

**LANDWISE**

Land Intelligence Services

- ARCHITECTURAL
- STRUCTURAL
- SANITARY
- MECHANICAL
- ELECTRICAL
- INTERIOR

FOR SUBMISSION

FOR TENDER

FOR CONSTRUCTION

FOR CLIENT

**LANDWISE**

Land Intelligence Services

28 February 2026

**LANDWISE**

Land Intelligence Services

INTERIOR DESIGNER:

DOCUMENT PHASE:

Package 2 - Land Visibility

**A.**

At the start of this study, the client asked LANDWISE to investigate the following key points before moving forward with design decisions:

- Confirm whether the land sits above the critical 80 m and 140 m elevation thresholds relevant to building regulations.
- Assess terrain steepness and slope conditions to understand construction feasibility and design limitations.
- Evaluate the quality and security of the sea view from the proposed building area.
- Analyse whether neighbouring land or future development could block or reduce the view.

Compare the land's elevation and terrain position relative to surrounding plots to understand long-term visibility and buildability.

**BUILDING REGULATIONS — GREEN ZONE  
(LAND ABOVE 140M ELEVATION)**

**Zone Classification:**

- Green Zone
- Elevation: Above 140 meters from sea level

**Maximum Building Height:**

- 6 meters maximum

**Maximum Building Footprint:**

- 90 sqm per building (ground footprint)

**Maximum Building Coverage:**

- Slopes up to 35° → Maximum 30% land coverage
- Slopes 35°–49° → Maximum 25% land coverage

**Roof Requirements:**

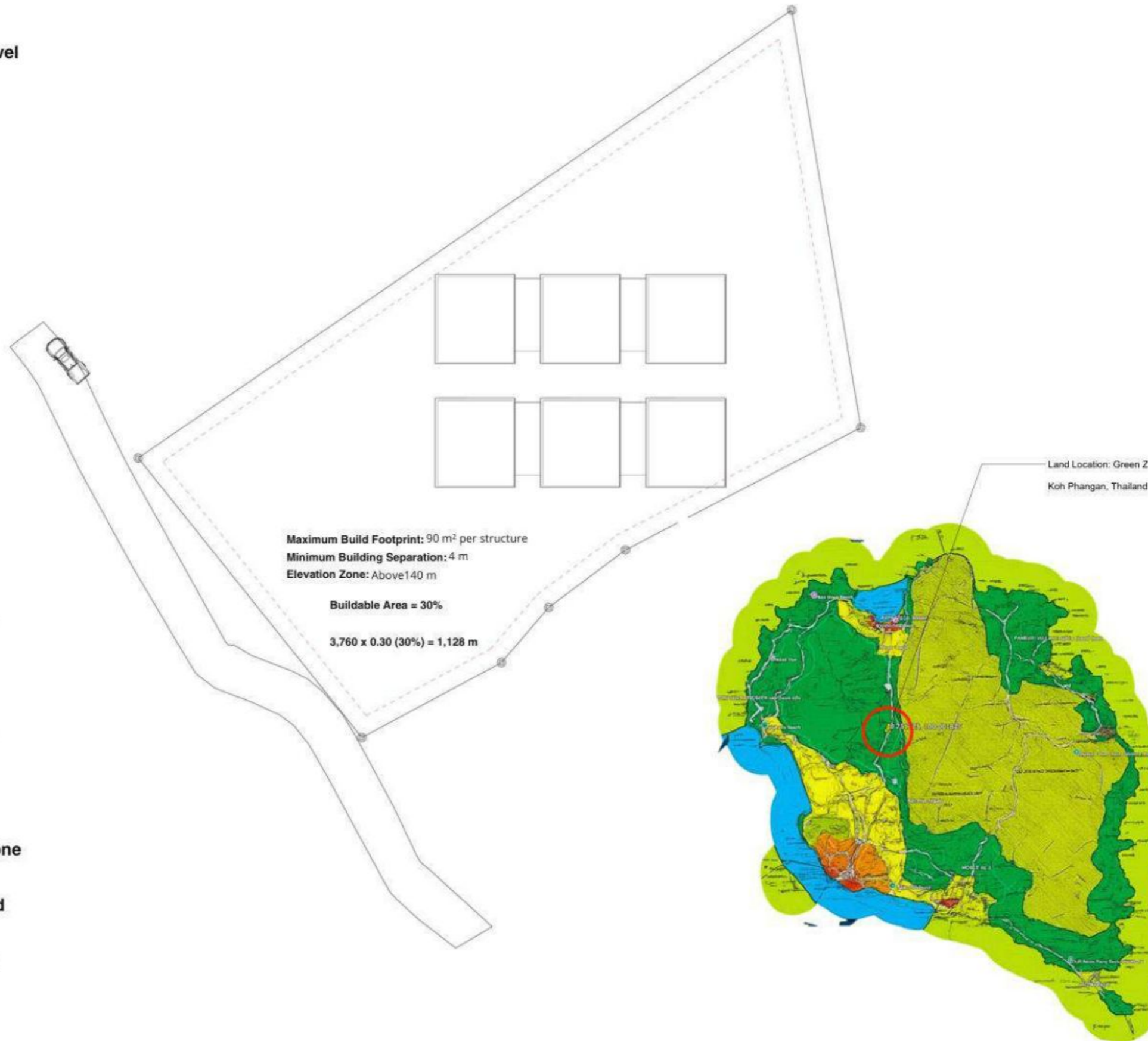
- No flat roof permitted
- Neutral roof colors required
- Minimum 80% covered roof design

**Planning Notes:**

- High-elevation hillside regulations apply
- Low-profile architecture recommended
- Multiple smaller structures are often preferred over one large building
- Site slope analysis is important for final buildable area

**LandWise Summary:**

This land falls within a protected Green Zone hillside category above 140m elevation. Development is permitted under controlled conditions, favoring low-profile tropical designs that follow the natural terrain and minimize visual impact.

