



LANDWISE

Land Intelligence Services

3D SketchUp Model

ARCHITECTURAL

STRUCTURAL

SANITARY

MECHANICAL

ELECTRICAL

INTERIOR

FOR SUBMISSION

FOR TENDER

FOR CONSTRUCTION

FOR CLIENT

LANDWISE
Land Intelligence Services

15 May 2026

LAND ANALYSIS
LEAD:

LICENCED
SURVEYER:

DOCUMENT PHASE:

Package 2 - Land Visibility
Report

BUILDING REGULATIONS — GREEN ZONE (LAND 80 M – 140 M ELEVATION)

Zone Classification

- Green Zone (Rural & Agricultural — Koh Pha-ngan Community Town Plan B.E. 2558/2015)
- Ban Tai Environmental Protection Area overlay (B.E. 2557/2014)

ay, mean 110.06 m)

- 6 meters maximum)

Maximum Building Footprint

- Up to 300 sqm total floor area per detached unit
- Single detached residence only — no row houses, condominiums or dormitories at this elevation
- Practical footprint on this plot is capped by the 50% coverage rule below

Maximum Development Area

- Slopes up to 35° → Up to 50% development area (Residential)
- Slopes 35°–49° → Maximum 25% development area, footprint capped at 80 sqm per building

Slope Restrictions

- Slopes over 49° are generally considered unsuitable for construction
- No excavation of soil, gravel, laterite or sand permitted on slopes greater than 35% (Ban Tai Notification §7)

Planning Notes

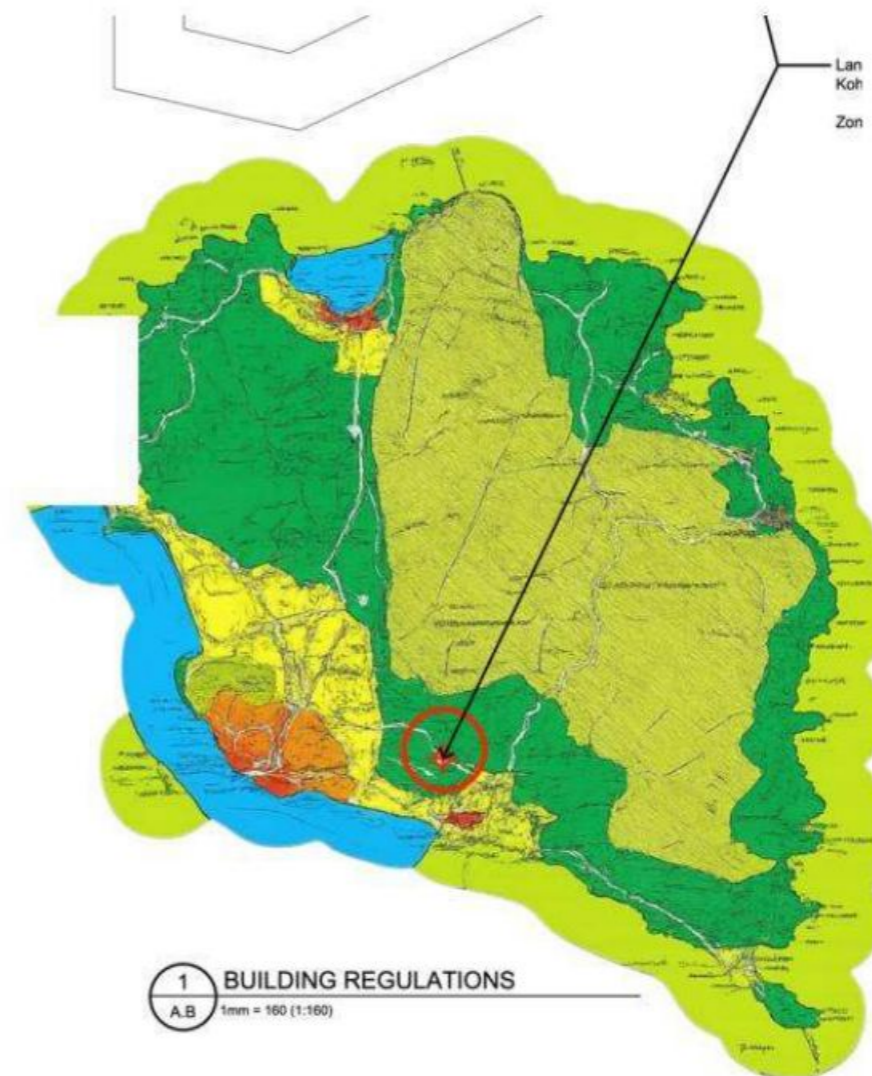
- Detached single-family hillside development only
- Pitched roof required — Thai, tropical or local vernacular style, roof ≥ 80% of building plan
- Natural earth-tone palette only (brick, terracotta, brown, grey, foliage green)
- Open space ≥ 50% of plot, of which ≥ 50% planted with native perennial trees
- Onsite rainwater detention required to reduce runoff to public drainage (flood mitigation)
- Buildings should follow the natural terrain; large excavation or terrain reshaping discouraged
- Detailed slope analysis is recommended to determine final buildable areas

LandWise Summary

This land falls within the Green Zone hillside development category in the 80–140 m elevation tier, where the Ban Tai Environmental Notification imposes a tighter envelope than the underlying Town Plan. Buildings are limited to a single detached residence of up to 6 m height, with a Town-Plan ceiling of 300 sqm total floor area where slopes remain below 35°.

Because the parcel is compact, the binding constraint on this site is the 50% development-area cap, not the 300 sqm ceiling. After deducting the required open space, planting, drainage works and setbacks, the realistic buildable footprint is significantly smaller than the gross 50% figure.

Development should follow the natural hillside terrain with a pitched native-tone roof, native-tree landscape, and onsite stormwater management, consistent with Koh Phangan and Ban Tai planning and environmental guidelines.



