PROPOSED 1.2m DEEP x 759m² CELLULAR ATTENUATION SYSTEM TO ACHIEVE A VOLUME OF 866m³ AT 95% POROSITY TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE. CELLULAR ATTENUATION SYSTEM TO BE FULLY ENCAPSULATED WITH A 1mm THICK IMPERMEABLE MEMBRANE. ALL JOINTS TO BE FULLY WELDED. ALLOW FOR PROVIDING VENT PIPES TO BE LOCATED IN SOFT (EXACT NUMBER AND LOCATION TO BE AGREED). ACCESS POINTS AND INSTALLATION TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
CL 30.186
IL 29.272 (Top of Unit)
IL 28.072 (Base of Unit)

PROPOSED 2.0m DEEP x 1140m² CELLULAR ATTENUATION SYSTEM TO ACHIEVE A VOLUME OF 2167m³ AT 95% POROSITY TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE. CELLULAR ATTENUATION SYSTEM TO BE FULLY ENCAPSULATED WITH A 1mm THICK IMPERMEABLE MEMBRANE. ALL JOINTS TO BE FULLY WELDED. ALLOW FOR PROVIDING VENT PIPES TO BE LOCATED IN SOFT (EXACT NUMBER AND LOCATION TO BE AGREED). ACCESS POINTS AND INSTALLATION TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
CL 30.526
IL 29.600 (Top of Unit)
IL 27.600 (Base of Unit)

600Ø @ 1:200 (1.006 L=49.660m)

SMH07
CL 30.579
IL 28.508
1800Ø PCC

SMH08
CL 30.421
IL 28.072
2100Ø PPIC

FFL: 30.940m

SMH14
CL 30.256
IL 27.887
2100Ø PPIC

FMH08
CL 30.945
IL 28.474
600Ø PPIC

600Ø @ 1:250 (7.003 L=48.918m)

1500 @ 1:150

RWP

SU

750Ø @ 1:76 (7.007 L=33.293m)

EX. FMH1
CL 29.48
IL 27.27

RG

600Ø @ 1:0 (6.000 L=7.485m)

750Ø @ 1:391(1.008 L=72.294m)

600Ø @ 1:371 (6.001 L=12.991m)

7500 @ 1:49 (7.004 L=35.090m)

1500 @ 1:150

SMH13
CL 30.692
IL 28.607
2100Ø PCC

PROPOSED 'SPEL' PURACEPTOR ESR P600/1C/ESR 600 SERIES.
CL 30.490
IL 27.887

FW (B2)

EX. FMH2
CL 29.62
IL 27.11

750Ø @ 1:440(1.011 L=8.032m)

750Ø @ 1:212(1.010 L=7.420m)

SMH15
CL 30.943
IL 27.635
2100Ø PPIC

SMH16
PROPOSED FLOW CONTROL MANHOLE TO DISCHARGE AT A RATE OF 1.3l/s
MD-SHE-0044-1300-2250-1300
CL 30.333
IL 27.582
1800Ø PCC

EX. FMH3
CL 29.63
IL 27.09

225Ø @ 1:156(1.012 L=9.840m)

1500 @ 1:150

FMH10
CL 30.860
IL 28.052
600Ø PPIC

PROPSED SW DISCHARGE INTO EXISTING WATERCOURSE VIA HEADWALL. SUBJECT TO AGREEMENT WITH WCBC.

EX. FMH4
CL 29.20
IL 26.74

DISCHARGE OF FOUL FLOWS AND CONNECTION IN ABEYANCE, SUBJECT TO RESOLUTION FROM MODELING STUDY ASSOCIATED WITH UTOPIA DEVELOPMENT.

PROPOSED FOUL CONNECTION
CL 29.20
IL 26.74 (EX. 225Ø)
IL 26.815 (PROPOSED 150Ø)

FMH10
CL 28.900
IL 27.841
600Ø PPIC

Legend

- PROPOSED SURFACE WATER DRAINAGE (TYPICALLY 100Ø FROM RWP AND 150Ø FROM GULLY UNO.)
- PROPOSED SURFACE WATER PRECAST CONCRETE CHAMBER.
- RWP — PROPOSED RAINWATER DOWNSPOUT (ASSUMED).
- PROPOSED FOUL DRAINAGE (TYPICALLY 100Ø UNO.)
- PROPOSED FOUL PRECAST CONCRETE CHAMBER.
- PROPOSED FOUL POLYPROPYLENE INSPECTION CHAMBER.
- FO — PROPOSED FOUL OUTLET (ASSUMED).
- PROPOSED CELLULAR ATTENUATION STORAGE SYSTEM.
- PROPOSED TANKED PERMEABLE PARKING BAY.
- SU — PROPOSED DRAINAGE CHANNEL (AND SUMP OUTLET WITH A RODDABLE AIR TRAP.
- EXISTING FOUL SEWER
- 4m EASEMENT IN ACCORDANCE WITH DWCC CONSULTATION RESPONSE

