ETHOS URBAN

34-72 Tallawong Road

Visual Impact Assessment
May 2019

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Issue to Council

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The information contained in this document is for submission to the Department of Planning and Environment. The client shall make its own enquiries analysis and calculations and form its own views in relation to the use or development of the property including the application of local government and statutory controls. It is assumed that the client will rely on its own expertise in considering the information. Ethos Urban Pty Ltd operates under a Quality Management System that has been certified as complying with ISO 9001:2008. This report has been prepared and reviewed in accordance with that system. If the report is not signed above, it is a preliminary draft. The drawings in this document were prepared with topographical survey data. Data has been sourced from Land and Property Information, SDG Surveyors and other relevant sources.

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1.0

KEY VIEWS & IMPACT ASSESSMENT

1.0 Key Views & Impact Assessment

1.1 Methodology

There is currently no universally agreed method of undertaking VIA in NSW. The methodology used to inform this VIA is based on established NSW practices and national and international policy. These include:

- Visual Management System, United States Department of Agriculture Forest Service, 1974
- Guidance for Landscape and Visual Impact Assessment, United Kingdom Landscape Institute and the Institute of Environmental Management & Assessment, 2005
- Planning principles for Impact on public domain views set down by the Land and Environment Court in Rose Bay Marina Pty Limited v Woollahra Municipal Council and Anor [[2013]
- Planning principles for views - general principles, in particular view sharing in the private domain, set down by the Land and Environment Court Rose in Tenacity Consulting v Warringah Council [2004]
- Implementation Guideline No. 8: Identifying and protecting scenic amenity values, Queensland Government, 2008
- Planning Practice Note 43: Understanding Neighbourhood Character, Victorian Department of Environment,Land, Water and Planning, 2015.

The methodology has also been influenced by a set of considerations typically required by the Department of Planning and Environment in setting SEARS for State Significant Development.

The methodology for the preparation of the photomontages has been explained in section 1.2.

The core methodology follows three key steps:

1. **Visual Character:** what is the character of the proposals visual catchment
2. **Visual Effect and impact:** assessment of the nature and scale of the proposal on the existing visual catchment and assessment of the impact of the visual effect following application of other, relevant considerations
3. **Mitigation and Recommendation:** what measures are needed to ensure acceptability of impact and can the proposal be supported in its current form based on a balance of considerations relevant to visual impact.

Based on the findings of this core methodology, a determination is then made as to whether the proposal can be supported in its current form from a visual impact perspective, and if so, whether any elements are critical to ensure its continued acceptability as it evolves from concept to detail design and development.

3.1.1 Visual Character Assessment & Viewpoint Selection

Visual character is formed by patterns created by the relationship of all elements within an area, including both the public and private domain and the combination of the public and private realms. (Victorian Department of Environment, Land, Water and Planning, 2015).

The visual character of the study area was identified through the background literature review, desktop analysis and ground-truthing on site.

Documents that have informed this study include:

- Area 20 Precinct Public Domain and Landscape Strategy 2011
- Riverstone East Landscape and Visual Assessment
- Riverstone East Precinct Map 2016

A site inspection was undertaken on 11/04/19 where

Ethos Urban, Weir Phillips Heritage, Sydney Living Museums and SDG Surveyors were present.

Through the collective intelligence of the above, views have been chosen on the basis of:

- Windows in the existing Rouse Hill House with prominent views or vistas over the landscape looking towards the site.
- Potential places of visual significance in terms of natural, cultural or scenic value within the estate grounds.
- Views facing south-west representative of the future character of the area.

1.0 Key Views & Impact Assessment

1.2 Preparation of Photos

The photomontages in this report have been prepared in accordance with the Land and Environment Court's Policy .

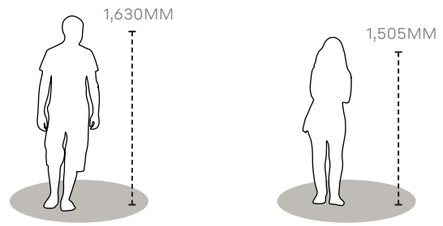
This methodology is further outlined in this section with consideration of the following:

- The Human Perspective
- Bearing of viewpoint in relation to the centre of the development
- Camera type and lens
- Software
- Surveyed Structures
- Limitations and Assumptions

