



NOTES;

NAVIGATION KEY

UTILITY KEY

	ELECTRIC CABLE		ELECTRIC & COMMS CABLE
	EARTH ROD / CABLE		TRAFFIC SIGNAL CABLE
	TELECOMS CABLE		CABLE TELEVISION
	COMMUNICATION CABLE		WATER PIPE
	GAS PIPE		FOUL DRAINAGE
	SURFACE DRAINAGE		COMBINED DRAINAGE
	PUMPING MAIN		FUEL PIPE
	VENT PIPE		OFFSET FILL PIPE
	GAUGE LINE		VAPOUR RECOVERY
	HEATING PIPES		UNIDENTIFIED GPR-HIT
	UNIDENTIFIED SERVICE		SERVICE DUCTS
	TRENCH SCAR		GROUND DEPRESSION
	SURVEY BOUNDARY		

ABBREVIATIONS

AC	ARRESTOR CEMENT	LP	LAMP POST
AR	ASSUMED ROUTE	MH	MANHOLE
BB	BASE BEND	MW	MONITORING WELL
BD	BACKDROP	OH	OVERHEAD
BH	BOREHOLE	OSA	OFF-SURVEY AREA
BR	BRICK	PE	POLYETHYLENE
BT	BT INSPECTION CHAMBER	PL	PLASTIC
CATV	CATV INSPECTION CHAMBER	PR	PIPE RISER
CBX	CONTROL BOX	PVC	POLYVINYL CHLORIDE
CI	CAST IRON	RE	RODDING EYE
CL	COVER LEVEL	RWP	RAIN WATER PIPE
CR	CABLE RISER	S/A	SOAKAWAY
CP	CATCHPIT	SI	SPUN IRON
d	DEPTH	ST	STOP TAP
DI	DUCTILE IRON	SV	STEEL
DP	DOWN PIPE	SV	SLUCE VALVE
ED	EMPTY DUCT	SVP	SOIL VENT PIPE
EOR	END OF RECORDS	TE	TRAPPED EXIT
EOSC	END OF TRENCH SCAR	TFR	TAKEN FROM RECORD
EOT	END OF TRACE	TL	TRAFFIC LIGHT
ER	EARTHING ROD	TP	TELEGRAPH POLE
EP	ELECTRICITY POLE	UTCCTV	UNABLE TO CCTV
FI	FIRE HYDRANT	UTL	UNABLE TO FIND
FL	FLOOD LIGHT	UTL	UNABLE TO LIFT
G	GULLY	UTS	UNABLE TO SURVEY
GPR	GROUND PENETRATING RADAR	VC	VITRIFIED CLAY
GRP	GLASS REINFORCED PLASTIC	VP	VENT PIPE
GV	GAS VALVE	VR	VAPOUR RECOVERY
HL	HIGH LEVEL	WL	WATER LEVEL
HOR	HEAD OF RUN	WM	WATER METER
IC	INSPECTION CHAMBER	WO	WASH OUT VALVE
IL	INVERT LEVEL		
SWS	SURFACE WATER SEWER		
CWS	CONTAMINATED SURFACE WATER SEWER		
FWS	FOUL WATER SEWER		
CWS	COMBINED WATER SEWER		

