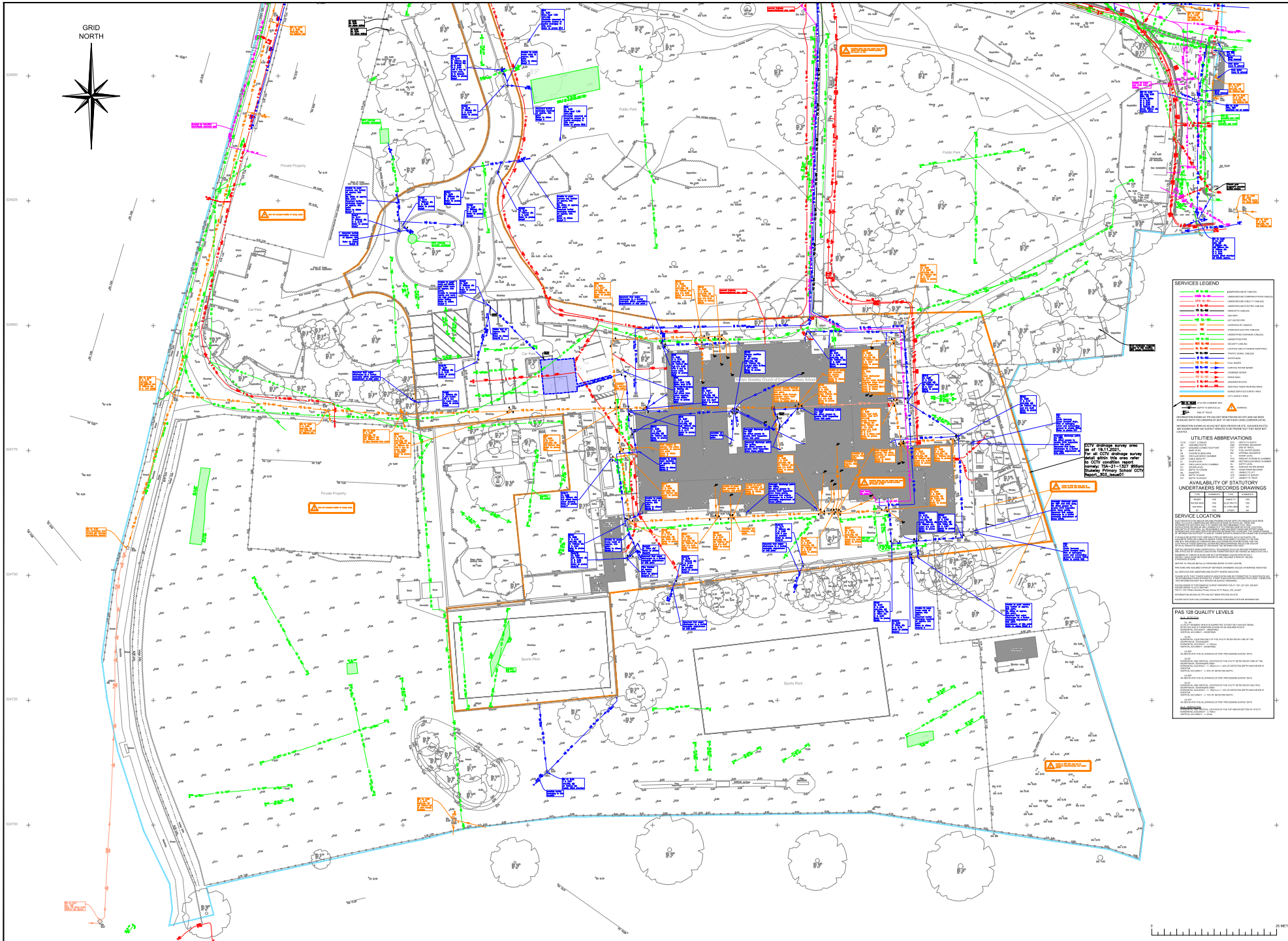


NOTES

A0

1. SURVEY CONTROL

A) SURVEY GRID (HORIZONTAL)

THIS SURVEY IS ORIENTATED TO ORDNANCE SURVEY GRID NORTH. THE SURVEY IS TO BE CARRIED OUT TO HORIZONTAL MEASUREMENTS TAKEN FROM THIS SURVEY WILL BE GROUND DISTANCE.

