H-3-264-525

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2.000
SN2 Thermoplastic Pipe
100mmØ
1 in 15
16.976m

F1 1200mm
CL: 146.781m
IL: 142.731m

Lateral to to be capped at bioundary for future works

1.001
SN2 Thermoplastic pipe
150mmØ
1 in 100
35.042m

F2 1200mm
CL: 147.446m
IL: 142.381m

4.000
SN2 Thermoplastic Pipe
400mmØ
1 in 18
39.559m
IMP Area: 1.08Ha

1.002
SN2 Thermoplastic Pipe
150mm
1 in 100
48.972m

3.000
SN2 Thermoplastic Pipe
100mmØ
1 in 15
10.529m
Lateral to to be capped at boundary for future works

F3 1200mm
CL: 147.987m
IL: 141.890m

1.003
SN2 Thermoplastic Pipe 150mmØ
1 in 99
36.630m

F4 2100mm - Backdrop
CL: 148.193m
IL: 141.520m
BD IL: 142.669m
Backdrop to avoid clash with surface water network

6.000
SN2 Thermoplastic Pipe
375mmØ
1 in 11
19.201m
IMP Area: 0.743Ha

5.000
SN2 Thermoplastic Pipe
100mmØ
1 in 10
13.040m
Lateral to to be capped at Boundary for future works

1.005
SN2 Thermoplastic Pipe 150mmØ
1 in 123
84.566m

Continuation on Viewport B

Cut line

S1 2100mm
CL: 146.630m
IL: 141.900m

1.001
CSR Pipe
600mmØ
1 in 364
32.400m
IMP Area: 1.395Ha

Commercial Development plot 3
SCA3.1 1500mm
CL: 145.500m
IL: 142.289m
Catchment: 1.55ha
Peak Flow: 547.8l/s

1.000
SN2 Thermoplastic Pipe
100mmØ
1 in 40
29.658m

Commercial Development plot 3
FC3B 1200mm
CL: 145.600m
IL: 143.522m
Peak Flow Rate: 0.8l/s

1.002
CSR Pipe
900mmØ
1 in 503
62.922m
IMP Area: 0.655Ha

Lateral to to be capped at boundary for future works

S2 2100mm
CL: 147.728m
IL: 141.475m

1.003
CSR Pipe
1200mmØ
1 in 121
47.456m

S3 2100mm
CL: 148.131m
IL: 141.075m

5.001
CSR Pipe
750mm
1 in 394
21.284m
IMP Area: 3.186Ha

Commercial Development plot 3
SCB3.1 2100mm
CL: 145.600m
IL: 141.579m
Catchment: 3.54Ha
Peak Flow: 1165.6 l/s

1.004
SN2 Thermoplastic pipe
150mmØ
1 in 118
36.600m

4.000
SN2 Thermoplastic Pipe
100mmØ
1 in 83
30.042m

Commercial Development plot 3
FC3a 1200mm
CL: 145.600m
IL: 143.032m
Peak Flow Rate: 2.0l/s