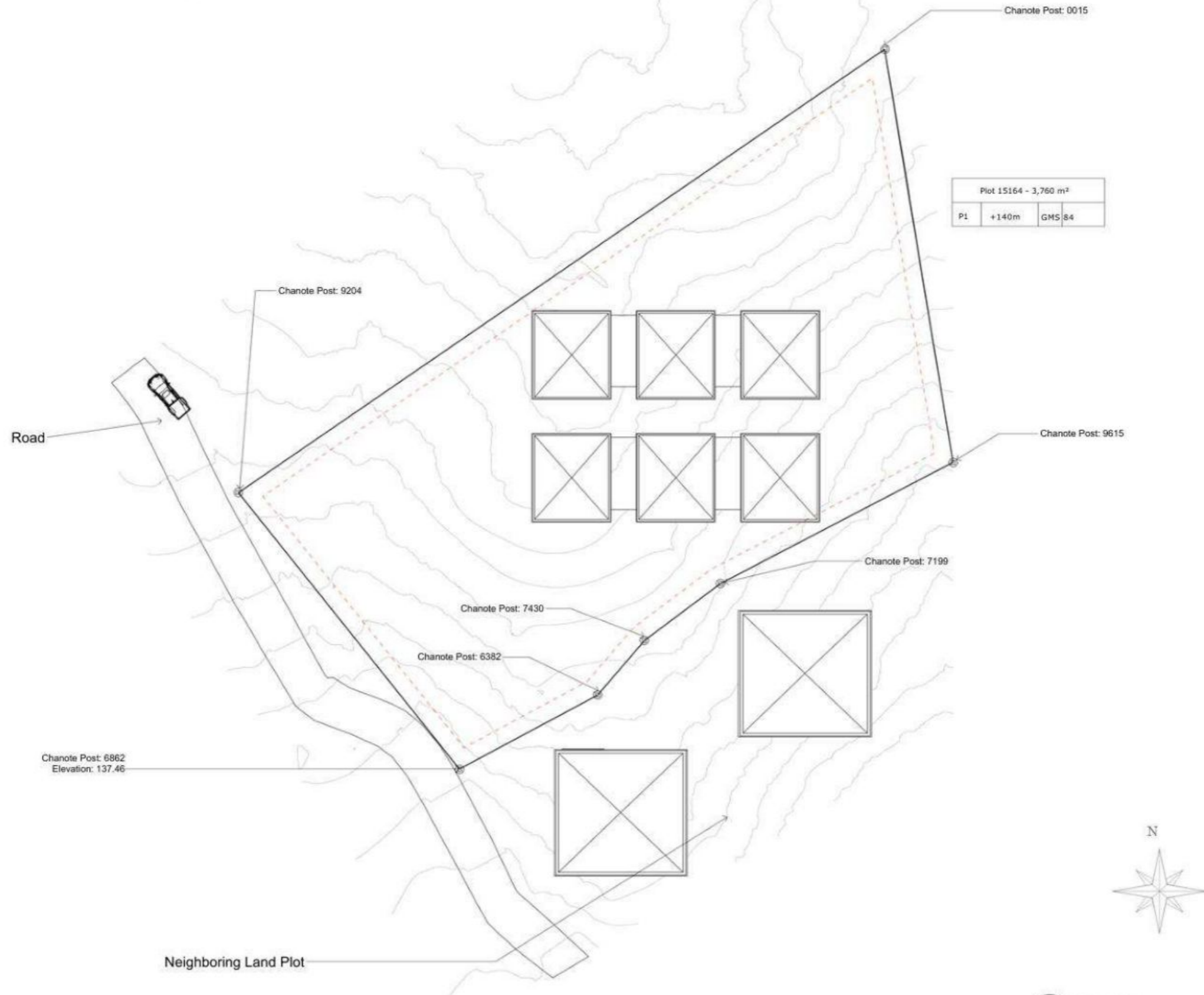


INTERIOR DESIGNER:

DOCUMENT PHASE:

Package 2 - Land Visibility

This masterplan slide shows the overall site layout and terrain context for David's Project. It illustrates the chanote boundary, key boundary markers, existing contour lines, access road location, and the proposed villa massing positions within the plot. The layout demonstrates how the building footprints follow the natural terrain while respecting boundaries, slope conditions, and elevation changes across the land. This plan provides a clear overview of spatial organization, helping the client understand how the development fits within the site and how the terrain influences placement and access while maintaining a true South Seaview direction.

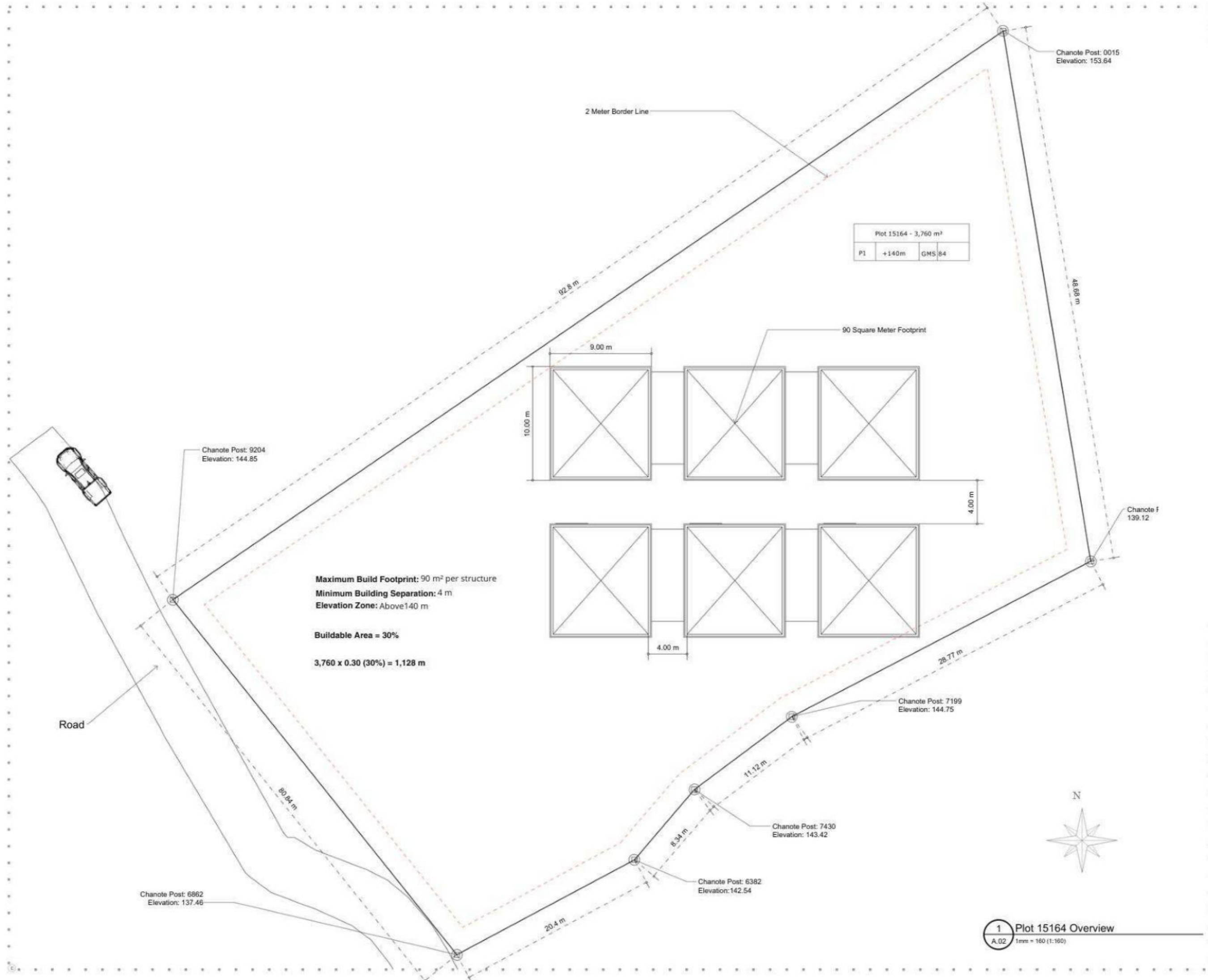


INTERIOR DESIGNER:

DOCUMENT PHASE:

Package 2 - Land Visibility

**Masterplan**



INTERIOR DESIGNER:

DOCUMENT PHASE:

Package 2 - Land Visibility

1 Plot 15164 Overview  
A.02 1mm = 160 (1:160)

Plot 15164  
Overview  
**A.02**

**Example Building Envelope – 90 sqm / 6 m Height Restriction**

This slide illustrates an example of how development may appear under the applicable building regulations for this land, using a maximum building footprint of approximately 90 square meters and a maximum height of 6 meters. The upper image shows a conceptual reference of scale and massing, while the lower illustration overlays a simplified model onto the actual terrain to demonstrate how such structures integrate with the site's natural slope and topography. This is intended as a visual reference only, helping the client understand realistic building proportions, spatial limitations, and how regulated construction parameters may influence design possibilities on the land.