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BUILDING
REGULATIONS

02

MASTERPLAN CONCEPT

This masterplan presents a concept feas layout for a single private villa located wit the buildable area of the 448 m² Chanote parcel.

VILLA CONFIGURATION

The villa is designed as a single-storey u comprising:

- Ground floor: approximately 80 m²
- Swimming pool: approximately 17 m²
- Terrace / outdoor deck: approximately 40
- Total plan area: approximately 174 m²

SITE PLANNING STRATEGY

The villa is positioned on the western porti of the plot to respect required boundary setbacks, the natural hillside contours and preferred view orientation. Adequate spaci has been maintained between the building footprint and the site boundaries to suppor privacy, preserve view corridors, and allow landscaping, drainage and circulation area

FEASIBILITY SUMMARY

This concept layout demonstrates that a vi of this size can comfortably be accommod within the site while complying with Koh Phangan Green Zone regulations and the Tai Environmental Protection requirements the 80–140 m elevation tier (≤ 6 m height, single detached unit, ≤ 50% development coverage). The 174 m² total plan area use: approximately 39% of the plot — well with the 50% maximum (224 m²) — leaving comfortable margin for native landscaping and onsite stormwater detention. The arrangement also provides flexibility for future architectural refinement and detailed site optimisation during the design development stage.

Villa Size:

Component	Size
Ground floor	80 m ²
Pool	17 m ²
Terrace / deck	40 m ²
Total plan area	174 m²

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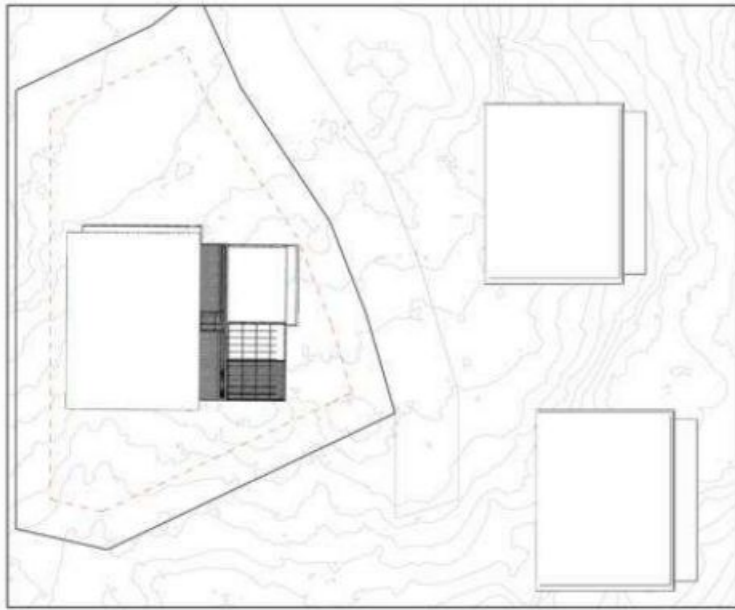
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MASTERPLAN

03



1 MASTERPLAN
A.B 1mm = 160 (1:160)



FRONT VIEW

This drawing presents the principal front elevation of the proposed villa, showing how the design sits within the hillside profile of the 448 m² Chanote plot and relates to the adjoining parcels on either side.

BUILDING HEIGHT

The villa is designed to a maximum overall height of approximately 6 m above the finished floor level (Elevation Level 113.00 m above mean sea level), in compliance with the 6 m height ceiling mandated for the Green Zone 80–140 m elevation tier under the Ban Tai Environmental Protection Notification.

ARCHITECTURAL EXPRESSION

A pitched-roof form has been adopted in line with the local vernacular requirement of the environmental overlay, with roof coverage exceeding 80% of the building plan area. The proposed material and colour palette uses natural earth tones — brick, terracotta, brown, grey and foliage green — to integrate with the surrounding landscape and satisfy the regulatory colour restrictions.

CONTEXT AND SITE INTEGRATION

The villa is shown alongside the two adjoining structures on neighbouring plots (FFL 108.50 m and 112.00 m respectively) to communicate scale and streetscape relationships across the hillside. The design is stepped into the natural terrain to minimise excavation, preserve the existing contour profile, and support onsite stormwater detention consistent with the flood-mitigation requirements of the elevation tier.



LAND ANALYSIS
LEAD:

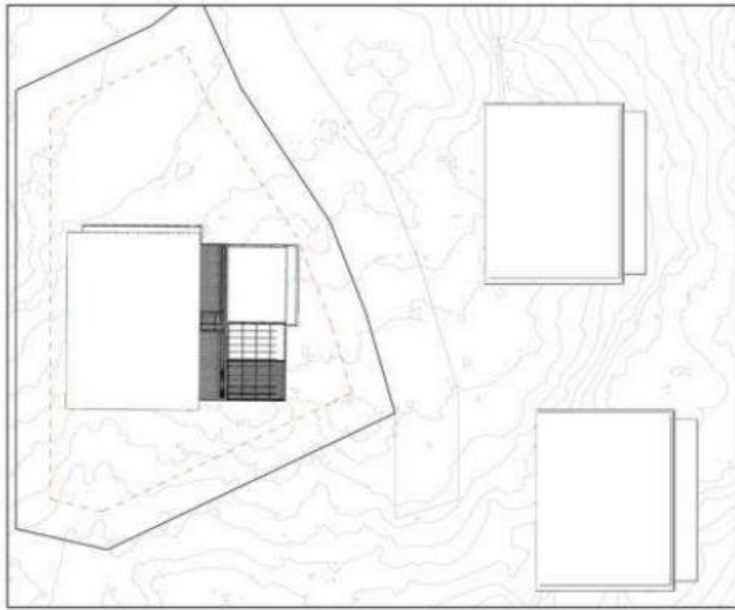
LICENCED
SURVEYER:

DOCUMENT PHASE:

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FRONT VIEW

1 FRONT VIEW
A.C 1mm = 160 (1:160)



SIDE VIEW

This drawing presents the lateral elevation through the hillside, showing the proposed villa in section against the natural terrain profile and the two downslope neighbouring structures.