1.004
CSR Pipe
1200mmØ
1 in 565
53.710

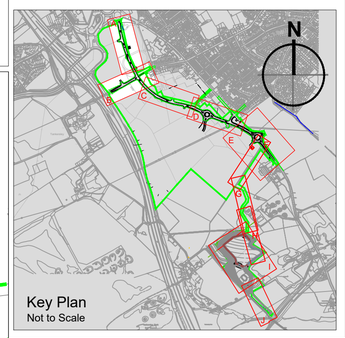
1.005
CSR Pipe
1200mmØ
1 in 347
88.554m

F5 2100mm
CL: 148.391m
IL: 141.211m

S4 2100mm
CL: 148.425m
IL: 140.980m

Viewport A
Scale 1:500

1. 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.
2. 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.
3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
4. Yorkshire water Is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or in-directly). 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 with regard to the disposal of the filter/land drainage run-off.
5. Cover slabs must carry the BSI Kitemark or will be rejected by Yorkshire Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued 2004 for Kitemarked cover slab opening sizes
6. Sulphate resistant cement (C20-DC2) and precast concrete products must be used, or a laboratory report provided proving tat such precautions are not necessary.
7. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
8. Sewers must have 5 metres clearance from trees and hedges.
9. Sewers to be laid in class 'S' bedding (150mm Granular bed and surround). Where depth of cover to top of sewer is less then 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provide above granular bed and surround.
10. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
11. The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.
12. Yorkshire Water policy is that Type "C" brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a type "S" manhole with 1200mm dia or 1500mm dia rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 - 1.5m
13. Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WIS 4-35-01 and BS/EN13476).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 prefer clayware channel in manholes. We have found that plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the benching.
14. 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
15. 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.
16. Yorkshire Water's Signs will be required once the detention basin is transferred to Yorkshire Water (Yorkshire Water will provide the signs and charge the developer for the signs).



Highway Boundary
Planning Boundary
Proposed Highway Gully
Proposed Kerb Drainage
Proposed Surface Water Sewer
Proposed Highway Surface Water Drain
Proposed Private Surface Water Drain
Proposed Foul Water Sewer
Proposed Foul Water Rising Main
Adoption Easement Areas
Existing Surface Water Drains

Cut line
Continuation on Viewport A

1.005
CSR Pipe
1200mmØ
1 in 347
88.554m

S5 2100mm
CL: 148.719m
IL: 140.725m

1.005
SN2 Thermoplastic Pipe
150mmØ
1 in 123
84.566m

F6 2100mm
CL: 148.455m
IL: 140.523m

1.006
SN2 Thermoplastic Pipe
150mmØ
1 in 123
57.585m

1.006
CSR Pipe
1200mmØ
1 in 817
52.304m
IMP Area: 0.512Ha

S6 2100mm
CL: 148.192m
IL: 140.661m

F7 2100mm
CL: 147.954m
IL: 140.055m

1.007
SN2 Thermoplastic Pipe
150mmØ
1 in 123
51.956m

1.007
CSR Pipe
1200mmØ
1 in 506
55.675m
IMP Area: 0.099Ha

Cut line
Continuation on Viewport C

M 1

M 1

GREEN LANE

33

31

Sewer Diameter/Size mm		Less Than 150	150-299	300-449	450-600	601-749	750-924	925-1000	1001-1124	1125-1399	1400 or greater
Depth to Invert of Sewer m	Less than 3.0	3.0	3.0	3.0	3.5	3.5	4.0	5.0	5.0	5.0	5.0
	3.0 to 4.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
	4.0 to 5.0	4.0	4.0	4.0	5.0	5.0	5.0	6.0	6.0	6.5	6.5
	5.0 to 6.0	5.0	5.0	5.0	6.0	6.0	6.5	6.5	6.5	6.5	6.5
	6.0 to 7.5	6.0	6.0	6.0	6.0	6.0	6.0	6.5	6.5	6.5	6.5
	7.5 or greater	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	6.0

Table 1 from the Yorkshire Water Developer Services - Requirements for Easements - Feb.2020

Viewport B
Scale 1:500

Section 111 of the Water Industry Act 1991

Under the provisions of Section 111 of the Water Industry Act 1991 it is unlawful to pass into any public sewer (or into any drain or private sewer communicating with the public sewer network) any items likely to cause damage to the public sewer network interfere with the free flow of its contents or affect the treatment and disposal of its contents. Amongst other things this includes construction materials. Contravention of the provisions of Section 111 is a criminal offence.

10m SCALE 1:500

Rev	Description	By	Ckd	Date
P10	Updated to suit YWS Comments - IMP Area updated	SMC	SH	26.04.21

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Client: newlands developments

Project: Hoyland Common

Title: Proposed Drainage GA
S104 Approval
(Sheet 1 of 6)

RPS Project Number	Scale @ A1	Date Created
NK020040	1:500	18.08.20
Task Team Manager	**Information Author**	**Task Information Manager**
SG	JNB	SMC

Status: S4 (Suitable for Stage Approval)

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Revision: P10

Project Code - Originator - Zone - Level - Type - Role - Drawing Number

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