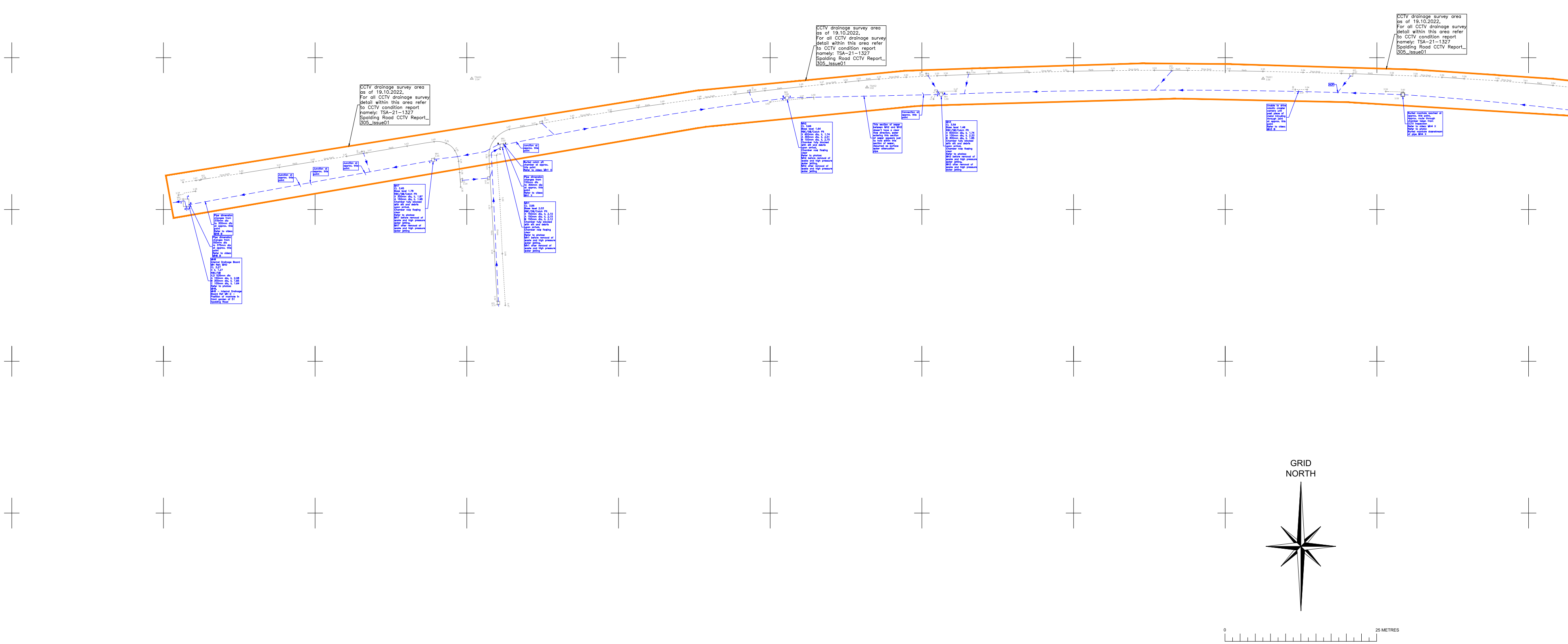


SERVICES LEGEND

BT QL-B2	UNDERGROUND BT CABLE(S)
COMS QL-B2	UNDERGROUND COMMUNICATIONS CABLE(S)
CATV QL-B2	UNDERGROUND CABLE TV CABLE(S)
E QL-B2	UNDERGROUND ELECTRIC CABLE(S)
FO QL-B2	FIBREOPTIC CABLE(S)
G QL-B2	GAS MAIN
HW QL-B2	HOT WATER PIPE
OBT	OVERHEAD BT CABLE(S)
OE	OVERHEAD ELECTRIC CABLE(S)
OHC	UNIDENTIFIED OVERHEAD CABLE(S)
UID QL-B2	UNIDENTIFIED PIPE
SEC QL-B2	SECURITY CABLING
SL QL-B2	LIGHTING CIRCUIT (WHERE IDENTIFIED)
TS QL-B2	TRAFFIC SIGNAL CABLE(S)
W QL-B2	WATER MAIN
FW QL-B2	FOUL SEWER
	SURFACE WATER SEWER
CW QL-B2	COMBINED SEWER
RM QL-B2	RISING MAIN
E QL-B4 AR	ASSUMED ROUTES
E QL-B4 TFR	SERVICES TAKEN FROM RECORDS
	BURIED SERVICES SURVEY AREA
	CCTV SURVEY AREA
MH CL 48.93	UTILITIES COMMENT BOX
0.50d	DEPTH TO SERVICE (m)
EOT	END OF TRACE
	WARNING