SEAVIEW CORRIDOR

A 1.7 m eye-level seaview line is projected from the upper floor of the villa toward the sea. This sightline is preserved clear over the rooflines of both downslope structures, confirming that the principal living level retains an unobstructed sea outlook from a standing eye height.

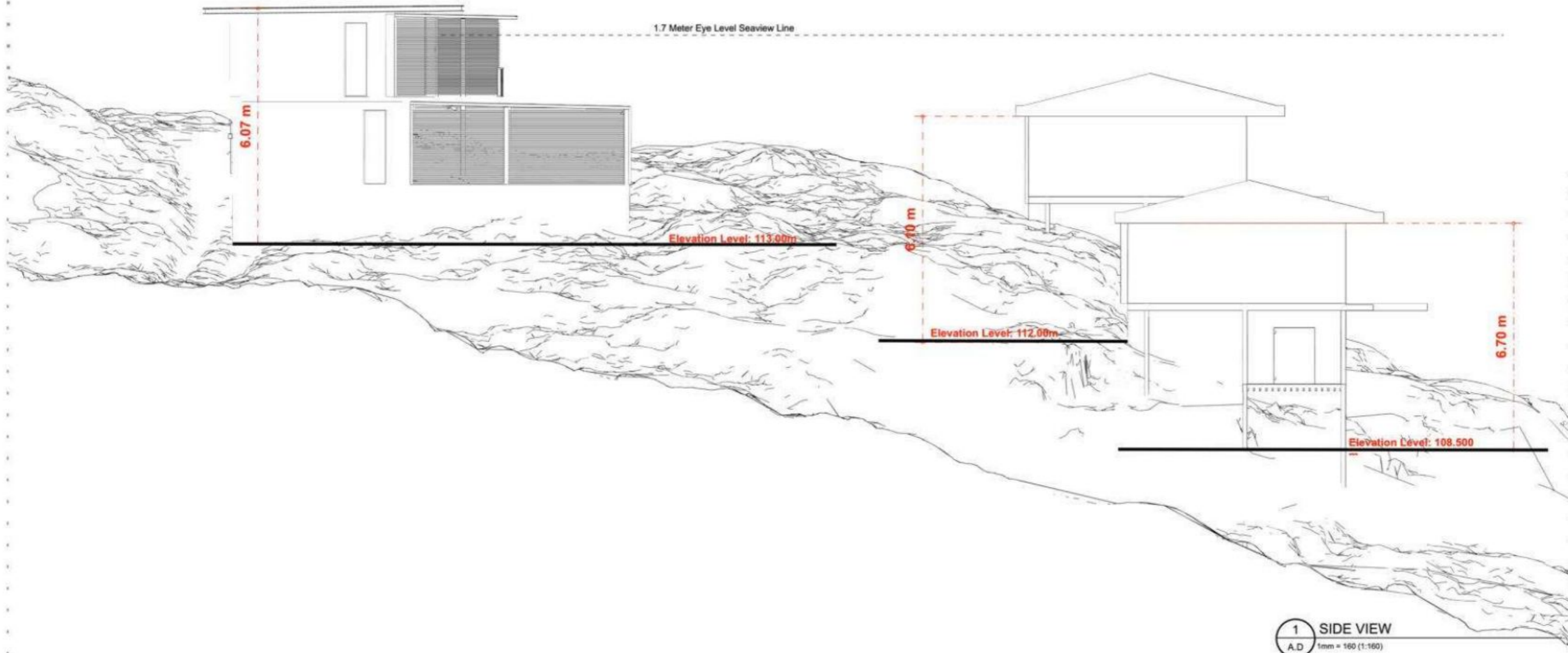
BUILDING HEIGHTS AND FINISHED FLOOR LEVELS

- Proposed villa: 6.07 m overall height, FFL Elevation Level 113.00 m a.s.l.
- Adjoining structure (mid-slope): 6.10 m overall, FFL Elevation Level 112.00 m a.s.l.
- Adjoining structure (lower slope): 6.70 m overall, FFL Elevation Level 108.50 m a.s.l.

The villa is designed to the 6 m regulatory height ceiling for the Green Zone 80–140 m elevation tier under the Ban Tai Environmental Protection Notification.

TOPOGRAPHIC RESPONSE

The cascade of finished floor levels (113.00 m → 112.00 m → 108.50 m) follows the natural hillside contour, minimising excavation and respecting the regulatory preference for terrain-led development. The stepped arrangement also preserves the upslope villa's sightline to the sea over the lower properties, supporting both privacy and view amenity across the cluster.