Notes

1. THE WORKS SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING SPECIFICATION.
2. THE LOCATION LINE & LEVEL OF ALL KNOWN EXISTING DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE AND LEVEL, BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE INSTALLATIONS.
4. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THROUGHOUT THE DURATION OF THE CONTRACT A FULL TRAFFIC MANAGEMENT SYSTEM TO ENSURE SAFE PASSAGE OF VEHICLES/PEDESTRIANS IN THE VICINITY OF THE WORKS. ALL TRAFFIC SIGNS, SIGNALS, BARRIERS ETC. SHALL BE IN ACCORDANCE WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL.
5. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR DEALING WITH AND DISPOSING OF GROUND/SURFACE WATER ENCOUNTERED DURING EXCAVATIONS
6. ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED FOLLOWING THE INSTALLATION OF ALL DRAINAGE WORKS. ALL SURFACE MARKINGS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED.
7. ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED IN A DESIGNATED AREA ON SITE.
8. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL PROVIDE AS BUILT SETTING OUT CO-ORDINATE AND LEVEL INFORMATION.
9. PIPEWORK WITH LESS THAN 750mm OF COVER IN TRAFFICKED AREAS TO BE CONCRETE ENCASED. (BEDDING CLASS Z)
10. PIPEWORK WITH MORE THAN 750mm OF COVER TO HAVE CLASS S GRANULAR BED AND SURROUND.
11. POLYPROPYLENE INSPECTION CHAMBERS OF 500Ø > 1.2m DEEP TO BE FITTED WITH A REDUCED ACCESS FITTING.
12. ALL SOIL AND VENT PIPES TO HAVE A LOW LEVEL ACCESS PLATES.
13. FOR 3 TO 4 STORY BUILDINGS - FOUL REST BEND TO BE A MINIMUM OF -450mm DEEP.
14. FOR 5 STORY BUILDINGS AND ABOVE - FOUL REST BEND TO BE A MINIMUM OF -750mm DEEP.
15. FOR 6 STOREY BUILDINGS AND ABOVE - GROUND FLOOR APPLIANCES TO DISCHARGE TO THEIR OWN STACKS.
16. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S, ENGINEER'S AND SPECIALIST'S DRAWINGS TOGETHER WITH THE APPROPRIATE SPECIFICATION.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK ALL DIMENSIONS ON SITE. DIMENSIONS MUST NOT BE SCALED FROM THIS DRAWING. ANY DISCREPANCIES TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT IN WRITING.
18. THIS DRAWING IS THE COPYRIGHT OF TIER CONSULT LTD AND CANNOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN CONSENT FROM THE COMPANY.
19. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S, ENGINEER'S AND SPECIALIST'S DRAWINGS TOGETHER WITH THE APPROPRIATE SPECIFICATION.
20. ALL DIMENSIONS ARE IN METRES UNO, FOR THE PURPOSES OF CONSTRUCTION THIS DRAWING MUST NOT BE SCALED AND ONLY WRITTEN DIMENSIONS USED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION AND ANY DISCREPANCIES TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER IN WRITING.
21. ALL LEVELS ARE IN METRES UNO & TO OS DATUM.

Rev	Date	By	Description	Appd
P4	04-08-2026	ESG	Updated to suit updated site plan & levels	WNL
P3	06-05-2025	ESG	Ex. foul sewer added. Proposed foul updated to suit.	WNL
P2	15-11-2024	ESG	Updated to Suit Levels	WNL
P1	04-11-2024	ESG	Preliminary Issue	WNL

Revisions

Status

PRELIMINARY

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Client

MAUNA KEA LTD

Project

LAND SOUTH BRYN LANE, WREXHAM

Title

FOUL AND SURFACE WATER DRAINAGE LAYOUT - SHEET 2

Scale	Drawn	Revision
1:250@A1	ESG	P4
Date	Checked	
Nov'24	WL	

Drawing Ref : Project|Originator|Volume|Level|Type|Role|Number

2721-TCG-XX-XX-DR-C-5502