DISCLAIMER

ELECTRO-MAGNETIC TECHNIQUES AND/OR GROUND PENETRATING RADAR HAVE BEEN USED IN THE LOCATION OF UNDERGROUND SERVICES. THE RESULTS ARE NOT INFALLIBLE AND TRIAL EXCAVATIONS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION, POSITIONS AND PARTICULARLY DEPTHS, WHERE THERE ARE CRITICAL, ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN SEARCHING AVAILABLE RECORD DRAWINGS. THE COMPLETENESS OF THE UNDERGROUND SERVICES INFORMATION CANNOT BE GUARANTEED. THE METHODS OF SURVEY DOES NOT DIFFERENTIATE BETWEEN LIVE AND DEAD SERVICES AND AS SUCH ALL SERVICES SHOULD BE TREATED AS LIVE. WHERE SERVICES ARE NON-METALLIC POSITIONS MAY BE TAKEN FROM RECORDS, TRENCH SCARS & SURFACE DETAIL. WHERE QUOTED, DEPTH ESTIMATIONS ARE GENERALLY TO THE CENTRE OF THE SERVICE. DEPTHS TO GRAVITY SEWERS AND DRAINS ARE GENERALLY TO INVERT LEVELS UNLESS OTHERWISE STATED. PIPE SIZES WHICH CANNOT BE OBTAINED BY VISUAL SURVEY ARE TAKEN FROM RECORD DRAWINGS OR MARKER PLATES WHERE AVAILABLE. WHERE GROUND PENETRATING RADAR HAS BEEN USED IT WILL PRIMARILY HAVE BEEN TO IDENTIFY UNDERGROUND UTILITIES IF POSSIBLE WE WILL ALSO IDENTIFY UNDERGROUND STRUCTURES/ TANKS ETC. BUT CANNOT GUARANTEE TO HAVE LOCATED ALL SUCH ITEMS. THE USE OF RADAR CAN BE LIMITED BOTH BY SURFACE CONDITIONS AND ALSO BY SOIL TYPE. DEPTH ESTIMATES WOULD NOT NORMALLY BE PROVIDED FOR SERVICES LOCATED WITH GPR.

REV	DATE	COMMENT	CAD

City Demolition Contractors (Birmingham) LTD
PROJECT
Contract Chemicals
Penrhryn Road
Knowsley Business Park
Knowsley, Prescot, L34 9HY

Underground Utility Survey

AMETHYST SURVEYS LIMITED
UTILITY | GPR | CCTV DRAINAGE | PAS128
TOPOGRAPHICAL | RECORD SEARCHES
CONFINED SPACE ENTRY | CLEARANCE

Unit 2, Davy Court, Central Park
Rugby, Warwickshire
CV23 0UZ

+44 (0)1788 566740
enquiries@amethystsurveys.com
amethystsurveys.com

DATE: 10/03/2021

JOB No: 14331

DRAWING No: 14331_UG1

REV: 0

DRAWN: TP/ED

SURVEYED: MD/TP/AS/JG

APPROVED:

SCALE: 1:200 @ A1

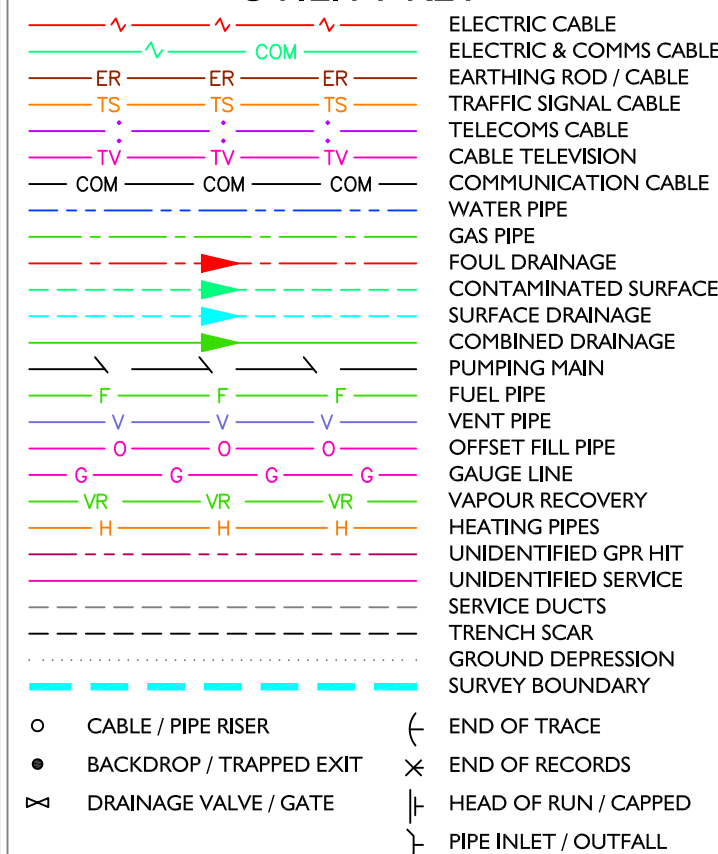
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NAVIGATION KEY



UTILITY KEY



ABBREVIATIONS

[illegible]

SWS	SURFACE WATER SEWER
CSWS	CONTAMINATED SURFACE WATER SEWER
FWS	FOUL WATER SEWER
CWS	COMBINED WATER SEWER

DISCLAIMER

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WHERE SERVICES ARE NON-METALLIC POSITIONS MAY BE TAKEN FROM RECORDS, TRENCH SACS & SURFACE DETAIL.