INFORMATION SHOWN AS TFR HAS NOT BEEN PROVEN ON SITE AND HAS BEEN OVERLAID ONTO THIS DRAWING BY BEST FIT METHODS USING COMMON DETAIL.

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

UTILITIES ABBREVIATIONS

1D 5C	1 DUCT 5 CABLES	DTS	DEPTH TO SOFFIT
AR	ASSUMED ROUTE	EBD	EXTERNAL BACKDROP
ACP	ASSUMED CONNECTION POINT	EOT	END OF TRACE
BL	BASE LEVEL	FW	FOUL WATER SEWER
CB	CONCRETE BENCHING	IBD	INTERNAL BACKDROP
CBC	CIRCULAR BRICK CHAMBER	IL	INVERT LEVEL
CDP	CABLE DRAW PIT	PCC	PRECAST CONCRETE CHAMBER
CL	COVER LEVEL	RBC	RECTANGULAR BRICK CHAMBER
CPC	CIRCULAR PLASTIC CHAMBER	SL	SOFFIT LEVEL
CrL	CROWN LEVEL	SW	SURFACE WATER SEWER
DCr	DEPTH TO CROWN	TFR	TAKEN FROM RECORDS
dia	DIAMETER	UTL	UNABLE TO LIFT
DTB	DEPTH TO BASE	UTS	UNABLE TO SURVEY
DTI	DEPTH TO INVERT	UTT	UNABLE TO TRACE

AVAILABILITY OF STATUTORY UNDERTAKERS RECORDS DRAWINGS

TYPE	COMMENTS	TYPE	COMMENTS
SEWER	YES	CABLE TV	YES
WATER MAIN	YES	ELECTRICITY	YES
GAS MAIN	YES	OIL PIPELINES	NO
BT	YES	OTHER	NO

SERVICE LOCATION

ELECTRODETECTION AND/OR GROUND PROBING RADAR (GPR) TECHNIQUES HAVE BEEN USED TO LOCATE UNDERGROUND SERVICES SHOWN ON THIS PLAN. THESE ARE INTERPRETIVE METHODS AND IT IS THEREFORE RECOMMENDED THAT TRIAL EXCAVATIONS OR SIMILAR ARE CARRIED OUT TO CONFIRM IDENTIFICATION, LOCATION AND DEPTH OF SERVICES. ALL REASONABLE CARE HAS BEEN TAKEN AND EFFORT MADE IN SEARCHING AVAILABLE SERVICES RECORD INFORMATION. HOWEVER, THE COMPLETENESS OF INFORMATION SUPPLIED TO AND BY TOWER SURVEYS ASSOCIATES CANNOT BE GUARANTEED.

IT SHOULD BE NOTED THAT CERTAIN TYPES OF SERVICES, SUCH AS PLASTIC OR CONCRETE PIPES OR CONDUITS WHERE THERE IS NO DIRECT ACCESS TO THE PIPE, ARE NOT TRACEABLE BY CONVENTIONAL ELECTRODETECTION METHODS; FOR THE LOCATION OF THESE SERVICES, EITHER RECORDS DRAWINGS SHOULD BE SOUGHT OR AN ALTERNATIVE MEANS OF OBTAINING THE INFORMATION USED.

