Appendix I

Planning Application No. A/SK-HC/354

Response to Departmental Comments as at 8.8.2025 in respect of the Application for a Temporary Private Garden on Lot 429 S. B (Part) in DD 244 and the adjoining Government land (House No. 450 Ho Chung New Village, Sai Kung, N.T.) on Review

Comments from Chief Engineer/Construction, Water Supplies Department

Thank you for WSD's comment that 'no control/mitigation measures to eliminate the risk of contaminated surface run-off entering the WGG through the proposed garden were provided.'

2. Please take note that we do proposed control/mitigation measures to eliminate possible contaminated surface run-off in the past submissions. Let us illustrate again below.

A bed of cultivated field will be designed for use. Loose sand and mud for growing will be placed on top the closely knitted iron wire mesh to support the sand and mud above.

Below the iron wire mesh net, a concrete tank will be constructed to hold any dripping material that runs down above. Any material that goes down will be channelled to the sand trap and eventually to the septic tank designed for use for treating any waste water collected from growing Amaranth and Purslane.

The Revised Risk Assessment Report (prepared by Mr. PAU Wah Lung, an architect and authorized person) and in particular Paragraph IX of the Appendix II together with the Attachments as attached to our submission to TPB and the Planning D on 01/03/2025 are submitted again for your reference.

3. Besides the installments mentioned at Paragraph 2, we have consulted agronomist and searched relevant literature on the key control and mitigation measures to prevent contaminated surface runoff from entering the water gathering ground through the proposed garden. The steps we intend to implement as well are described below by power point:

a). Source Reduction (Most Effective):
* Minimize Impervious Surfaces: Use permeable paving (gravel, permeable pavers), stepping stones, or mulch paths instead of concrete/asphalt. Maximize planted areas.
* Chemical-Free Gardening:
  * No Fertilizers or Compost tea will be used.
  * Pesticides/Herbicides: Implement strict Integrated Pest Management (IPM). Use only approved organic/non-chemical controls as a last resort and never before forecast rain.

* Plant Selection: Amaranth and Purslane are chosen as the two are well-adapted plants requiring minimal water. Avoid invasive species. Use dense groundcovers to protect soil.
* Waste Management: Securely store cultivation materials away from runoff paths and drains. Never dispose of garden waste (clippings, soil) near watercourses.

b). Pathway Interruption & Runoff Management:
* Strategic Grading & Earthworks:
  * Contour Planting/Grading: Shape the garden to follow contours, slowing runoff and promoting infiltration.
  * Berms & Swales: Construct gentle berms and vegetated swales across slopes to intercept, slow, spread, and infiltrate runoff before it leaves the site.
  *Buffer Zones:
  * Establish a mandatory, undisturbed vegetated buffer strip between the garden and the water gathering ground boundary. Plant with dense, deep-rooted native grasses, shrubs, and trees to filter sediments, nutrients, and pollutants physically and biologically.
* Diversion Structures: Install ditches, channels, or pipes up-slope of the garden to divert clean runoff from adjacent areas around the garden, reducing the total volume entering it.

c). Containment & Treatment On-Site:
* Rain Gardens/Bioswales: Construct these landscaped depressions in strategic low points or along runoff pathways within the garden. They collect runoff, allow it to pond, infiltrate, and be filtered by plants and soil. Size them for the catchment area.
* Infiltration Trenches/Basins: Use gravel-filled trenches or shallow basins (where soil permeability allows) to capture and infiltrate runoff volume.
* Sediment Control: During construction/establishment, use silt fences, fiber rolls, and sediment traps to prevent soil erosion. Stabilize bare soil immediately with mulch or temporary cover.

d). Operational & Maintenance Controls:
* Strict Chemical Management Plan: Document and enforce the zero chemical use policy. Train all gardening staff.
* Irrigation Management: Use drip irrigation or soaker hoses to minimize excess water and runoff. Avoid over-watering; use soil moisture sensors. Schedule irrigation to avoid generating runoff.
* Regular Maintenance:
  * Inspect and clean runoff management structures (swales, rain gardens, drains) regularly.
  * Maintain the health and density of filter strips.
  * Promptly fix erosion points.
  * Keep gutters and drains clear of debris.
* Spill Response Plan: Have kits and procedures ready to immediately contain and clean up any accidental spills (e.g., fuel and oils).
* Monitoring: Periodically test runoff quality (especially after heavy rain) and soil nutrients to verify effectiveness.

e). Design & Planning Integration:

* Detailed Drainage Plan: Integrate all runoff controls into the garden's master plan from the outset. Calculate runoff volumes for design storms.
* Phasing: Minimize the area of disturbed soil at any one time during construction.
* Local Expertise: Consult hydrologists, soil scientists, or environmental engineers familiar with the nearby water gathering ground regulations and local conditions.
* Regulatory Compliance: Ensure all designs and practices exceed the minimum requirements of the WSD managing the water gathering ground.

f). Key Principles to Remember:

* Multi-Barrier Approach: Use several layers of protection (source reduction + pathway interruption + treatment).
* Manage Water at the Source: Infiltrate or evaporate as much rainwater as possible where it falls.
* Slow It Down, Spread It Out, Soak It In: This is the mantra for reducing runoff volume, velocity, and pollutant transport.
* Protect the Buffer: The vegetated buffer zone is our last and most critical line of defense. Its integrity is paramount.
* Proactive Maintenance: All structures degrade without regular upkeep. Budget and plan for it.

4. By adopting proposed installments described at Paragraph 2, and the measures to be followed as outlined at Paragraph 3 and focusing heavily on source reduction and natural infiltration/treatment, we are confident that the risk of contaminated runoff reaching the sensitive water gathering ground can be effectively eliminated or reduced to an extremely low level.

…….End…….

Appendix II

A Risk Assessment Report on water quality likely to be affected by proposed private garden at Lot No. 429 S. B (Part) in DD244 and adjoining Government land (House No. 450 Ho Chung New Village, Sai Kung, N.T.) (Revised version)

I. Introduction

This Risk Assessment Report is updated and revised according to the comments made by Mr. Terry LAW of the Construction Division, Water Supplies Department (WSD) on Review Application No. A/SK-HC/354 as at 13.2.2025.

As the proposed temporary garden falls within Water Gathering Ground (WGG), Mr. LAW commented that:

"There are risks of contamination to the WGG due to the formation, operation and management of the garden".

As such he advised that a Risk Assessment Report is required to provide the particulars of the proposed organic farming for review, and to prove and demonstrate that there is no material increase in pollution effect within WGG resulting from the proposed development.

