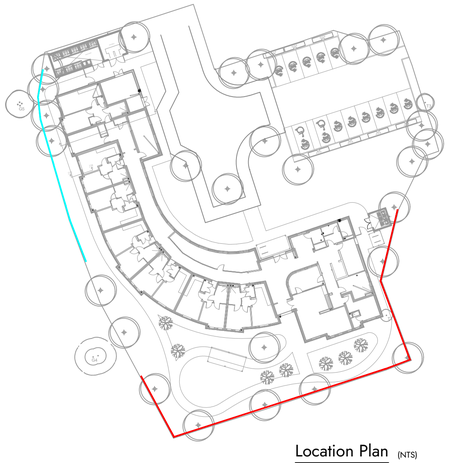
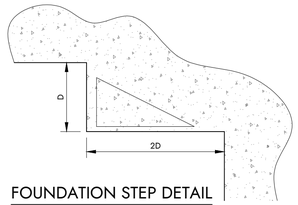


Location Plan (NTS)

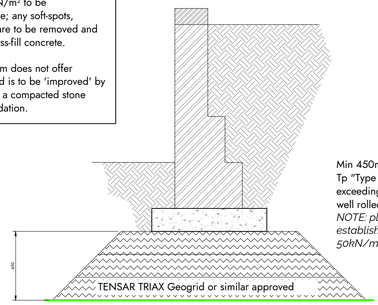


FOUNDATION STEP DETAIL

(SCALE 1:20)

FOUNDATION:
Bearing stratum must offer a minimum safe bearing pressure of 50kN/m² to be checked/approved on site; any soft-spots, unsuitable material, etc. are to be removed and replaced with 'GEN1' mass-fill concrete.

Where the bearing stratum does not offer 50kN/m² then the ground is to be 'improved' by pre-rolling and providing a compacted stone blanket beneath the foundation.



Min 450mm well rolled and consolidated D. of Tp "Type 1" stone fill laid in loose layers not exceeding 150mm thick with each layer being well rolled & compacted using a vibrating roller.
NOTE: plate load tests to be undertaken to establish that the bearing capacity of 50kN/m² is achieved

Existing subgrade to be proof-rolled until movement stops with 6-No. passes with a 1800kg vibratory roller; provide geotextile to stabilise formation

GROUND IMPROVEMENT PROPOSAL

(SCALE 1:20)

GENERAL NOTES

DO NOT SCALE OFF THIS DRAWING

THIS DRAWING TO READ IN CONJUNCTION WITH ALL RELEVANT ENERGETICS' DRAWINGS AND SPECIFICATIONS.
ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR / FABRICATOR PRIOR TO COMMENCEMENT OF WORKS.
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
ALL WORKS TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE ENERGETICS' SPECIFICATIONS, RELEVANT BRITISH STANDARDS, STATUTORY HEALTH AND SAFETY/C.D.M. REGULATIONS, RELEVANT CODES OF PRACTICE AND THE CURRENT EDITION OF THE BUILDING REGULATIONS.
FOR FINAL SETTING OUT INFORMATION RELATING TO GRID LINES AND WALL POSITIONS REFER TO THE ENERGETICS' DRAWINGS.
ALL DIMENSIONS, LEVELS AND SETTING OUT TO BE CONFIRMED WITH THE ENERGETICS PRIOR TO CONSTRUCTION.
THE CONTRACTOR IS TO BE FULLY RESPONSIBLE FOR ALL TEMPORARY/PERMANENT PROPPING AND SHORING ON THE PROJECT. CONTRACTOR TO ENSURE THAT ALL PARTS OF THE STRUCTURE ARE ADEQUATELY PROPPED PRIOR TO ANY COMMENCEMENT OF WORKS. ADVICE MAY BE SOUGHT FROM A SPECIALIST

PLAIN CONCRETE
C16/20 PLAIN CONCRETE USED IN FOUNDATIONS TO HAVE:-
DESIGN SULPHATE CLASS DS-1, ACEC CLASSIFICATION AC-1
MINIMUM CEMENT CONTENT OF 225kg/m³
WATER/CEMENT RATIO OF 0.7.
MAXIMUM SIZE OF AGGREGATE TO BE 20mm

GC TO ENSURE ALL GROUND EXCAVATIONS ARE STABLE AND SECURELY SHORED. ADVICE ON THIS MATTER MAY BE OBTAINED FROM THE STRUCTURAL ENGINEER.