---

INTERIOR DESIGNER:

---

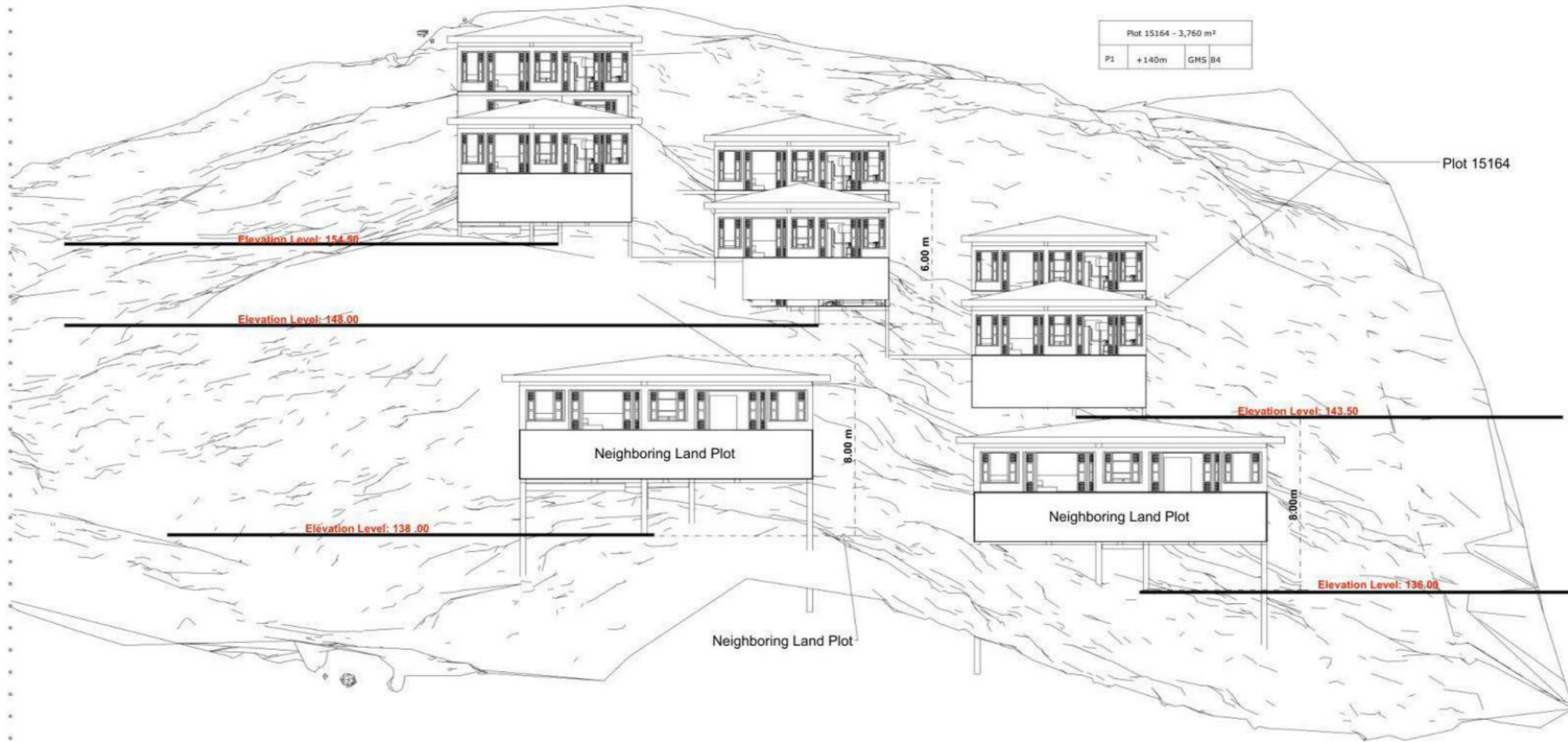
DOCUMENT PHASE:

Package 2 - Land Visibility  
R7 eFpeobrrutary 2025

---

**Example  
Envelope  
A.05**

This front-elevation study illustrates how the proposed 90 m<sup>2</sup> building footprints sit within the natural terrain and legal elevation limits of the site. The model shows a conceptual arrangement of villas positioned according to the measured ground levels, with elevation reference lines indicating approximate build heights relative to the land profile. The purpose of this view is to help visualize how development can step naturally with the slope while maintaining compliance with current zoning and height regulations above the 140 m elevation threshold. This is a massing and regulation demonstration only, intended to show feasibility and spatial relationship rather than final architectural design.



INTERIOR DESIGNER:

DOCUMENT PHASE:

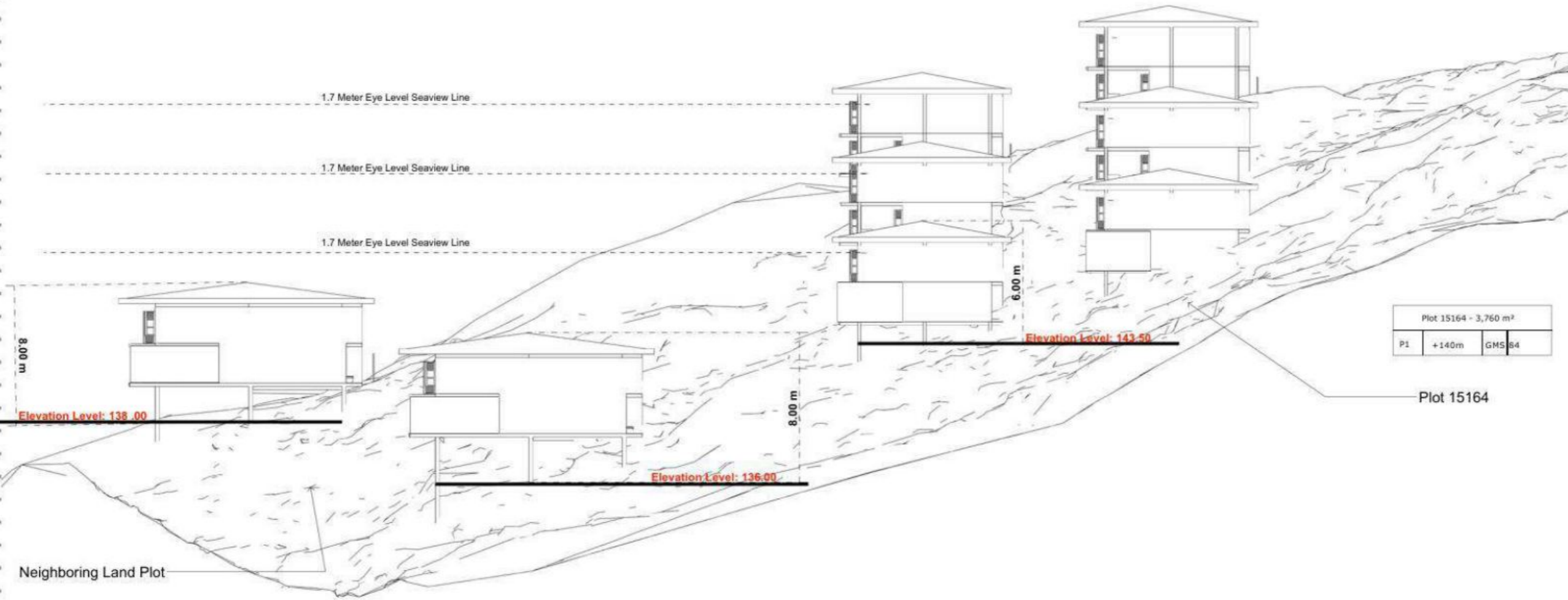
Package 2 - Land Visibility  
R7 efpeobrrutary 2025