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SIDE VIEW

1 SIDE VIEW
A.D 1mm = 160 (1:160)

TOPOGRAPHIC CONTOUR MAP

PROJECT DETAILS

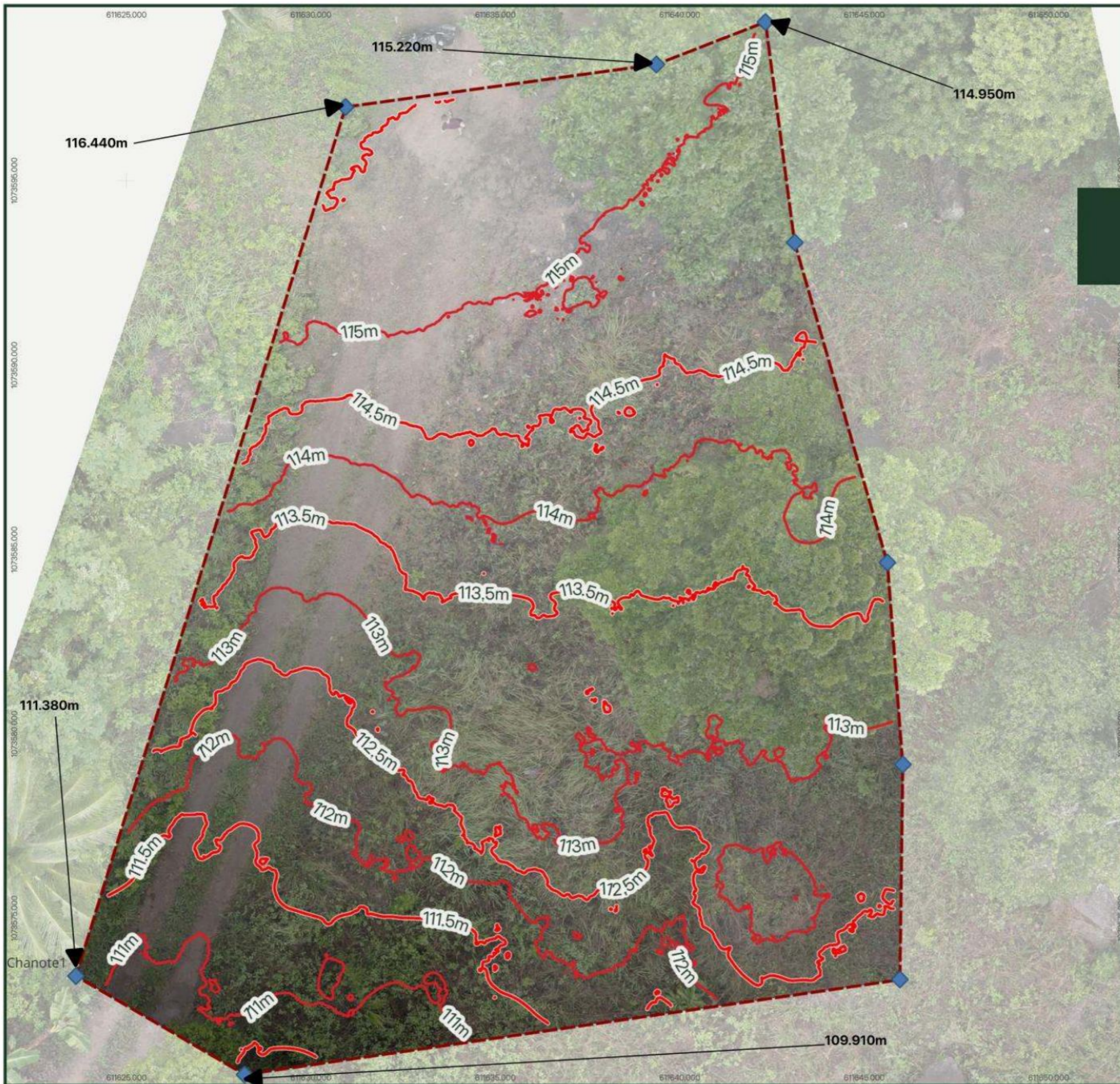
Date: 12 May 2026
Survey: Drone Photogrammetry
CRS: EPSG-32647
Contour Interval: 0.5m
Index Interval: 1.0m
Elevation: 99.5m – 117.0m
Relief: 17.5m
Total Contours: 11
Index: 5 | Intermediate: 6

LEGEND

- Index Contours
- Intermediate Contours
- ▭ Land_Boundary
- ◆ Chanotes Posts



Coordinate System: EPSG:32647
Datum: WGS 1984



SOLAR ORIENTATION & EXPOSURE

PROJECT DETAILS

Date: 13 May 2026
Survey: Drone Photogrammetry
CRS: EPSG:32647
Elevation: 99.5m - 117.0m
Relief: 17.5m

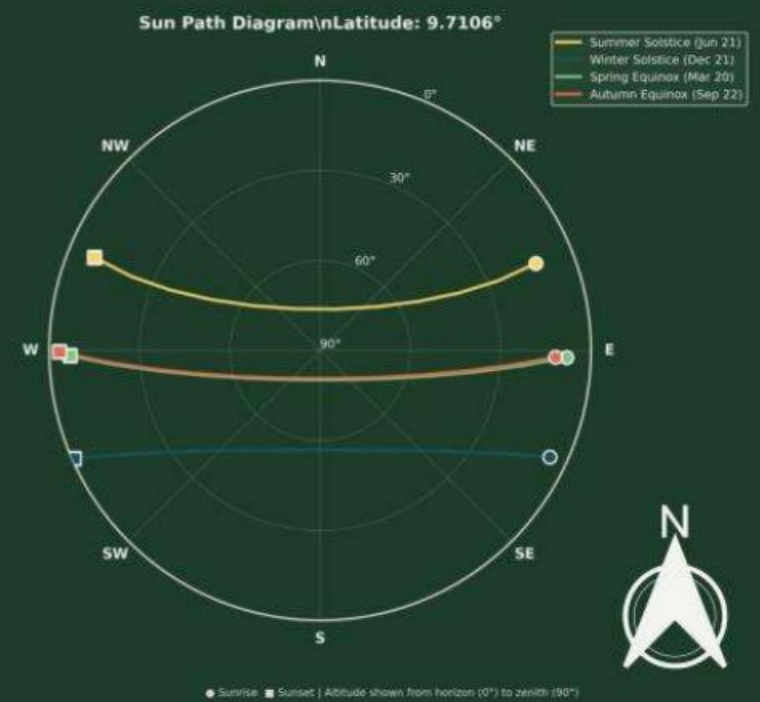
SUN PATH

Sunrise: 06:05 UTC+7
66° (ENE)
Sunset: 18:45 UTC+7
294° (WNW)
Daylight: 12.7 hours

LEGEND

- Neutral Terrain
- Cooler Slopes
- Morning Sun
- Full Sun
- Afternoon Heat

(Summer Solstice data)



