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.

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

EXTERNAL WORKS KEY

RET–RET–RET–RET	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	
TNK–TNK–TNK	DENOTES LOCATION OF TANKED RET.WALL
UBL–UBL–UBL 450mm IBR IBR	DENOTES DEPTH OF FACING BRICKWORK IN ADDITION TO STANDARD 150mm BETWEEN FFL/DPC AND FLAG LEVEL
FDE–FDE–FDE	DENOTES LOCATION OF FLAG ON EDGE MAX. RETAINED HEIGHT 450mm
FGB–FGB–FGB	DENOTES LOCATION OF FENCE AND GRAVEL BOARD MAX. 300mm HIGH
ACD–ACD	DENOTES ACO TYPE DRAIN WITH CONNECTION TO SW DRAINAGE SYSTEM
32.60 •	DENOTES FINISHED GROUND / SURFACE LEVEL
1:35	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
	DENOTES BATTER SLOPES
TTTTT ramp	ACCESS RAMP AS ABOVE BUT FORMED TO SHAPE USING DRIVEWAY SURFACING MATERIAL
	YARD GULLY TO CONNECT TO PRIVATE SW SYSTEM

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

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

THIS DRAWING IS BASED ON PLANNING LAYOUT PROVIDED BY CLIENT
DRAWING NUMBER:- 1566WHD/FRC-PL01
REVISION:- Y
CLIENT TO ENSURE THE ABOVE LAYOUT IS CURRENT BEFORE USING THIS DRAWING FOR CONSTRUCTION PURPOSES

SCALE IN METRES
0 5 10 20 50

BENCH MARK INFORMATION

All levels relate to OSBM NEWLYN
DATUM GENERATED BY VRS GPS

GENERAL
1. All adoptable sewers and associated works are to comply fully with "Sewers for Adoption" 6th.Edition
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 roads 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
J	UPDATED TO PLANNING LAYOUT REV Y PLOTS 115-120,123-126 FFL'S UPDATED	RW	03.03.20
I	BRIDGE LEVELS REVISED FOR CLIENT	GWH	20.1.21
H	TURNING HEAD LAYOUT MIRRORED LEVELS REVISED TO SUIT BRIDGE	FT	20.01.21
G	PLOTS 110-114 REVISED	AS	17.09.20
F	REVISED TO LATEST LAYOUT REV V	PT	30.07.20
E	REVISED TO LATEST LAYOUT REV S	PT	29.07.20
D	FFL LEVELS CORRECTED AS DISCUSSED RET. WALL ADJ PLOT 108 REVISED	PT	11.12.19
C	REVISED TO LATEST ARCHITECTS LAYOUT	JAR	12.08.19
B	REVISED TO CLIENT MARK UP	JAR	10.06.19
A	LAYOUT REVERTED TO REV G	JAR	21.05.19

smas worksafe consultant www.smasltd.com as recognised by SSIP SAFETY SCHEMES IN PROCUREMENT

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

Client
WAINHOMES LIMITED

Job title
FORGE ROAD PLOTS 92-143

Drawing title
EXTERNAL WORKS DRG 3

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

Date	Scale	Drawn
07.12.18	1/250	ADP

DRAWING No 17103/14/3 Rev J

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

A1 SHEET