EXTERNAL WORKS KEY

32.50 900mm RET RET RET 31.60	DENOTES RETAINING STRUCTURE AS CLIENTS STANDARD DETAILS RETAINED HEIGHTS ARE FOR RETAINED DEPTH ONLY AND DO NOT ALLOW FOR HANDRAIL OR PARAPET WALL HANDRAILS/BALLUSTRADES AS CLIENT DETAILS TO COMPLY WITH APPROVED DOCUMENT
UBL UBL UBL 450mm 150 150	DENOTES DEPTH OF FACING BRICKWORK IN ADDITION TO STANDARD 150mm BETWEEN FFL/DPC AND FLAG LEVEL
FOE FOE FOE	DENOTES LOCATION OF FLAG ON EDGE MAX. RETAINED HEIGHT 450mm
ACO ACO ACO	CLASS A LINEAR DRAINAGE CHANNEL
ACO ACO ACO	CLASS B LINEAR DRAINAGE CHANNEL
ACO ACO ACO	CLASS C LINEAR DRAINAGE CHANNEL
FGB FGB FGB	DENOTES LOCATION OF FENCE & GRAVEL BOARD MAX. RETAINED HEIGHT 550mm
32.60	DENOTES FINISHED GROUND / SURFACE LEVEL
1:25	DENOTES PROPOSED GRADIENTS
	ACCESS RAMP TO COMPLY WITH APPROVED DOCUMENT PART M SECTION 6.14 1 in 15 max. GRADIENT OVER A MAXIMUM DISTANCE OF 10m 1 in 12 max. GRADIENT OVER A MAXIMUM DISTANCE OF 5m
5.00	DENOTES SITE BOUNDARY LEVEL FROM TOPO. SURVEY
	DENOTES BATTER SLOPES
TTTTT Ramp	ACCESS RAMP AS ABOVE BUT FORMED TO SHAPE USING DRIVEWAY SURFACING MATERIAL
	DENOTES EXTERNAL STEPS (AS PER APPROVED DOCUMENT M Section 1.8.) 150mm MAX RISE 300mm MIN. GOING WITH HANDRAILS FOR 3 OR MORE STEPS OR WHERE MORE THAN 600mm HIGH BRICKWORK & CAPPING TO SIDES OF STEPS FOR 2 OR MORE STEPS (INDICATED BY * ON DRAWINGS)
■	YARD GULLY TO CONNECT TO PRIVATE SW SYSTEM
M	DOUBLE DAMP PROOF COURSE

RETAINING FEATURES AND STRUCTURES SHOWN ON THESE DETAILS ARE PROVIDED TO INDICATE THE LOCATIONS IN WHICH SUCH FEATURES WILL BE REQUIRED.
IT IS INCUMBENT UPON THE CLIENT TO ENSURE THAT THEY CONSULT WITH THEIR STRUCTURAL ENGINEERS FOR THEM TO PRODUCE THE RELEVANT RETAINING FEATURE DESIGNS AND CALCULATIONS IN ACCORDANCE WITH RELEVANT GUIDELINES AND COP'S

TO CATER FOR ANY DEVIATIONS IN THE AS CONSTRUCTED ROAD / FOOTPATH LEVELS IN RELATION TO THE DESIGN LEVELS, THE PROPOSED FLOOR LEVELS SHOWN MUST BE CHECKED ON SITE BY THE SITE AGENT OR ENGINEER IN RELATION TO AS BUILT ROAD LEVELS TO ENSURE COMPLIANCE WITH PART M OF THE BUILDING REGULATIONS

FOUNDATIONS TO BE DESIGNED / CONSTRUCTED TO TAKE INTO ACCOUNT THE PROXIMITY AND DEPTH OF ADJACENT SEWERS AND DRAINS

CONTRACTOR/CLIENT SHOULD NOTE THE EXISTENCE OF EXISTING BURIED PLANT AND OR OVERHEAD POWER CABLE(S) BEFORE WORK COMMENCES CONTRACTOR MUST UNDERTAKE RISK ASSESSMENT AND PROVIDE METHOD STATEMENT FOR WORKING IN THIS AREA IN ACCORDANCE WITH HSE AND POWER SUPPLIERS GUIDELINES TO SATISFACTION OF THE CDM CO-ORDINATOR