DEPTHS OBTAINED USING GEOPHYSICAL TECHNIQUES SUCH AS GROUND PROBING RADAR ARE AFFECTED BY GROUND CONDITIONS THEREFORE MUST BE VIEWED AS INDICATIVE ONLY.

NUMBERS OF CABLES IN RUNS ARE NOT DETERMINED UNLESS SPECIFICALLY SHOWN. CABLE RUNS BETWEEN DRAWPITS ARE ASSUMED STRAIGHT UNLESS OTHERWISE SHOWN.

DEPTHS TO TRACED METALLIC PIPEWORK REFER TO PIPE CENTRE.

PIPE RUNS ARE ASSUMED STRAIGHT BETWEEN CHAMBERS UNLESS OTHERWISE INDICATED.

ALL SERVICES ARE UNDERGROUND EXCEPT WHERE INDICATED.

PLEASE NOTE THAT TOWER SURVEYS ASSOCIATES ARE NOT PERMITTED TO INVESTIGATE ANY TELECOMMUNICATIONS APPARATUS, OTHER THAN EXISTING EXPOSED FEATURES. THEREFORE THIS INFORMATION MAY NOT APPEAR ON SURVEY DRAWINGS.

PLEASE REFER TO TOPOGRAPHIC SURVEY DRAWING TSA-21-1327_201-202_ISSUE01
PLEASE REFER TO CCTV REPORT:
TSA-21-1327 Spalding Road CCTV Report_305_Issue01

INFORMATION SHOWN AS TFR HAS NOT BEEN PROVEN ON SITE.

PLEASE NOTE OUR CAD LAYERING CONVENTION CONTAINS FURTHER INFORMATION.

A0

NOTES

1. SURVEY CONTROL

A) SURVEY GRID (HORIZONTAL):

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

FULL ORDNANCE SURVEY CO-ORDINATES CAN BE CALCULATED BY SCALING THE SURVEY ABOUT THE GIVEN SITE CENTRE POINT, WITH CO-ORDINATES E 535650.00 N 324730.00 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. SEE 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 - ODN) NEW OS NET USING OSGM15 TRANSFORMATION PARAMETERS.

C) GPS CONTROL:

THE CO-ORDINATE SYSTEM USED FOR THE PRIMARY CONTROL IS OSGB36; THIS HAS BEEN CALCULATED FROM ETRS89 NEW OS NET USING OSTN15 TRANSFORMATION PARAMETERS.

FOR THIS PARTICULAR PROJECT, THE "TRIMBLE VRS NOW" NETWORK HAS BEEN USED. OBSERVATIONS HAVE BEEN TAKEN ON: 14/10/2021

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 WHEREVER POSSIBLE AND PRACTICAL, TOWER SURVEYS ASS' HAVE USED AN OPEN SKY WITH GOOD SATELLITE GEOMETRY SO AS TO MAINTAIN THE HIGHEST ACCURACY POSSIBLE.

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

LEGEND

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

C/B	CLOSE BOARDED	I/R	IRON RAILING
C/L	CHAIN LINK	P/W	POST AND WIRE
CBr	CRASH BARRIER	P/R	POST AND RAIL
Conc/P	CONCRETE PANEL	W/M	WIRE MESH

