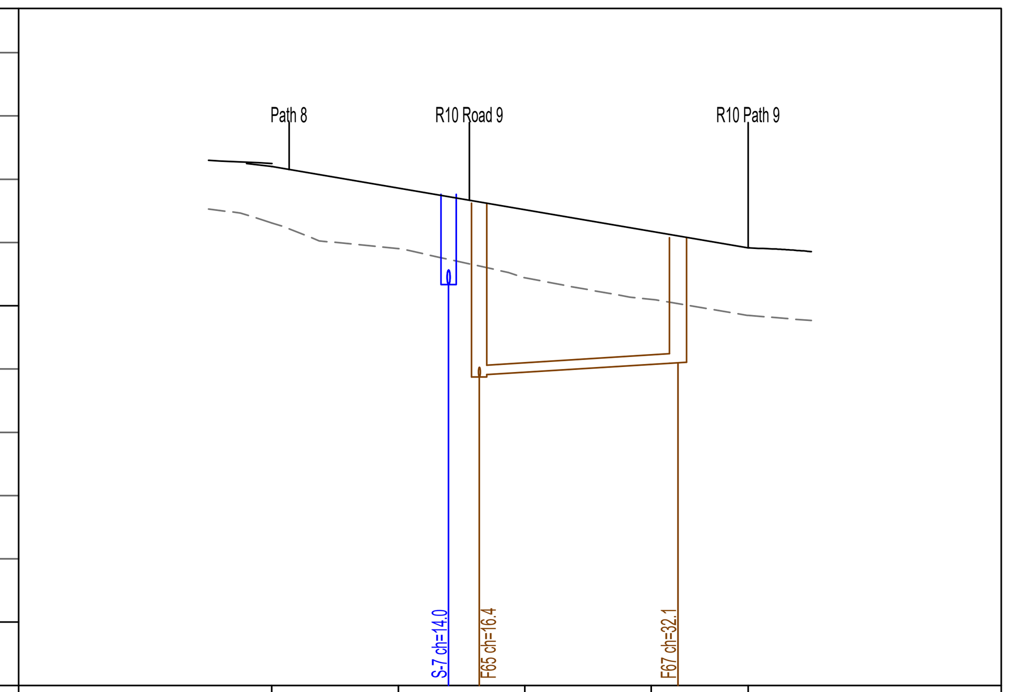
**ALL PIPE BED TO BE CLASS 'S' GRANULAR SURROUND UNLESS NOTED OTHERWISE ON THE DRAWING**