II. Site visit conducted on 19 July 2024

Site was visited in the afternoon of 19 July 2024. After arriving and dropping off at House No. 450 Ho Chung New Village, I walked towards the stream course in the north and a few photographs were taken. The location plan showing the proposed boundary of the private garden is at Attachment 1, photographs taken of the surrounding at Attachment 2, and plan showing alignment of the U-Channel for rain/storm water outside House No. 450 Ho Chung New Village is at Attachment 3.

III. Revised proposal of a simple private garden with the cultivation plot of organic vegetables

I have further discussed with Applicant Ms. LAM Yeuk Yin regarding her latest proposal of growing organic vegetables in the proposed garden area. Ms LAM remarked that in view of departmental comments, and the fact that there is no public sewer at the present location and in the vicinity, she now desires to grow organic vegetables inside the proposed private garden. The green house would be taken away, part of the lawn immediately in front of the house would be paved and the remainder of the area would be used to grow organic vegetables. The Revised Plan showing Proposed Private Garden is at Attachment 4.

I have read carefully the Report on growing Organic Vegetables compiled by Mr. YEUNG Siu Fung and in collaboration with Ms. LAM which is attached at Attachment 5 for reference. By following the advice of those in the trade of growing organic vegetables, she does not think that there would be any creation of wastewater from the revised proposal.

Other than my recommendations to address the WSD concerns at Paragraph VIII, my other comments on tackling the likely issue of contamination are at Paragraph IX.

IV. History of Lot 2194 & Lot 429 S. B in DD244

The Applicant is the owner of Lots Nos. 2194 and 429 S.B in DD244. Lot 2194 is a 3-storey small house lot (New Grant No. 20956 issued on 28/07/2010), and Lot 429 S. B is an old scheduled Block Government Lease agricultural lot.

The applicant bought the two lots on 16/01/2015 as the small house Lot was completed with Certificate of Compliance duly issued on 02/01/2013 after satisfactory construction of the small house, the septic tank and surface drains in and around Lot 2194 as required by the grant conditions.

I have checked the details of the small house conditions of Lot No. 2194 in DD244 which are common to all small house grants in the New Territories. I am not going to attach the said grant conditions here as it has a total of 22 pages. I shall just mention Special Condition Nos. 17 & 23 at Paragraphs V and VI below.

Nevertheless a copy of the Certificate of Compliance is at Attachment 6 for reference.

V. Storm or rain water from Lot No. 2194

According to Special Condition No. 17 (listed at Page 16 of New Grant No. 20956):

> "All storm or rain water from the lot shall be conveyed into the nearest stream course, catchpit, channel or storm - water drain as required and in a manner to be approved by the District Lands Officer"
>
> In other words, the Applicant's current practice in discharging storm or rain water according to the aforesaid grant condition is acceptable to the District Lands Officer.

VI. Drainage of Lot No. 2194

According to Special Condition No. 23 (listed at Page 17 of New Grant No. 20956):

> "The drainage of any building erected on the lot shall be effected as may be required by the District Lands Officer, and the Grantee shall make all

arrangements at his own expense and to the satisfaction of the District Lands Officer for the treatment and disposal of sewage, sullage and foul, contaminated or waste water by the construction of suitable works either within the lot or on Government land or otherwise and on such terms as the District Lands Officer shall require, and the Grantee shall be solely liable for any damage or nuisance caused thereby."

As a result septic tank was constructed to the satisfaction of the District Lands Officer and Letter of Compliance was issued on 02/01/2013 as at Attachment 6.

VII. My Views of the septic tank, the small house and the proposed private garden

I have no information as to the reasons leading to the small house grant in this area of current Agriculture zoning and WGG in the year 2010.
Moreover, there were other three small house grants, namely Lot 2196, BL 2527 & BL 2478 to the south-west of Lot 2194, and eleven small houses piled up immediately on the right hand side of Lot 2194 across the track. Plan showing the houses is at Attachment 7.

There was no public sewer then in the vicinity to serve the to-be-built small houses. The Departments in considering issuing small house grants at the time must have thought that the septic tanks (be it individual or communal) would not pose any threat to the WGG and the nearby stream course to the north of the small houses.

In my view, the contamination to the WGG and the stream course to the north as a result of the development of a proposed private garden would have far less pollution effect than the wastewater created by inhabitants of the existing small house or actual farming in the area if a sceptic tank system is built below the proposed private garden.

If septic tank for a small house can prevent contamination of the WGG and the stream course, I am of the view that a septic tank to hold foul water generates from the simple cultivation plot of organic vegetables (hereafter refers as 'the cultivation plot') can prevent contamination to the surrounding and the stream course in the north as well.

VIII. Concerns of WSD

Let me describe below the concerns of WSD and my recommended proposed measures:

A. No discharge of effluent or foul water into adjoining land, storm water drain, channel, stream or river course is allowed. Such foul water or effluent shall be collected and disposed of outside WGG.

Proposed measures – A septic tank of similar size as to a septic tank required by a small house would be constructed under Lot 429 S. B in D.D.244. As a result, any foul water or effluent generates from 'the cultivation plot' would be collected into the said septic tank just like those foul water or effluent generates from the small house on Lot 2194. It is my view that the foul water or effluent generates from 'the cultivation plot' would be far less than that from one small house, and the proposed septic tank could solve the issue of possible contamination.

Moreover an additional sand trap will also be constructed as described at Paragraph IX to filter the foul water and any effluent before entering the septic tank. The plan showing the location of the proposed sand trap and the septic tank is at Attachment 8 for reference.

B. All solid waste and sludge arising from the development shall be disposed of properly outside WGG.

Proposed measures – the sand trap and the septic tank system as described under A above should serve the propose of preventing pollution in the area. I am of the view that the revised proposal of a garden with 'the cultivation plot' would only generate negligible amount of solid waste and sludge, if not none at all. Such a small amount of solid waste and sludge together with wastewater would be first filtered by the sand trap before going to the septic tank. The used sand would be replaced every 6 months and disposed of properly outside WGG according to the rules imposed by the Environmental Protection Department (EPD) as stipulated by their Water Control Pollution Ordinance.
More details of the sand trap and septic tank system are also described at Paragraph IX.

C. The use and storage of pesticide, herbicides, toxicants, chemical solvents, lavicidal oil, rodenticide, tar and petroleum oil are strictly prohibited in WGG.

   Proposed measures – Applicant promises not to use and the storage of such materials inside the private garden and the small house Lot 2194.

D. No chemicals including fertilizers and detergents shall be used/stored without the prior approval from the Water Authority.

Proposed measures – Applicant promises to abide by D; demolish the green house and grow only organic vegetables.

E. Oil leakage and spillage are not allowed within WGG at all time.

Proposed measures – Applicant promises to abide by E.

F. The garden and its associated horticultural activities shall be located away from any water courses as far as possible. All garden structures shall be water tight and properly maintained. Signage for alerting not to pollute WGG should be displayed.