Coordinate System: EPSG:32647
Data Interval: 5 units

Solar Interpretation

SLOPE ANALYSIS

PROJECT DETAILS

Date: 12 May 2026
Survey: Drone Photogrammetry
CRS: EPSG-32647
Elevation: 99.5m - 117.0m
Relief: 17.5m

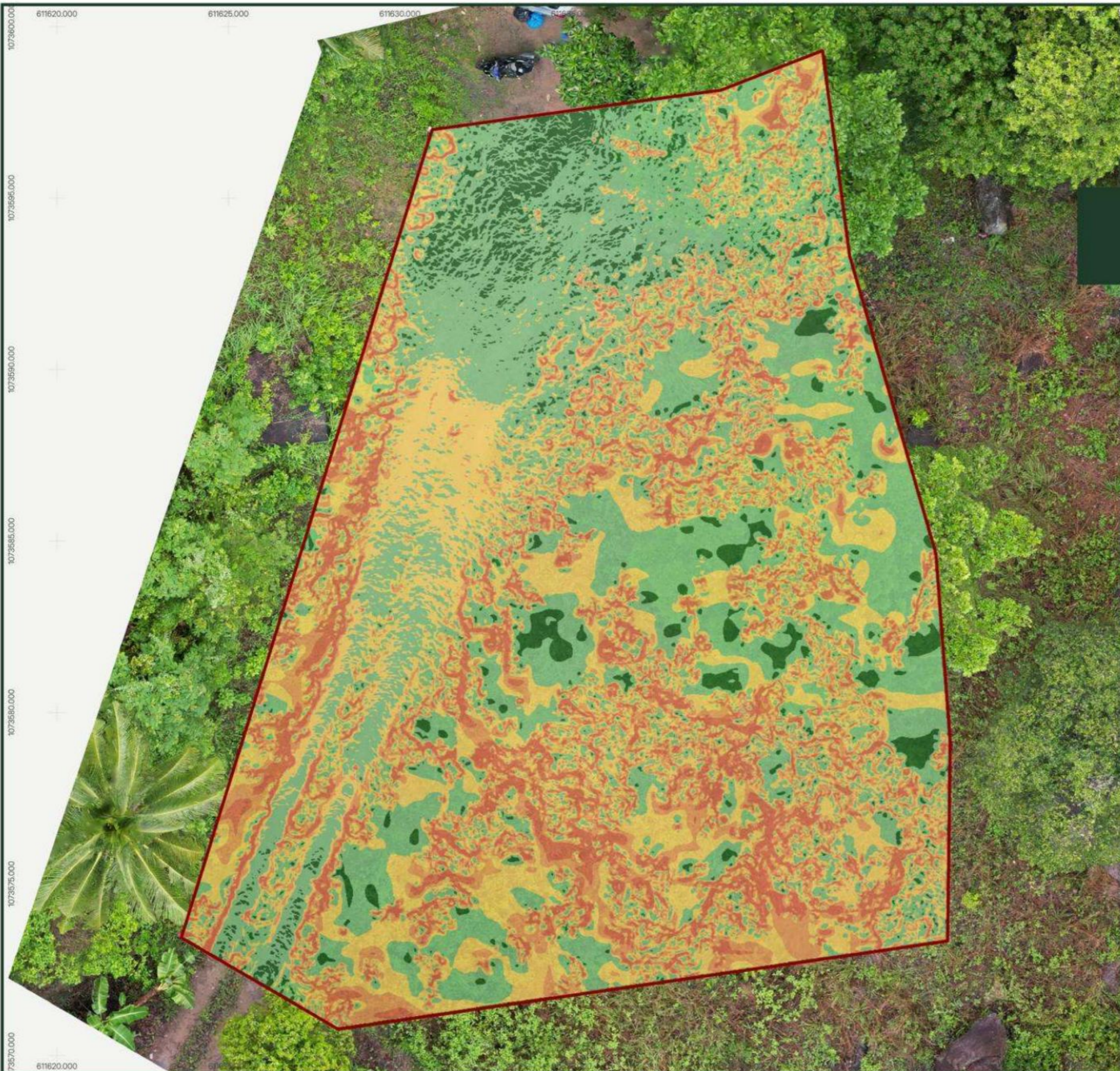
LEGEND

- Flat / Buildable (0-5°)
- Gentle Slope (5-15°)
- Moderate Slope (15-25°)
- Steep (25-35°)
- Very Steep (35°+)

0 2 4 6 m



Coordinate System: EPSG:32647
Contour Interval: 0.5m



SLOPE PROFILE ANALYSIS

PROJECT DETAILS

Date: 19 May 2026
CRS: EPSG:32647
Source: DTM (Bare Earth)
Profiles: 3 cross-sections
Sample step: 0.5 m

PROFILE SUMMARY

Section A:
Length: 22.0 m
Elev: 111.1-113.1m
Max slope: 7.5° (13.2%)

Section B:
Length: 19.0 m
Elev: 112.7-113.8m
Max slope: 13.8° (24.5%)