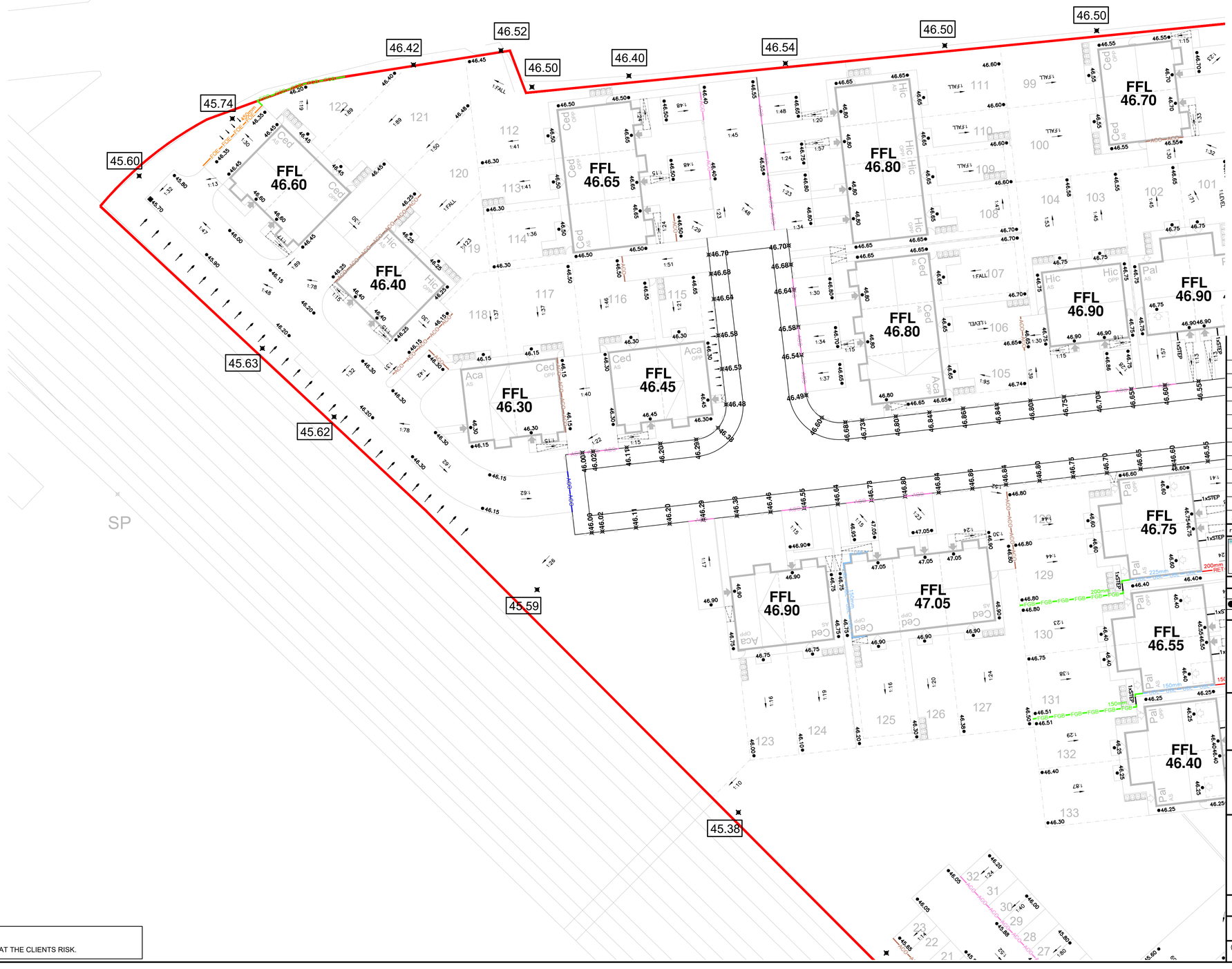
ALL EXISTING SERVICES TO BE LOCATED AT COMMENCEMENT IN ACCORDANCE WITH UNDERTAKERS REQUIREMENTS AND PROTECTED ACCORDINGLY DURING THE WORKS

ALL MANHOLE COVERS AND FRAMES MUST COMPLY WITH BS EN124.
COVERS IN ROAD TO BE GRADE D400 AND BE 150mm DEEP. MANHOLE COVERS IN CAR PARKING AREAS AND DRIVES TO BE GRADE B125. WHILST LANDSCAPED AREAS MAY BE GRADE A15. ALL TO BE SIZED IN ACCORDANCE WITH PART H OF THE BUILDING REGULATIONS 2002 TABLES 11 & 12

WHERE THE FLOOR LEVELS OF PLOTS ARE RAISED SIGNIFICANTLY (i.e OVER APPROX. 500mm) AND FILLING IS REQUIRED THERE MAY BE AN NHBC REQUIREMENT TO PROVIDE A DETAILED SPECIFICATION FOR THE TYPE OF FILL TO BE USED AND METHOD OF COMPACTION. IN SUCH INSTANCES PLEASE REVERT BACK TO REFA FOR FURTHER DETAILS