# R10 Road 10

Vertical Exaggeration: 5
Datum: 59.000M AOD

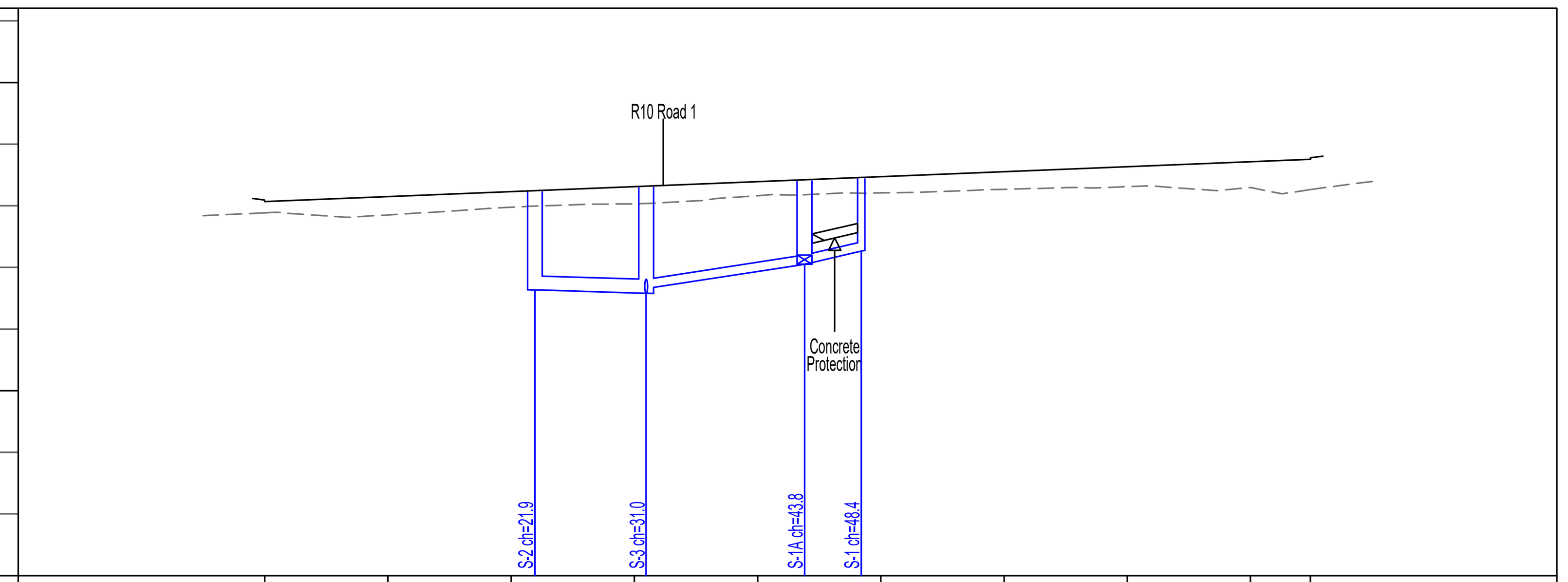



| CHAINAGE ON CENTRELINE (m) | 0.000 | 10.000 | 20.000 | 30.000 | 37.656 |
|---|---|---|---|---|---|
| EXISTING LEVELS (m) | 66.311 | 65.904 | 65.443 | 65.100 | 64.849 |
| LEVELS ON CENTRELINE OF CARRIAGEWAY (m) | 67.200 | 66.859 | 66.518 | 66.177 | 65.916 |
| LEVELS ON LEFT HAND CHANNEL (m) | 67.137 | 66.797 | 66.456 | 66.115 | 65.853 |
| LEVELS ON RIGHT HAND CHANNEL (m) | 67.262 | 66.922 | 66.581 | 66.240 | 65.978 |

| | |
|---|---|
| VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE | GRADIENT -3.4% (-1 in 29) LENGTH = 37.656m |
| HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE | STRAIGHT LENGTH = 37.656m |
| MANHOLE COVER LEVELS APPROX (m) | 66.762, 66.620, 66.075 |
| FOUL WATER SEWER INVERT LEVELS (m) | 63.904 — 150Ø 1/80 L=15.72 PN=11.000 — 64.100 |
| SURFACE WATER SEWER INVERT LEVELS (m) | 65.337 |

