

YW REF NO:  
**H-3-264-976**

MANHOLE COVER LEVELS (m)									
FOUL WATER SEWER INVERT LEVELS (m)									
SURFACE WATER SEWER INVERT LEVELS (m)									
MANHOLE DIAMETER (mm)									
Datum: 169.000M AOD									
CHAINAGE ON CENTRELINE (m)		0.000	10.000	20.000	30.000	35.599	40.349		
LEVELS ON CENTRELINE OF CARRIAGEWAY (m)		175.524	176.086	176.652	177.216	177.532	177.458		
LEVELS ON LEFT HAND CHANNEL (m)		175.488	176.052	176.616	177.180				
LEVELS ON RIGHT HAND CHANNEL (m)		175.580	176.144	176.708	177.272				
VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE		GRADIENT 5.6% (1 in 18) LENGTH = 35.599m							
HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE		STRAIGHT LENGTH = 20.841m		STRAIGHT LENGTH = 14.757m					
EXISTING LEVELS (m)		175.145	176.290	176.373	176.896	176.814			

MANHOLE COVER LEVELS (m)									
FOUL WATER SEWER INVERT LEVELS (m)									
SURFACE WATER SEWER INVERT LEVELS (m)									
MANHOLE DIAMETER (mm)									
Datum: 166.000M AOD									
EXISTING CHAINAGE (m)		0.000	10.000	20.000	30.000	35.599	40.349		
EXISTING LEVELS (m)		175.515	176.086	176.652	177.216	177.532	177.458		

MANHOLE COVER LEVELS (m)				
FOUL WATER SEWER INVERT LEVELS (m)				
SURFACE WATER SEWER INVERT LEVELS (m)				
MANHOLE DIAMETER (mm)				
Datum: 176.000M AOD				
EXISTING CHAINAGE (m)		0.000	4.000	10.822
EXISTING LEVELS (m)		176.305	176.211	176.874
x-survey.dwg (m)		176.305	176.211	176.874
Final Surface (m)		176.305	176.211	176.874

- YW NOTES:**
- ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH '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/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 LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF THE FILTER/LAND DRAINAGE RUN-OFF.
  - THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1.0m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
  - SEWERS MUST HAVE A 5.0m 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 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 A2).
  - YORKSHIRE WATER POLICY IS THAT TYPE "C" BRICK MANHOLES AND 1050mm DIAMETER MANHOLES RINGS ARE NOT PREFERRED. INSTEAD, IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIAMETER OR 1500mm DIAMETER RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE THE DEPTH OF COVER TO THE PIPE IS 1.0m - 1.5m.
  - ADOPTABLE PLASTIC SEWER PIPES TO BE BSI KITEMARKED (CERTIFIED TO WIS 4-35-01 AND BS EN 13476). ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE 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 CLAYWARE CHANNELS 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, 300mm DIA 72kN/m. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916 / BS 5911-1-2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN 13476.
  - 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.

- NOTES**
- THIS DRAWING IS PRODUCED FOR USE IN THIS PROJECT ONLY AND MAY NOT BE USED FOR ANY OTHER PURPOSE. THE CONSULTING ENGINEERS ACCEPT NO LIABILITY FOR THE USE OF THIS DRAWING OTHER THAN THE PURPOSE FOR WHICH IT WAS INTENDED IN CONNECTION WITH THIS PROJECT AS RECORDED ON THE TITLE BLOCK FIELDS 'PURPOSE FOR ISSUE' AND 'FILE STATUS CODE'.
  - THIS DRAWING MAY NOT BE REPRODUCED IN ANY FORM WITHOUT PRIOR WRITTEN AGREEMENT FROM ADVANT ENGINEERS.
  - DO NOT SCALE FROM THE DRAWING. USE WRITTEN DIMENSIONS ONLY.
  - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
  - DISCREPANCIES MUST BE REPORTED BACK TO THE ENGINEER PRIOR TO CONSTRUCTION.
  - THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ADVANT ENGINEERS DRAWINGS AND SPECIFICATIONS.

J	UPDATED TO LLFA COMMENTS	MJM	20.04.25
I	UPDATED TO CLIENT COMMENTS	MJM	12.03.25
H	UPDATED TO YW COMMENTS	MJM	23.11.24
G	UPDATED TO YW COMMENTS	MJM	08.11.24
F	UPDATED TO YW COMMENTS	MJM	19.10.24
E	UPDATED TO YW COMMENTS	MJM	30.09.24
D	UPDATED TO YW COMMENTS	MJM	12.09.24
C	UPDATED TO YW COMMENTS	MJM	24.07.24
B	DRAINAGE UPDATED	MJM	24.05.24
A	INITIAL ISSUE	MJM	18.04.24
REV	AMENDMENTS	BY	DATE

**FOR APPROVAL**

STATUS	CHK'D
PRELIMINARY	MJM
FOR COMMENT	MJM
FOR APPROVAL	MJM
FOR CONSTRUCTION	
AS BUILT	

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CLIENT  
**NORTH PARK HOMES LTD**

CONTRACT  
**YEW TREE ROAD BIRCHENCLIFFE HUDDERSFIELD**

TITLE  
**ROAD AND SEWER LONG SECTIONS SHEET 2**

DRAWN	MJM	CHK'D	MJM
SCALE	1:200 @ A1	DATE	18.04.24

JOB No	DRG No	REV
22046	116	J