FULL ORDNANCE SURVEY CO-ORDINATES CAN BE CALCULATED BY SCALING THE SURVEY ABOUT THIS GIVEN SITE CENTRE POINT, WITH CO-ORDINATES E 330668.00 N 324735.40 AS FOLLOWS:

SHIFT - NOT REQUIRED
SCALE - LSF = 0.99983
ROTATION- NOT REQUIRED.

THE LOCAL SCALE FACTOR (LSF) APPLICABLE TO THIS SITE IS 0.99983, CALCULATED USING STANDARD TABULATED DATA.

THE CONTROL HAS BEEN ESTABLISHED BY: TYING INTO THE ACTIVE ORDNANCE SURVEY CONTROL NETWORK. REF NOTE C, BELOW.

(FOR THIS RELATIVELY LOW LEVEL SITE, MEAN SEA LEVEL CORRECTIONS (MSL) ARE DEEMED TO BE INSIGNIFICANT AND HAVE THEREFORE NOT BEEN APPLIED.)

B) VERTICAL DATUM

ALTITUDES FOR THE CONTROL HAVE BEEN CALCULATED FROM GPS DERIVED HEIGHTS AND CONVERTED TO ORTHOMETRIC HEIGHTS (ORDNANCE DATUM NEWLYN - OSGM15NEW OS NET USING OSTAR'S TRANSFORMATION PARAMETERS.

C) GPS CONTROL:

THE CO-ORDINATE SYSTEM USED FOR THE PRIMARY CONTROL IS OSGB36. THIS HAS BEEN ACHIEVED BY APPLYING THE FROM STRATUM NEW OS NET USING OSTAR'S TRANSFORMATION PARAMETERS.

FOR THIS PARTICULAR PROJECT, THE 7 TRIMBLE VRS NOW NETWORK HAS BEEN USED. OBSERVATIONS HAVE BEEN TAKEN ON: 14/10/21

MANUFACTURERS QUOTED ACCURACY IS RMSE 10 - 20 mm IN PLAN AND 20 - 30 mm IN HEIGHT HOWEVER, RESULTS MAY VARY DURING THE DAY AND CERTAIN CONDITIONS COULD CAUSE DEGRADATION TO THE FINAL SOLUTIONS. FOR SALIENT CONTROL AND DETAIL SURVEY WORK, THE SURVEYOR WILL ENSURE THAT THE SURVEY IS CARRIED OUT WITH GOOD SATELLITE GEOMETRY SO AS TO MAINTAIN THE HIGHEST ACCURACY POSSIBLE.

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS/DOCUMENTATION.
2. CHECK SCALE BAR AND GRID BEFORE TAKING NON-FIGURED DIMENSIONS FROM THIS DRAWING.
3. IF IN DOUBT ASK.

LEGEND

SPOT LEVEL
SURVEY STATION
TREE (INDICATIVE ONLY)
HEDGE/AREA OF UNDERGROWTH
BUILDING
CONTOUR
RETAINING WALL
BANKING
GATE
OVERHEAD CABLE
FENCE WITH DESCRIPTION

CLOSE BOARDED		LR	IRON RAILING
CL	CHAIN LINK	PW	POST AND WIRE
CW	CLOSE BOARDED	WR	WOOD RAIL
CH/CP	CONCRETE PANEL	WIR	WIRE MESH

