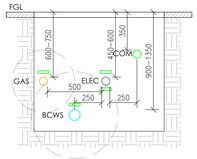
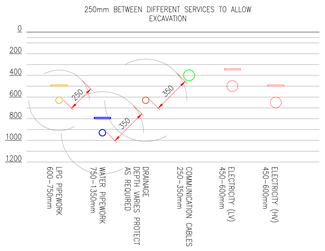
KEY:

- EELEC — EXISTING ELECTRICAL SERVICES
- EELEC — EXISTING ABANDONED & DISCONNECTED ELECTRICAL SERVICES
- EFD — EXISTING FOUL DRAIN SERVICES
- EPD — EXISTING PUMPED FOUL DRAIN SERVICES
- ESW — EXISTING SURFACE WATER SERVICES
- EGAS — EXISTING GAS SERVICES
- ELPG — EXISTING LPG SERVICES
- EMCWS — EXISTING MAINS COLD WATER SERVICES
- EBCWS — EXISTING BOOSTED COLD WATER SERVICES
- EBT — EXISTING BT SERVICES
- HV — NEW HV ELECTRICAL SERVICES
- ELEC — NEW ELECTRICAL SERVICES
- FD — NEW FOUL DRAIN SERVICES
- PD — NEW PUMPED FOUL DRAIN SERVICES
- SW — NEW SURFACE WATER SERVICES
- GAS — NEW GAS SERVICES
- LPG — NEW LPG SERVICES
- MCWS — NEW MAINS COLD WATER SERVICES
- BCWS — NEW BOOSTED COLD WATER SERVICES (LOWER PRESSURE SUPPLY)
- BCWS — NEW BOOSTED COLD WATER SERVICES (FULL PRESSURE SUPPLY)
- BT — NEW BT SERVICES
- DES — NEW DOOR ENTRY SYSTEM SERVICES
- LTHW — NEW LTHW FLOW SERVICES
- LTHW — NEW LTHW RETURN SERVICES
- CCTV — CCTV SERVICES
- SPARE DUCT
- SERVICES TO BE REMOVED
- DUCT — SERVICES DUCT

- SV — ISOLATION VALVE
- DISTRIBUTION BOARD
- MAN HOLE
- CCTV
- AP — WIFI ACCESS POINT
- 450 x 450 ROAD CROSSING PIT



STANDARD CAMC TRENCHING DETAIL



STANDARD SERVICES DEPTHS

NOTE: ROAD CROSSING DEPTHS VARY DEPENDANT ON ROAD MAKE UP AND PROTECTION REQUIREMENTS.

TABLE 1 – Recommended Colour Coding of Underground Utilities Apparatus
All depths are from the surface level to the crown of the apparatus

Utility	Duct	Pipe	Cable	Marker Systems	Recommended Minimum Depths Footway/Verge	Carriageway
Electricity 33kV (High Voltage)	Black or red duct or as cable	N/A	Red or black	Yellow with black legend at concrete box	450 – 1200mm	750 – 1200mm
Electricity LV (Low Voltage)	Black or red duct or tile	N/A	Black or red	Yellow with black legend	450mm	600mm
Gas	Yellow	*** See row below	N/A	Black legend on PE pipes every linear metre	500mm footway 750mm verge	750mm.
		*** PE – up to 2 bar – yellow or yellow with brown stripes (removable skin revealing white or black core pipe). Steel pipes between 2 to 7 bar orange. Steel pipes may have yellow wrap or black tar coating or no coating. Ductile iron may have plastic wrapping. Asbestos & PVC Spun Cast Iron – no distinguishable colour				
Water non Potable & Grey Water	N/A	Black with green stripes	N/A	N/A	600 – 750mm	600 – 750mm
Water – Freshwater (SEE text platform)	N/A	Black with red stripes or bands	N/A	N/A	600 – 750mm	600 – 750mm
	N/A	Black	N/A	Various surface markers Marker tape or tiles above ref. duct/pipe	600mm All work within 3 metres of oil fuel pipelines must receive prior approval	900mm All work within 3 metres of oil fuel pipelines must receive prior approval
Sewerage	Black	No distinguishing colour / material (eg. Ductile Iron may be red, PVC may be brown)	N/A	Variable	Variable	Variable
Communications	Grey, white, Black, Duck, purple	N/A	Black or light grey	Various	250 – 350mm	450 – 600mm
Water	Blue or Grey	Blue polymer or blue or unsheated Iron / GRP	N/A	Blue or Blue/black	750mm	750mm minimum
		Blue polymer with brown stripes (removable skin revealing white or black core pipe)				
Water pipes for special purposes (e.g. unsheathed ground)	N/A	Blue polymer with brown stripes (non-removable skin)	N/A	Blue or blue/black	750mm	750mm minimum

These guidelines describe utility industry practice. However, it should not be assumed that all apparatus will conform to the recommendations for positioning and colour coding contained in this publication.