WHERE SERVICES ARE METALLIC POSITIONS ARE GENERALLY TO THE CENTRE OF THE SERVICE. DEPTHS TO GRAVITY SEWERS AND DRAINS ARE GENERALLY TO INVERT LEVELS UNLESS OTHERWISE STATED.

PIPE LINES WHICH CANNOT BE OBTAINED BY VISUAL SURVEY ARE TAKEN FROM RECORD DRAWINGS OR MARKER PLATES WHERE AVAILABLE.

WHERE GROUND PENETRATING RADAR HAS BEEN USED IT WILL BE TAKEN INTO ACCOUNT TO IDENTIFY UNDERGROUND UTILITIES. IF POSSIBLE WE WILL ALSO IDENTIFY UNDERGROUND STRUCTURES/ TANKS ETC. BUT CANNOT GUARANTEE TO HAVE LOCATED ALL SUCH ITEMS.

THE USE OF RADAR CAN BE LIMITED BOTH BY SURFACE CONDITIONS AND ALSO BY SOIL TYPE. DEPTH ESTIMATES WOULD NOT NORMALLY PROVIDE A SERVICE POSITION WITHIN 10%.

REV	DATE	COMMENT	

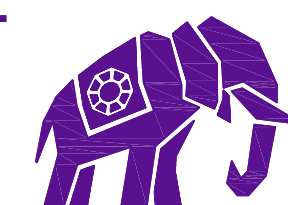
City Demolition
Contractors (Birmingham) LTD

PROJECT

Contract Chemicals
Penrhyn Road
Knowsley Business Park
Knowsley, Prescott, L34 9HY

TITLE	Underground Utility Survey
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AMETHYST
SURVEYS LIMITED
UTILITY | GPR | CCTV DRAINAGE | PAS:128
TOPOGRAPHICAL | RECORD SEARCHES
CONFINED SPACE ENTRY | CLEARANCE



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Rugby, Warwickshire
CV23 0UZ

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enquiries@amethystsurveys.com
amethystsurveys.com