# R10 Road 11

Vertical Exaggeration: 5
Datum: 62.000M AOD

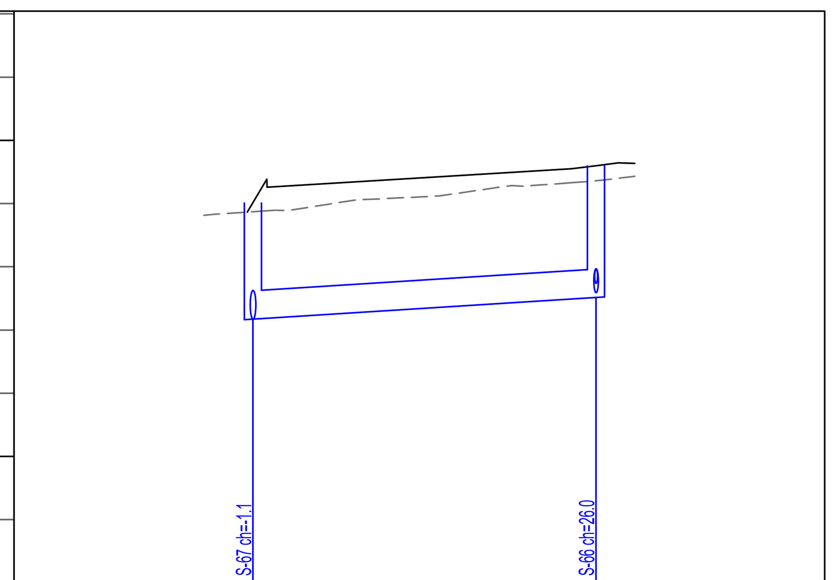



| CHAINAGE ON CENTRELINE (m) | 0.000 | 10.000 | 20.000 | 30.000 | 40.000 | 50.000 | 60.000 | 70.000 | 80.000 | 84.865 |
|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING LEVELS (m) | 67.884 | 67.852 | 67.976 | 68.032 | 68.164 | 68.209 | 68.267 | 68.310 | 68.296 | 68.261 |
| LEVELS ON CENTRELINE OF CARRIAGEWAY (m) | 68.068 | 68.149 | 68.230 | 68.311 | 68.392 | 68.473 | 68.554 | 68.635 | 68.716 | 68.755 |
| LEVELS ON LEFT HAND CHANNEL (m) | 67.980 | 68.061 | 68.142 | 68.223 | 68.304 | 68.385 | 68.466 | 68.547 | 68.628 | 68.668 |
| LEVELS ON RIGHT HAND CHANNEL (m) | 68.130 | 68.211 | 68.292 | 68.373 | 68.454 | 68.535 | 68.616 | 68.697 | 68.778 | 68.818 |

| | |
|---|---|
| VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE | GRADIENT 0.8% (1 in 123) LENGTH = 84.865m |
| HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE | STRAIGHT LENGTH = 84.865m |
| MANHOLE COVER LEVELS APPROX (m) | 68.223, 68.299, 68.401, 68.437 |
| FOUL WATER SEWER INVERT LEVELS (m) | |
| SURFACE WATER SEWER INVERT LEVELS (m) | 66.635 — 225Ø 1/167 L=9.03 PN=2.000 — 66.581 66.656 — 150Ø 1/33 L=12.85 PN=1.001 — 67.051 [illegible] — 150Ø [illegible] PN=1.000 — [illegible] |

