



IN SOME LOCATIONS, THE FINISHED FLOOR LEVELS ARE BELOW THE LEVEL OF THE RECEIVING MANHOLE. THE FFLS ARE SET ABOVE SURROUNDING LEVELS, AND HENCE IN THE EVENT OF FLOODING CAUSED BY BLOCKAGES IN BOTH THE FOUL AND SURFACE WATER SEWERS, THE FLOOD EXCEEDANCE ROUTE WILL FOLLOW THE ARROWS ON THE PLAN, AND AWAY FROM PROPERTY THRESHOLDS.

AS THE COVER LEVEL OF THE RECEIVING MANHOLE IN WEST PARK ROAD IS AT A SIGNIFICANTLY LOWER LEVEL THAN THE SITE, ANY SURCHARGING FROM THE DOWNSTREAM SEWER WOULD NOT RESULT IN FLOODING WITHIN THE SITE BOUNDARY, AND HENCE THE PROPERTIES WITHIN THE SITE.

YORKSHIRE WATER NOTES:

- ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'CODE FOR ADOPTION'. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATERS STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND MUST BE KITEMARKED.
- MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
- FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
- YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED, AND YOU WILL HAVE TO LAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUN-OFF.
- THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
- SEWERS MUST HAVE 5m CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT (PLEASE ALSO REFER DESIGN AND CONSTRUCTION GUIDANCE FOR RESTRICTIONS ON TREE PLANTING ADJACENT TO SEWERS).
- SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NONVEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
- BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A1).
- YORKSHIRE WATER POLICY IS THAT BRICK MANHOLES AND 1050mm DIA. MANHOLE RINGS ARE NOT PREFERRED. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIA., 1350mm DIA. OR 1500mm DIA. RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5m.
- ADOPTABLE PLASTIC SEWER PIPES TO BE BS1 KITEMARKED (CERTIFIED TO WIS 4-35-01 AND BS/EN13476). ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3m LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD REQUIRE CLAY WARE CHANNEL IN MANHOLES.
- THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA. 40kN/m, 150mm DIA. 40kN/m, 225mm DIA. 45kN/m AND 300mm DIA. 72kN/m. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916/BS5911-1:2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN13476.
- WHERE A B125 COVER AND FRAME HAS BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.
- THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX. 300mm: IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY NEED TO BE INCREASED.

KIRKLEES COUNCIL NOTES:

- ALL PRECAST CONCRETE ELEMENTS, INCLUDING COVER SLABS, TO BE IN ACCORDANCE WITH THE SEWERAGE SECTOR GUIDANCE APPENDIX C CLAUSES E2.29 AND E2.30 AND TO HAVE A CONCRETE DESIGN CHEMICAL CLASS OF DC-4.
- PCC COVER SLABS TO HAVE A MINIMUM OF 300mm COVER.
- ALL PCC UNITS IN OVERSIZE MANHOLES MUST HAVE A DESIGN WORKING LIFE OF 100 YEARS (MIN.) IN ACCORDANCE WITH BS 8500-1:2015+A2:2019-TABLE A.5.

DO NOT SCALE

DESIGNERS HAZARD IDENTIFICATION

IT IS ASSUMED THAT ALL WORKS WILL BE UNDERTAKEN BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. IN ADDITION TO THE HAZARDS TYPICALLY ASSOCIATED WITH THE TYPES OF CONSTRUCTION DETAILED ON THIS DRAWING, ANY KNOWN ABNORMAL HAZARDS SPECIFIC TO THIS SCHEME HAVE BEEN IDENTIFIED.



ABNORMAL HAZARD REFERENCE

NOTES

- DO NOT SCALE FROM THIS DRAWING.
- THIS DRAWING IS TO BE REPRODUCED IN COLOUR.
- IF ANY DISCREPANCIES ARE FOUND IN THIS DRAWING, PLEASE REPORT TO DUDLEYS CONSULTING ENGINEERS.
- THIS DRAWING HAS BEEN ORIENTATED TO OS BRITISH NATIONAL GRID (EPSG:27700 OSGB36). EXISTING SURVEY STATIONS ARE SHOWN ON THE TOPOGRAPHICAL SURVEY.
- THIS DRAWING IS BASED ON THE FOLLOWING INFORMATION:
 - 4246 - 01 - TOPOGRAPHICAL SURVEY BY MOBILE CAD SURVEYING SOLUTIONS DATED APRIL 2024.
 - 2405-GWP-00-00-D-A-(00)-0005 REVISION C05 - PROPOSED SITE PLAN BY GWP ARCHITECTS DATED NOVEMBER 2025.
- ALL WORK TO BE UNDERTAKEN IN ACCORDANCE WITH THE CURRENT EDITION OF THE BUILDING REGULATIONS, SEWERAGE SECTOR CODES OF PRACTICE, AND THE RELEVANT LOCAL HIGHWAY AUTHORITY STANDARDS.

KEY

- SITE BOUNDARY
- FLOOD EXCEEDANCE ROUTE
- PROPOSED SPOT LEVELS
- FFL 000.000
- EXISTING SPOT LEVELS
- PROPOSED GRAVEL BOARD (MAX HEIGHT 0.6m FOR A DOUBLE, NOT TO BE USED TO RETAIN DRIVEWAYS)
- PROPOSED FLAG ON EDGE (MAX HEIGHT 0.6m)
- PROPOSED MASONRY RETAINING WALL
- PROPOSED KINGPOST RETAINING WALL
- PROPOSED GRADIENTS

| DATE | REVISION DESCRIPTION | BY | CHK. | REV. |
|----------|---|----|------|------|
| 04.12.25 | AMENDED LEVELS TO THE FRONT OF PLOTS 15-17 | JA | PD | P07 |
| 26.11.25 | UPDATED SITE LAYOUT | DC | JA | P07 |
| 29.09.25 | NOTE ON DRAWING AMENDED FOLLOWING COMMENTS FROM YW | DC | JA | P06 |
| 20.08.25 | UPDATED SITE LAYOUT, UPDATED LEVELS DESIGN, ADDED NOTES | JA | PD | P05 |
| 23.01.25 | UPDATED SITE LAYOUT | JA | PD | P04 |
| 10.01.25 | DETAILED DESIGN TO SUIT UPDATED SITE LAYOUT | JA | PD | P03 |
| 07.06.24 | REVISED FFLS | JA | PD | P02 |
| 06.06.24 | PRELIMINARY ISSUE | JA | PD | P01 |

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PROJECT
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TITLE
FLOOD EXCEEDANCE ROUTE

| SCALE | PAPER | STATUS |
|-------------------------|-------|-------------|
| 1:200 | A1 | PRELIMINARY |
| DRAWING NO. | REV. | |
| 24106-DCE-XX-XX-D-C-129 | P08 | |