DATE: 10/03/2021

JOB No:	14331
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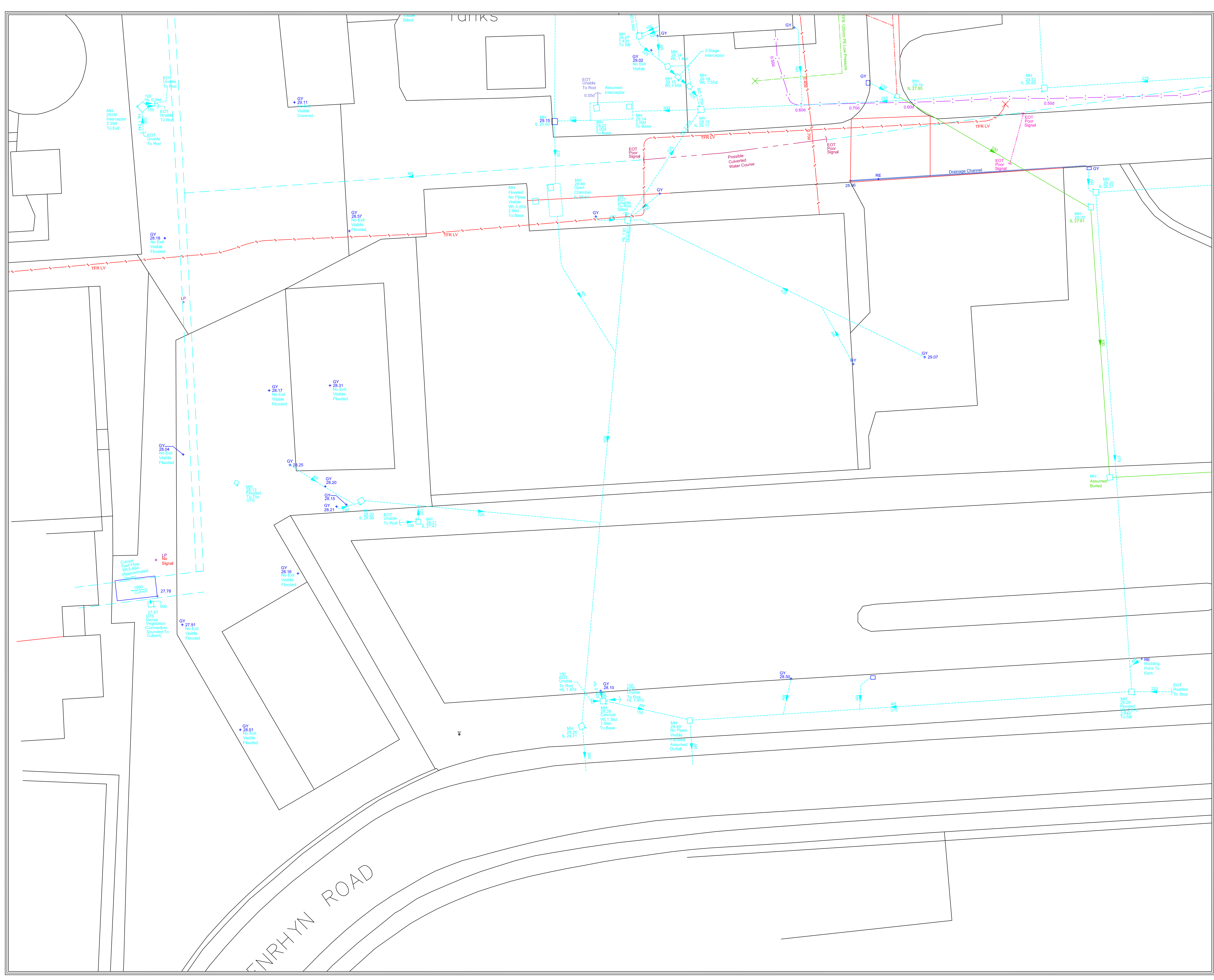
DRAWING No: 14331 UG2

REV: 0

DRAWN: TP/ED	SURVEYED: MD/TP/AS/JG
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APPROVED: SCALE: 1:200 @ A





NOTES;

NAVIGATION KEY

UTILITY KEY

	ELECTRIC CABLE		ELECTRIC & COMMS CABLE
	EARTHING ROD / CABLE		TRAFFIC SIGNAL CABLE
	TELECOMS CABLE		CABLE TELEVISION
	COMMUNICATION CABLE		WATER PIPE
	GAS PIPE		FOUL DRAINAGE
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	PUMPING MAIN		FUEL PIPE
	VENT PIPE		OFFSET FILL PIPE
	GAUGE LINE		VAPOUR RECOVERY
	HEATING PIPES		UNIDENTIFIED GPR-HIT
	UNIDENTIFIED SERVICE		SERVICE DUCTS
	TRENCH SCAR		GROUND DEPRESSION
	SURVEY BOUNDARY		END OF TRACE
	END OF RECORDS		HEAD OF RUN / CAPPED
	PIPE INLET / OUTFALL		

ABBREVIATIONS

AC	ASBESTOS CEMENT	LP	LAMP POST
AR	ASSUMED ROUTE	MH	MANHOLE
BB	BASE BEND	MW	MONITORING WELL
BD	BACKDROP	OH	OVERHEAD
BH	BOREHOLE	OSA	OFF-SURVEY AREA
BR	BRICK	PE	POLYETHYLENE
BT	BT INSPECTION CHAMBER	PL	PLASTIC
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REV	DATE	COMMENT	CAD

