

GENERAL NOTES:

1. Do not scale.
2. Refer to all other Project Drawings.
3. All adoptable drainage works to be constructed as detailed in the Code For Adoptions Sector Guidance in relation to the adoption of sewerage assets by sewerage companies in England published by Water UK or as stipulated in Thames Water's local practise document accompanying this guidance'.
4. All public sewers are to be the subject of a Section 104 agreement of the Water Industry Act 1991.
5. Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
6. 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.
7. All drainage ironworks to comply with BS EN124, and be stamped with BSI Kitemark. Covers to suit loading as below;
 - Carriageways and Roads - E600/D400
 - Driveways and Verges - C250
 - Footways and Pedestrian Areas - B125
 - Gardens/Landscaping - A15
8. All sewer pipes, up to, and including 300mm are to be vitrified clay to BS EN295. All sewer pipes 375mm diameter and above to concrete pipes to BS EN1916.
9. 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.
10. All bedding shall be Class S unless noted otherwise.
11. All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
12. 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.
13. Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
14. All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.
14. The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
15. Construction details subject to refinement through detailed design/technical approval process.
16. All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.
17. 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.
18. All existing drainage invert levels to be confirmed prior to commencement of work.

Manhole cover levels are derived from a 3D digital terrain model, final cover levels to suit finished surfaces onsite.

Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

Perforated pipes denoted within schedules as 150Ø 'P'.

P5	08/24	Manholes S20, S21, S35, S37a, S37b, S50, F18 & F20 removed. Manhole details added & updated to suit latest design.	AS	SM
P4	07/24	Manhole details updated following design update	LC	SM
P3	06/24	Amendments following further design team review	SM	LA
P2	05/24	Amended following design team review	LC	SM
P1	04/24	FIRST ISSUE	AS	SM
Rev	Date	Description	Drawn	Checked



3 Tealgate, Charnham Park
Hungerford, Berkshire RG17 0YT
www.alpce.co.uk Tel: 01488 684390

Client

UNIVERSITY OF READING

Project
**THAMES VALLEY
SCIENCE PARK
PRIMARY INFRASTRUCTURE**

Title
**NHM ACCESS ROAD
MANHOLE SCHEDULES
SHEET 2**

Status

Scale	Date	Drawn	Checked
NTS	APRIL 2024	AS	SM
Drawing No	HD065-507		Revision
			P5