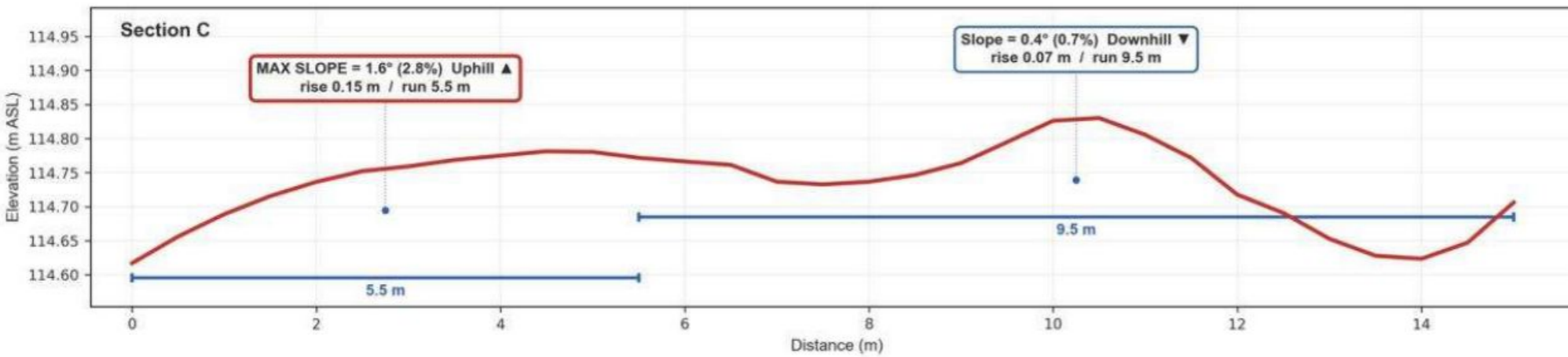
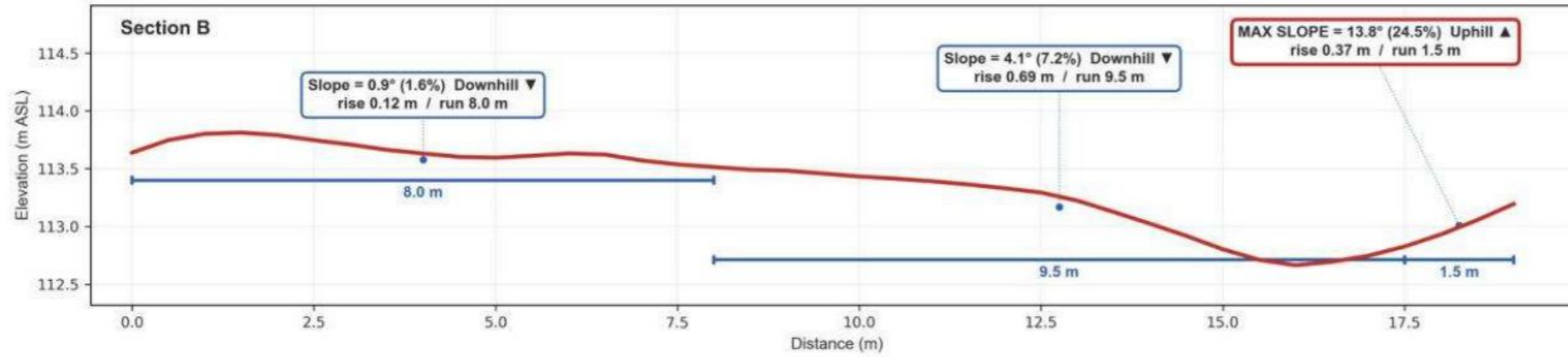
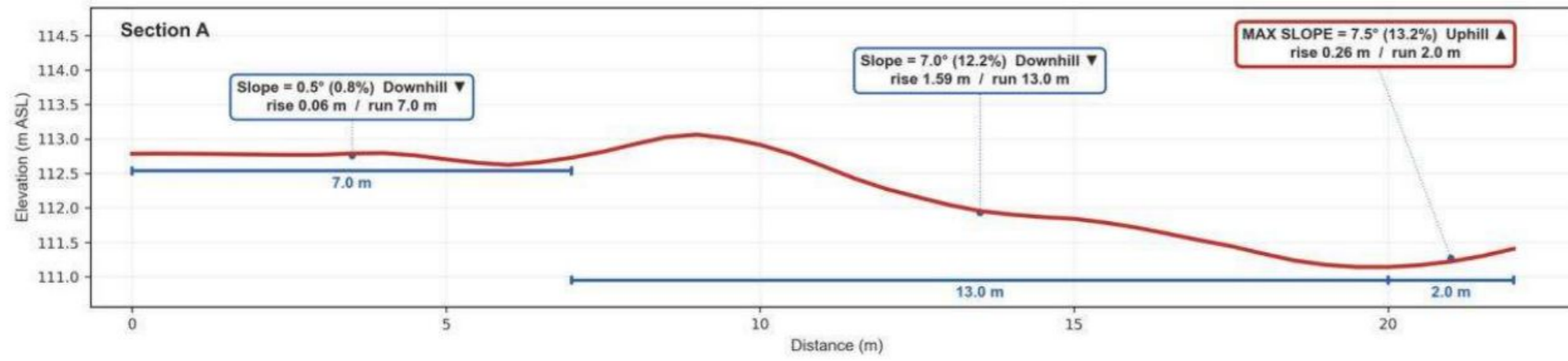
Section C:
Length: 15.0 m
Elev: 114.6-114.8m
Max slope: 1.6° (2.8%)

DATA SOURCE

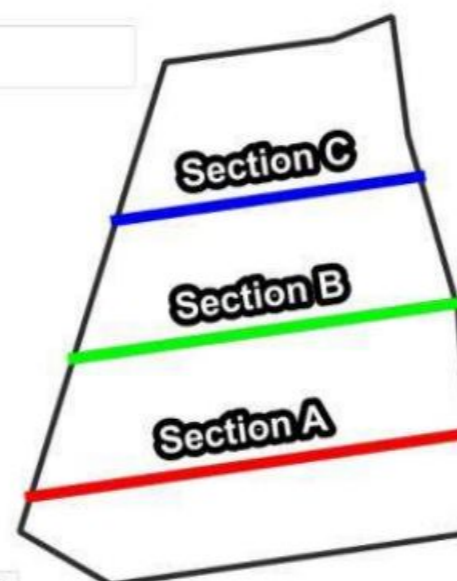
Drone-derived DTM
(Photogrammetry)

Elevations are relative and
for planning analysis only.

Survey confirmation required
for final design.