# R10 Road 12

Vertical Exaggeration: 5
Datum: 58.000M AOD

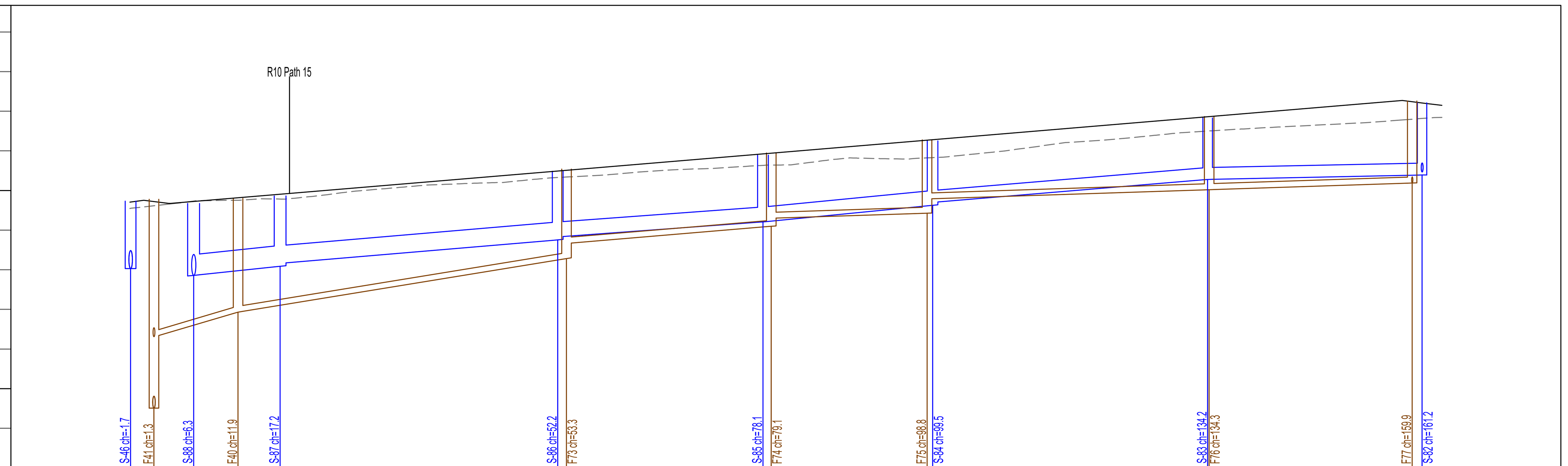



| CHAINAGE ON CENTRELINE (m) | 0.000 | 10.000 | 20.000 | 24.066 | 27.758 |
|---|---|---|---|---|---|
| EXISTING LEVELS (m) | 63.885 | 64.085 | 64.279 | 64.331 | |
| LEVELS ON CENTRELINE OF CARRIAGEWAY (m) | 64.259 | 64.380 | 64.501 | 64.550 | 64.643 |
| LEVELS ON LEFT HAND CHANNEL (m) | 64.310 | 64.431 | 64.567 | | |
| LEVELS ON RIGHT HAND CHANNEL (m) | 64.208 | 64.241 | 64.453 | | |

| | |
|---|---|
| VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE | GRADIENT 1.2% (1 in 83) LENGTH = 24.066m |
| HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE | STRAIGHT LENGTH = 24.066m |
| MANHOLE COVER LEVELS APPROX (m) | 64.009, 64.594 |
| FOUL WATER SEWER INVERT LEVELS (m) | |
| SURFACE WATER SEWER INVERT LEVELS (m) | 62.172 — 450Ø 1/80 L=27.14 PN=5.000 — 62.513 |

# R10 Road 13

Vertical Exaggeration: 5
Datum: 58.000M AOD




| CHAINAGE ON CENTRELINE (m) | 0.000 | 3.247 | 10.000 | 20.000 | 30.000 | 40.000 | 50.000 | 60.000 | 70.000 | 80.000 | 90.000 | 100.000 | 110.000 | 120.000 | 130.000 | 140.000 | 150.000 | 158.696 | 161.196 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING LEVELS (m) | | 64.658 | 64.750 | 64.825 | 65.040 | 65.170 | 65.296 | 65.423 | 65.546 | 65.643 | 65.817 | 65.834 | 66.037 | 66.256 | 66.442 | 66.569 | 66.671 | 66.779 | |
| LEVELS ON CENTRELINE OF CARRIAGEWAY (m) | 64.751 | 64.670 | 64.783 | 64.951 | 65.118 | 65.285 | 65.453 | 65.620 | 65.787 | 65.955 | 66.122 | 66.289 | 66.457 | 66.624 | 66.791 | 66.959 | 67.126 | 67.272 | 67.209 |
| LEVELS ON LEFT HAND CHANNEL (m) | | | 64.846 | 65.013 | 65.242 | 65.347 | 65.515 | 65.682 | 65.850 | 66.017 | 66.184 | 66.352 | 66.519 | 66.686 | 66.917 | 67.084 | 67.188 | | |
| LEVELS ON RIGHT HAND CHANNEL (m) | | | 64.689 | 64.886 | 65.056 | 65.223 | 65.390 | 65.557 | 65.725 | 65.892 | 66.059 | 66.227 | 66.394 | 66.561 | 66.729 | 66.896 | 67.063 | | |