ABBREVIATIONS

ARR	ARCH ROOF LEVEL	MH	MANHOLE
B	BOLLARD	MP	MILE POST
BE	BEDDING BEACON	OHC	OVERHEAD CABLE
BH	BOREHOLE	OHL	OVERHEAD LINE
BOP	BACK OF PATH	PIT	PIT
BP	BOUNDARY POST	PM	PARKING METER
BT	BUTT MARK	PO	POST
BT	BRITISH TELECOM (C)	PYL	ELECTRIC PYLON
CATV	CABLE TELEVISION (C)	RC	RODDING EYE
CCTV	CLOSED CIRCUIT TELEVISION	RGP	RAILWAY GUARD RAIL
CCV	CLOSED CIRCUIT TELEVISION	RMP	ROAD NAME PLATE
CL	CENTRE LEVEL	RS	ROAD SIGN
CP	CAT'S EYE	RWP	RAIN WATER PIPE
CP	CATCH PIT	SC	STOP COCK
CTV	CABLE TELEVISION POINT	SFL	SOFFIT LEVEL
DP	DRAIN PIPE	SP	SIGN POST
DRN	DRAIN	SP	SIGN POSTBOARD
EC	ELECTRICITY CONTROL BOX	ST	STOP TAP
EL	ELECTRICITY	SV	STOP VALVE/VALVE
EL	ELECTRICITY COVER	SV	STOP VALVE
EP	ELECTRICITY POLE	SVF	SOIL VENT PIPE
FH	FIRE HYDRANT	TB	TELEGRAPH BOX
FFL	FINISHED FLOOR LEVEL	TAP	WATER TAP
FH	FIRE HYDRANT	TBM	TEMPORARY BENCHMARK
G	GULLY	TC	TRAFFIC CONTROLLER
G	GULLY	TL	TARGETED LEVEL
GP	GAS PIPE	TP	TRAFFIC LIGHT
GV	GATE VALVE	TP	TELEPHONE POST
IC	INSPECTION COVER	TSPL	TOP OF WALL
IL	INVERT LEVEL	VP	VENT PIPE
KG	KERB/GUTTER GULLY	WCH	WATER COCK
LP	LAMP POST	WM	WATER METER
LP	LAMP POST	WO	WASTE OUTLET
MWP	MARKER POST	WP	WASTE/SOIL PIPE

TREE NOTES

A) NBI "X" NO. - MULTIPLE BOLES FOLLOWED BY NUMBER OF.
B) DIA - TRUNK DIAMETER MEASURED AT APPROX 1.5M ABOVE GROUND LEVEL.
C) SPREAD - DIAMETER OF CANOPY. (TREE SPREADS ARE INDICATIVE ONLY AND ARE TAKEN AT THE CARDINAL POINTS ONLY AND DO NOT NECESSARILY REPRESENT THE TRUE SHAPE/EXTENT OF CANOPY OR ENTIRE TREE (MAY NOT BE CENTRALLY TO TRE CANOPY).
D) HEIGHT - APPROXIMATE HEIGHT OF CANOPY - ESTIMATED FROM GROUND LEVEL.
E) ATTENTION SHOULD BE PAID TO THE ORIGINAL TOPOGRAPHICAL BRIEF AS TO WHAT TREES HAVE ACTUALLY BEEN SCHEDULED. IE: THOSE TREES UNDER THAN DIAMETER 0" DIA "ONLY TREES WITHIN THE IMMEDIATE SURVEY LIMITS" THOSE TREES ONLY THE CASE UNLESS OTHERWISE SPECIFIED AS INCLUDING "OFF SITE" TREES.

STATION CO-ORDINATES

STATION	EASTING	NORTHING	LEVEL	DESCRIPTION
ST01	330668.66	324877.97	4.37	SURVEY NAIL
ST02	330668.66	324877.97	4.37	SURVEY NAIL
ST03	330734.80	324829.77	4.48	SURVEY NAIL
ST04	330579.28	324695.90	4.18	SURVEY NAIL
ST05	330579.28	324695.90	4.18	SURVEY NAIL
ST06	330736.87	324827.26	4.61	SURVEY NAIL
ST07	330715.99	324826.09	4.22	SURVEY NAIL
ST08	330599.73	324823.43	3.25	SURVEY NAIL
ST09	330526.23	324708.71	3.33	SURVEY NAIL
ST10	330526.23	324708.71	3.33	SURVEY NAIL
ST11	330701.68	324729.38	3.29	SURVEY NAIL
ST12	330629.24	324862.23	3.50	SURVEY NAIL
ST13	330629.24	324862.23	3.50	SURVEY NAIL
ST14	330668.73	324803.73	3.73	SURVEY NAIL
ST15	330695.29	324708.69	3.75	SURVEY NAIL
ST16	330695.29	324708.69	3.75	SURVEY NAIL
ST17	330577.12	324764.23	3.59	SURVEY NAIL
ST18	330577.12	324764.23	3.59	SURVEY NAIL
ST19	330577.12	324764.23	3.59	SURVEY NAIL
ST20	330675.84	324777.52	3.91	SURVEY NAIL
ST21	330675.84	324777.52	3.91	SURVEY NAIL
ST22	330727.24	324752.34	3.83	SURVEY NAIL
ST23	330537.85	324759.68	3.79	SURVEY NAIL
ST24	330537.85	324759.68	3.79	SURVEY NAIL
ST25	330639.52	324757.05	3.76	PEG & NAIL
ST26	330669.27	324703.29	3.26	PEG & NAIL
ST27	330669.27	324703.29	3.26	PEG & NAIL

UNLESS OTHERWISE STATED THE SURVEY STATIONS LISTED ABOVE ARE ONLY INTENDED FOR USE USED FOR TOPOGRAPHICAL SURVEYS AT THE STATED SCALE. DUE CONSIDERATION SHOULD BE GIVEN TO LONG TERM STABILITY OF SURVEY STATION MARKERS.

