Basin 2
Gross Ha - 2.357
QBAR - 4.4 l/s/ha
Q = 10 l/s
225mm Permanent water

Bank Slope 1:3
Bed Level - 106.90 (658m²)
Crest Level - 108.45 (1208m²)
Top of bank - 108.50
Twl 100yr+cc 108.421
Freeboard to lowest Plot FFL
1.1.279m

Basin 3
Gross Ha - 1.673
QBAR - 4.4 l/s/ha
Q = 7 l/s
225mm Permanent water

Bank Slope 1:3
Bed Level - 107.10 (685m²)
Crest Level - 108.575 (1163m²)
Top of Bank - 108.600
Twl 100yr+cc 108.465
Freeboard to lowest Plot FFL
1.235m

Basin 4
Gross Ha - 7.237
QBAR - 4.4 l/s/ha
Q = 29 l/s
225mm Permanent water

Bank Slope 1:3
Bed Level - 108.00 (2528m²)
Crest Level - 109.40 (3371m²)
Top of Bank - 109.45
Twl 100yr +cc 109.165
Freeboard to lowest Plot FFL
1.485m

GENERAL NOTES

1. THE CONTRACTOR SHALL CHECK ALL TIE INS FOR LINE AND LEVEL WITH EXISTING BEFORE COMMENCING ANY WORKS SHOULD ANY ERRORS BE FOUND, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY IN WRITING. IT IS ESSENTIAL THAT ALL PIPE CONNECTIONS ARE CHECKED FOR LINE, LEVEL AND DIAMETER PRIOR TO COMMENCING WORKS, AS DATA ON THESE PIPELINES HAS BEEN OBTAINED FROM A VARIETY OF SOURCES WHICH MAY NOT BE NECESSARILY ACCURATE OR COMPLETE.
2. THE DEPICTION OF ANY SERVICE APPARATUS ON THIS DRAWING HAS BEEN OBTAINED FROM THIRD PARTY SOURCES. AND IS NOT NECESSARILY ACCURATE OR COMPLETE. AT NO TIME DOES THE INFERRED POSITION ON THE DRAWING ABSOLVE THE CONTRACTOR FROM TAKING ALL NECESSARY STEPS TO LOCATE SERVICE PLANT IN ACCORDANCE WITH THE METHODS SUGGESTED BY THE RELEVANT AUTHORITY. STEPHEN DAYKIN CONSULTING LTD WILL ACCEPT NO CLAIMS WHATSOEVER IN RESPECT OF ANY LOSSES OR DAMAGE CAUSED IN-RESPECT OF SUCH APPARATUS, HOWEVER CAUSED.
3. SEWERS TO BE CONSTRUCTED IN ACCORDANCE WITH THE W.S.A PUBLICATION "DESIGN AND CONSTRUCTION GUIDANCE 2020" (DCG) AND RELEVANT WATER COMPANY ADDENDUMS.
4. ALL LATERAL DRAINAGE CONNECTIONS TO THE PUBLIC SEWER SHALL BE 150MM DIAMETER UNLESS OTHERWISE SPECIFIED .
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXECUTE THE WORKS AT ALL TIMES IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE 1974 HEALTH AND SAFETY AT WORK ACT, AND THE 2015 CDM REGULATIONS. THE CONTRACTOR WILL BE DEEMED TO HAVE ALLOWED FOR FULL COMPLIANCE WITH THE SAME WITHIN HIS RATES, INCLUDING FULL LIAISON WITH THE PRINCIPAL DESIGNER.
6. FOR DETAILS OF CARRIAGEWAY CONSTRUCTION REFER TO THE 30 SERIES PROJECT DRAWINGS.
7. FOR DETAILS OF SEWER CONSTRUCTION REFER TO THE 40 SERIES PROJECT DRAWINGS.

KEY:

- ADOPTABLE SECTION 104 FOUL SEWER AND MANHOLE
- ADOPTABLE SECTION 104 STORM SEWER AND MANHOLE
- ADOPTABLE SECTION 38 HIGHWAY DRAIN AND MANHOLE
- FIRST OFF MANHOLE DEPTH LESS THAN 2M 450MM DIAMETER PPIC NON-MAN ENTRY SYSTEM
- FIRST OFF MANHOLE DEPTH GREATER THAN 2M CONCRETE MANHOLE DIMENSIONED AS 2015 BUILDING REGULATIONS PART H TABLE 12 MIN 1200 DIAMETER AS SUBSCRIPT NOTE 7
- PEDESTRIAN DROPPED CROSSING COMPRISING 2No. DROPPER KERBS AND 2No. DROPPED KERBS
- PEDESTRIAN DROPPED CROSSING COMPRISING 2No. DROPPER KERBS AND 2No. DROPPED KERBS WITH TACTILE PAVING
- Street lighting Indicative location - See 3230-D-01A for details

RISK ASSESSMENT

EXISTING SERVICES:

OPEN FIELD AREAS OVERHEAD SERVICES PRESENT - CLIENT TO PROVIDE INFORMATION FOR ANY EXISTING, INCLUDING OVERHEAD
EXISTING DOMESTIC SERVICES TO EXISTING FARMS IN CENTRE AND EASTERN BOUNDARY

THE POTENTIAL AREA FOR CONFLICT IS THE CONSTRUCTION OF THE ROAD ACCESS AND OUTFALL SEWERS WHICH MAY INTERFERE WITH UTILITY PIPES- RISK OF ELECTROCUTION, RISK OF EXPLOSION, RISK OF FLOOD. ALSO HIGHWAY AND RESIDENTIAL ACCESS FOR WESTFIELDS FARM AND TRACK. OUTFALL SEWER WILL NEED TO CROSS A47, TRAFFIC MANAGEMENT AND EXISTING SERVICES TO BE CONSIDERED.