PROFILE LOCATION MAP



Red=A Green=B Blue=C



**DRAINAGE
ANALYSIS**

Date: 13 May 2026
Survey: Drone Photogrammetry
CRS: EPSG:32647
AOI: 0.360 ha (3,603 m²)
Elevation: 99.5 m – 117.0 m
Relief: 17.5 m

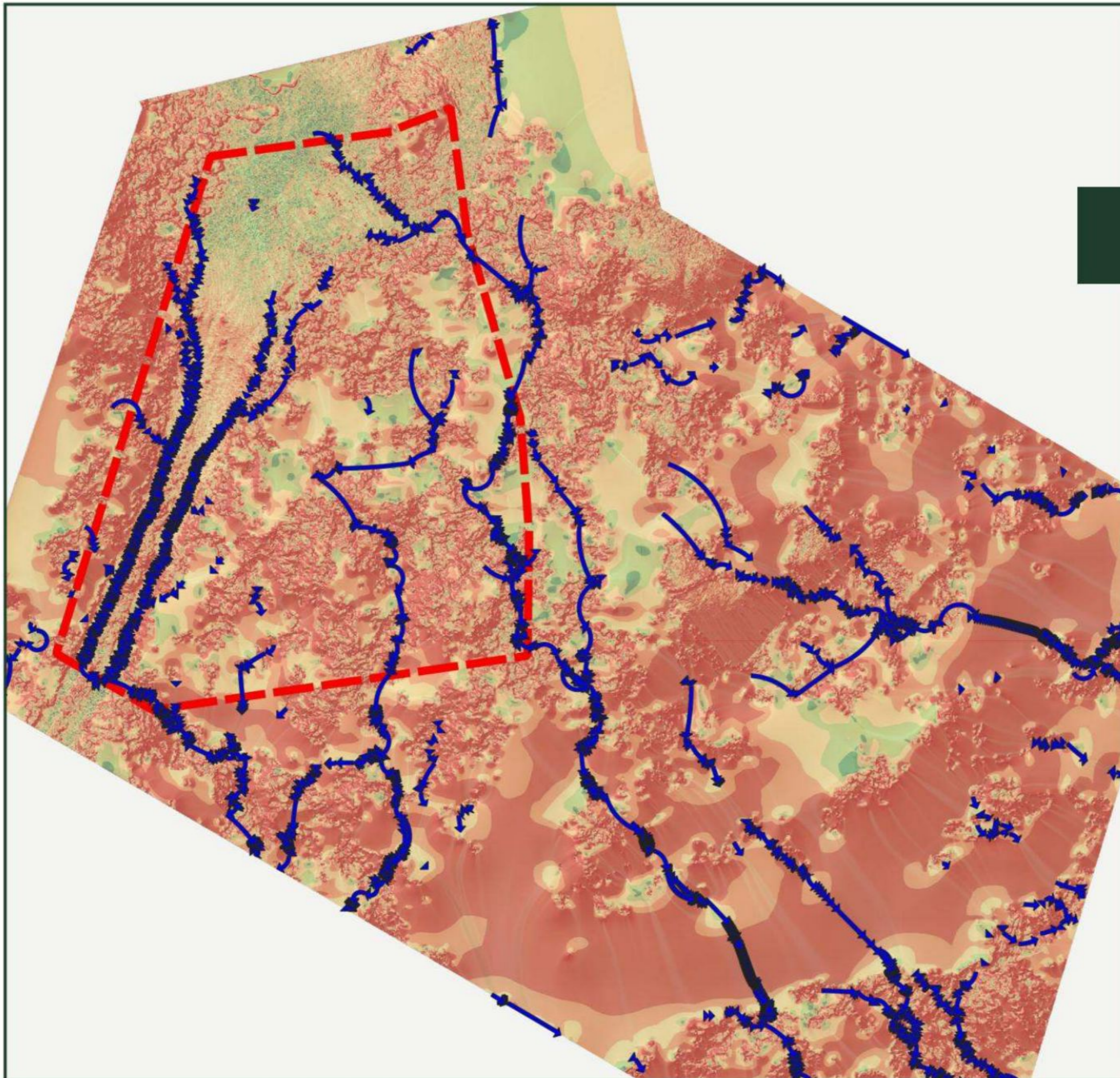
Streams: 4623
Inflow points: 0
Outflow points: 0
Unknown xings: 0

LEGEND

-  Streams
-  Plot Boundary
- Slope Risk
 -  Flat
 -  Moderate
 -  Slope



Coordinate System: EPSG:32647
Grid: 5 m



608700.000

608750.000

608800.000

608850.000

DEM ELEVATION ANALYSIS

PROJECT DETAILS

Date: 15 May 2026
Survey: Drone Photogrammetry
CRS: EPSG:32647
Resolution: 0.02m

Min Elevation: 110.2m
Max Elevation: 115.7m
Mean Elevation: 113.4m
Relief: 5.6m
Std Deviation: 1.3m

