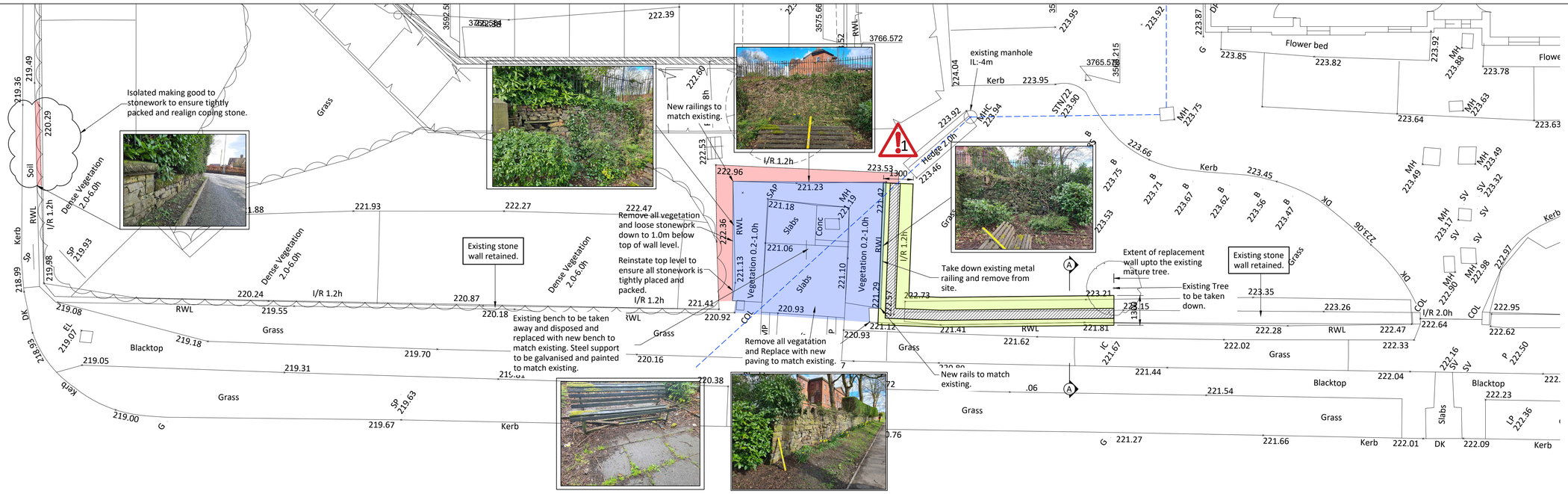


MASONRY REINFORCED RETAINING WALL

1. Reinforced Concrete Base Foundation Shall be Designated Mix RC32/40 with Minimum Cement Content of 300kg/m³, Water/Cement Ratio 0.6 and Maximum 20mm Aggregate.
2. Reinforced Concrete Cavity and Hollow Block Cores Shall be Designated Mix RC32/40 with Minimum Cement Content of 300kg/m³, Water/Cement Ratio 0.6, Maximum 10mm Aggregate size 10mm. Slump to be Class S4.
3. No Membranes or PVC to be Used Within the Retaining Walls Elements.
4. Waterproofing and Tanking to Building Walls Shall be in Accordance with the Architects Details and Specifications.
5. Landscape Retaining Walls Shall Have The Rear Face of Masonry Flush Pointed and Painted with 2 coats of RIW LAC RIW or Self Adhesive Membrane i.e. Structureseal Sheets to Manufacturers instructions.
6. Proprietary Protection Boards to be used prior to backfilling with Free Draining 20-10mm Clean Pea Gravel.
7. 100mm Minimum Diameter Perforated Land Drain to be Placed at the Rear of the Retaining Wall, Wrapped in Non-Woven Geotextile Membrane and Laid to Falls to Suitable Collection Point in to Manufacturers Instructions.
8. The Backfill Shall be Approved As Dug Free Draining Granular Material, to be Well Compacted Layers Not Exceeding 225mm.
9. Concrete Cavities and Filled Cores Shall be Placed and Compacted in Low Lift 450mm Vertical Intervals. Concrete Filling Around the Reinforcement in Hollow Core Blocks Shall be Filled as Work Proceeds.
10. Care Must be Taken to Avoid Damage to the Wall Resulting in Excessive Pressure From the Infill During the Concreting Process.
11. All Excess Mortar & Snots in the Cavity Shall be Removed Prior to Concreting.
12. Concrete Infill to be Placed in Layers to Within 50mm of the Last Course Laid.
15. Concrete in Each lift Shall be Checked for Settlement and Recompaction Requirements Due to Water Absorption into the Masonry Before it Sets
16. Each Skin of Masonry Shall be Tied Together Using Stainless Steel Ties Ancon RT2 at a Maximum of 750mm Horizontal and 450mm Vertical Centres Lengths to be Chosen to achieve 62.5mm Minimum 75mm Maximum Embedment.
17. RC Cavity Wall Blockwork below ground level to have a minimum density of 1500kg/m³ and to be made with dense aggregate to BS882 or BS1047. Minimum average crushing strength of 10N/mm² (unless stated otherwise). Mortar to be Class M6 Designation (ii).
18. Hollow Blockwork Below Ground to have a Density Exceeding 1500kg/m³ and Compressive Strength not less than 7.3N/mm² Blocks Laid in M12 Mortar Designation (i).
19. Brickwork Below Ground to be 35N FL or FN Bricks Laid in M12 Mortar Designation (i).
20. Formation Levels to be Approved by the Local Authority Inspector and Agreed with the Engineer.
21. Any Over Dig to Reach Suitable Formation or Avoiding Surcharging Adjacent Structures Shall be in GEN1 Concrete.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

In addition to the normal hazards/risks associated with the types of work detailed on this drawing, note the following risks and information.