	COVER 44.519m DIAMETER 1350mm Type C	I N V E R T E	A 43.39m B 43.289m C 43.289m D 42.44m E		COVER 45.005m DIAMETER 1500mm Unknown	I N V E R T E	A 43.15m B 43.057m C 43.057m D 42.98m E		COVER 44.80m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.65m B 43.35m C 43.35m D 43.20m E		COVER 45.72m DIAMETER 1350mm Type B	I N V E R T E	A 42.970m B 42.43m C 42.43m D 42.43m E
	COVER 44.798m DIAMETER 1350mm Type C	I N V E R T E	A 43.289m B 43.289m C 42.44m D 42.44m E		COVER 45.55m DIAMETER 1500mm Type B	I N V E R T E	A 43.057m B 43.057m C 42.98m D 42.98m E		COVER 44.335m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.35m B 43.35m C 43.20m D 43.20m E		COVER 43.085m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 42.43m B 42.43m C 42.43m D 42.43m E
	COVER 44.778m DIAMETER 1350mm Type C	I N V E R T E	A 42.979m B 43.129m C 42.44m D 42.44m E		COVER 45.526m DIAMETER 1500mm Type B	I N V E R T E	A 42.98m B 42.98m C 42.98m D 42.98m E		COVER 44.30m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.20m B 43.20m C 43.20m D 43.20m E		COVER 45.082m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 44.40m B 44.40m C 44.40m D 44.40m E
	COVER 44.069m DIAMETER 1350mm Type C	I N V E R T E	A 42.44m B 42.440m C 42.44m D 42.44m E		COVER 44.50m DIAMETER 1350mm Type C	I N V E R T E	A 42.970m B 42.970m C 42.970m D 42.970m E		COVER 41.919m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 40.119m B 40.119m C 40.119m D 40.119m E		COVER 44.740m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.05m B 43.05m C 43.05m D 43.05m E
	COVER 44.183m DIAMETER 1350mm Type C	I N V E R T E	A 43.10m B 42.40m C 42.40m D 42.40m E		COVER 44.394m DIAMETER 1500mm Unknown	I N V E R T E	A 42.90m B 42.90m C 42.90m D 42.90m E		COVER 41.969m DIAMETER 1200mm Type B	I N V E R T E	A 40.069m B 40.069m C 40.069m D 40.069m E		COVER 44.604m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.45m B 43.45m C 43.45m D 43.45m E
	COVER 44.246m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 42.825m B 42.91m C 43.58m D 43.58m E		COVER 45.221m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.45m B 43.45m C 43.45m D 43.45m E		COVER 41.50m DIAMETER 1350mm Type D	I N V E R T E	A 40.00m B 40.00m C 40.00m D 40.00m E		COVER 45.025m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.95m B 43.95m C 43.95m D 43.95m E
	COVER 43.80m DIAMETER 1200mm Type C	I N V E R T E	A 42.114m B 42.114m C 42.114m D 42.114m E		COVER 45.221m DIAMETER 1200mm Type B	I N V E R T E	A 43.30m B 43.30m C 43.30m D 43.30m E		COVER 43.600m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 41.88m B 42.07m C 42.07m D 42.07m E		COVER 44.115m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 42.85m B 42.85m C 42.85m D 42.85m E
	COVER 43.50m DIAMETER 1200mm Type C	I N V E R T E	A 41.910m B 41.91m C 41.91m D 41.91m E		COVER 45.20m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.77m B 43.77m C 43.77m D 43.77m E		COVER 43.457m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 41.86m B 42.01m C 41.86m D 41.86m E		COVER 44.065m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 42.58m B 42.58m C 42.58m D 42.58m E
	COVER 42.815m DIAMETER 1200mm Type C	I N V E R T E	A 41.54m B 41.54m C 41.54m D 41.54m E		COVER 44.823m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.48m B 43.48m C 43.48m D 43.48m E		COVER 43.183m DIAMETER 1350mm Type B	I N V E R T E	A 41.463m B 41.613m C 41.463m D 41.463m E		COVER 45.50m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.85m B 43.85m C 43.85m D 43.85m E
	COVER 42.42m DIAMETER 1200mm Type C	I N V E R T E	A 41.352m B 41.352m C 41.352m D 41.352m E		COVER 44.75m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.43m B 43.43m C 43.43m D 43.43m E		COVER 43.364m DIAMETER 1200mm Type B	I N V E R T E	A 41.40m B 41.40m C 41.40m D 41.40m E		COVER 45.50m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.85m B 43.85m C 43.85m D 43.85m E
	COVER 42.093m DIAMETER 1200mm Type C	I N V E R T E	A 41.12m B 41.12m C 41.12m D 41.12m E		COVER 44.746m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.69m B 43.69m C 43.69m D 43.69m E		COVER 42.30m DIAMETER 1350mm Type C	I N V E R T E	A 40.80m B 40.72m C 40.72m D 40.72m E		COVER 45.50m DIAMETER 1200 x 900mm Type D	I N V E R T E	A 43.85m B 43.85m C 43.85m D 43.85m E

