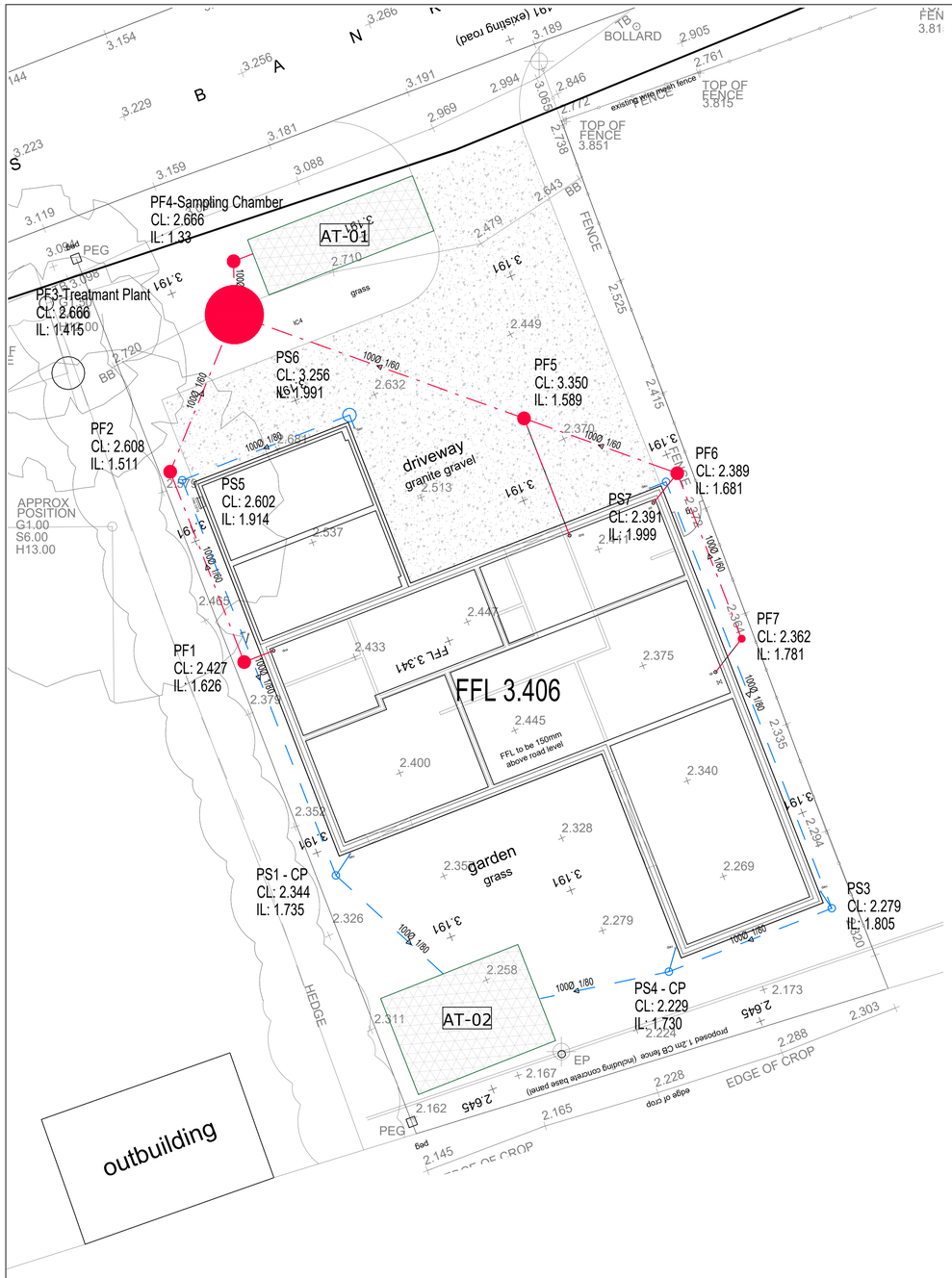
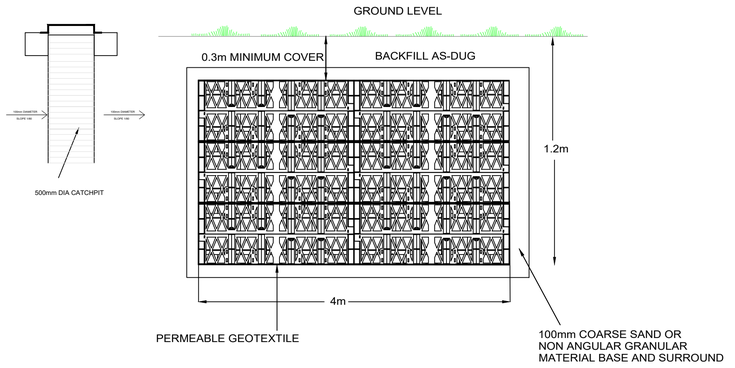
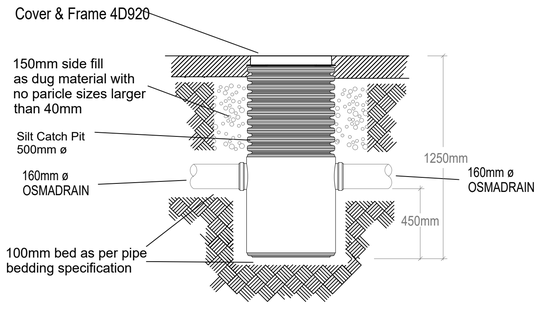