Front View  
Section

**A.04**

1 Front View Section  
A.04 1mm=160 (1:160)

This section view illustrates a worst-case neighbouring development scenario based on current building regulations and terrain elevation. The neighbouring land plot is shown with example building masses positioned according to realistic elevation levels, allowing a clear comparison between surrounding development and the proposed villa locations on Plot 15164. The dashed lines represent approximate eye-level sea view lines (1.7 m), demonstrating how views are maintained across the terrain profile despite potential future construction. This analysis helps confirm that, due to the site's higher elevation and terrain advantage, primary sea views remain protected even if neighbouring plots are developed to their allowable limits.



INTERIOR DESIGNER:

DOCUMENT PHASE:

Package 2 - Land Visibility

Side View Section

**A.06**

1 Side View Section  
A.06 1mm = 160 (1:160)

## David's Project — Initial Questions

At the start of this study, the client asked LANDWISE to investigate the following key points before moving forward with design decisions:

- Confirm whether the land sits above the critical 80 m and 140 m elevation thresholds relevant to local planning regulations.
- Assess terrain steepness and slope conditions to understand construction feasibility and design implications.
- Evaluate the quality and security of the sea view from the proposed building area.
- Analyse whether neighbouring land or future development could block or reduce the view.
- Compare the land's elevation and terrain position relative to surrounding plots to understand long-term visibility and buildability.

## TOPOGRAPHIC CONTOUR MAP

### PROJECT DETAILS

Package 2 - Land Visibility Study

Date: 02 March 2026  
Survey: Drone Photogrammetry  
CRS: EPSG:32647  
Contour Interval: 1.0m  
Index Interval: 5.0m  
Elevation: 128.5m - 163.8m  
Relief: 35.3m  
Total Contours: 71  
Index: 14 | Intermediate: 57

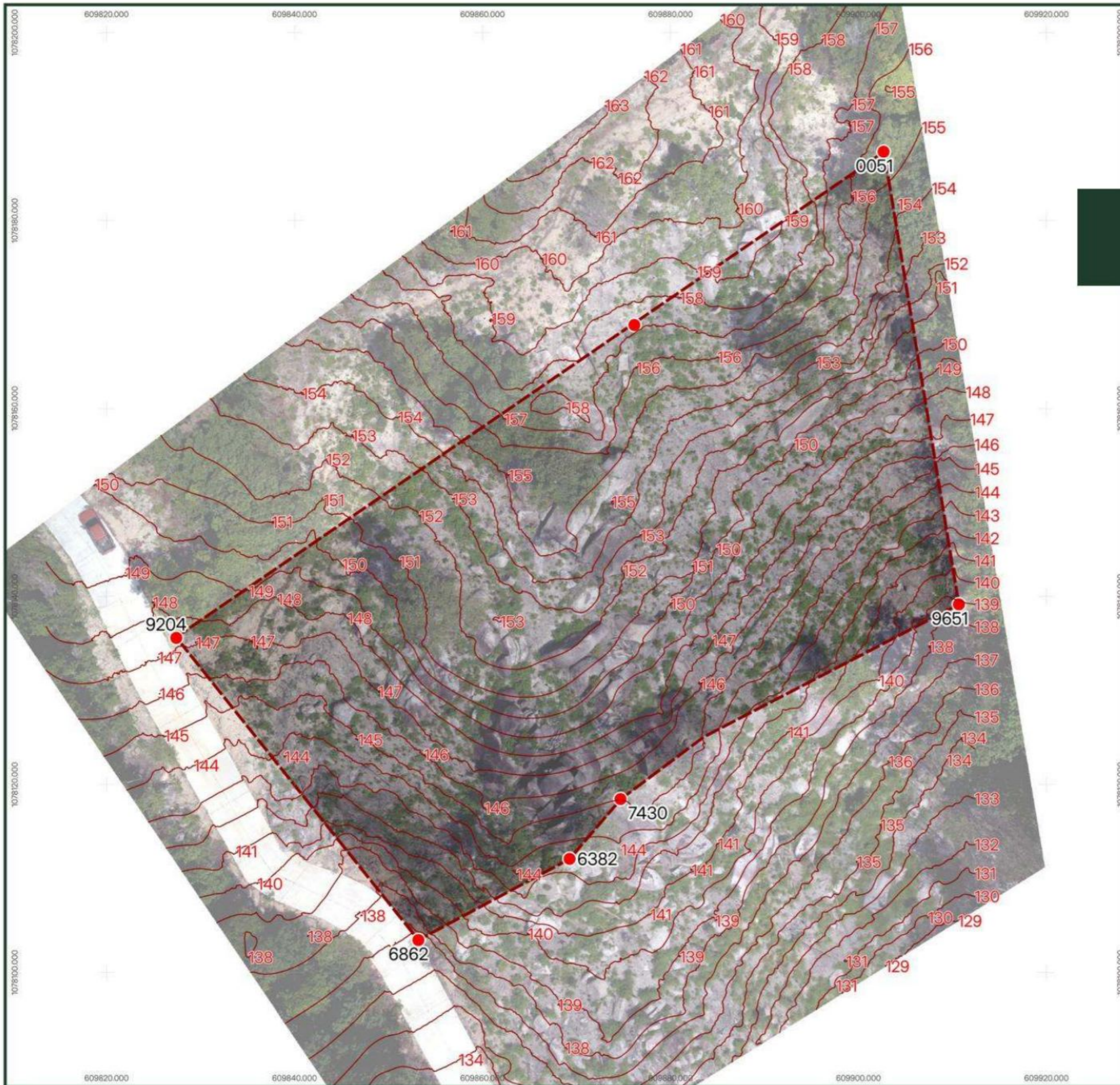
### LEGEND

- Contours
- Index Contours
- Intermediate Contours
- Land Boundary
- Chanote Posts

0 10 20 30 m



Coordinate System: EPSG:32647  
Grid Interval: 20 m



609840.000

609860.000

609880.000

0051

Natural drainage already forms a stable flow corridor through the site; design should work with this existing pattern rather than divert it.