WALLS
MORTAR ABOVE GRD TO BE 1:1:6 (iii) / M4
MORTAR BELOW GRD TO BE 1:0:3 (i) / M6

REINFORCED CONCRETE
REINFORCED CONCRETE TO BE GRADE RC28/35
ACEC CLASS AC-1, DESIGN SULPHATE CLASS DS-1
MINIMUM CEMENT CONTENT 280 kg/m³
WATER/CEMENT RATIO OF 0.60
MAXIMUM AGGREGATE SIZE 20mm.

MINIMUM CONCRETE COVER TO BE 40mm TOP, 40mm BTM AND SIDES UNLESS NOTED OTHERWISE.
REINFORCEMENT AS BS8666 CUT AND BENT TO BS8666 AND DENOTED:-
H HIGH YEILD FY500 N/mm²

REINFORCEMENT MINIMUM LAPS FOR C28/35

H8 : 320mm	H10 : 440mm
H12 : 570mm	H16 : 830mm
H20 : 1090mm	H25 : 1420mm
H32 : 1810mm	H40 : 2450mm

ALL LAPS AND INTERSECTIONS OF BARS SHALL BE SECURELY CONNECTED WITH MALLEABLE IRON WIRE OF A SUITABLE SIZE OR OTHER APPROVED METHOD OF FIXING.
ALL REINFORCEMENT SHALL BE ACCURATELY PLACED, SECURED AND MAINTAINED IN POSITION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY STOOLS, CHAIRS AND SPACERS REQUIRED TO SUPPORT AND RESTRAIN REINFORCEMENT.
MESH REINFORCEMENT TO HAVE A MINIMUM LAP OF 460mm UNLESS NOTED OTHERWISE.
ALL CONCRETE TO BE ADEQUATELY VIBRO COMPACTED (ON PLACING) TO ENSURE THAT ALL VOIDS ARE REMOVED.
ALL WORKS ARE TO CARRIED OUT IN ACCORDANCE WITH ALL THE RELEVANT BRITISH STANDARD CODES OF PRACTICE.

STRUCTURAL DESIGN
STRUCTURAL DESIGN AND LAYOUT MAY CHANGE DEPENDING ON CONFIRMATION OF ARCHITECTS DESIGN AND DETAILS

Member	Bar mark	Type and size	No. of mbrs	No. of bars in each	Total No.	Length of each bar † *[mm]*	Shape code	A * *[mm]*	B * *[mm]*	C * *[mm]*	D * *[mm]*	E/R * *[mm]*	Rev.	Weight *[kg]*
L-Starter Bar	01	H 12	388	1	388	1475	11	745	(745)					508.1

KEY:
Indicates approximate extent of Proposed Grouted Cavity Retaining Wall
Indicates approximate extent of Proposed Brickwork Retaining Wall

GROUTED CAVITY RETAINING WALL (325mm thick overall)

BACK (RETAINED) FACE CONSTRUCTED USING 100mm THICK, 7.3N/mm² CONCRETE BLOCKS; FRONT FACE CONSTRUCTED USING 103mm, 7-12% FACING BRICKWORK TO ARCHITECTS/CLINT REQUIREMENTS.

ALL MASONRY LAID IN TYPE (ii)/M6 MORTAR THROUGHOUT, ANY ADMIXTURES SHOULD CONFORM TO BS EN 943-3.

STAINLESS STEEL CAVITY TIES, 250mm LONG, TO BE PROVIDED AT 450mm VERTICAL AND 450mm HORIZONTAL STAGGERED CENTRES (ANCON "RT2" OR SIMILAR APPROVED)

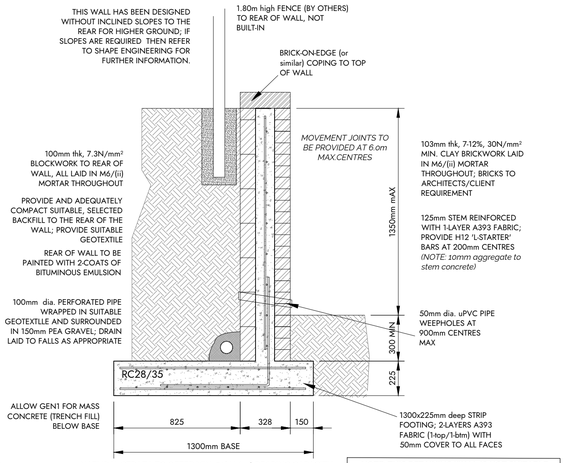
CAVITY (Nominal 125mm) TO BE REINFORCED, CENTRALLY, FULL HEIGHT WITH 1-LAYER A393 MESH AND INFILLED WITH DESIGNATED MIX RC28/35 CONCRETE - ALL TO BS.8500 - WITH 10mm MAXIMUM AGGREGATE. ALL TO BS8500-PART 2.