SERVICES LEGEND

W 6in	WATER MAIN AT GABLE (W)
COMMS	UNDERGROUND COMMUNICATIONS CABLE(S)
E 6in	UNDERGROUND CABLE TV CABLE (E)
E 6in	UNDERGROUND ELECTRIC CABLE (E)
E 6in	ELECTRIC CABLE
GAS	GAS MAIN
ME 6in	GAS WATER PIPE
OHP	OVERHEAD POWER
OHC	OVERHEAD COMMS
OHC	UNIDENTIFIED OVERHEAD CABLE(S)
ME 6in	UNIDENTIFIED PIPE
SEC 6in	SECURITY CABLING
	LIGHTING CIRCUITS INSIDE ROOF PIPES
TR 6in	TRAFFIC SIGNAL CABLE(S)
	WATER MAIN
TRM	TRIAL MAINS
	SURFACE WATER SEWER
	COMBINED SEWER
	FOWAS MAIN
	UNKNOWN MAINS
	SERVICES TAKEN FROM RECORDS
	SURFACE SERVICES SURVEY AREA
	CCTV SURVEY AREA

0.5 MH	STATION SUMMARY BOX
	DEPTH TO INVERT (m)
	FALL OF TRACE
	WARNING

INFORMATION SHOWN AS BT PIA HAS NOT BEEN PROVEN ON SITE AND HAS BEEN OVERLAID WITH NO DIMENSIONS AT BEST OF METHOD USING COMMON DETAIL

INFORMATION SHOWN AS AS HAS NOT BEEN PROVEN ON SITE, ASSUMED ROUTES ARE SHOWN WHERE WE SURVEY SERVICES TO BE PRESENT BUT THEY WERE NOT LOCATED.

UTILITIES ABBREVIATIONS

CC	COURT CORNER	DTS	DEPTH TO SURVEY
CP	CONCRETE POST	DTT	DEPTH TO TRACE/TOP
ACP	ASSUMED CONNECTION POINT	EOT	END OF TRACE
BL	BASE LEVEL	FW	FOUL WATER SEWER
CH	CHAMBER DIMENSIONS	SW	SURFACE WATER
CM	CIRCULAR MANHOLE CHAMBER	IL	INVERT LEVEL
CP	CABLE DRAW PIT	PEC	PROTECTIVE EARTH CONDUCTOR
CS	CABLE SUPPORT	PEC	PROTECTIVE EARTH CHAMBER
CT	CABLE DUPLICATE CHAMBER	RL	RODDING EYE
DC	DEPTH TO CROWN	SC	SURFACE WATER SEWER
DI	DEPTH TO INVERT	TAS	TAKEN FROM RECORDS
DTB	DEPTH TO BASE	TL	TARGET LEVEL
DTS	DEPTH TO SURVEY	VP	VENT PIPE

AVAILABILITY OF STATUTORY UNDERTAKERS RECORDS DRAWINGS

WATER	YES	GAS	YES
ELECTRICITY	YES	TELEPHONE	YES
BT PIA	YES	CABLE TV	YES
BT PIA	YES	BT OPENREACH	NO
BT PIA	YES	OTHER	NO

SERVICE LOCATION

PLEASE REFER TO THE ABOVE RECORD PLANS FOR ANY SERVICES APPERTAINING TO THE SITE. THE SERVICES SHOWN ON THIS SURVEY PLAN ARE THOSE VISIBLE AT THE TIME OF SURVEY AND ARE PLOTTED FROM THE RECORDS SUPPLIED BY THE RELEVANT AUTHORITIES. THE ACCURACY OF THE SERVICES SHOWN CANNOT BE GUARANTEED AND IT IS RECOMMENDED THAT THE RELEVANT AUTHORITIES BE CONTACTED BEFORE ANY EXCAVATION WORKS ARE UNDERTAKEN. IT IS THE RESPONSIBILITY OF THE PERSON SUPPLYING PLANS TO ENSURE THAT ALL OTHER SUPPLIERS HAVE BEEN CONTACTED.