Analysis: Terrain + Hydrology

LEGEND

Elevation



608700.000

608750.000

608800.000

608850.000

1078750.000

1078700.000

1078650.000

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1078750.000

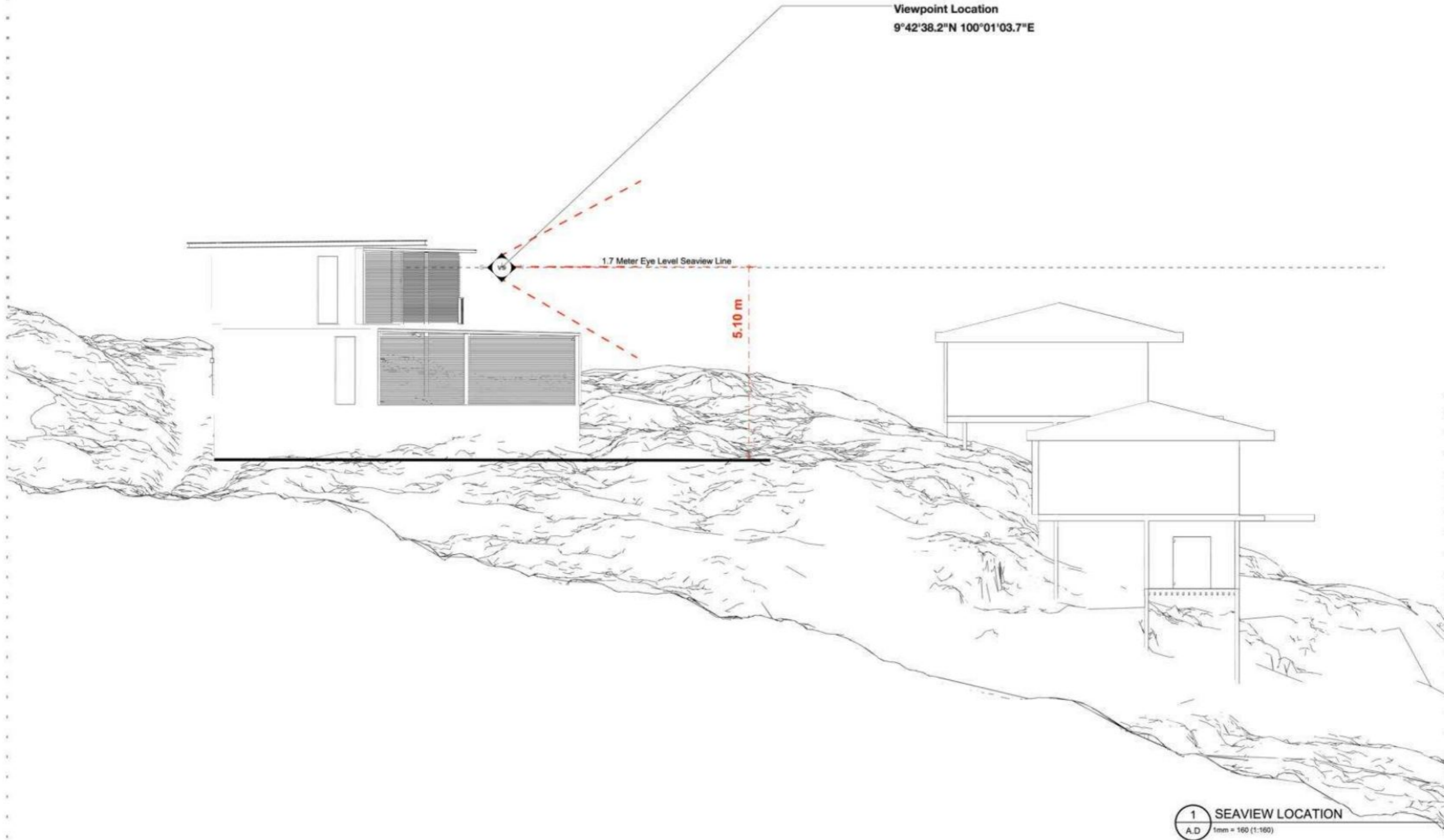
1078700.000

1078650.000

1078600.000

SEAVIEW VIEWSHED ANALYSIS

This analysis illustrates the primary viewpoint location and corresponding sightlines, demonstrating how the proposed design aligns with and preserves key seaview orientations.



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SEAVIEW
LOCATION

06

Real Site View + Real Terrain 3d Model

On-site photographic reference (1.70 m eye level) integrated with the terrain-based massing model to verify real-world view alignment, elevation relationship, and design positioning.



Raw Terrain + Massing Model

Preliminary visualization used for analysis and positioning.



Real Site View + Real Terrain 3d Model

On-site photographic reference (1.70 m eye level) integrated with the terrain-based massing model to verify real world view alignment, elevation relationship, and design positioning.



Raw Terrain + Massing Model

Preliminary visualization used for analysis and positioning.



LANDWISE — REPORT SUMMARY

This report was prepared to evaluate the development potential of the site and answer several key pre-design questions relating to terrain conditions, sea view security, and building zoning regulations.

The analysis included:

- Building regulation and zoning review (Green Zone, 80–140 m elevation tier, Ban Tai Environmental Notification)
 - Drone-based terrain modelling and orthophoto mapping
 - Terrain slope and longitudinal profile analysis
 - Feasibility testing for a single villa with pool and terrace within the buildable area
 - Sea view visibility assessment at a 1.7 m standing eye level above the upper floor
 - Neighbouring building comparison to assess potential view obstruction
 - Surface drainage flow analysis based on terrain modelling

Key Findings

- The site follows a consistent hillside slope suitable for stepped villa construction.
- Terrain profiles confirm that the land can comfortably accommodate the proposed 174 m² villa along the natural gradient.
- Sea view analysis indicates clear views from the upper floor at FFL 113.00 m, over the downslope neighbouring rooflines.
- Neighbouring building heights of approximately 6.10 m and 6.70 m are unlikely to significantly block the primary sea view.

Recommendations

- Align building placement with the natural terrain slope to minimise excavation.
- Maintain the upper-floor elevation advantage to preserve long-term sea views.
- Use a pitched roof in natural earth tones and onsite stormwater detention to satisfy the Ban Tai Environmental Notification.
- Use the terrain and drainage analysis to guide architectural design and site planning.

Thank you for choosing LANDWISE — Land Intelligence Services.

This report provides accurate terrain, slope, and visibility analysis to support informed development decisions before architectural design begins.

Terms, Limitations & Disclaimer (Important)

This report is provided for conceptual planning, visualization, and decision-support purposes only.
All analysis is based on available survey data, drone models, terrain processing, and interpreted regulations at the time of reporting.
LANDWISE does not provide legal, architectural, engineering, or certified surveying services.
This report must not be used as a legal document, construction approval document, or regulatory submission.
Final design, legal verification, structural design, and compliance approvals must be completed by licensed professionals and relevant authorities.
LANDWISE accepts no liability for legal, regulatory, or construction decisions made solely on the basis of this report.