IN LOW-LIFT GROUTED-CAVITY CONSTRUCTION, THE CONCRETE INFILL SHOULD BE PLACED AS PART OF THE PROCESS OF LAYING THE MASONRY UNITS AT MAXIMUM VERTICAL INTERVALS (LIFTS) OF 750mm IN ORDER TO AVOID TEMPORARY INSTABILITY DURING THE POURING OF THE CONCRETE TO THE STEM (ALTERNATIVELY THE WALL MAY BE TEMPORARILY PROPPED DURING CONSTRUCTION). ANY EXCESS MORTAR IN THE CAVITY SHOULD BE REMOVED BEFORE INFILLING. THE INFILL CONCRETE SHOULD BE PLACED IN LAYERS TO WITHIN 50mm OF THE LEVEL OF THE LAST COURSE LAID AND SHOULD BE PLACED USING RECEPTACLES WITH SPOUTS TO AVOID STAINING AND SPLASHING OF FACE WORK. IT IS IMPORTANT THAT THE CONCRETE INFILL SHOULD BE COMPACTED IMMEDIATELY AFTER POURING.

CARE SHOULD BE TAKEN TO AVOID RAISING THE WALLS TOO RAPIDLY, CAUSING DISRUPTION DUE TO EXCESSIVE LATERAL PRESSURE FROM THE INFILL CONCRETE BEFORE THE MASONRY HAS HAD TIME TO GAIN SUFFICIENT STRENGTH. IF THE WALL SHOULD MOVE AT ANY LEVEL DUE TO THESE FORCES, IT IS ESSENTIAL TO TAKE IT DOWN AND REBUILD IT.

FOUNDATIONS TO BE A DESIGNATED MIX RC28/35 CONCRETE WITH 20mm MAXIMUM AGGREGATE, ALL TO BS8500. FOUNDATION TO BE REINFORCED WITH 2-LAYERS OF A393 MESH (1-top/1-btm)., 50mm COVER TO ALL FACES.

GROUND BELOW FOUNDATIONS IS TO BE CAPABLE OF PROVIDING A SAFE BEARING CAPACITY OF 50kN/m² WITH FOUNDATIONS TAKEN DOWN TO SUITABLE BEARING STRATA AS REQUIRED USING GEN1 LEAN-MIX TRENCH FILL CONCRETE.



NATURAL STRATA TO OFFER MIN. 50kN/m² BEARING CAPACITY BENEATH FOUNDATION

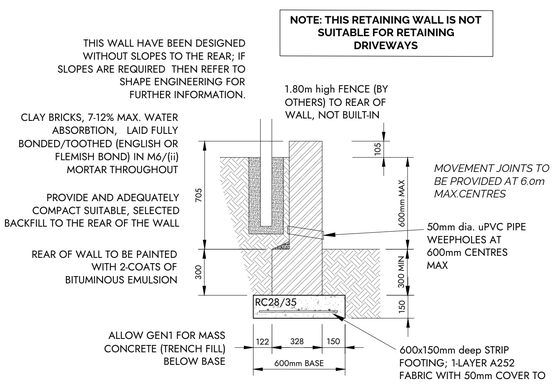
NOTE: THIS RETAINING WALL IS NOT SUITABLE FOR RETAINING DRIVEWAYS

TYPICAL 1350mm HIGH GROUTED CAVITY RETAINING WALL

(SCALE 1:20)

NOTE: THIS RETAINING WALL IS NOT SUITABLE FOR RETAINING DRIVEWAYS

THIS WALL HAVE BEEN DESIGNED WITHOUT SLOPES TO THE REAR; IF SLOPES ARE REQUIRED THEN REFER TO SHAPE ENGINEERING FOR FURTHER INFORMATION.



NATURAL STRATA TO OFFER MIN. 50kN/m² BEARING CAPACITY BENEATH FOUNDATION

TYPICAL 600mm high BRICKWORK RETAINING WALL

(SCALE 1:20)

Rev	Date	By	Description
P04	10.03.26	JP	Extent of Wall Amended
P03	09.03.26	JP	Step Detail and L Starter Bar Schedule Included

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Client
Irwell Valley Homes

Project
Jurby Ave, Manchester

Title
Boundary Retaining Wall

Status	Suitability Description	Structural Stage	Date
S1	Information	Preliminary	Jan' 2026
Designed By	Drawn By	Scale @ A1	Project No.
PK	JP	As Shown	2108

Sheet No.
2108-SCE-XX-XX-DR-S-SK01

Revision
P04

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