1078160.000

1078160.000

1078160.000

1078160.000

9204

9651

7430

6382

6862

609860.000

609880.000

609900.000

## DRAINAGE ANALYSIS

Package 2 - Land Visibility Report

### PROJECT DETAILS

Date: 01 March 2026  
Survey: Drone Photogrammetry  
CRS: EPSG:32647  
Elevation: 136.8m - 159.7m  
Relief: 22.9m  
Mean Slope: 46.8%  
Major Channels: 4  
Tributaries: 12  
Total Segments: 114

### LEGEND

-  Major Channels
-  Tributaries
-  Detail Drainage
-  Flow Concentration Paths



Coordinate System: EPSG:32647  
Grid Interval: 20 units

609840.000

609860.000

609880.000

609900.000

8180.000

1078

8160.000

1078

8140.000

1078

8120.000

1078

609840.000

609860.000

609880.000

609900.000

## DEM ELEVATION

### PROJECT DETAILS

Package 2 - Land Visibility Study

Date: 28 February 2026

CRS: EPSG:32647

Source: DEM (Surface)

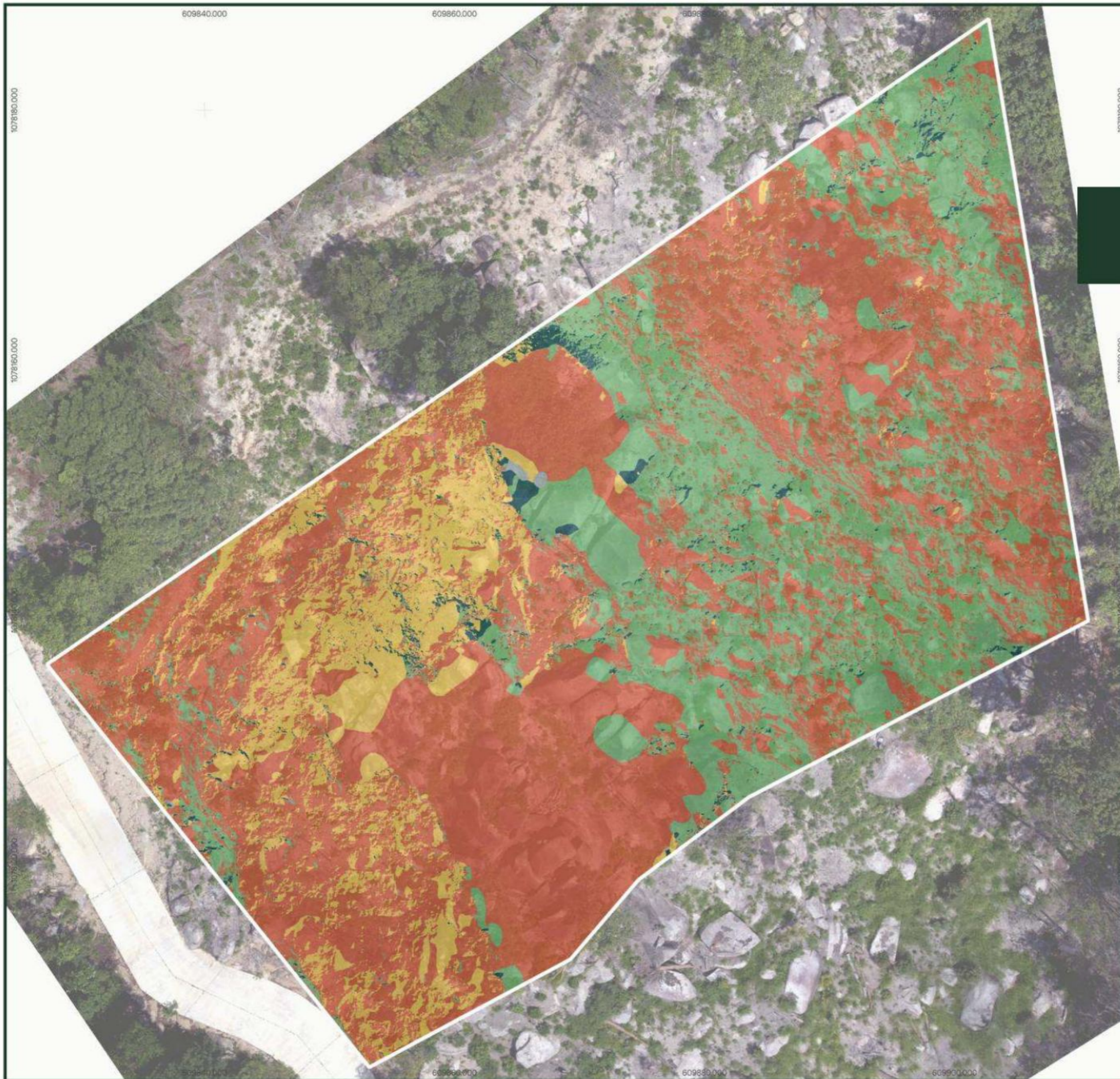
Elevation: 136.8m - 161.6m

Relief: 24.8m

### LEGEND

- 155 m +
- 150 m +
- 140m +





**SOLAR ORIENTATION & EXPOSURE**

**PROJECT DETAILS**

Date: 28 February 2026  
 Survey: Package 2 - Land Visibility Report  
 CRS: EPSG:32647  
 Elevation: 128.5m - 163.8m  
 Relief: 35.3m

**SUN PATH**

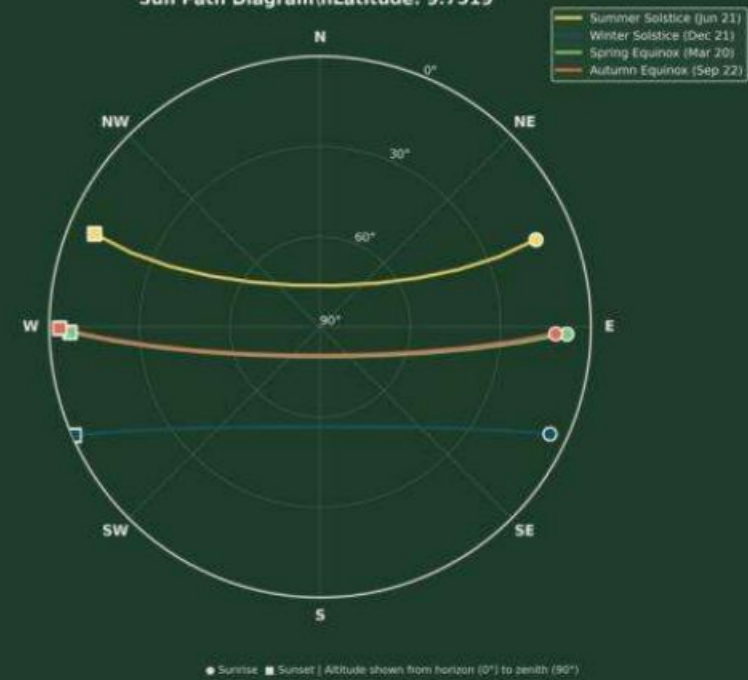
Sunrise: 06:05 UTC+7  
 66° (ENE)  
 Sunset: 18:45 UTC+7  
 294° (WNW)  
 Daylight: 12.7 hours

**LEGEND**

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

(Summer Solstice data)

Sun Path Diagram \nLatitude: 9.7519°



Colors show terrain orientation relative to sun path, indicating areas receiving morning, afternoon, or full sun exposure. Open terrain assumptions (no tree canopy shading).