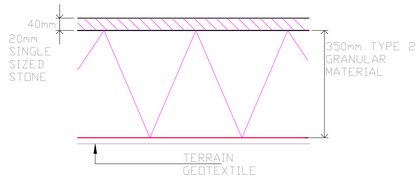
WAVIN AQUACELL
StormWater Management System



Typical Detail for Catch Pit
Non Trafficked areas



Scale 1:100



DETAIL - GRANITE DRIVEWAY

Scale 1:10

SOAKAWAY	AT-01
Lowest Cover Level (m)	2.66
Level top of Cells (m)	1.48
Base level of Cells (m)	1.08
Pipe invert (m)	1.33
Contributing area (m2)	--
Dimension on Plan (m)	6.0 x 2.0 x 0.4(d)
Cell Thickness (m)	0.4
Void Space (%)	95
Maximum Storage Volume (m3)	4.56

SOAKAWAY	AT-02
Lowest Cover Level (m)	2.30
Level top of Cells (m)	2.00
Base level of Cells (m)	0.80
Pipe invert (m)	1.65
Contributing area (m2)	180
Dimension on Plan (m)	5.0 x 3.5 x 1.2(d)
Cell Thickness (m)	1.2
Void Space (%)	95
Maximum Storage Volume (m3)	19.95

PHASE: 0 (PRIVATE)

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
PS1-CP	250	250 Inspection	2.344	1.735	0.509	533778.257	319939.259
PS2	250	250 Inspection	2.300	1.650	0.550	533783.248	319934.679
PS3	250	250 Inspection	2.279	1.805	0.375	533795.071	319938.144
PS4-CP	250	250 Inspection	2.229	1.730	0.399	533789.549	319935.997
PS5	250	250 Inspection	2.602	1.914	0.588	533773.044	319952.664
PS6	450	450 Inspection	3.256	1.991	1.166	533778.717	319954.873
PS7	250	250 Inspection	2.391	1.999	0.293	533789.449	319952.607
PF1	450	450 Inspection	2.427	1.626	0.701	533775.143	319946.497
PF2	450	450 Inspection	2.608	1.511	0.997	533772.634	319952.952
PF5	450	450 Inspection	3.350	1.589	1.662	533784.633	319954.762
PF6	450	450 Inspection	2.389	1.681	0.608	533789.830	319952.900

North Arrow

N W E S

NOTES

1. The contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
2. Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works.
3. All private drainage works to be in accordance with the requirements of Building Regulations 2010, Part H, "Drainage and waste disposal", (01st October 2015).
4. All pipes to be bedded and backfilled in accordance with Part H, Diagram 10. Shallow pipes shall be protected in accordance with Part H, Diagram 11.
5. Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues and these should be regarded as minimums. Unless there are constraints dictating otherwise, gradients shall generally be 1 in 60. 100mm diameter pipes shall not be laid flatter than 1 in 80, 150mm diameter pipes shall not be laid flatter than 1 in 150.
6. All pipes, chambers and fittings to be installed strictly in accordance with the manufacturers instructions.
7. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25 and Diagram 8.
8. All private manholes, inspection chambers and drainage channels to comply with BS EN124. Cover strengths to be:
   Class D400 in heavy trafficked areas (access roads, service yards etc.)
   Class C250 in lightly trafficked areas (car parks, driveways etc)
   Class B125 in Non trafficked areas
   Class A15 in landscaping areas
9. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.
10. Private drainage frames must be tied to manhole risers by use of manufacturers ties (e.g. Polypipe ref. FRK500 fixing kit and FRKSS1 black ties.) The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
11. All existing land drains encountered on site during construction to be re-connected.
12. Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.
13. Garage slabs relate to the finished level of the concrete at the front entrance of the garage.
14. Where a drive slopes towards a garage there is to be a 75mm ramp up to the garage slab.
15. Maximum gradients of gardens to be 1 in 6 (unless stated otherwise), except for designed banking works.
16. All dimensions in metres unless otherwise stated.
17. As underlying ground conditions may be variable across the site the Contractor shall undertake onsite porosity tests at the location and depth of each soakaway. Tests should be undertaken in accordance with BRE365 and results forwarded to the Engineers to allow verification of designs.
18. All existing services, sewers and drains indicated on this drawing and any other related drawings are shown only indicatively, and shall have their positions and level confirmed on site by the Contractor.
19. The invert levels of all existing sewers, drains, ditches, tanks or other features and apparatus where a new connection is to be made shall have their precise position and level confirmed on site by the Contractor prior to commencement of any construction work. The results of the investigations shall be confirmed to MTC Engineering (Cambridge) Ltd so that the design can be verified.

Private Drainage Key

- Foul Inspection Chamber (Depth <0.6m [1 side connection])
- Foul Inspection Chamber (Depth <1.2m [2 side connections])
- Storm Inspection Chamber (Depth <0.6m [1 side connection])
- Storm Inspection Chamber (Depth <1.2m [2 side connections])

Sewerage Treatment Plant

Kingspan Klargester BioDisc Domestic Sewerage Treatmant Plant Type BA with 1250mm Inlet

Surface Water Attenuation

WAVIN-Aquacell Cellular Storage Storm Water Management System
Cellular storage tanks suitable for vehicular loading (where applicable) with 95% voids wrapped in an permeable geo-membrane.

Permeable Driveway

FOR APPROVAL

REV	DATE	DESCRIPTION/REASON FOR ISSUE	APPR
A	18.04.24	increased size of rear soakaway	JF

MTC ENGINEERING
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PROJECT
Land on Ravens Bank, Whaplode St Catherines, Spalding

TITLE
Detailed Design

ORIG	DATE
JTC	16.02.24
CHKD	SCALE 1:100 @ A1
APPR	DRAWING NO 3234 - 02 REV -A