALLY A COST OPTIMAL SOLATION).

THE MOST STRAIGHTFORWARD STRATEGY TO COMPLY WITH THE FORTHCOMING REGULATIONS WILL BE AHEAT PUMP. IT WILL STILL BE POSSIBLE TO COMPLY WITH BOILERS BUT MUCH MORE DIFFICULT COMPARED TO THE CURRENT REGULATIONS.

GENERAL NOTES

1. ALL DUCTS TO BE INSTALLED WITH A DRAW ROPE AND TIED WITHIN EACH ACCESS CHAMBER.
2. SITE UTILITY DRAWING IS AN INDICATIVE DESIGN. CONSULTATION WITH ESB NETWORKS PRIOR TO THE COMMENCEMENT OF WORKS WILL BE REQUIRED.
3. ESB NETWORKS RESERVE THE RIGHTS TO RECONFIGURE LAYOUT .
4. ESB NETWORKS TO CONFIRM FINAL LOCATIONS OF MINI SUBSTATION & MINI PILLARS POSITIONS PRIOR TO THE COMMENCEMENT OF DEVELOPMENT

LEGEND OF SYMBOLS

- DENOTES ESB CABLE TRENCH 600mm WIDE x 1000mm DEEP AS PER DETAIL "B"
- C/W NO. 125mm# UNDERGROUND "RED" PVC PIPEDUCTS TO ESB STANDARD.
- DENOTES TELECOM CABLE TRENCH 450mm WIDE x 900mm DEEP AS PER DETAIL "D" C/W 100mm# UNDERGROUND PVC PIPE DUCTS FOR UNIVERSAL TELCO PROVIDER.
- DENOTES TELECOM CABLE TRENCH 450mm WIDE x 900mm DEEP AS PER DETAIL "D" C/W 100mm# UNDERGROUND PVC PIPE DUCTS FOR EIRCOM.
- 800mm x 800mm x 800mm DEEP L.T. POWER MANHOLE C/W CAST IRON COVER SUITABLE FOR VEHICULAR TRAFFIC DETAIL "E".
- NEW LOW PRESSURE 75 MbAR NATURAL GAS SUPPLY
- NEW LOW PRESSURE 75 MbAR NATURAL GAS SUPPLY
- EIRCOM — NEW EIRCOM NODE
- UNI-TELCO — NEW UNIVERSAL TELECOM NODE
- PROPOSED LOCATION FOR ESB SUB STATION
- PROPOSED LOCATION FOR ESB MINI PILLAR

rev	date	description
P1	JUL. '19	ISSUED FOR PLANNING
P0	OCT. '18	ISSUED FOR PLANNING

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drawing title: PROPOSED SITE UTILIITY SERVICES PHASE 1 LAYOUT

date:	cad ref:	scale:
JAN. '18	E-(6-)02	1:1000@A1
drawn by: CR	checked by: KO'B	approved by: BD
job no: 16028	drawing no: e-(6-)02	rev no: P1