ABBREVIATIONS

AXR	APEX ROOF LEVEL	MH	MANHOLE
B	BOLLARD	MP	MILE POST
BB	BELISHA BEACON	OHC	OVERHEAD CABLE
BL	BED LEVEL	PB	PILLAR BOX
BOP	BACK OF PATH	PI	PIPE
BP	BOUNDARY POST	PM	PARKING METER
BS	BUS STOP	P	POST
BT	BRITISH TELECOM IC	PYL	ELECTRIC PYLON
CATV	CABLE TELEVISION IC	RE	RODDING EYE
CC	CONTROL CABINET	RF/RG	ROOF/RIDGE LEVEL
CCTV	CLOSED CIRCUIT TELEVISION	RNP	ROAD NAME PLATE
CL	COVER LEVEL	RS	ROAD SIGN
COL	COLUMN	RWP	RAINWATER PIPE
CP	CATCH PIT	SC	STOP COCK
CTV	CABLE TELEVISION POINT	SFL	SOFFIT LEVEL
DK	DROP KERB	SGY	STRIP GULLY
DRN	DRAIN	SP	SIGN POST/BOARD
EC	ELECTRICITY CONTROL BOX	ST	STOP TAP
EV	EAVES LEVEL	STN	SURVEY STATION
EL	ELECTRICITY COVER	SV	STOP VALVE
EP	ELECTRICITY POLE	SVP	SOIL VENT PIPE
ER	EARTH ROD	SW	STORM WATER
FFL	FINISHED FLOOR LEVEL	TAP	WATER TAP
FH	FIRE HYDRANT	TBM	TEMPORARY BENCHMARK
FL	FLOOD LIGHT	TCB	TELEPHONE CALL BOX
FW	FOUL WATER	THL	THRESHOLD LEVEL
G	GULLY	TL	TRAFFIC LIGHT
GV	GAS VALVE	Tlev	TOP OF TREE LEVEL
GP	GATE POST	TP	TELEPHONE POLE
IC	INSPECTION COVER	TWL	TOP OF WALL
IL	INVERT LEVEL	VP	VENT PIPE
KO	KERB OUTLET GULLY	WLV	WATER LEVEL
LB	LITTER BIN	WM	WATER METER
LP	LAMP POST	WO	WASH OUT
MKR	MARKER POST	WP	WASTE/SOIL PIPE

TREE NOTES

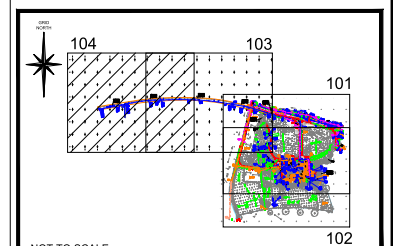
A) MB "X" NO – MULTIPLE BOLES FOLLOWED BY NUMBER OF.
B) DIA – TRUNK DIAMETER MEASURED AT APPROX 1.5M ABOVE GROUND LEVEL.
C) SPREAD – DIAMETER OF CANOPY. (TREE SPREADS ARE INDICATIVE ONLY AND ARE REPRESENTATIVE OF THE GENERALISED CANOPY SIZE, AND MAY NOT REPRESENT THE TRUE CANOPY POSITION AS OUTLINED ON SITE – TREE BOLES MAY NOT SIT CENTRALLY TO THE CANOPY).
D) HEIGHT – APPROXIMATE HEIGHT TO TOP OF CANOPY – ESTIMATED FROM GROUND LEVEL.
E) ATTENTION SHOULD BE PAID TO THE ORIGINAL TOPOGRAPHICAL BRIEF AS TO WHAT TREES HAVE ACTUALLY BEEN SCHEDULED; I.E. THOSE "TREES LARGER THAN DIAMETER "X" OR "ONLY TREES WITHIN THE IMMEDIATE SURVEY LIMITS". (THIS IS NORMALLY THE CASE UNLESS OTHERWISE SPECIFIED AS INCLUDING "OFF SITE" TREES).