THE SURVEYOR CANNOT BE HELD RESPONSIBLE FOR ANY INACCURACIES IN THE RECORDS SUPPLIED BY THE RELEVANT AUTHORITIES. ALL SERVICES SHOULD BE TREATED AS LIVE AND CARE SHOULD BE TAKEN WHEN WORKING NEAR THEM. THE SURVEYOR CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED AS A RESULT OF ANY EXCAVATION CARRIED OUT AT OR NEAR TO THE POSITION OF ANY SERVICE SHOWN ON THIS PLAN. ALL SERVICES SHOULD BE TREATED AS LIVE AND CARE SHOULD BE TAKEN WHEN WORKING NEAR THEM. THE SURVEYOR CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED AS A RESULT OF ANY EXCAVATION CARRIED OUT AT OR NEAR TO THE POSITION OF ANY SERVICE SHOWN ON THIS PLAN.

BEFORE YOU TRENCH OR BEGIN ANY EXCAVATION, CONTACT THE APPROPRIATE UTILITY COMPANIES AND HAVE THEM MARK THE LOCATION OF THEIR UNDERGROUND FACILITIES. THIS IS THE LAW IN MANY STATES. IT'S ALSO GOOD SENSE. IF YOU DIG, YOU ARE RESPONSIBLE FOR ANY DAMAGE YOU CAUSE. CALL BEFORE YOU DIG.

BEFORE TO TRENCH OR BEGIN ANY EXCAVATION, CONTACT THE APPROPRIATE UTILITY COMPANIES AND HAVE THEM MARK THE LOCATION OF THEIR UNDERGROUND FACILITIES. THIS IS THE LAW IN MANY STATES. IT'S ALSO GOOD SENSE. IF YOU DIG, YOU ARE RESPONSIBLE FOR ANY DAMAGE YOU CAUSE. CALL BEFORE YOU DIG.

BEFORE TO TRENCH OR BEGIN ANY EXCAVATION, CONTACT THE APPROPRIATE UTILITY COMPANIES AND HAVE THEM MARK THE LOCATION OF THEIR UNDERGROUND FACILITIES. THIS IS THE LAW IN MANY STATES. IT'S ALSO GOOD SENSE. IF YOU DIG, YOU ARE RESPONSIBLE FOR ANY DAMAGE YOU CAUSE. CALL BEFORE YOU DIG.

PAS 128 QUALITY LEVELS

Sub-surface

QL-A
ALIGNED TO MARKET WHICH IS SURVEYED TO POINT BUT HAS NOT BEING EXCAVATED. (ACCURACY +/- 300mm IN HORIZONTAL AND +/- 40% OF DEPTH IN VERTICAL ACCURACY - UNDEFINED)

QL-B
HORIZONTAL LOCATION ONLY OF THE UTILITY DETECTED FROM ONE OF THE GEOPHYSICAL TECHNIQUES (ACCURACY +/- 300mm IN HORIZONTAL ACCURACY - UNDEFINED)

QL-C
HORIZONTAL AND VERTICAL LOCATION OF POINTS PROCESSING SURVEY DATA

QL-D
HORIZONTAL AND VERTICAL LOCATION OF THE UTILITY DETECTED FROM ONE OF THE GEOPHYSICAL TECHNIQUES (ACCURACY +/- 300mm in +/- 40% OF DETECTED DEPTH IN HORIZONTAL ACCURACY - +/- 40% OF DETECTED DEPTH)

QL-C
HORIZONTAL AND VERTICAL LOCATION OF POINTS PROCESSING SURVEY DATA

QL-B
HORIZONTAL AND VERTICAL LOCATION OF THE UTILITY DETECTED FROM MULTIPLE GEOPHYSICAL TECHNIQUES (ACCURACY +/- 150mm in +/- 15% OF DETECTED DEPTH IN HORIZONTAL ACCURACY - +/- 15% OF DETECTED DEPTH)

QL-C
HORIZONTAL AND VERTICAL LOCATION OF POINTS PROCESSING SURVEY DATA

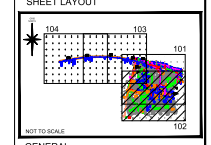
QL-A
ALIGNED WITH THE ALLOWANCE OF POST PROCESSING SURVEY DATA