STANDARD STREETWORKS (NJUG) SERVICES DETAILS

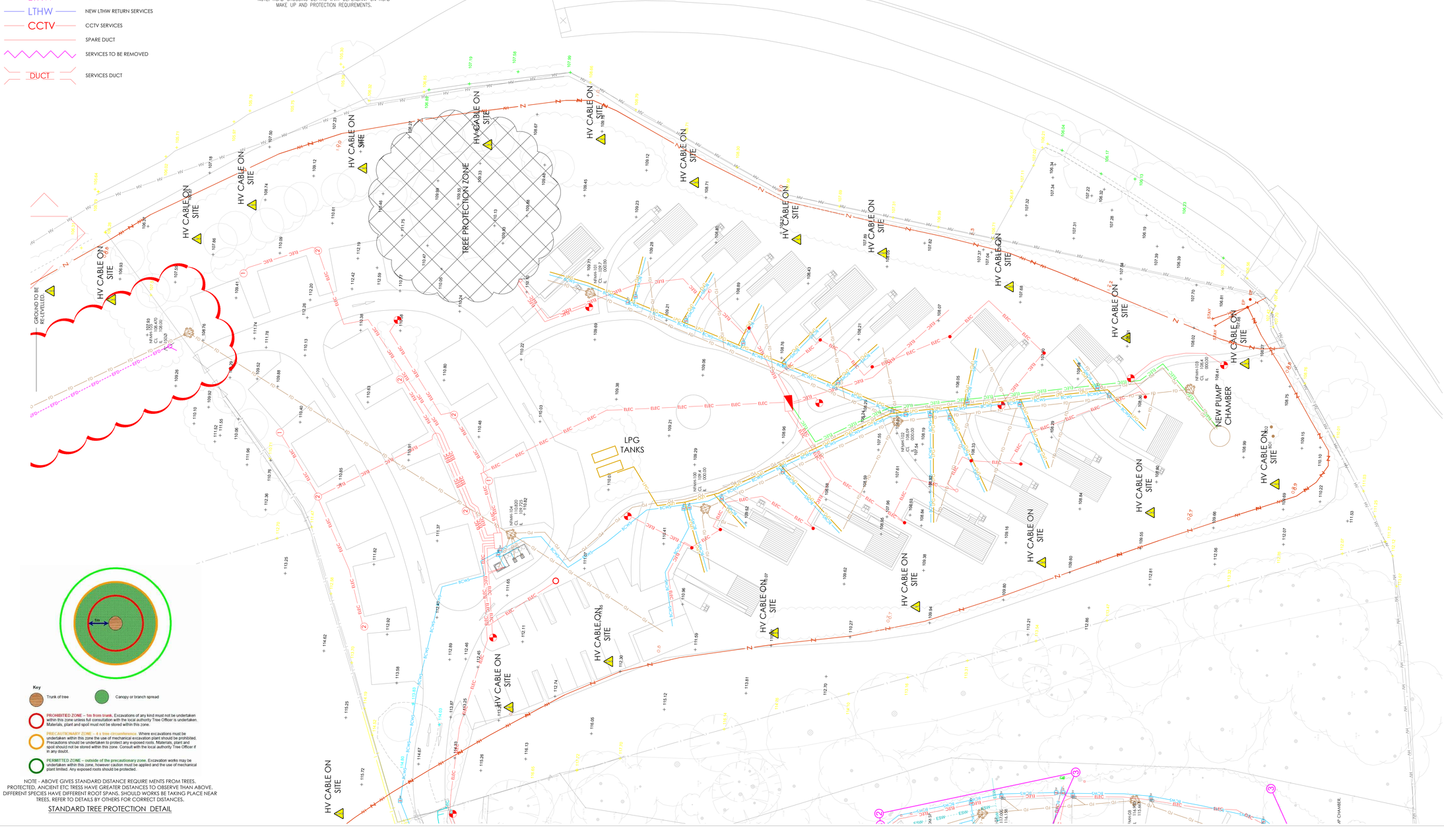
NOTE

1. ALL EXISTING SERVICES TO BE LOCATED / CAT SCANNED PRIOR TO WORKS STARTING. HV CABLE ON SITE.
2. EXISTING GAS PIPEWORK TO BE ISOLATED & CAPPED THEN REDUNDANT PIPEWORK REMOVED OR PURGED WITH NITROGEN. CERTIFICATION TO BE PROVIDED.
3. EXISTING SERVICES UNKNOWN DEPTHS.
4. CCEP DISCHARGE LICENCE TO BE CHECKED.
5. EXISTING LEAK DETECTED NEAR SERVICE POINT 3, REPAIR TO BE UNDERTAKEN BY OTHERS PRIOR TO WORKS.
6. EXISTING CANNEL TUNNEL UNDER SITE, APPROX 30m DEEP. AIR SHAFTS ON SITE UNDER MANHOLES. CONTRACTOR TO TRACE INVESTIGATE AND WARN ON SITE PERSONNEL OF DANGERS.
7. ALL EXISTING SERVICES TO BE ISOLATED PRIOR TO WORKS.
8. EXISTING UNDERGROUND SERVICES TO BE REMOVED WHERE VIABLE. EXISTING REDUNDANT SERVICES TO BE MARKED UP ON PLAN FOR INCLUSION IN O&M MANUAL.
9. EE ADVISE ONCE HV CABLES TRACED, EXCLUSION ZONE TO BE TAPED DISTANCE OFF EITHER SIDE OF CABLE LOCATION WITH PERMIT TO WORK SYSTEM IMPLEMENTED WITHIN THIS AREA.

NEW MANHOLE SCHEDULE

MH Nos	INVERT LEVEL	COVER LEVEL	MH DEPTH (m)	DRAIN LENGTH (m)	GRADIENT (1:—)	FALL (m)	BACK DROP	PIPE SIZE mm	NOTES
NFMH/100	109.40	108.60	0.8				-		
				37.00	60	0.617		150	RUN TO NFMH/102
NFMH/101	109.70	108.90	0.80				-		
				58.40	60	0.973		150	RUN TO NFMH/102
NFMH/102	107.93	108.09	0.16				-		LEVELS OF GROUND TO BE ADJUSTED
				51.00	80	0.638		150	RUN TO NFMH/103
NFMH/103	107.29	108.40	1.11				-		
				-	-	-		100	PUMPED
NFMH/104	109.73	110.82	1.10						
				69.00	40	1.725	-	150	RUN TO NFMH/105
NFMH/105	108.00	108.47	0.47						
				65.70	100	0.67		150	
NFMH/106	107.33	TBC	TBC				-		
				50.00	100	0.50		150	
NFMH/107	106.83	TBC	TBC						
				50.00	100	0.50	-	150	
NFMH/108	106.33	TBC	TBC						
				50.00	100	0.50		150	
NFMH/41	104.81	106.50	1.69				-		
				-	-	-		-	PIPEWORK RUN @ 670mm BELOW C.L.