Proposed measures – Applicant promises to abide by F and put up the signage as described.

G. During the formation of the garden, no earth and other construction materials which may cause contamination to WGG are allowed to be stockpiled or stored on site. Furthermore, all excavated or filled surfaces shall be protected from erosion and siltation to any water courses shall be prevented within WGG. All construction spoils shall be contained and protected; and effluent containing spoils shall be disposed of after desiltation.

Proposed measures – Applicant promises to adhere to all situations as described at G.

IX. An on-site sewage disposal septic system

In order to tackle the issue of contamination effectively, the Applicant is agreeable to set up an on-site sewage disposal septic system for any wastewater likely to be generated from the 'the cultivation plot'.

The on-site sewage disposal septic system for the private garden will consist of two parts. The first part is a sand trap and the second part is the septic tank for the settlement and treatment of the wastewater and slurries in the same place just in case any wastewater and slurries, which are very unlikely, are being generated.

The first treatment removes materials that will settle with gravity or float. The method is to sprinkle or trickle the water over the bed of sand. As the water filters downward, it is put into contact with oxygen and microorganisms, which work together to break down the organic matter in the water before the decomposed wastewater goes down to the septic tank built below Lot 429 S. B in DD244. In practice the bed of sand will be

replaced every six months with clean and fresh sand whereas the used ones will be disposed of properly outside WGG according to rules required by the EPD.

A drainage engineer will be asked to design the drainage facilities (the sand trap plus the septic tank and the surface running water channels) surrounding the proposed garden area should this proposal is acceptable to WSD.

X. Conclusion

It is my view that the revised proposal of 'the cultivation plot' within the private garden and with the setting up of the sand trap plus the septic tank immediately beneath part of the land at Lot 429 S. B in DD244 will not cause any contamination to the WGG, and will not pose any threat to water quality in and around the area.

Basing on the preceding paragraphs, I am confident to say that there would be "no material increase in pollution effect resulting from the proposed development" of a revised private garden with a cultivation plot of organic vegetables.

PAU Wah Lung
Registered Architect, Fellow Member of HKIA &
Authorised Person – Architect

Date: 1st March 2025

Attachments

Attachment 1: Location Plan

Attachment 2: Photographs of House No. 450 and the surrounding (a) to (g)

Attachment 3: Plan showing alignment of the U-Channel for rain/storm water

Attachment 4: Revised Plan showing Proposed Private Garden

Attachment 5: Report on growing Organic Vegetables

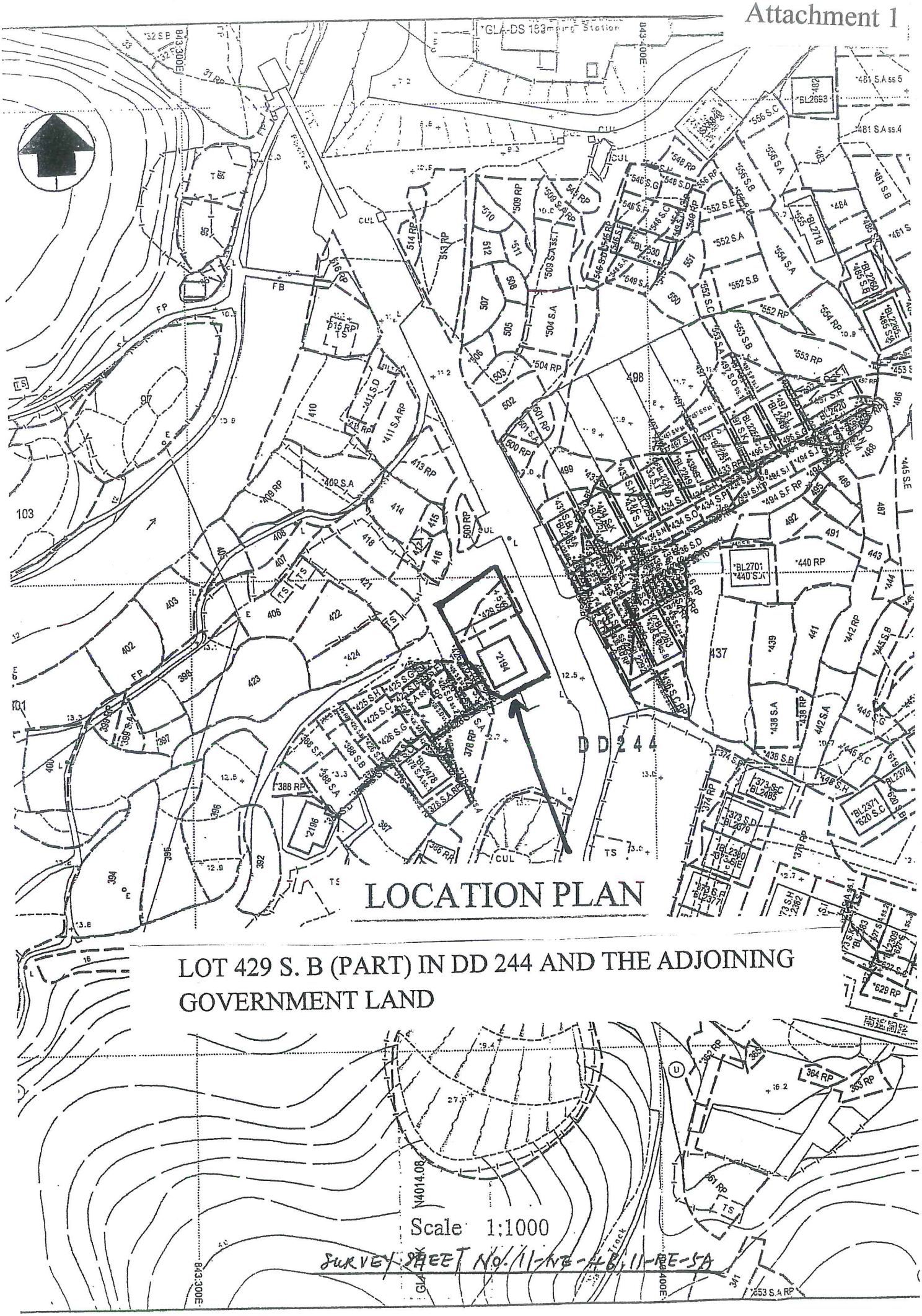
Attachment 6: Copy of the Certificate of Compliance