STATION CO-ORDINATES

STATION	EASTING	NORTHING	LEVEL	DESCRIPTION
STN1	535659.85	324877.57	4.37	SURVEY NAIL
STN2	535659.19	324825.86	3.39	SURVEY NAIL
STN3	535734.84	324868.77	4.46	SURVEY NAIL
STN4	535579.26	324895.90	4.18	SURVEY NAIL
STN5	535562.92	324912.83	4.18	SURVEY NAIL
STN6	535736.82	324827.28	4.61	SURVEY NAIL
STN7	535715.98	324820.09	4.22	SURVEY NAIL
STN8	535595.76	324831.45	3.28	SURVEY NAIL
STN9	535529.23	324786.71	3.30	SURVEY NAIL
STN10	535580.77	324780.98	3.77	SURVEY NAIL
STN11	535515.98	324728.56	3.29	SURVEY NAIL
STN12	535629.24	324862.23	3.50	SURVEY NAIL
STN13	535573.10	324805.29	3.38	SURVEY NAIL
STN14	535549.57	324801.73	3.13	SURVEY NAIL
STN15	535609.26	324796.60	3.75	SURVEY NAIL
STN16	535675.10	324797.22	3.93	SURVEY NAIL
STN17	535657.73	324799.23	3.93	SURVEY NAIL
STN18	535619.65	324764.61	3.91	SURVEY NAIL
STN19	535608.03	324761.12	3.60	SURVEY NAIL
STN20	535675.84	324777.52	3.91	SURVEY NAIL
STN21	535686.09	324777.14	3.88	SURVEY NAIL
STN22	535687.77	324757.34	3.83	SURVEY NAIL
STN23	535637.85	324750.88	3.78	SURVEY NAIL
STN24	535589.40	324724.01	3.24	SURVEY NAIL
STN25	535525.55	324747.02	3.16	PEG & NAIL
STN26	535669.27	324703.29	3.26	PEG & NAIL
STN27	535691.07	324715.17	3.20	PEG & NAIL

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

SHEET LAYOUT



NOT TO SCALE

GENERAL

- NO ALLOWANCE HAS BEEN MADE FOR SUB SURFACE ENTRY INTO MANHOLES OR OTHER CHAMBERS OR VOIDS BELOW GROUND LEVEL. THEREFORE ANY DETAILS RELATING TO DEPTHS, SIZES ETC. ARE TAKEN FROM ABOVE GROUND AND AS SUCH WILL BE APPROXIMATE ONLY.
- THE CONTRACTOR IS 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 OF UNKNOWN CONDITION, CONTRACTORS SHOULD UNDERTAKE SUITABLE VALIDATION WORK AND TAKE PARTICULAR CARE DURING EXCAVATION WORK; SAFE DIGGING PRACTICES SHOULD BE FOLLOWED.
- SHOULD THERE BE ANY CONFLICT BETWEEN THE DETAILS INDICATED ON THIS DRAWING AND THOSE INDICATED ON OTHER DRAWINGS, THEN TOWER SURVEYS ASS' SHOULD BE INFORMED PRIOR TO CONSTRUCTION ON SITE.
- IT IS IMPORTANT TO NOTE THAT THE SAME ACCURACIES IMPLIED BY THE PLOTTING SCALE ARE EQUALLY APPLICABLE TO DIGITAL DATA SUPPLIED FOR CAD.
- EVERY EFFORT IS MADE TO IDENTIFY ALL VISIBLE ABOVE GROUND FEATURES. HOWEVER, IT SHOULD BE BORNE IN MIND THAT THERE MAY BE ITEMS OBSCURED AT THE TIME OF SURVEY.
- VISIBLE FEATURES IN THE VICINITY OF THE BOUNDARIES, AS SHOWN ON THIS SURVEY, MAY NOT REPRESENT THE EXTENT OF LEGALLY CONVEYED OWNERSHIP.
- UNLESS OTHERWISE SPECIFIED FEATURES SHOWN USING LINE STYLES OR HATCHING ARE INDICATIVE ONLY, SUCH AS; ROAD MARKINGS, HEDGE CENTRELINES, BRICK HATCHING AND GLAZING DETAIL.

DESCRIPTION	REV	DATE	DRWN	CHKD	APPR
Topographic and CCTV Drainage Survey Data Added - Spalding Road.	A	25/10/22	DW/NJD	DW/NJD	JWH

DRAWING STATUS

INFORMATION

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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 4 OF 4)

DRAWN	DM/DW	DATE	NOVEMBER 2021
PROJECT ENGINEER	JWH		
CHECKED	IL/RL	SCALE	1:250 (WHEN PLOTTED @ A0)
APPROVED	JWH		

DRAWING NUMBER: TSA-21-1327/104
REVISION: A

CAD REFERENCE
\\2021Projects\TSA-21-1327\TSA-21-1327_101-104_ISSUE02

CTB REFERENCE
\\CTB-files\TSU-Utils-v02.ctb

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