

FOR CONTINUATION REFER TO DWG
GUI005-BBK-XX-XX-DR-C-91-250

Construction Design and Management (CDM) Key Residual Risks

Contractors entering the site should gain permission from the relevant land owners and/or principle contractor working on site at the time of entry. Contractors shall be responsible for carrying out their own risk assessments and for liaising with the relevant services companies and authorities. Listed below are Site Specific key risks associated with the project.

1. Overhead and underground services
2. Street lighting cables
3. Working adjacent to water courses and flood plain
4. Soft ground conditions
5. Working adjacent to live highways
6. Uncharted services

NOTES:

1. Do not scale from this drawing.
2. All dimensions are in millimetres unless otherwise stated.
3. Brookbanks Consulting Ltd has prepared this drawing for the sole use of the client. The drawing may not be relied upon by any other party without the express agreement of the client and Brookbanks Consulting Ltd. Where any data supplied by the client or from other sources has been used, it has been assumed that the information is correct. No responsibility can be accepted by Brookbanks Consulting Ltd for inaccuracies in the data supplied by any other party. The drawing has been produced based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.
4. No part of this drawing may be copied or duplicated without the express permission of Brookbanks Consulting Ltd.

DRAINAGE LEGEND

- EXISTING SURFACE WATER MANHOLE
- EXISTING FOUL WATER MANHOLE
- EXISTING BELOW GROUND SURFACE WATER DRAINAGE
- EXISTING BELOW GROUND FOUL WATER DRAINAGE
- PROPOSED SURFACE WATER SILT TRAP
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED FOUL WATER MANHOLE
- 150mm @ 1:150 - DENOTES BELOW GROUND SURFACE WATER DRAINAGE BY OTHERS
- 150mm @ 1:150 - DENOTES BELOW GROUND FOUL DRAINAGE BY OTHERS
- PROPOSED POROUS PAVING, FORMATION TO BE 600mm DEEP MIN.
- PROPOSED POROUS PAVING SUB-BASE DRAIN
- PROPOSED GULLY & CONNECTION CONNECTED TO SURFACE WATER SYSTEM
- PROPOSED SURFACE WATER INSPECTION CHAMBER (450mm DIA)
- PROPOSED SURFACE WATER SILT TRAP INSPECTION CHAMBER (460mm DIA)
- PROPOSED FOUL WATER INSPECTION CHAMBER (450mm DIA)
- PROPOSED SURFACE WATER ACCESS CHAMBER (250mm DIA)
- PROPOSED FOUL WATER ACCESS CHAMBER (250mm DIA)
- PROPOSED RODDING EYE
- PROPOSED VERTICAL FOUL STACK TO GROUND
- PROPOSED RAIN WATER PIPE TO GROUND

DRAINAGE NOTES

1. THIS DRAWING IS COPYRIGHT.
2. THE CONTRACTOR AND HIS SUBCONTRACTOR ARE TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE.
3. DO NOT SCALE THIS DRAWING. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE ENGINEER ANY DISCREPANCIES CONTAINED IN THIS DRAWING PRIOR TO WORK COMMENCEMENT.
4. ALL 100mm PIPES OFFERED FOR ADOPTION OR BELOW HIGHWAYS TO BE EXTRA STRENGTH VITRIFIED CLAY PIPES
5. ALL 150mm AND 225mm DIAMETER PIPES TO BE EXTRA STRENGTH VITRIFIED CLAY PIPES OR PLASTIC PIPES ALL PIPES OF 300mm DIAMETER OR GREATER TO BE CLASS M CONCRETE OR PLASTIC PIPES COMPLYING WITH SEWER UNDERTAKER TECHNICAL REQUIREMENTS AND DESIGN AND CONSTRUCTION GUIDE FOR FOUL AND SURFACE WATER SEWERS OFFERED FOR ADOPTION. ALL PLASTIC PIPES ARE REQUIRED TO WITHSTAND 2600 PSI
6. ALL PIPES OF 300mm DIAMETER OR GREATER TO BE CLASS M CONCRETE OR PLASTIC PIPES COMPLYING WITH SEWER UNDERTAKER TECHNICAL REQUIREMENTS AND DESIGN AND CONSTRUCTION GUIDE FOR FOUL AND SURFACE WATER SEWERS OFFERED FOR ADOPTION .
7. ALL PIPE MATERIALS TO BE CONSISTENT BETWEEN MANHOLES.
8. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDELINES. THE SPECIFICATION FOR HIGHWAY WORKS 1998 AND ALL SUBSEQUENT AMENDMENTS AND LOCAL AUTHORITIES DESIGN GUIDE. WHERE THERE IS CONFLICT BETWEEN THESE DOCUMENTS THE MATTER SHALL BE REFERRED TO THE ENGINEER.
9. FOR CONSTRUCTION DETAILS OF MANHOLES AND SEWERS REFER TO DESIGN AND CONSTRUCTION GUIDELINES AND UNDERTAKERS STANDARD DETAILS WHICH CAN BE OBTAINED FROM THE LOCAL OFFICE.
10. INVERT LEVELS OF EXISTING SEWERS TO BE CONFIRMED ON SITE BEFORE ANY SEWER WORK UNDERTAKEN. ANY DISCREPANCIES FOUND SHOULD BE NOTIFIED TO ENGINEERS.
11. WHERE SEWERS HAVE LESS THAN 1.2m OF COVER UNDER ROADS AND 0.9m COVER ELSEWHERE PIPES ARE TO HAVE A 150mm CONCRETE BED AND SURROUND.
12. PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL, TO TABLE 11 OF APPROVED DOCUMENT H1 OF THE BUILDING REGULATIONS 2010.
13. ORIENTATION OF ALL ACCESS AND INSPECTION CHAMBERS TO BE IN ACCORDANCE WITH NHBC TECHNICAL GUIDANCE 5.3/01
14. WHERE HOUSE DRAINAGE IS TAKEN THROUGH BLOCK CARE IS TO BE TAKEN THAT FOUNDATION LEVELS AND DRAINAGE RUNS DO NOT CLASH.
15. ALL ADAPTABLE MANHOLES TO HAVE A MINIMUM CLEAR OPENING OF 675mmx875mm AND GRADE D400 UNO.
16. ALL BELOW GROUND DRAINAGE TO BE 100mmØ UNLESS OTHERWISE INDICATED WITH A MIN. GRADIENT AS FOLLOWS:-
 - S.W : 100mm Dia. 1:100
 - S.W : 150mm Dia. 1:150
 - F.W : 100mm Dia. 1:80
 - F.W : 150mm Dia. 1:150
17. ALL ADAPTABLE DRAINAGE MATERIALS SHOULD COMPLY WITH THE REQUIREMENTS OF PART E CIVIL ENGINEERING SPECIFICATION INCLUDED WITH DESIGN AND CONSTRUCTION GUIDELINES.

P02 24.07.2026 Drawing number updated
P01 22.07.2026 Initial work in progress issue

PJ
PJ

Stonebond.

Project Title:
Bartons Road, Havant

Project Number:
GUI005

Drawing Title:
**Drainage Layout
Sheet 2 of 2**

Revision Notes:
Initial issue

Drawing Number:
GUI005-BBK-XX-XX-DR-C-91-251

Scale:
1:250
Date:
July 2026
Rev:
P02