Pre-excavation

QL-B
HORIZONTAL AND VERTICAL LOCATION OF THE TOP AND/OR BOTTOM OF UTILITY. (ACCURACY +/- 40mm)

QL-A
ALIGNED WITH THE ALLOWANCE OF POST PROCESSING SURVEY DATA

SHEET LAYOUT



GENERAL

- NO ALLOWANCE HAS BEEN MADE FOR SUB SURFACE ENTRY INTO MANHOLES OR OTHER UNDERGROUND STRUCTURES. ALL LEVELS ARE TAKEN FROM GROUND LEVEL AT THE CENTRAL OPENING ETC. ONLY TAKEN FROM MEDIUM LEVEL AND ARE SUCH WILL BE APPROXIMATE ONLY.
- IT IS CONTRACTOR'S TO CHECK AND VERIFY ALL CRITICAL DIMENSIONS AND LEVELS BEFORE WORK STARTS.
- BURIED SERVICES SHOWN ON THIS DRAWING MAY BE ASSUMED ROUTES AND WILL NORMALLY BE SHOWN WHERE WE SURVEY SERVICES TO BE PRESENT BUT THEY WERE NOT LOCATED. WORK AND TRIAL PARTICULAR CARE DURING EXCAVATION WORK. SAFE DIGGING PRACTICE SHOULD BE FOLLOWED.
- IF THERE IS ANY APPARENT CONFLICT BETWEEN THE DETAILS INDICATED ON THIS DRAWING AND THOSE INDICATED ON OTHER DRAWINGS, THEN SURVEYOR'S ADVICE SHOULD BE OBTAINED PRIOR TO CONSTRUCTION ON SITE.
- THE ACCURACY OF THE PLOTTED DETAIL CAME ACCORDINGLY IMPLIED BY THE PLOTTING SCALE AND EQUALLY APPLICABLE TO DIGITAL DATA SUPPLIED FOR CAD.
- EVERY EFFORT IS MADE TO IDENTIFY ALL VISIBLE ABOVE GROUND FEATURES, HOWEVER, IT CANNOT BE GUARANTEED THAT ALL FEATURES HAVE BEEN SHOWN. THE EXTENT OF ANY VISIBLE PLAN AREAS ARE THE LIMITS OF SURVEY DETAILS. AN OUTLINE ON THIS PLAN MAY NOT REPRESENT THE EXTENT OF LEGALLY CONVEYED OWNERSHIP.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. LETTERS OR HATCHING ARE INDICATIVE ONLY. SUCH AS ROAD MARKINGS, MEDGE DETAILING, BRICK HATCHING AND GLAZING DETAIL.

Topographic and CCTV Drainage Survey Data Added - Spalding Road

DESCRIPTION	REV.	DATE	DRAWN	CHKD	APPR
	A	25/10/22	DRN/LD	DRN/LD	JWH

DRAWING STATUS

INFORMATION

Tower Surveys Associates Ltd
Chartered Surveyors
Member of the Geomatics Group
RICS
Unit 4B
The Workhouse
Old Hall Road
Sleaford
NG34 7GW
TEL: +44 (0)1529 300 444
info@towersurveys.com
www.towersurveys.com
Regulated by RICS

CLIENT

LINCOLNSHIRE COUNTY COUNCIL

PROJECT TITLE

WILLIAM STUKELEY C of E PRIMARY SCHOOL
SPALDING ROAD, HOLBEACH, PE12 7HG

DRAWING DETAIL

BURIED SERVICES & CCTV SURVEY AS OF 19/11/2021 (SHEET 2 OF 4)

DRAWN	DMDW	DATE	NOVEMBER 2021
PROJECT ENGINEER	JWH		
CHECKED	ILRL	SCALE	1:250 (WHEN PLOTTED @ A0)
APPROVED	JWH		

DRAWING NUMBER: TSA-21-1327/102
REVISION: A

CAD REFERENCE: \\2021Projects\TSA-21-1327\TSA-21-1327_101-104_ISSUE02
CTB REFERENCE: \\CTB-files\TSU-Utils-v02.ctb

© Tower Surveys Associates Ltd cannot be copied or distributed. Third parties consent must be obtained from Tower Surveys Associates Ltd before any part of this drawing is used by third parties.