CONSTRUCTION RISKS

1: Care to be taken when working above line of existing drain. Excavation depth to be limited to the designed depth, notify Engineer if additional depth is required.

For information relating to Use, Cleaning and Maintenance risks refer to Health and Safety File.

It is assumed that all works on this drawing will be carried out by a competent Contractor working, where appropriate, to an approved method statement.

SCALE BARS

1:20 (mm)	0	500	1000	
1:25 (mm)	0	500	1000	
1:50 (mm)	0	1000	2000	
1:100 (mm)	0	1000	3000	5000
1:200 (mm)	0	2000	4000	6000
1:500 (m)	0	5	15	25
1:1250 (m)	0	10	30	50	70

General Notes

1. This drawing is to be read in conjunction with all other project drawings and specifications.
2. All dimensions are in millimetre's unless otherwise stated
3. Should there be any conflict between the details indicated on this drawing and those indicated on other drawings the Project Engineer shall be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given, it is entirely at his own risk

FOUNDATIONS

1. All organic material / topsoil / made ground is to be stripped from within the areas of the buildings and external works, levels to be taken after site stripping and agreed with the supervising officer as the work proceeds.
2. Foundations have been designed using an allowable net bearing pressure of 100kN/m². To be founded on an undisturbed, naturally occurring strata OR improved weak and/or made ground as applicable. Any over dig to reach a suitable formation level (or to accommodate adjacent deeper drainage) is to made up in Gen 3 concrete. All formations are to be approved by the Building Control Inspector.
3. It is the responsibility of the landscape Architect (or planting specifier) in accordance with BS 5837:2012 to consider an impact assessment of new planting. Any new planting that could cause direct or indirect effect on the proposed structure should be communicated to the Engineer for approval.
4. Construction joints and steps in foundations are to be in accordance to NHBC standards chapter 4.4 (latest revision).
5. All foundation shall have a common top level unless noted otherwise.
6. Foundation concrete to be cast against vertical earth faces. Any over excavation to be filled to the appropriate levels indicated, monolithically, with the appropriate grade of concrete specified.
7. All excavations for foundations shall be excavated checked for safe bearing capacity (see note 4) and blinded with min 50mm concrete in one working day. The excavations shall be kept free from water, loose material and rubbish etc.
8. Any services passing through the structure are to be sleeved and waterproofed to the service Engineers details.
9. Sufficient cover and protection to be provided to all services in accordance with the service providers and services Engineers requirements. Final service location/routes to be agreed.
10. All concrete generally to be in accordance with BS EN 206-1 and BS 8500-2.
11. Mass concrete to strip/trench fill footings and concrete pad foundations is to be designated mix Gen1 - Class AC-1 / DS-1.
12. Mesh and bar reinforced concrete to reinforced ground beams, strip/trench fill footings and concrete pad foundations is to be designated mix RC32/40 - Class AC-1 / DS-1.

Refer to Wood Goldstraw Yorath Pre-tender CDM, health and safety Site constraints and footpath closure requirement for details.

Refer to C2C drawing 210309-C2C-XX-XX-M2-S-004 for site layout and constraints plan.

REV	AMENDMENT	BY	CHK	DATE
T03	Scale Bar Added	SG	SJC	09/11/21
T02	Client detail updated no change to content	SG	SJC	05/10/21
T01	TENDER Issue	SG	SJC	28/09/21
P03	Layout updated	SG	SJC	08/09/21
P02	Layout updated	SG	SC	11/08/21

PROJECT EXECUTION CLASS:

All materials supplied in relations to those specified on this drawing are to be CE marked in accordance with the European Union Declaration of conformity

DRAWING STATUS

TENDER

CONSULTING ENGINEERS LTD
CIVIL | STRUCTURAL | DESIGN

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CLIENT

Midlands Partnership NHS Foundation Trust

PROJECT

Leek Moorlands Hospital

DRAWING TITLE

Retaining Wall Layout

SHEET SIZE	SCALE	DATE	DRAWN	CHECKED	STATUS
A1	1:100 1:20	30/04/21	SG		S3

PROJECT No.	DRAWING No.		REV.
210309	C2C - XX - XX - M2 - S	001	T03

CAD File Path: StevenSmith/c_2 PROJECT - CE/2015 2021/210309 - Leek Moorlands Hospital/01 DRAWINGS/01 CIVILS/DWG/210309-C2C-XX-XX-M2-S-001

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