THIS DRAWING IS BASED ON PLANNING LAYOUT PROVIDED BY CLIENT
DRAWING NUMBER:- KH006 A-100
REVISION:- U
CLIENT TO ENSURE THE ABOVE LAYOUT IS CURRENT BEFORE USING THIS DRAWING FOR CONSTRUCTION PURPOSES

PLEASE NOTE THAT THIS DRAWING IS ISSUED FOR INFORMATION/TENDER PURPOSES ONLY UNTIL TECHNICAL APPROVAL HAS BEEN GRANTED.
ANY WORK UNDERTAKEN PRIOR TO TECHNICAL APPROVAL BEING GRANTED IS AT THE CLIENTS RISK.



GENERAL

1. All adoptable sewers and associated works are to comply fully with "Design and Construction Guidance" & Local Practices
2. All highway works to be to adoptable standards and to to comply fully with the Local Authority specification.
3. All private drainage works are to comply fully with part H of the Building Regulations
4. All existing invert levels to be checked by the Contractor at the start of works and any discrepancies notified to REFA.
   All levels are based on topographical survey information provided by others.
5. All materials to bear the relevant B.S.Kitemark and comply fully with the specifications.
   All concrete & concrete products must use Sulphate resistant cement (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur)
6. All opening notices etc. as required under highways acts etc. are to be obtained prior to commencement of works.
   All works are to be inspected by L.A., NHBC or Relevant Water Authority as applicable.

C.D.M. REGULATIONS 2015

In line with the above regulations we are obliged to inform the Client of their responsibilities under section CDM 15/1, and residual risks that may be encountered in the construction of these works.
All design work has been carried out with Health and Safety aspects given full consideration.
Wherever possible risks have been eliminated from the design, however due to the very nature of this type of work it is not possible to remove all the risks from the design.
We would also respectfully remind the Client of his obligations to take all reasonable steps in ensuring that only competent Contractors who have a valid safety policy are employed.
They should also provide satisfactory responses at tender stage as to the manner in which they will deal with the elements of risk involved in this type of work and in particular those highlighted by REFA below:-

1. Support / treatment for ALL excavation work.
2. Guarding to edges of excavations to prevent people,materials and vehicles falling into excavation.
3. Guarding of excavations outside working hours to prevent unauthorised access.
4. Undermining to adjacent roods or structures.
5. Confined space operations.
6. Dealing with existing services.
7. Traffic management on existing highways.
8. Procedure to be followed in event of accident or emergency.
9. Method of working where contaminated ground is present on site.
10. Confirmation will be required that all operatives are adequately trained, copies of relevant training certificates to be supplied.

The above list is by no means exhaustive but it does highlight operations that present a risk to contractors and the general public.
For clarification on any item please contact REFA.

rev	Revision details	Rev.By	Date
i	TO PLANNING LAYOUT REV U	RW	28.02.24
H	REVISED FOLLOWING CLIENTS COMMENTS	RW	06.11.23
G	TO PLANNING LAYOUT REV O	RW	24.10.23
F	TO PLANNING LAYOUT REV Q	RW	19.10.23
E	TO PLANNING LAYOUT REV M	RW	13.07.23
D	TO PLANNING LAYOUT REV L	RW	06.04.23
C	UPDATED TO PLANNING LAYOUT REV H	RW	25.01.23
B	PLOTS 119-122 FFL REVISED	RW	30.11.22
A	REVISED FOLLOWING CLIENTS COMMENTS	RW	28.11.22

smas worksafe designer www.smasltd.com — Re-registered by SSIP SAFETY SCHEMES IN PROCUREMENT

Drawing Stage			Drawing Status		
	Draft		Comments	●	Tender
●	Issued		Information		Construction
		●	Approval		As Built

Client
KELLEN HOMES

Job title
BENNETT STREET MANCHESTER

Drawing title
EXTERNAL WORKS DRG 5

REFA
45 Bridgeman Terrace
Wigan, Lancs
WN1 1TT
Tel:-(01942) 826020
Fax:-(01942) 230816
CONSULTING ENGINEERS
CIVIL • STRUCTURAL
GEOTECHNICAL • ENVIRONMENTAL

Date	Scale	Drawn
17.11.22	1/250	RW

DRAWING No 22122/106/5 Rev i

© This drawing is the property of REFA and should not be copied, used or its contents divulged without prior written consent.

A1 SHEET