| | |
|---|---|
| VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE | GRADIENT 1.7% (1 in 60) LENGTH = 155.450m |
| HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE | STRAIGHT LENGTH = 13.001m; CURVE R = 56.500 L = 18.436; L = 2.28m; L = 1.88m; CURVE R = 32.500 L = 20.046; STRAIGHT LENGTH = 16.384m; CURVE R = 38.500 L = 14.830; CURVE R = 68.500 L = 21.175; STRAIGHT LENGTH = 14.552m; CURVE R = 26.500 L = 17.349; STRAIGHT LENGTH = 15.632m |
| MANHOLE COVER LEVELS APPROX (m) | 64.730, 64.778, 64.672, 64.799, 64.861, 65.484, 65.541, 65.890, 65.947, 66.278, 66.250, 66.829, 67.259, 67.212 |
| FOUL WATER SEWER INVERT LEVELS (m) | 61.308 — 150Ø 1/18 L=11.46 PN=8.006 — 61.929 61.929 — 150Ø 1/31 L=41.53 PN=8.005 — 63.281 63.664 — 150Ø 1/60 L=25.97 PN=8.004 — 64.097 64.299 — 150Ø 1/150 L=19.37 PN=8.003 — 64.428 64.766 — 150Ø 1/150 L=35.24 PN=8.002 — 65.021 65.021 — 150Ø 1/150 L=25.41 PN=8.001 — 65.190 |
| SURFACE WATER SEWER INVERT LEVELS (m) | 63.030; 62.858 — 525Ø 1/48 L=10.95 PN=3.006 — 63.086 63.161 — 450Ø 1/59 L=35.07 PN=3.005 — 63.754 63.829 — 375Ø 1/68 L=25.90 PN=3.004 — 64.208 64.208 — 375Ø 1/52 L=21.76 PN=3.003 — 64.625 64.700 — 300Ø 1/61 L=35.09 PN=3.002 — 65.279 65.279 — 300Ø 1/244 L=27.30 PN=3.001 — 65.391 |

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DRAINAGE NOTES:

1. Do not scale.
2. This drawing is to be read in conjunction with and checked against all other drawings, Engineering details, Specification and any structural, Geotechnical or other specialist document provided.
3. Site layout shown for context only, refer to other project drawings for details.
4. All adoptable drainage works to be constructed as detailed in design and construction guidance or as stipulated in the water authorities addendum.
5. All public sewers are to be the subject of a section 104 agreement of the water industry act 1991.
6. Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
7. The contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.
8. All drainage ironworks to comply with bs en124, and be stamped with bsi kitemark. covers to suit loading as below;
   - -carriageways and roads - d400
   - -driveways and verges - c250
   - -footways and pedestrian areas - b125
   - -gardens/landscaping - a15
9. All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN295. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1916. Where agreed with adopting authority pipes up to and including 600mm diameter can be PVC-U to BS EN1404.
10. All drainage shall be installed and tested strictly in accordance with the manufacturers' printed instructions, bs en 752, bs en 1601, local water authority requirements and the building regulations.
11. All bedding shall be class s unless noted otherwise.
12. All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted type 1 granular sub-base material.
13. Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
14. Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
15. The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
16. All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the engineer.
17. All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with document h of the building regulations, together with nhbc standards chapter 5.3 and bs8301.
18. Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
19. Where inverts are less than 0.6m deep inspection chambers (min dia. 190mm) or access fittings (225 x 100mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sized in accordance with table 11 of document h of the building regulations [<0.6m to invert min dn300, >0.6m to invert min dn475].
20. Where required 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway/ demarcation to protect from both proposed and future plantation.
21. Construction details subject to refinement through detailed design/technical approval process.

## PERMITTED PIPE MATERIALS

CLAYWARE (FOR SEWERS 150mm, 225mm & 300mm)

All clayware pipes to be vitrified clay to BS EN 295-1:1991 and of minimum crushing strength of 72kN for diameters of 300mm , 45kN for diameters of 225mm and 28kN for diameters of 150mm.

CONCRETE (FOR SEWERS 375mm AND ABOVE)
All CONCs are to be pipe strength Class 120 to BS 5911-1:2004 unless indicated otherwise on the drawings.

KEY:

- EXISTING GROUND PROFILE
- PROPOSED CENTRELINE PROFILE
- PROPOSED FOUL SEWER
- PROPOSED STORM SEWER
- PROPOSED CONCRETE PROTECTION

| Rev | Date | Description | Drawn | Checked |
|---|---|---|---|---|
| A | 02.25 | FIRST ISSUE | JJS | RF |

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Client
MILLER HOMES

Project
SOUTH WOKINGHAM SDL PHASE 2B R10 RESERVED MATTERS APPLICATION

Title
LONGITUDINAL SECTIONS SHEET 3

Status

| Scale | Date | Drawn | Checked |
|---|---|---|---|
| 1:500 H @ A1<br>1:100 V | FEB' 2025 | JJS | RF |

| Drawing No | Revision |
|---|---|
| A389-R10-RM-153 | A |