EXISTING GROUND CONDITIONS:

SITE INVESTIGATION
SOFT: TOPSOIL 0.2M-0.4M
In general, the intrusive investigation has confirmed the geology comprising variable granular and cohesive materials interpreted as drift deposits across the site. Granular drift deposits were encountered centrally and in particular centrally in the south that could be interpreted as the Wolston Sand and Gravel. Further to this, granular materials were locally encountered in the north-east that could be interpreted as the Dunsmore Gravel. However, the drift deposits were found to be variable in nature. Due to the difficulties in interpreting the materials encountered, all drift deposits have been interpreted as the Wolston Glaciginic Formation. Please see report for details.

FROM REPORT - **ASL Report No. 092-24-087-10**

FURTHER TO THIS, COLLAPSE WAS RECORDED AT SEVERAL TRIAL HOLES AND WAS TYPICALLY RECORDED IN ASSOCIATION WITH GRANULAR MATERIALS AND THE PRESENCE OF GROUNDWATER. THE FINDINGS OF THE INVESTIGATION HAVE LOCALLY SHOWN THE SHALLOW GROUND CONDITIONS TO BE SUBJECT TO SPALLING AND COLLAPSE, PARTICULARLY IN ASSOCIATED WITH GRANULAR MATERIALS AND GROUNDWATER INFLOWS.

SHALLOW EXCAVATIONS SHOULD REMAIN STABLE IN THE SHORT TERM HOWEVER, DEEPER EXCAVATIONS MAY BE PRONE TO COLLAPSE, PARTICULARLY IN ASSOCIATION WITH INFLOWS OF WATER WITHIN GRANULAR SOILS. CONSEQUENTLY, TEMPORARY SUPPORT SHOULD BE CONSIDERED FOR ALL EXCAVATIONS WHERE COLLAPSE IS TO BE AVOIDED. PARTICULARLY WHERE EXCAVATIONS EXTEND BEYOND 1.20 M IN DEPTH. IN ACCORDANCE WITH CURRENT HEALTH AND SAFETY REQUIREMENTS, SHORING OR BATTERING BACK OF EXCAVATIONS IS REQUIRED IN ALL CASES WHERE ACCESS FOR PERSONNEL IS REQUIRED TO ENTER THOSE EXCAVATIONS WHENEVER THERE IS A RISK THAT COLLAPSE OF THE EXCAVATION COULD OCCUR. HEAVIER DUTY CLOSED SHORING SHOULD BE PROVIDED FOR ANY EXCAVATION WHERE MAN ENTRY IS NECESSARY, IN COMPLIANCE WITH STATUTORY REQUIREMENTS, TO ENSURE SAFE WORKING CONDITIONS.

GROUND WATER - DURING THE INTRUSIVE INVESTIGATION, GROUNDWATER WAS RECORDED AT APPROXIMATELY HALF OF THE EXPLORATORY LOCATIONS AT DEPTHS OF BETWEEN APPROXIMATELY 0.8M AND 11.5M BGL. GROUNDWATER WAS TYPICALLY RECORDED ASSOCIATED WITH GRANULAR MATERIALS OR GRANULAR POCKETS WITHIN TYPICALLY COHESIVE MATERIALS. DURING THE SUBSEQUENT MONITORING PROGRAMME, GROUNDWATER WAS RECORDED AT ALL OF THE MONITORING INSTALLATIONS AT DEPTHS BETWEEN APPROXIMATELY 0.44M AND 1.98M BGL AT WS116 AND WS102 RESPECTIVELY.

PERCHED WATER - Not known
GASSING - BASED ON THE RESULTS OF THE GROUND GAS MONITORING, GAS PROTECTION MEASURES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT IN ACCORDANCE WITH BS 8485
TRENCH STABILITY - SEE ABOVE
CONTAMINATION - BASED ON THE RESULTS OF THE GROUND GAS MONITORING, GAS PROTECTION MEASURES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT IN ACCORDANCE WITH BS 8485

SITE WIDE ELEMENTS

THE SITE FALLS ON OPEN FIELDS TO THE NORTH OF NORMANDY WAY A47 IN HINCKLEY. THERE ARE NO SCHOOLS ADJACENT TO THE SITE, THOUGH NORMANDY WAY ARE ONE OF THE MAIN ROADS AROUND HINCKLEY. THERE ARE ADJACENT HOUSES, FARMS, BUSINESSES ADJACENT TO THE SITE.