Attachment 7: Plan showing the houses in the vicinity

Attachment 8: Plan showing proposed sand trap and the septic tank

---End of Report---

Attachment 1



LOT 429 S. B (PART) IN DD 244 AND THE ADJOINING GOVERNMENT LAND

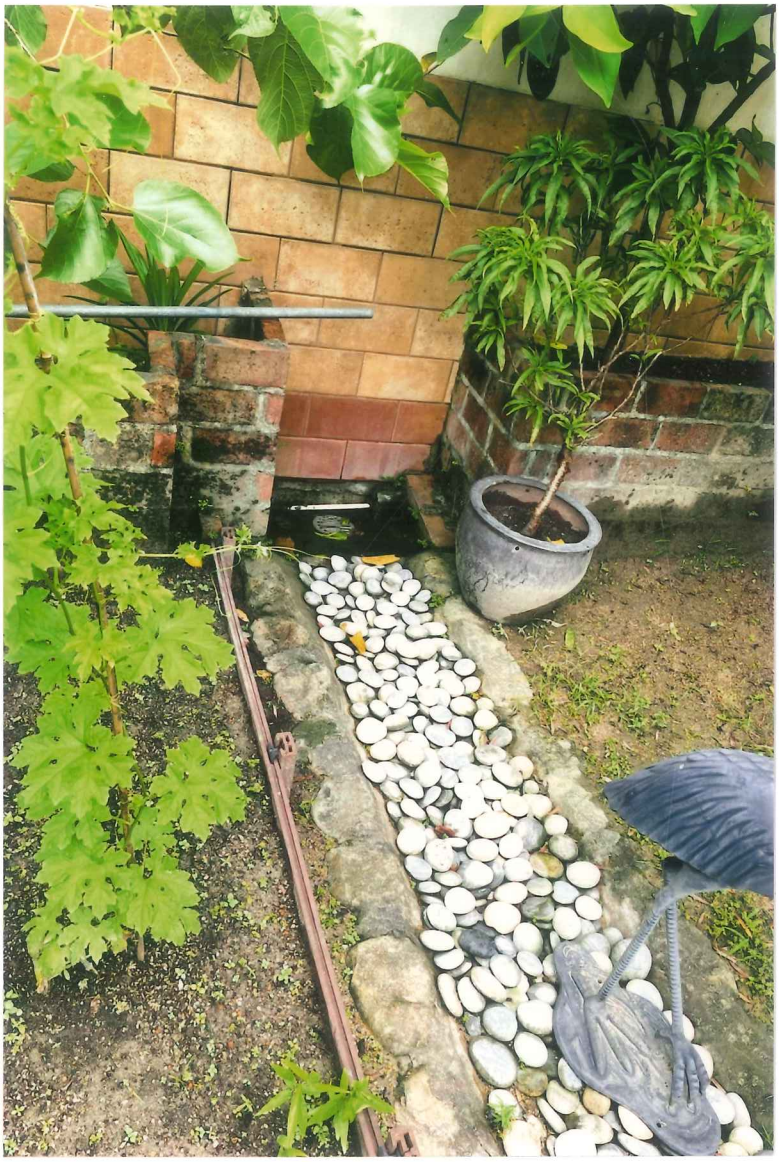
Scale 1:1000

SURVEY SHEET No. 11-NE-4B, 11-RE-5A

Attachment 2

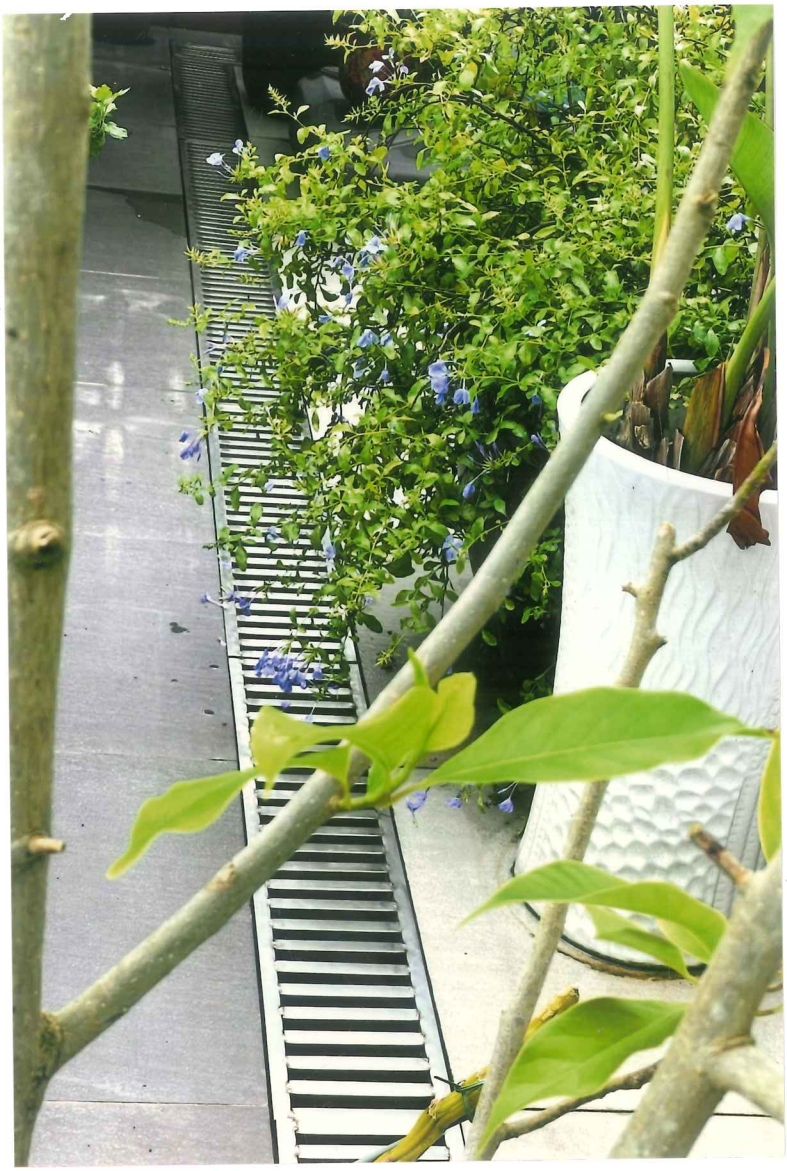
(a)

House No. 450 Ho Chung New Village, Sai Kung, N. T.



