



- YORKSHIRE WATER NOTES:**
- ALL ADAPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'DESIGN AND CONSTRUCTION GUIDANCE (DCG) CODE FOR ADOPTION', THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
  - MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BE 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 DRAINLAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADAPTABLE DRAINAGE (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY. LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF FILTER DRAINLAND DRAINAGE RUN-OFF.
  - THE ADAPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND 0.5m FROM KERB FACES AND SERVICE MARGINS.
  - SEWERS MUST HAVE A 5m CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
  - 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 0.9m IN NON-VEHICULAR 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 A2).
  - YORKSHIRE WATER POLICY IS THAT BRICK MANHOLES AND TYPE 'C' 1050mm DIA MANHOLE RINGS ARE NOT PREFERRED. INSTEAD, IT IS PREFERRED THAT A 'TYPE B' MANHOLE WITH 1200mm DIA OR 1350mm DIA RINGS ARE USED, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5m.
  - ADAPTABLE PLASTIC SEWER PIPES TO BE BSI KITEMARKED (CERTIFIED TO WIS 4-35-01) AND BS EN 13476). ADAPTABLE PLASTIC PIPES 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 PREFER CLAYWARE 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 CONFIRM 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.

**HIGHWAYS**  
 1. ALL EXCAVATIONS BELOW ADOPTED HIGHWAYS TO BE BACKFILLED WITH TYPE 1 AND COMPACTED IN LAYERS NOT EXCEEDING 150mm.  
 2. HIGHWAY AUTHORITY TO BE CONTACTED AS SOON AS CONTRACTOR IS ON SITE TO ENABLE EARLY DISCUSSIONS WITH THE CLERK OF WORKS.

**GENERAL DRAINAGE**  
 3. MANHOLE/INSPECTION CHAMBER COVERS IN TRAFFICKED AREAS TO BE LOADING TYPE D400 AND B125 IN NON-TRAFFICKED AREAS.  
 4. ALL GULLIES TO BE TRAPPED AS SHOWN ON THE DETAILS DRAWINGS.

**ADOPTED DRAINAGE**  
 5. POSITION AND LEVELS OF EXISTING MANHOLES AND SEWERS ARE TO BE CHECKED ON SITE AS SOON AS POSSIBLE AND PREFERABLY BEFORE SITE ACTIVITIES COMMENCE.  
 6. THE SEWER CONNECTION IS TO BE CARRIED OUT BY AN NWL APPROVED CONTRACTOR.  
 7. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE DRAINAGE DETAILS DRAWINGS.  
 8. FOR PROPOSED ADOPTED DRAINAGE PIPES WITH LESS THAN 900mm COVER IN AREAS NOT SUBJECTED TO VEHICULAR LOADING AND LESS THAN 1200mm IN VEHICULAR LOADING AREAS TO BE CONCRETE PROTECTED.  
 9. ADOPTED DRAINAGE IS TO COMPLY WITH 'DESIGN AND CONSTRUCTION GUIDANCE'.  
 10. PIPE SURROUND TO BE GRANULAR TYPE 'S' UNLESS NOTED OTHERWISE.

**PRIVATE DRAINAGE**  
 11. PRIVATE DRAINAGE IS TO COMPLY WITH ALL STATUTORY REQUIREMENTS AND ACCORD WITH BS EN 752 AND BUILDING REGULATIONS APPROVED DOCUMENT H.  
 12. PIPE BEDDING SHOULD GRANULAR UNLESS NOTED OTHERWISE AND THE GRANULAR MATERIAL TO BE TO BS882:PT 2 AND TO BUILDING REGULATIONS PART H.  
 13. PIPE SIZES TO BE 100MM U.N.O.  
 14. FOR DRAINAGE PIPES TO BE CAST IN CONCRETE TO HAVE ROCKER PIPES EITHER SIDE OF CONCRETE.

**KEY**

- EXISTING SURFACE WATER SEWER
- EXISTING FOUL WATER SEWER
- PROPOSED SURFACE WATER SEWER
- PROPOSED FOUL WATER SEWER
- EXTENT OF GEGRID GROUND REINFORCEMENT (DETAIL TO BE CONFIRMED WITH ADOPTING DRAINAGE AND HIGHWAY AUTHORITIES)

Issue	Date	Description	By	Chkd	Apprd
P9	27.08.25	Plot 36 FFL revised	GW	PB	PB
P8	21.08.25	Updated in accordance with client comments	GW	PB	PB
P7	15.08.25	S1-S5 & F1-F4 revised	PB	PB	PB
P6	14.08.25	Foul & surface water outfalls revised	PB	PB	PB
P5	13.08.25	Surface water outfall revised following receipt of drainage survey	PB	PB	PB
P4	13.08.25	Manhole S3 omitted. S4 & F3 revised.	PB	PB	PB



Client  
**BELLWAY HOMES**

Job Title  
**HOYLAND BARNSELY**

7 Silvertown Court, Northumberland Business Park, NE23 7RY  
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Drawing Title <b>OVERALL ENGINEERING LAYOUT</b>	
Scale at A1 1:500	
Drawing Status <b>PRELIMINARY</b>	
Job No <b>25035</b>	Issue <b>P9</b>
Drawing No <b>04</b>	