FLOOR MAKE UP ASSUME CAN START FIRST BEND FROM -200mm FFL



NOTE - ABOVE GIVES STANDARD DISTANCE REQUIRE MENTS FROM TREES. PROTECTED, ANCIENT ETC TRESS HAVE GREATER DISTANCES TO OBSERVE THAN ABOVE. DIFFERENT SPECIES HAVE DIFFERENT ROOT SPANS. SHOULD WORKS BE TAKING PLACE NEAR TREES, REFER TO DETAILS BY OTHERS FOR CORRECT DISTANCES.

STANDARD TREE PROTECTION DETAIL

general notes

CARBONCONSULTANTS LOW

REGISTRATION No. – LO2244632

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Do not scale from this drawing.

All dimensions are to be checked on site prior to work commencing or preparation of shop working drawings - any discrepancies should be notified immediately.

Unless otherwise stated all drawing revision & status conform to the RIBA plan of work 2020 as detailed in BSRIA BG 6.

REV No	REVISION DETAILS	AUTH
-	-	-

ISSUED FOR APPROVAL

Status A..... ☐ (Proceed - no further comments)

Status B..... ☐ (Proceed incorporating comments)

Status C..... ☐ (Rejected)

Signed.....

Date.....
If not returned within 10 working days, status 'A' will be assumed

CARAVAN CLUB REVIEW

SERVICES MANAGER

Signed.....

Date.....

DEVELOPMENT MANAGER

Signed.....

Date.....

revision

S4.1	STAGE 4 ISSUE	DB	13.05.24	DP
S4	STAGE 2 ISSUE	DB	30.08.23	DP
N°	Revision	By	Date	Ord

contact

ENERGY | ENGINEERING

Bellbine House
156, Shirehall Road,
Hawley, Kent,
DA2 7SN
Tel: 01322 277844
info@energyengineeringltd.com
www.energyengineeringltd.com

drawing status

STAGE 2	STAGE 3	STAGE 4	STAGE 5
CONCEPT DESIGN	DEVELOPED DESIGN	TECHNICAL DESIGN 4E 4B 4B	CONSTRUCTION
		✓	

client

CARAVAN AND MOTORHOME CLUB

EEL project number: 23074

project title

LADY MARGARETS PARK
CAMC

drawing

drawing title
SITEWIDE EXTERNAL SERVICES
SHEET 1 OF 2

scale (A0)	date	drawn	checked
1:200	AUG 2023	D.B.	D.P.

reference

drawing no.	revision
LMP-EEL-SITE-XX-DR-MEP-2000	S4.1