CITY DEMOLITION CONTRACTORS (BIRMINGHAM) LTD
PROJECT
Contract Chemicals
Penrhyn Road
Knowsley Business Park
Knowsley, Prescot, L34 9HY
TITLE
Underground
Utility Survey
AMETHYST SURVEYS LIMITED
UTILITY | GPR | CCTV DRAINAGE | PAS-128
TOPOGRAPHICAL | RECORD SEARCHES
CONFINED SPACE ENTRY | CLEARANCE
Unit 2, Davy Court, Central Park
Rugby, Warwickshire
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enquiries@amethystsurveys.com
amethystsurveys.com
DATE: 10/03/2021
JOB No: 14331
DRAWING No: 14331_UG3
REV: 0
DRAWN: TP/ED
SURVEYED: MD/TP/AS/JG
APPROVED: SCALE: 1:200 @ A1

[illegible]

ABBREVIATIONS (Land & Utilities)

[illegible]

KE

[illegible]

Station	Easting (m)	Northing (m)	Level (m)
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Survey Coordinates and Grid

Please note that the grid shown on this drawing is as follows:

- ☐ Arbitrary
- ☐ Arbitrary but approx. related to North
- ☐ Best fit to an Ordnance Survey Digital Sheet
- ☒ Related to the Ordnance Survey National GPS Network

Levels

Please note that the levels shown on this drawing are as follows;

- ☐ Arbitrary
- ☐ Related to an Ordnance Survey Bench Mark
- ☒ Related to the Ordnance Survey National GPS Network

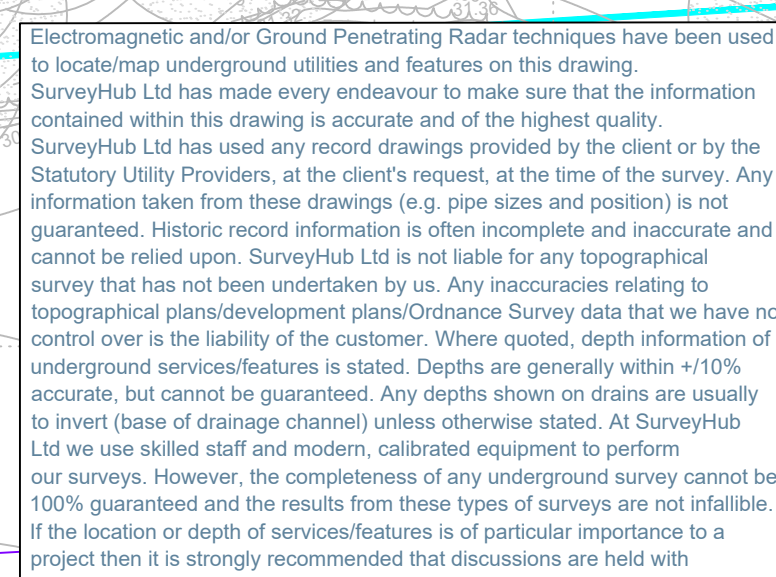
		Nottingham Manchester London Head Office: 0115 7744123 mail@surveyhub.co.uk www.surveyhub.co.uk	
Client Knowledge Redevlopments Ltd			
Project Penrhyn Road Knowsley			
Title Underground Utility Survey CCTV Drainage Condition Survey			
Surveyed Sheet No	ED/LM Checked 1 of 1	CR DrawingScale	Survey date 29/11/2021 1:200@A0
Job No. 5166		Issue date	14/12/2021

NOTES

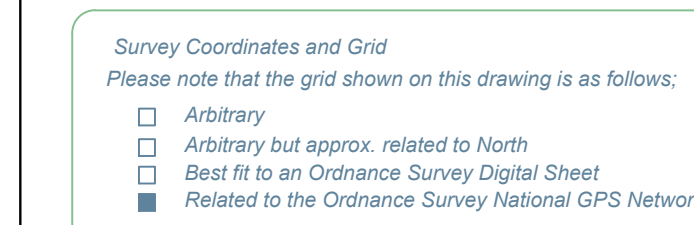
All critical measurements should be checked on site prior to design.
No liability will be taken for this plan if passed on to 3rd parties.
Some servitudes/data may be omitted in areas of parked vehicles and vegetation.