Part of the Existing Features inside House No. 450

(c)



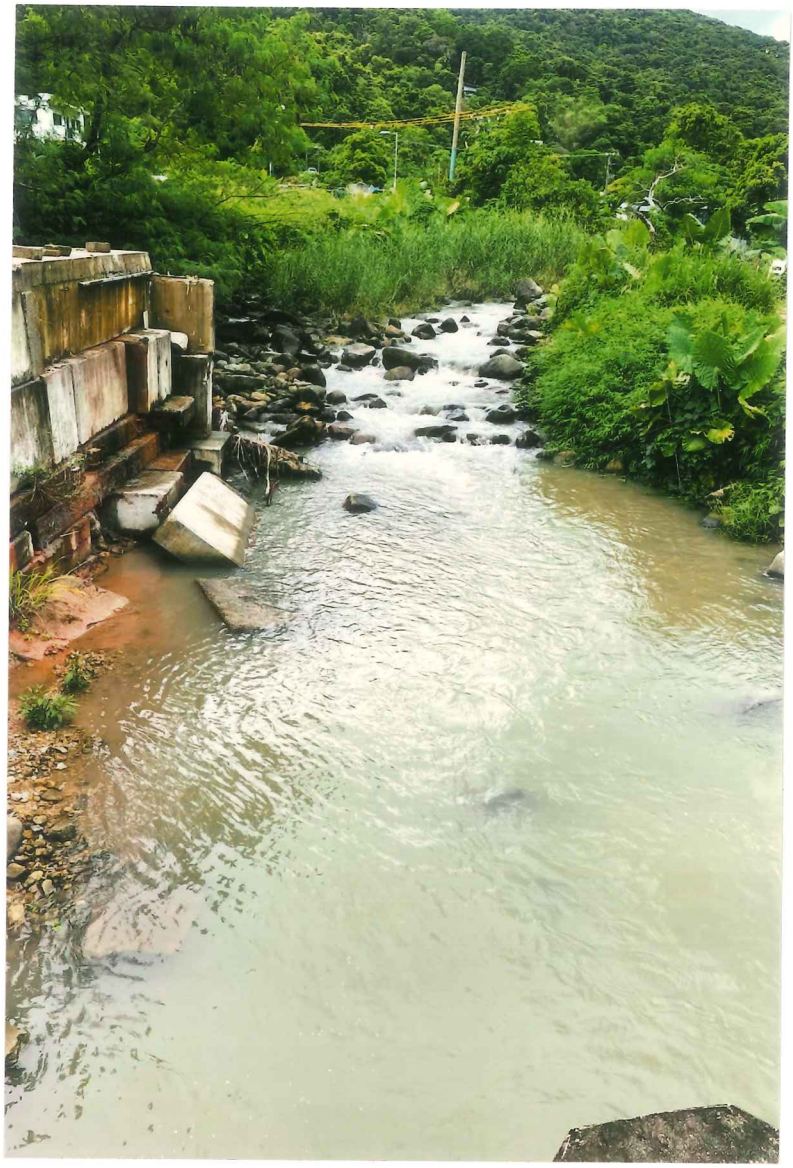
Part of the existing drainage for rain/storm water inside House No. 450

A nearby culvert

(e)

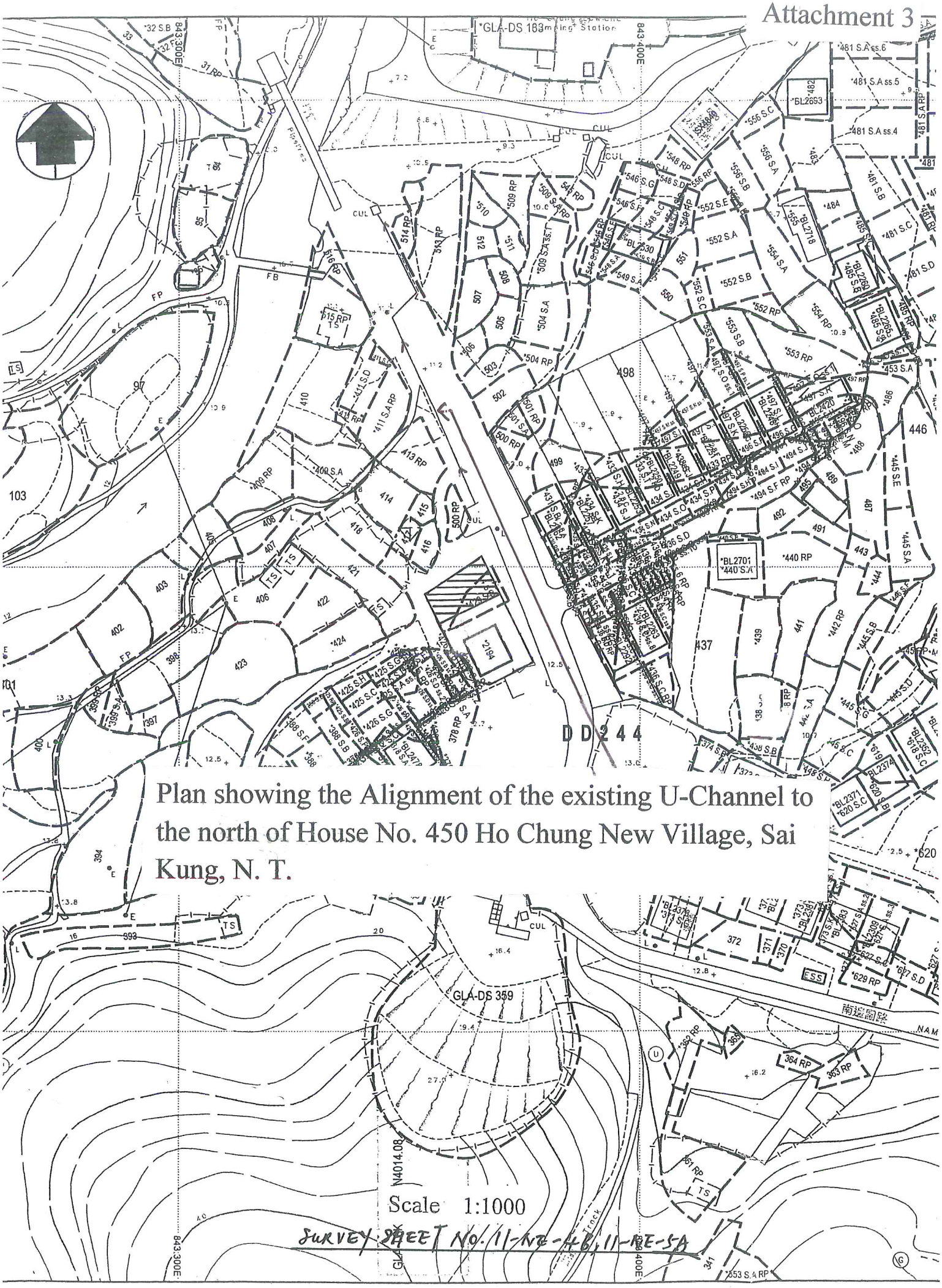
A U-Channel to the North of House No. 450 Ho Chung New Village (Part 1)

A U-Channel to the North of House No. 450 Ho Chung New Village (Part 2)