SEWERS / DRAINS - PUBLIC SEWERS EXIST IN THE ROAD NETWORK SURROUNDING THE SITE. SOME LOCAL LAND DRAINAGE MAY BE ENCOUNTERED AND THERE ARE EXISTING SEWERS IN NORMANDY WAY. THE SITE IS CROSSED BY EXISTING LAND DRAINS.
HIGHWAYS - THERE IS ONE ACCESS POINT FOR THE SITE, A PROPOSED NEW S278 ROUNDABOUT ON NORMANDY WAY.

TOPOGRAPHY - THE SITE FALLS FROM EAST TO WEST.

FALL RISKS - THOSE DETAILED BELOW

RISK TO EXISTING STRUCTURES - NO KNOWN STRUCTURES WITHIN THE DEVELOPMENT SITE
ADDITIONAL RISKS - THE SITE HAS MANY LARGE MATURE HEDGEROWS AND SOME TREES ON THE BOUNDARIES WHICH COULD FORM POTENTIAL FALL HAZARDS IF THEIR ROOT SYSTEMS ARE INTENFERED WITH OR EXCAVATIONS REMOVE GROUND SUPPORT.

THE MAIN WATERCOURSE RUNS THROUGH THE SITE FROM SOUTH TO NORTH WITH ASSOCIATED DITCH COURSES AND THE RISK OF FALLS THERETO.

IDENTIFIED UNAVOIDABLE HAZARDS OR WORK SEQUENCES:

CONTACT WITH LIVE UTILITY SERVICES DURING ACCESS CONSTRUCTION AND OUTFALL SEWER CONSTRUCTION.

PLANT AND DELIVERY MOVEMENTS ON SITE AND WITHIN CONSTRAINED SITE ACCESS AREA.

THE TRAFFIC LEVEL ON THE ADJACENT ROADS SIGNIFICANTLY NORMANDY WAY. AND THE EXTENT TO WHICH TURNING CONSTRUCTION PLANT MAY CAUSE INCREASED ACCIDENT POTENTIAL.

ADVERSE TOPOGRAPHY- RISKS TO PLANT AND MATERIAL STABILITY GENERAL 1:15 GRADIENT.

WATER INGRESS INTO EXCAVATIONS FROM PERCHED LENSES.

TRENCH SUPPORT ADEQUATE TO DEAL WITH EXCAVATIONS THROUGH MADE GROUND AND VARIABLE SOIL PROFILES. ABNORMALLY DEEP FOUL SEWERAGE CONSTRUCTION NEAR TO PUMP STATION.

TRENCH CONTROL REQUIRED TO DEAL WITH WATER BEARING STRATA.

POSSIBLE UNKNOWN BASEMENTS CELLARS TROUGHS OR OTHER UNDERGROUND STRUCTURES. ASSOCIATED WITH FORMER BUILDINGS.

WORKING IN CONFINED SPACES. SPECIFIC RISKS IN ALL TRENCHES , AND ESPECIALLY WITHIN DEEP ON SITE SEWERS INCLUDING THE PUMP STATION WET
WELL AND CONNECTIONS TO EXISTING SEWERS. RISK OF ELEVATED CO_2 RISK OF SUDDEN WATER OR FLOWING SOLIDS OR GASEOUS INGRESS.

WORKING IN PROXIMITY TO OR CROSSING EXISTING STRUCTURES, RISK OF PLANT INSTABILITY AND STRUCTURAL COLLAPSE.

DISEASE AND CONTAMINATION RISK ASSOCIATED WITH CONTACT WITH EXISTING SEWERAGE.

DISEASE RISK ASSOCIATED WITH WORKS ADJACENT TO WATERCOURSES (LEPTOSPIROSIS).

COSHH CONTROL MEASURES REQUIRED FOR ROAD AND SEWERAGE CONSTRUCTION.RISK OF BURN, CHEMICAL BURN, CONTAMINATION, DISEASE, ASPHYXIATION, POISONING

SDC dwg no. E970-12

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Site layouts and landscaping are not intended to form part of any contract or warranty unless specifically incorporated in writing into the contract.

Rev	Description	Initial	Date
A	Full engineering details added	JW	31.03.26
B	FFLs updated to externals & drainage.	JW	20.04.26
C	Updated to latest Arch Layout Rev J rec 30.04.26	JW	30.04.26
D	FFLs updated to latest Arch Layout Rev J rec 30.04.26	JW	04.06.26
E	Updated to LLFA comments 18.06.26	JW	22.06.26

Rev	Description	Initial	Date
F	Updated to Latest layout Rev M	JW	29.07.26
G	Drainage amended to new standards for SUDS and latest NPPF. Sewers upsized and ponds upsized	SWS	28.08.26

ENGINEERING_LAYOUT A47_HINCKLEY

BARRATT HOMES

Drwg No.	H0997-100-03	Rev	G
Scale	1:500	Date	27.02.26
Drawn by	JW	Checked by	.

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