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WARNING
ACCURACY OF UNDERGROUND SERVICES INFORMATION
UNDERGROUND SERVICES SHOWN ON THIS PLAN HAVE BEEN LOCATED TO THE QUALITY LEVEL INDICATED IN THE LINE TYPE DESCRIPTOR. THE LOCATION AND DEPTHS STATED SHOULD BE TREATED AS APPROXIMATE AND CAN ONLY BE VERIFIED VIA PROVING METHODS (MANUAL EXPOSURE/NON-DESTRUCTIVE DIGGING; QL-A) OF WHICH, UNLESS OTHERWISE AGREED UPON, IS THE RESPONSIBILITY OF THE CONTRACTOR.
THERE IS NO GUARANTEE ALL SERVICES THAT EXIST IN THE AREA COVERED ON THIS PLAN ARE SHOWN.
THIS PLAN DOES NOT REPLACE BEFORE YOU DIG PLANS

BEFORE YOU DIG
www.byda.com.au
Zero Damage - Zero Harm

LEGEND

C(B)	COMMUNICATIONS	PW(B)	POTABLE WATER
FAC(B)	FIRE ALARM CABLE	TW(B)	TANK WATER
FO(B)	FIBRE OPTIC	BW(B)	BORE WATER
NBN(B)	NBN	DW(B)	DAM WATER
OPT(B)	OPTUS	PF(B)	POOL FILTRATION
T(B)	TESLTRA	RW(B)	RECYCLED WATER
VRC(B)	VICROADS COMMS	IW(B)	IRRIGATION WATER
VTC(B)	VICTRACK COMMS	FS(B)	FIRE SERVICE
AG(B)	AGGI DRAIN	//	FENCE
CSW(B)	CHARGED STORM WATER		COMMUNICATIONS FEATURE
PSW(B)	PUMPED STORM WATER		STORM WATER FEATURE
SW(B)	STORM WATER		ELECTRICAL FEATURE
CP(B)	CATHODIC PROTECTION		HYDROCARBONS FEATURE
EW(B)	EARTH WIRE		UNKNOWN FEATURE
EF(B)	ELECTRIC FENCE		SEWER FEATURE
ELV(B)	EXTRA LOW VOLTAGE		POTABLE WATER FEATURE
HV(B)	HIGH VOLTAGE ELECTRICITY		TANK WATER FEATURE
HVO	HIGH VOLTAGE OVERHEAD		BORE WATER FEATURE
ICW(B)	IRRIGATION CONTROL WIRE		DAM WATER FEATURE
LV(B)	LOW VOLTAGE ELECTRICITY		POOL FILTRATION FEATURE
LVO	LOW VOLTAGE OVERHEAD		RECYCLED WATER FEATURE
SIG(B)	RAIL SIGNALS		IRRIGATION WATER FEATURE
VRE(B)	VICROADS ELECTRICITY		FIRE SERVICE FEATURE
VTE(B)	VICTRACK ELECTRICITY		SURVEY MARK / TBM
CA(B)	COMPRESSED AIR	600ø	PIPE DIAMTER IN MM
F(B)	FUEL	CL	COVER LEVEL
G(B)	GAS	IL	INVERT LEVEL
GTX(B)	GAS TRANSMISSION	DTC	DEPTH TO COVER
O(B)	OIL	DTI	DEPTH TO INVERT
SL(B)	STEAM LINE	BSL	BELOW SURFACE LEVEL
GPR	GROUND PENERTRATING RADAR	AHD	AUSTRALIAN HEIGHT DATUM
UKN	UNKNOWN	BOK	BACK OF CURB
EFF(B)	EFFLUENT	EOT	END OF TRACE
PS(B)	PUMPED SEWER	NTF	NOT TRACED FURTHER
S(B)	SEWER	UTL	UNABLE TO LOCATE
SRM(B)	SEWER RISING MAIN	UTO	UNABLE TO OPEN
TRW(B)	TRADE WASTE	-0.55	DEPTH BELOW SURFACE (m)
		×13.603	POINT LEVEL (AHD)