The Stream Course to the North

Attachment 3



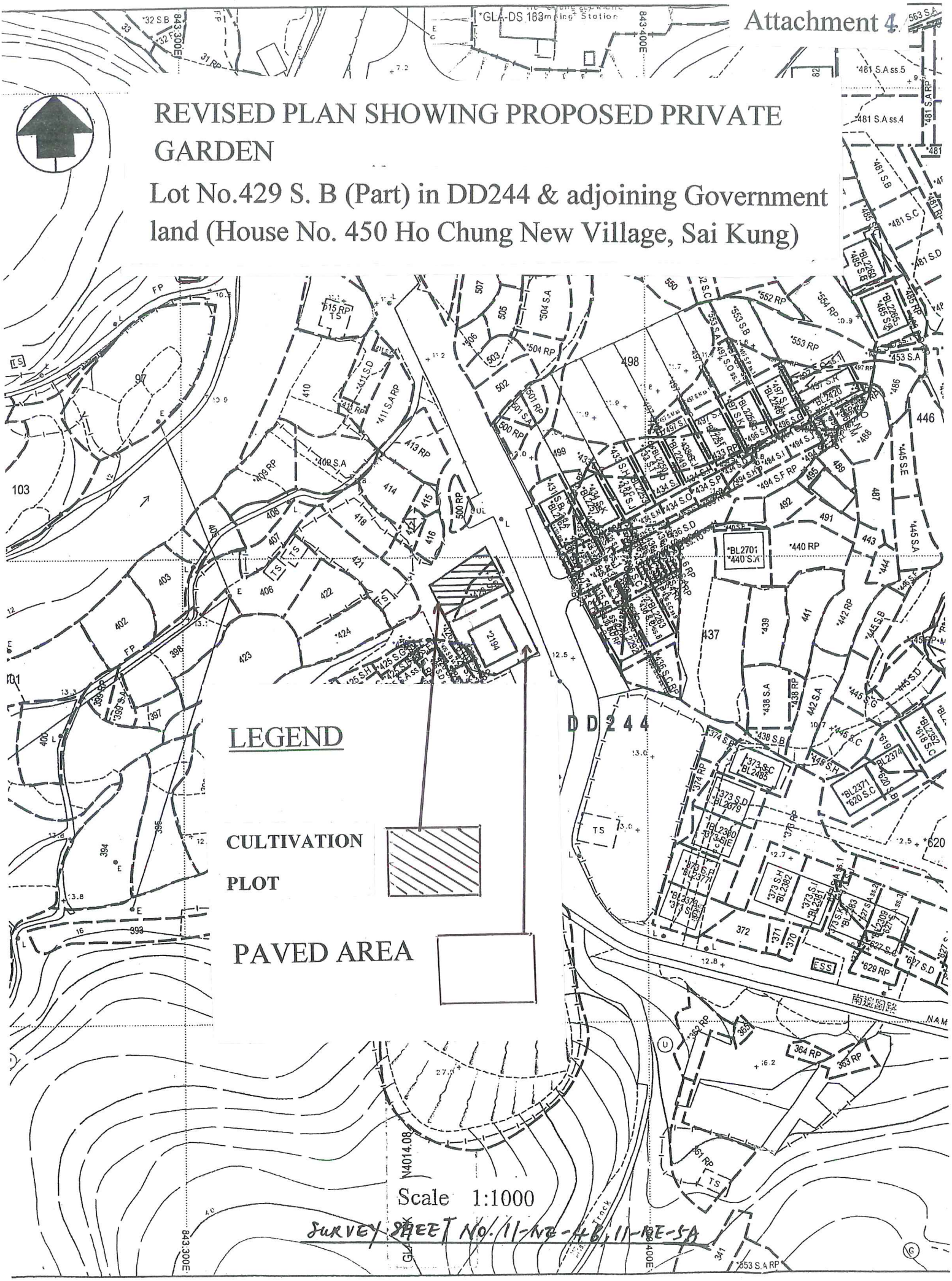
Plan showing the Alignment of the existing U-Channel to the north of House No. 450 Ho Chung New Village, Sai Kung, N. T.

SURVEY SHEET No. 11-NE-4B, 11-NE-5A

Attachment 4

REVISED PLAN SHOWING PROPOSED PRIVATE GARDEN

Lot No.429 S. B (Part) in DD244 & adjoining Government land (House No. 450 Ho Chung New Village, Sai Kung)



The growing of Organic Vegetables at the proposed private garden at Lot No. 429 S. B (Part) in DD244 and adjoining Government land (House No. 450 Ho Chung New Village, Sai Kung, N.T.)

The following information is advised by those professionals in the trade of growing of Organic Vegetables:-

I. What is Organic Farming?

Organic farming is a system of agricultural production based on the use of natural processes and resources – no chemicals or genetically modified organisms are used – in order to obtain healthier and more nutritious food while protecting soil fertility, preventing the spread of pests and respecting the environment. It is a system that, instead of using agricultural inputs, carries out specific practices depending on the characteristics of each ecosystem.

II. Fertilizer used – Compost tea and Composting

Compost tea works well as a homemade plant fertilizer since it contains a wide array of nutrients and beneficial bacteria which are best for red leave lettuce.

Composting is the act of combining organic materials to encourage healthy decomposition. To make compost, organic materials like food waste grass clippings, newspapers, and coffee grounds are layered together to create the perfect environment for microbes, fungi, and other decomposition bacteria to break them down into an all-natural fertilizer.

The benefits of compost include providing nutrients to crops as fertilizer, acting as a soil conditioner, increasing the humus or humic acid contents of the soil, and introducing beneficial microbes that help to suppress pathogens in the soil and reduces soil-borne diseases.

III. Organic pesticide used

Use the organic pesticide, BTK (bacillus thuringiensis kurstaki). BTK is a naturally occurring microorganism that sickens and kills caterpillars without harming butterflies, bees, and other beneficial insects.

IV. Specific steps to be adopted by Applicant, Ms. LAM

Step 1. Choose the Right Variety of Lettuce

- Butterhead lettuce is chosen as it is a good source of carotenoid antioxidants which helps to protect our cells from free radical damage that can lead to chronic diseases like cancer.
- It is also High in iron and vitamins A & K.

Step 2. Prepare the Soil
- Soil Quality: Lettuce grows best in well-draining, fertile soil rich in organic matter.
- Soil pH: Aim for a slightly acidic to neutral pH (6.0–7.0).
- Amend the Soil: Add compost or well-rotted manure to improve soil fertility and structure. Avoid synthetic fertilizers to maintain organic practices.

Step 3. Planting Lettuce
- Sow seeds directly in the garden and transplant seedlings.
- Plant seeds ¼ inch deep and 1 inch apart.
- Thin seedlings to 6–12 inches apart once they have a few leaves.
- Spacing: Allow enough space for air circulation to prevent disease.