**Solar Interpretation**

## David's Project — Initial Questions

At the start of this study, the client asked LANDWISE to investigate the following key points before moving forward with design decisions:

- Confirm whether the land sits above the critical 80 m and 140 m elevation thresholds relevant to building regulations.
- **Assess terrain steepness and slope conditions to understand construction feasibility and design implications.**
- Evaluate the quality and security of the sea view from the proposed building area.
- Analyse whether neighbouring land or future development could block or reduce the view.
- Compare the land's elevation and terrain position relative to surrounding plots to understand long-term visibility and buildability.

## SLOPE ANALYSIS

### PROJECT DETAILS

Package 2 - Land Visibility Study

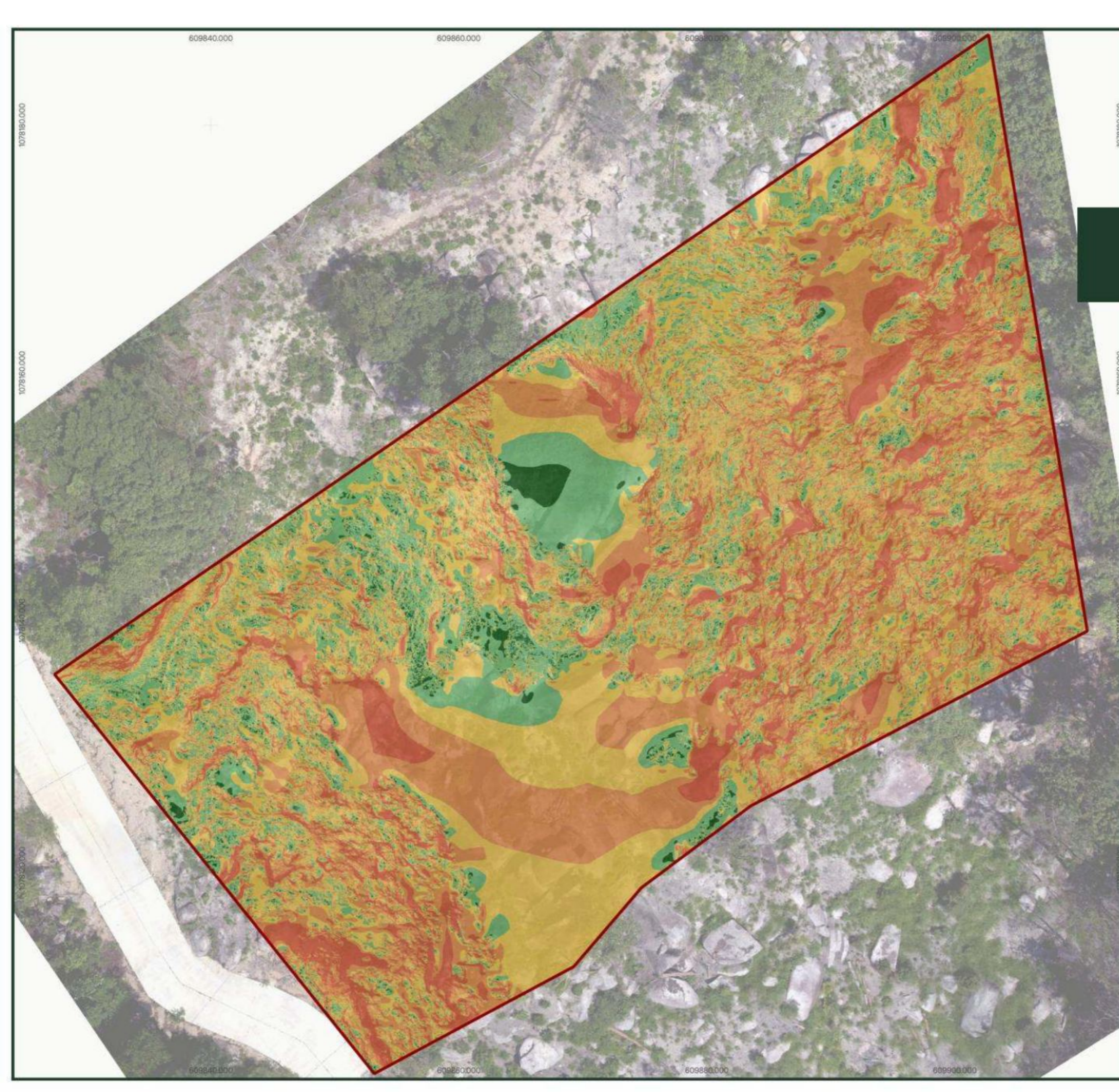
Date: 01 March 2026  
Survey: Drone Photogrammetry  
CRS: EPSG-32647  
Elevation: 128.5m - 163.8m  
Relief: 35.3m

### LEGEND

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



Coordinate System: EPSG-32647  
Grid Interval: 20 units



## SLOPE PROFILE ANALYSIS

### PROJECT DETAILS

Package 2 - Land Visibility Report

Date: 28 February 2026  
CRS: EPSG:32647  
Source: DTM (Bare Earth)  
Profiles: 3 cross-sections  
Sample step: 0.5 m