THIS SURVEY HAS BEEN ORIGINATED TO THE ORDINANCE SURVEY (JO. NATIONAL GRID JO500000 VIA A GLOBAL POSITIONING SYSTEM (GPS) AND THE U.S. ACTIVE NETWORK (US NET). THE COORDINATES ARE IN THE U.S. ACTIVE NETWORK (US NET) AND HAVE A TRANSFORMATION USING THE OSTROM & OSTROM TRANSFORMATION MODELS. THE SURVEY HAS BEEN CORRELATED TO THE POINT AND A FURTHER ONE OR MORE COORDINATE TRANSFORMATIONS WILL BE REQUIRED TO OBTAIN THE COORDINATES. NO SCALE FACTOR HAS BEEN APPLIED TO THE SURVEY THEREFORE THE COORDINATES ARE NOT NECESSARILY A TRUE TRUE U.S. COORDINATES WHICH HAVE A SCALE FACTOR APPLIED.

PLEASE REFER TO SURVEY STATION DATA TO OBTAIN ESTABLISHMENT OF THE JO.500000

[illegible]

KEY:	
SC	VISIBLE SCARRING
TS	TRAFFIC SIGNAL
BT	BT CABLE(S)
OC	OVERHEAD BT CABLE(S)
CC	COMMUNICATIONS CABLE(S)
CCOC	OVERHEAD COMMUNICATIONS CABLE(S)
TCV	CABLE TV CABLE(S)
EC	ELECTRIC CABLE(S)
ECOC	OVERHEAD ELECTRIC CABLE(S)
FM	FIBRE OPTIC CABLE(S)
GM	Gas MAIN
GS	Gas SERVICE
GPR	GROUND PENETRATING RADAR (GPR)
HW	HOT WATER PIPE
LC	LIGHTING CIRCUIT
SC	SECURITY CABLEING
UT	UNIDENTIFIED TRACE
WM	WATER MAIN
WS	WATER SERVICE
FR	FIRE ALARM CABLE
EM	EMPTY DUCTING
CS	CLIMBED SEWER
FS	FOUL SEWER
RS	RISEING MAN
SS	SURFACE W/IN SEWER
IE	INVESTIGATION EXTENTS
AS	SERVICE ASSUME ROUTE
TR	SERVICE TAKEN FROM RECORDS
DF	DEPTH TO SERVICE
PC	POLE

[illegible]

Levels
Please note that the levels shown on this drawing are as follows:

- ☐ Arbitrary
- ☐ Related to an Ordnance Survey Bench Mark
- ☒ Related to the Ordnance Survey National GPS Network

Survey Hub Nottingham | Manchester | London
Head Office: 0115 7141123
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Client	Knowsley Redevelopments Ltd
Project	Penrhyn Road Knowsley
Title	Underground Utility Survey CCTV Drainage Condition Survey

Surveyed	ED/LMChecked	CR	Survey Date	29/11/2021
Sheet No	2 of 3		Drawing Scale	1:200@A0
Job No.	5166		Issue Date	14/12/2021

NOTES:

All critical measurements should be checked on site prior to design. No liability will be taken for this plan if passed on to 3rd parties. Some services/data may be omitted in areas of parked vehicles and vegetation.

This survey has been orientated to the ORDNANCE SURVEY (OS) NATIONAL GRID JOSSO (JG) with a LOCAL POSITIONING SYSTEM (GPS) AND THE OS ACTIVE NETWORK (OS NET), WHICH ORIGINALLY COORDINATED THE SURVEY TO THE NATIONAL GRID JOSSO (JG) WITH A TRANSFORMATION USING THE OSNED3 AND OSNED4 TRANSFORMATION MODELS.

The survey has been completed to this plan and a FURTHER DEGREE OF MEASUREMENTS FORWARDS ESTABLISHED TO CREATE A TRUE (O.S. BEARING) FOR ANGLE ORIENTATION. NO SCALE FACTOR HAS BEEN APPLIED TO THE SURVEY THEREFORE THE COORDINATE SHOWING HAS ABBREVIATED TO THE O.S. JOSSO (JG) COORDINATE WITH A LOCAL FACTOR.

PLEASE REFER TO SURVEY STATION TAGS TO ENABLE ESTABLISHMENT OF THE ON-SITE