Step 4. Watering
- Consistent Moisture: Lettuce needs consistent moisture but avoid waterlogging.
- Water deeply 1–2 times per week, depending on weather.
- Mulching: Use organic mulch (straw, grass clippings, or shredded leaves) to retain soil moisture and regulate temperature.

Step 5. Organic Pest and Disease Management
- Common Pests: Watch for aphids, slugs, and caterpillars. Use organic solutions like:
  - Organic pesticide to be used as listed at Paragraph III, and also

- Neem oil or insecticidal soap for aphids.

- Beer traps or diatomaceous earth for slugs.
- Hand-pick caterpillars or use row covers.
- Diseases: Prevent fungal diseases by avoiding overhead watering and ensuring good air circulation. Crop rotation may be applied annually to prevent soil-borne diseases.

Step 6. Fertilizing
- As mentioned at Paragraph II and also use fish emulsion, or seaweed extract every 3–4 weeks to provide nutrients.

Step 7. Harvesting
- Leaf Lettuce: Harvest outer leaves as needed, allowing the plant to continue growing.
- Head Lettuce: Harvest the entire head when it reaches full size.
- Timing: Harvest in the morning for the best flavor and crispness.

Step 8. Succession Planting
- To enjoy a continuous harvest, plant new seeds every 2–3 weeks.

V. Conclusion

By following the advice of the professionals and the steps, Ms. LAM is confident that she can grow healthy, organic lettuce in the proposed private garden.

And with the setting up of the sand trap plus the septic tank immediately beneath part of the proposed private garden area at Lot 429 S. B in DD244 as advised by the architect Mr. PAU Wah Lung, it is believed that the organic vegetable growing will not cause any contamination to the Water Gathering Ground, and will not pose any threat to water quality in and around the area.

Prepared by Mr. YEUNG Siu Fung in collaboration with the Applicant, Ms. LAM Yeuk Yin

1st March 2025

Attachment 6

地 政 總 署
西貢地政處
DISTRICT LANDS OFFICE, SAI KUNG
LANDS DEPARTMENT

電　　話 Tel: 2972 5187
圖文傳真 Fax: 2792 0706
電郵地址 Email: gendlosk@landsd.gov.hk
本署檔號 Our Ref.: ( ) in DLO/SK 32/SHL/05
來函檔號 Your Ref.:

我們矢志努力不懈，提供盡善盡美的土地行政服務。
We strive to achieve excellence in land administration.

新界西貢親民街34號西貢政府合署三樓及四樓
3RD & 4TH FLOORS, SAI KUNG GOVERNMENT OFFICES, 34 CHAN MAN STREET, SAI KUNG NEW TERRITORIES

網址 Web Site: www.landsd.gov.hk

Mr. WAN Pak Kan
c/o HAU, LAU, LI & YEUNG Solicitors & Notaries
Unit 1303, 13th Floor
Tower 1, Admiralty Centre
18 Harcourt Road, Admiralty
Hong Kong

By Recorded Delivery

- 2 JAN 2013

Dear Sir,

Lot No. 2194 in Demarcation District No. 244

The house erected on the lot pursuant to New Grant No. 20956 under which the above lot has been granted has now been inspected and I hereby certify that all the positive obligations imposed on the Grantee of the above lot under the General and Special Conditions of New Grant No. 20956 have been complied with to my satisfaction.

This certification is given without prejudice to all or any rights of the Government whether under the said Conditions or otherwise in respect of any breach or failure to observe any of the said Conditions which may exist on the date hereof or which may hereafter occur.

As the building erected on the lot is exempted from the provisions of the Buildings Ordinance, Cap. 123 under the Buildings Ordinance (Application to the New Territories) Ordinance, Cap. 121 by virtue of Certificates of Exemption dated 16/11/2010 and 12/04/2012, no site formation, building or other plans have been approved by the Building Authority in respect of the above lot and the building erected thereon. Accordingly this certificate is not to be construed as a representation by Government that the building erected on the above lot or any works in connection therewith are structurally safe and Government expressly excludes any liability arising out of such construction or works.

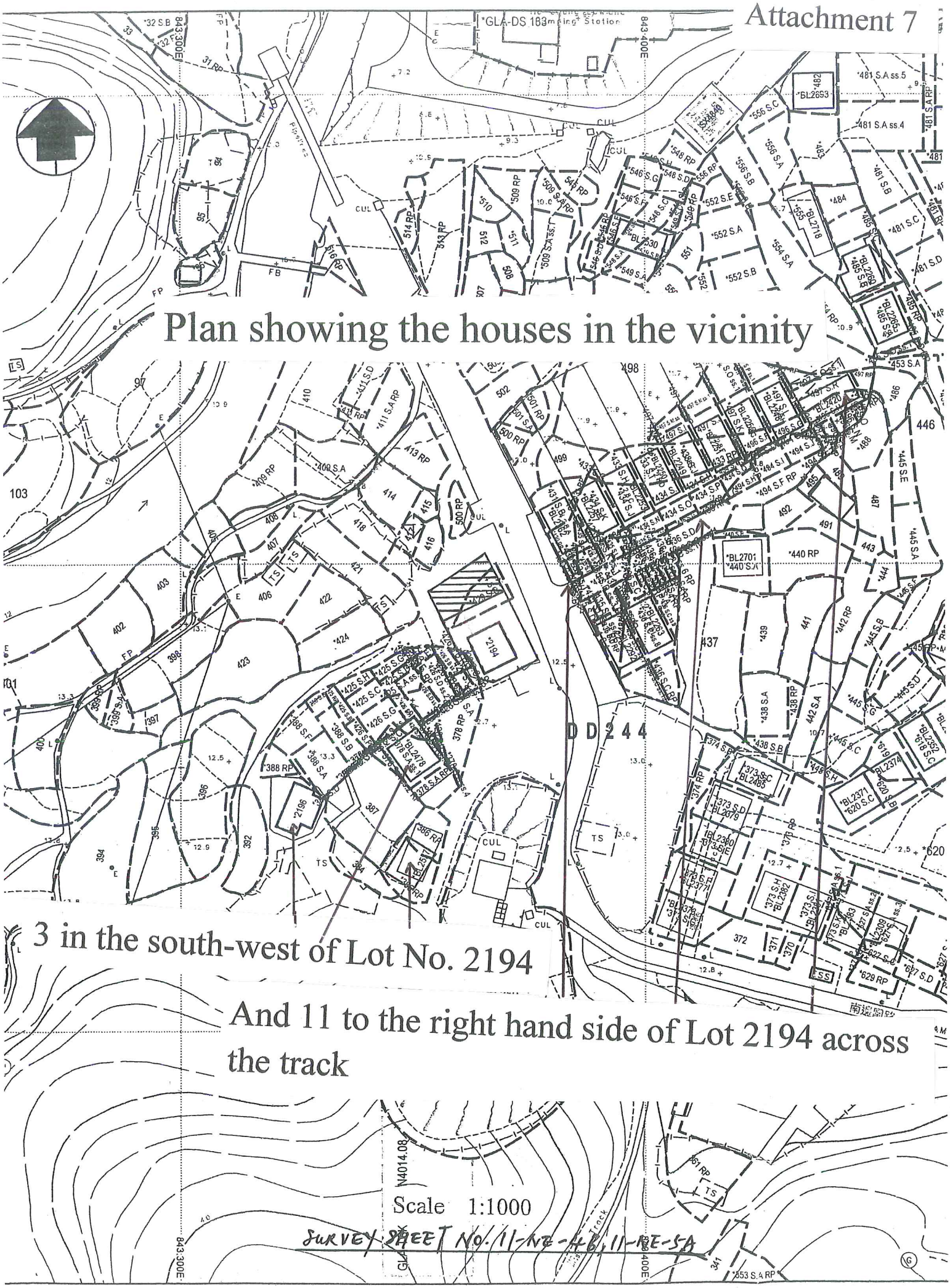
In your own interest, you are advised to register this certificate in the Land Registry by memorial which shall be verified by the certificate of a solicitor in accordance with Regulation 7 of the Land Registration Regulations.