### PROFILE SUMMARY

Section A:  
Length: 42.5 m  
Elev: 143.7-151.8m  
Max slope: 37.4%

Section B:  
Length: 41.0 m  
Elev: 142.9-158.1m  
Max slope: 53.1%

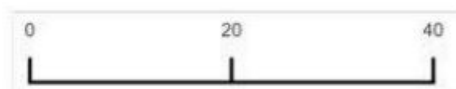
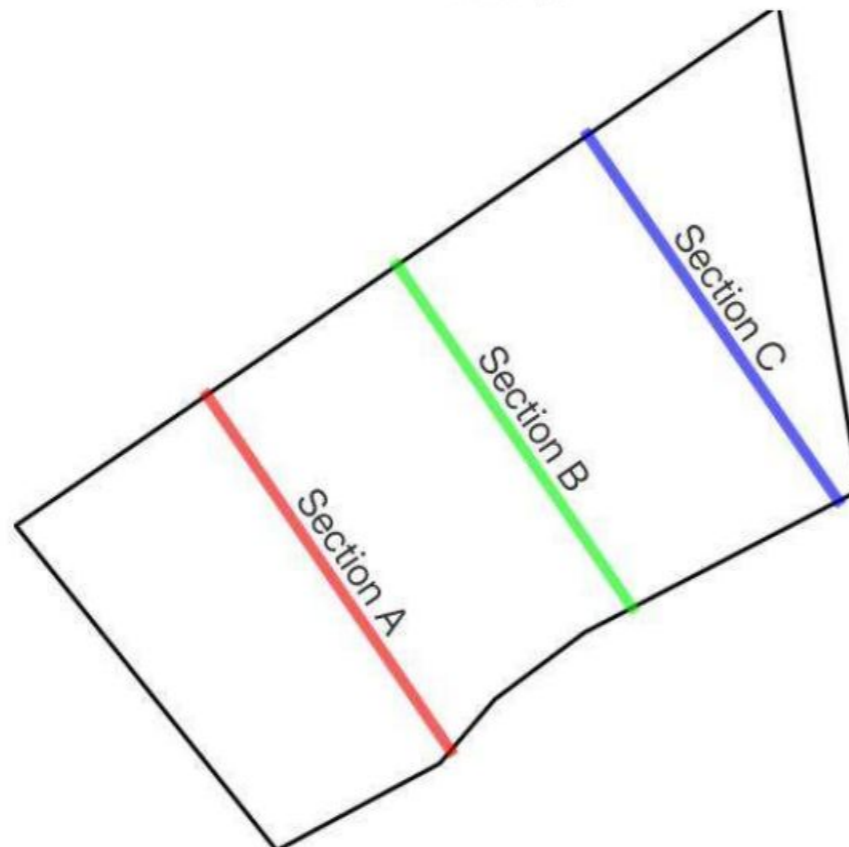
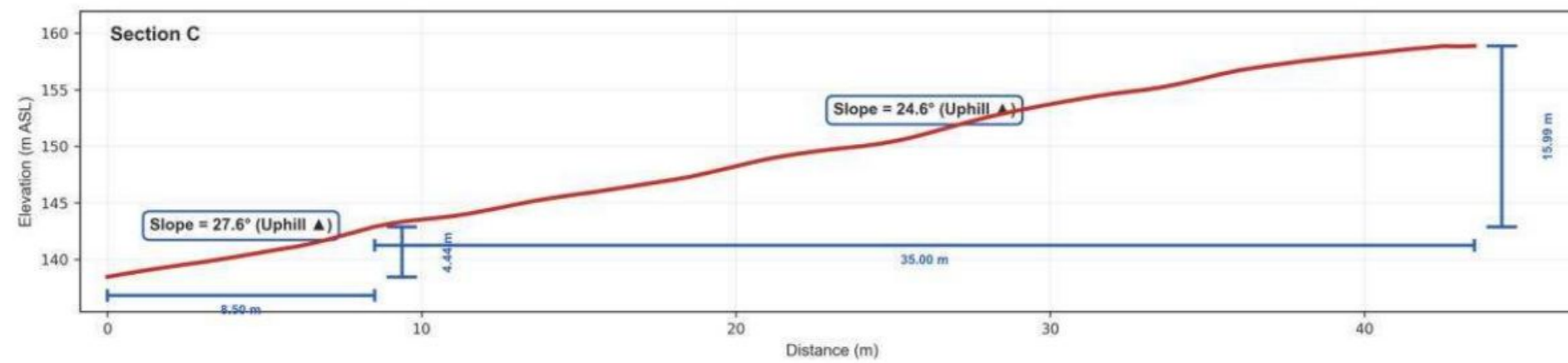
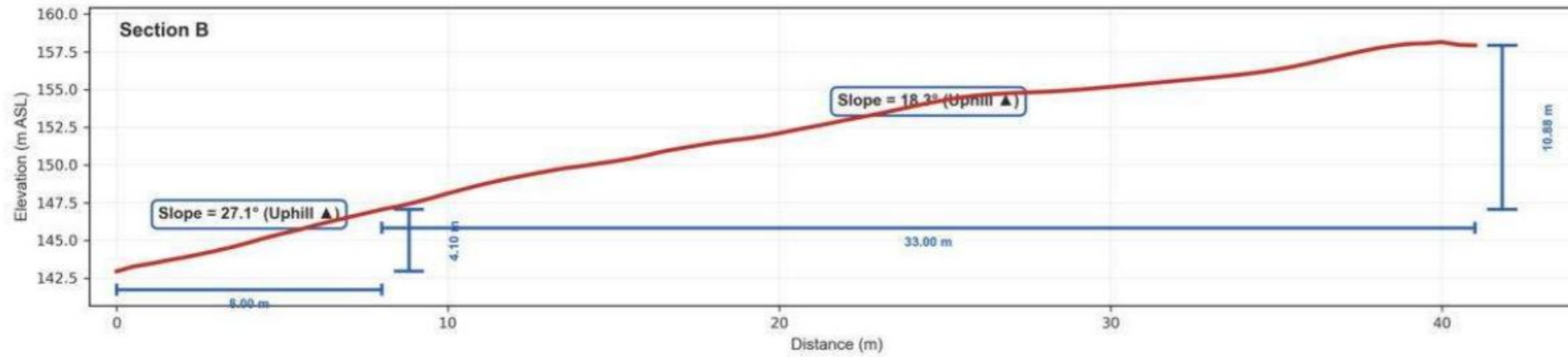
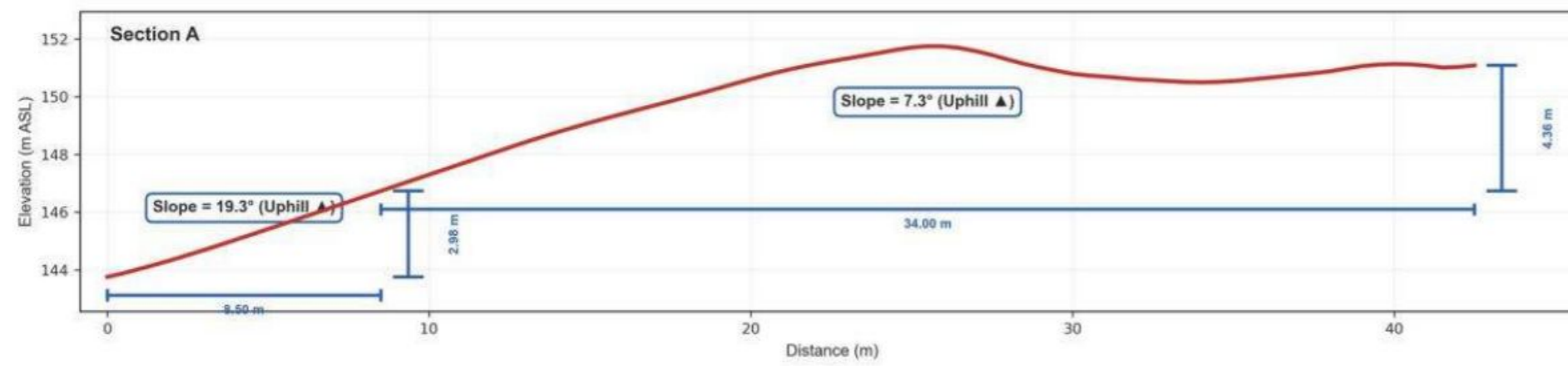
Section C:  
Length: 43.5 m  
Elev: 138.4-158.9m  
Max slope: 57.1%

### DATA SOURCE

Drone-derived DTM  
(Photogrammetry)

Elevations are relative and  
for planning analysis only.