Notes

1. TRACEABILITY OF SERVICE MATERIAL TYPES. The ability to locate underground services using electronic (radio) detection is heavily dependent on the type of material a given underground service is made from. To summarise, metallic pipes and electrical cables can often be identified as these are conductive materials suitable for locating using electronic detection. Conduits (encasing non-conductive cables e.G. Fibre optic), sewer pipes and storm water pipes do not themselves conduct electricity. To locate these types of materials a conductive tracing rod is fed into the underground service and the signal emitted from the rod or tracing head (sonde) is then located. A limitation of electronic detection is when an underground service is made from non conductive material such as polyvinyl chloride (pvc) or polyethylene (poly) etc and where the service is also under pressure i.E., cannot be opened or accessed like a conduit or drainage pipe. Examples of these are pvc water pipes, poly irrigation pipes, poly gas pipes, sealed and flooded gravity fed storm water harvesting systems and pressurised rising sewer mains. Without the presence of an accessible trace wire, accurate plans or capability to isolate and access the service, ability to locate these services is limited.
2. INFORMATION REGARDING UNDERGROUND SERVICE DEPTHS. Depths of services provided on this drawing are obtained using electronic detection (ql-b) unless otherwise stated. Accuracy of these readings is highly dependent on the environment. Depths should be taken as a guide only and service depths should be proven manually on site when excavating within the vicinity of the service.
3. INFORMATION REGARDING DEPTHS OF STORM WATER AND SEWER PIPES. Depths of storm water and sewer pipes are provided in various manors on this plan. Unless otherwise stated, depths of pipes (measured from pit access points/man holes) are noted from top of pit to pipe invert level (il) in mm. In some cases australia height datum (ahd) levels are provided. This can be used to derive the il/ahd of the pipe. In some cases this may already be calculated and noted as x.Xxl/ahd.
4. METHODS OF OBTAINING DEPTHS FOR STORM WATER & SEWER:
   - depth measured using electronic detection: the method of determining the il at specific points along any given pipe is obtained using electronic detection.
   An in-depth explanation of how this is achieved is as follows; a tracing rod is fed into the pipe from an access point, for example a junction pit or manhole. The tracing rod has a locating sonde attached to the head. The rod is fed into the pipe so the head is directly below the specific point with the transmitting sonde sitting on the bottom of the inside of the pipe. Electronic depth is obtained and noted at approximately xmm below the surface level. Additionally if required and if not already provided, surface levels are then measured using a topcon roving surveyor's gps. Electronic depth is then subtracted from the measured gps surface level ahd to ascertain an approximate invert level ahd.
   - depth measured using inferred depth: this method assumes consistent and linear fall on a pipe. First, depth is obtained using depths measured at access points for the pipe, for example at 2 separate junction pits or manholes. Approximate depth can then be derived for a particular point along the pipe by considering calculated grade, invert levels and surface level ahd at the given point.
5. We are not licensed surveyors therefore certified levels can only be attained by exposing the utility by excavation and having it surveyed by a licensed surveyor.
6. Depending on the nature of the works, reason for survey and field conditions determines if and what method will be used and how much information is provided. Every attempt will be made to provide all relevant information however, should additional information be required subsequent site visits and/or techniques may be needed.

Notes regarding quality levels, taken from as/nzs 5488 2013

quality level is defined as "a classification reflecting the precision and accuracy of utility location and attribute information."
quality levels will be represented on the line type as a single letter (a,b,c or d) in brackets proceeding the utility descriptor. See below.

- LV(A) — Quality Level A - potholing to prove a utility location.
- LV(B) — Quality Level B - use of locating equipment/electronic detection to locate a utility.
- LV(C) — Quality Level C - using features above the surface to make alignments. For example, fire hydrants, utility pits.
- LV(D) — Quality Level D - from plans, anecdotal evidence.

Where the whole line segment cannot be verified by line of sight, quality Level A shall not be attributed to the line segment between validated points.
Quality levels may vary on separate sections of a single subsurface utility, depending on the source information available for each section.

- This is a master plan compiled from multiple surveys across the college over a wide time frame. Just because an area shows services does not mean all services are shown. Other services may be present.

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UNDERGROUND SERVICES (PARTIAL)
SITE ADDRESS

SALESIAN COLLEGE SUNBURY
1 MACEDON ST,
SUNBURY VIC 3429

0 15m 3m 4.5m 6m 7.5m 15m
SCALE 1:150 @ A1

PROJECTION: MGA2020 MGA ZONE 55
HEIGHT DATUM: AHD
FIELD WORK: JAKE SUTHERLAND
DRAWN: JAKE SUTHERLAND
DATE: VARIOUS - SEE COVERSHEET