Yours faithfully,

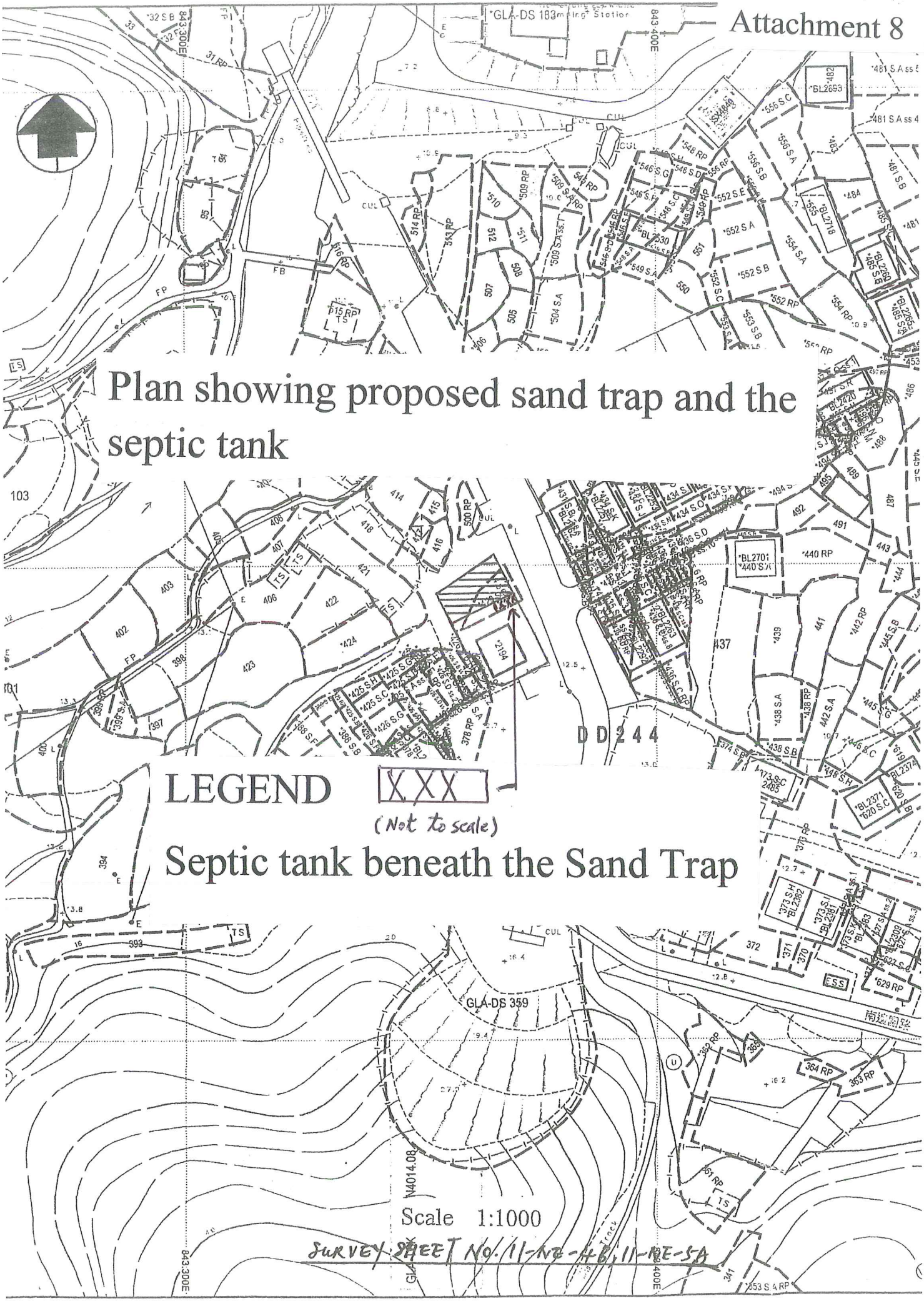
(Ken CHEUNG)
for District Lands Officer/Sai Kung

c.c. CR & V (Attn. Tech. Secy. (Information)) – with plan
DSO/SK – with plan

Attachment 7



Attachment 8



Plan showing proposed sand trap and the septic tank

Planning Application No. A/SK-HC/354

Response to Departmental Comments as at 8.8.2025 in respect of the Application for a Temporary Private Garden on Lot 429 S. B (Part) in DD 244 and the adjoining Government land (House No. 450 Ho Chung New Village, Sai Kung, N.T.) on Review

Comments from Chief Heritage Executive (Antiquities and Monuments), Antiquities and Monuments Office (AMO), Development Bureau

a. The Applicant expresses apology of her not knowing the existence of the Ho Chung SAI in 2015 and hence failed to consult AMO on the erection of a porch and a green house then.

b. As to AMO's comments and enquiry sent to us on 11 March 2025. Please note the following:
1. We have submitted Photos before showing Application site, during and after the construction of the porch and greenhouse.
2. We have explained before that the porch was constructed with wooden frame and fiberglass in between. It was intended for creeping plants to provide shade.
3. As for the greenhouse, it was constructed with light material of transparent fiberglass for passage of sunlight.
4. Both structures are erected on the cement surface which were built after Applicant bought the small house property on 16.01.2015.
5. Please be informed that no digging of any kind was carried out for the erection of the porch and the greenhouse in January 2015.
6.The Applicant hereby undertakes not to further disturb the SAI by construction and any other work without prior consultation, comment and approval from AMO and any other relevant authorities.

…….End…….