	COVER 45.859m DIAMETER 1200mm Type A	I N V E R T E	A 42.167m B 42.167m C 42.167m D 42.167m E		COVER 42.443m DIAMETER 1500mm Type A	I N V E R T E	A 37.931m B 37.931m C 37.931m D 37.931m E		COVER 41.845m DIAMETER 1500mm Type A	I N V E R T E	A 37.720m B 37.720m C 37.720m D 37.720m E		COVER 40.606m DIAMETER 1500mm Type A	I N V E R T E	A 37.033m B 37.033m C 37.408m D 37.408m E
	COVER 45.623m DIAMETER 1200mm Type A	I N V E R T E	A 42.117m B 42.117m C 42.117m D 42.117m E		COVER 44.159m DIAMETER 1200mm Type A	I N V E R T E	A 40.099m B 40.099m C 40.099m D 40.099m E		COVER 41.590m DIAMETER 1500mm Type A	I N V E R T E	A 37.669m B 37.669m C 37.669m D 37.669m E		COVER 40.585m DIAMETER 1500mm Type A	I N V E R T E	A 36.962m B 36.962m C 36.962m D 36.962m E
	COVER 45.315m DIAMETER 1200mm Type A	I N V E R T E	A 41.865m B 41.865m C 41.865m D 41.865m E		COVER 41.423m DIAMETER 1350mm Type C	I N V E R T E	A 40.24m B 40.24m C 40.24m D 40.24m E		COVER 41.361m DIAMETER 1500mm Type A	I N V E R T E	A 37.617m B 37.617m C 37.992m D 37.992m E		COVER 40.844m DIAMETER 1500mm Type A	I N V E R T E	A 36.869m B 36.869m C 36.869m D 36.869m E
	COVER 44.789m DIAMETER 1200mm Type A	I N V E R T E	A 40.884m B 40.884m C 40.959m D 40.959m E		COVER 42.275m DIAMETER 1350mm Type B	I N V E R T E	A 38.90m B 39.139m C 38.90m D 38.90m E		COVER 41.158m DIAMETER 1500mm Type A	I N V E R T E	A 37.559m B 37.559m C 37.559m D 37.559m E		COVER 40.975m DIAMETER 1500mm Type A	I N V E R T E	A 36.771m B 36.771m C 36.771m D 36.771m E
	COVER 44.260m DIAMETER 1200mm Type A	I N V E R T E	A 39.905m B 39.905m C 39.980m D 39.980m E		COVER 42.552m DIAMETER 1350mm Type A	I N V E R T E	A 38.774m B 38.774m C 38.774m D 38.774m E		COVER 41.065m DIAMETER 1500mm Type A	I N V E R T E	A 37.503m B 37.503m C 37.503m D 37.503m E		COVER 40.979m DIAMETER 1500mm Type A	I N V E R T E	A 36.734m B 36.734m C 36.734m D 36.734m E
	COVER 44.501m DIAMETER 1200mm Type A	I N V E R T E	A 39.255m B 39.255m C 39.330m D 39.330m E		COVER 42.903m DIAMETER 1350mm Type A	I N V E R T E	A 38.604m B 38.604m C 38.604m D 38.604m E		COVER 40.996m DIAMETER 1500mm Type A	I N V E R T E	A 37.451m B 37.451m C 37.826m D 37.826m E		COVER 41.316m DIAMETER 1500mm Type A	I N V E R T E	A 36.680m B 36.680m C 36.680m D 36.680m E
	COVER 44.341m DIAMETER 1500mm Type A	I N V E R T E	A 38.30m B 38.60m C 38.447m D 38.60m E		COVER 43.542m DIAMETER 1350mm Type A	I N V E R T E	A 38.536m B 38.536m C 38.536m D 38.536m E		COVER 41.482m DIAMETER 1500mm Type A	I N V E R T E	A 37.388m B 37.388m C 37.388m D 37.388m E		COVER 41.154m DIAMETER 1500mm Type A	I N V E R T E	A 36.646m B 36.646m C 36.646m D 36.646m E
	COVER 43.813m DIAMETER 1500mm Type A	I N V E R T E	A 38.247m B 38.247m C 38.247m D 38.247m E		COVER 44.394m DIAMETER 1200mm Type A	I N V E R T E	A 38.975m B 38.975m C 38.975m D 38.975m E		COVER 40.738m DIAMETER 1500mm Type B Special	I N V E R T E	A 37.322m B 37.322m C 37.697m D 37.697m E		COVER 41.063m DIAMETER 1500mm Type A	I N V E R T E	A 36.625m B 36.625m C 36.625m D 36.625m E
	COVER 42.971m DIAMETER 1500mm Type A	I N V E R T E	A 38.107m B 38.107m C 38.107m D 38.107m E		COVER 41.952m DIAMETER 1200mm Type B	I N V E R T E	A 39.517m B 39.517m C 39.517m D 39.517m E		COVER 40.569m DIAMETER 1500mm Type B Special	I N V E R T E	A 37.242m B 37.242m C 37.617m D 37.617m E		COVER 41.063m DIAMETER 1500mm Type A	I N V E R T E	A 36.625m B 36.625m C 36.625m D 36.625m E
	COVER 42.979m DIAMETER 1200mm Type A	I N V E R T E	A 38.260m B 38.260m C 38.260m D 38.260m E		COVER 42.377m DIAMETER 1500mm Type A	I N V E R T E	A 37.833m B 37.833m C 38.208m D 38.208m E		COVER 40.561m DIAMETER 1500mm Type B Special	I N V E R T E	A 37.178m B 37.178m C 37.178m D 37.178m E		COVER 41.063m DIAMETER 1500mm Type A	I N V E R T E	A 36.625m B 36.625m C 36.625m D 36.625m E
	COVER 42.675m DIAMETER 1500mm Type A	I N V E R T E	A 38.004m B 38.004m C 38.004m D 38.004m E		COVER 42.192m DIAMETER 1500mm Type A	I N V E R T E	A 37.781m B 37.781m C 37.781m D 37.781m E		COVER 40.582m DIAMETER 1500mm Type B Special	I N V E R T E	A 37.118m B 37.118m C 37.118m D 37.118m E		COVER 41.063m DIAMETER 1500mm Type A	I N V E R T E	A 36.625m B 36.625m C 36.625m D 36.625m E