Survey confirmation required  
for final design.



Red=A Green=B Blue=C

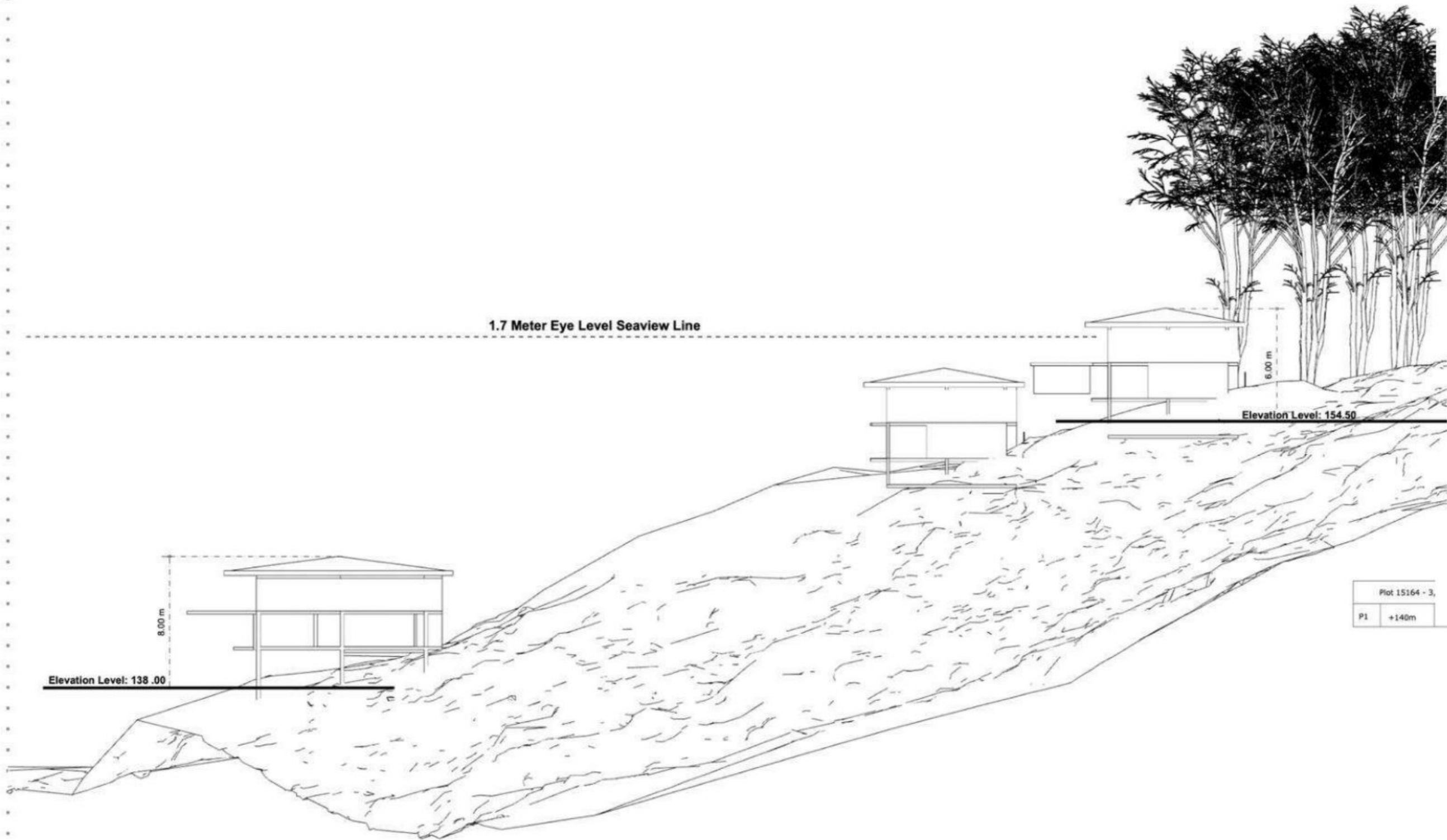


Coordinate System: EPSG:32647  
Grid Interval: 50 units

## David's Project — Initial Questions

At the start of this study, the client asked LANDWISE to investigate the following key points before moving forward with design decisions:

- Confirm whether the land sits above the critical 80 m and 140 m elevation thresholds relevant to building regulations.
- Assess terrain steepness and slope conditions to understand construction feasibility and design implications.
- Evaluate the quality and security of the sea view from the proposed building area.
- Analyse whether neighbouring land or future development could block or reduce the view.
- Compare the land's elevation and terrain position relative to surrounding plots to understand long-term visibility and buildability.



Plot 15164 - 3,	
P1	+140m

INTERIOR DESIGNER:

DOCUMENT PHASE:

Package 2 - Land Visibility Report

1 Side View Section  
A.01

Side View Section

A.01

## 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

---

## Scope of Analysis

This report was prepared to answer key pre-design questions relating to elevation regulations, terrain steepness, and long-term view potential. The analysis included:

- Drone-based terrain modeling (DEM & DTM generation)
  - Orthophoto and topographic contour analysis
- Verified elevation comparison using chanote marker survey data
  - Terrain slope and cross-section profile analysis
- Building regulation comparison (80 m / 140 m elevation thresholds)
- View and visibility assessment including neighbouring land influence
  - Conceptual massing and front-section visual studies

The purpose of this analysis is to provide accurate site intelligence so design decisions can proceed with confidence before architectural development begins.

---

## Key Findings

- The site elevation has now been confirmed using corrected survey data, giving reliable verification of levels relative to the 80 m and 140 m regulatory thresholds.
- Terrain analysis shows the land contains moderate to steep slopes in certain areas, requiring terrain-responsive architectural design rather than heavy land modification.
  - Slope profile studies confirm that buildable zones exist when aligned correctly with the natural gradient.
  - View analysis indicates strong visual potential from the upper zones of the site.
- Neighbouring land and realistic worst-case development scenarios are unlikely to significantly block the primary sea views when building heights remain within regulations.
  - Updated contour and elevation workflows now provide accurate terrain guidance for design and planning decisions.

---

## Recommendations

- Use the verified elevation data as the baseline for all future design and regulation assessments.
- Position buildings to follow natural terrain lines to reduce excavation and construction complexity.
  - Maintain elevation advantage where possible to secure long-term views.
- Continue architectural development using the slope, terrain, and visibility analysis as primary guidance.
  - Integrate drainage and terrain-responsive design early in the architectural phase.

---

## LANDWISE — REPORT SUMMARY

Thank you for choosing LANDWISE – Land Intelligence Services.

This analysis was completed to reduce uncertainty and provide clear, accurate site understanding before design and investment decisions are made.

We appreciate the opportunity to support your project and look forward to assisting with the next stage of development.

## 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.