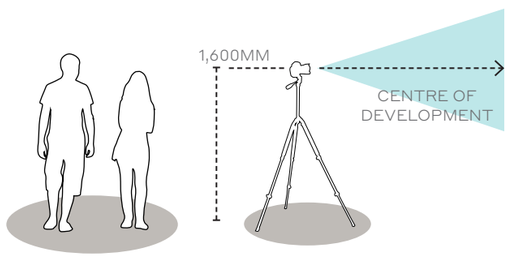
1.1.1 Human Perspective

Anthropometrics is the science concerned with the measurement of human kind. While many people vary in height the average dimensions for both male and female adult eye heights are shown below (Metric Handbook, David Adler)

- Male Eye height: 1630mm
- Female Eye height: 1505mm

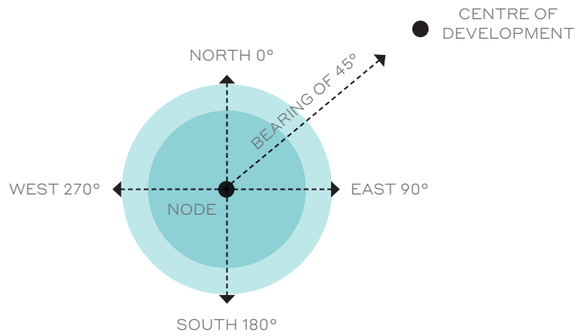


On the basis of the above dimensions and for the purpose of this Visual Impact Analysis, the Camera has been fixed on a tripod at 1,600mm above ground level. This is illustrated in the diagram below.



1.1.2 Location of Viewpoints (Nodes)

Due to the nature of the view corridor and the subject site being so far away, a bearing to which the camera faces the centre of the development was used. The Camera bearing ensures that the centre of development is the focus of the image. This is illustrated in the below diagram.



1.1.3 Camera Type & Lens

In order to accurately depict the proposed envelopes, Ethos Urban has used a 35mm lens as this lens captures a perspective that is the closest to that of the human eye.

- Camera Body: Canon 6D
- Camera Lens: Sigma 35mm

1.1.4 Software

The software used to match the photographs and the proposed development at 34-72 Tallawong Road is Rhino. Rhino is a 3D modelling and rendering tool used in architecture and urban design. The software allows you set up views with a specific location, target and focal length. The Location is set to the coordinates, RL's and a bearing which have been surveyed. The focal length is then assigned to match the 35mm lens.

1.1.5 Surveyed Structures & View Nodes

Specific visual elements and structures such as roof pitches, telegraph pole, the Sydney Water Reservoir and fencing have been modelled based on a Survey done by SDG Surveyors on 11/04/19. This is shown in the 3D wireframe view along with each photograph.

1.1.6 Limitations and Assumptions

All other modelling has been prepared with the following assumptions and limitations:

- A 3D representation of the built and natural environment has been sourced from a LiDAR (Light Detection and Ranging) scan over the sydney region. This data is freely available from the NSW Governments, Spatial Services. This data has an accuracy of 0.3m (95% Confidence Interval) vertical and 0.8m (95% Confidence Interval) horizontal with a minimum point density of 1.03 laser pulse per square metre. The purpose of this data set is to provide fit-for-purpose elevation data for use in applications related to coastal vulnerability assessment, natural resource management (especially water and forests), transportation and urban planning.

1.0 Key Views & Impact Assessment

1.3 Significance of Rouse Hill House & Estate

Rouse Hill House Estate with its outbuildings, associated farm structures, garden and the Rouse Hill Primary School is one of the most significant heritage sites in Australia (GML, 2009). This significance is related to the cultural landscape setting and is therefore of high importance to the visual and landscape assessment of the Precinct.

Rouse Hill House has views looking over paddocks and across to the Blue Mountains. Six generations of the Rouse and Terry families occupied the house from its construction in the early 1800s until the late 1990s, when it opened as a museum.

As stated by Dr Scott Hill, Curator from Sydney living museums - One of the most fascinating aspects of the house as a museum is the accumulation of physical traces of the lives lived within the rooms.

With its grand stables and prize horses, orchards and elegant summerhouse, Rouse Hill House was once the social hub of the area. And although the estate was later subdivided as the family fortunes waned, the house and its stories still draw people to its door.

Photos shown below are a representation of Rouse Hill House, past and present.

01 Aerial perspective looking south west towards the proposal.
Source: Detail from Panorama © Peter Murphy, HHT

02 Man, women and child outside house, Rouse Hill,
Source: Sydney Living Museums

03 Schoolroom, Rouse Hill House & Farm,
Source: James Horan for Sydney Living Museums

04 Front of Rouse Hill House
Source: Ethos Urban

05 Rear of Rouse Hill House
Source: Ethos Urban

06 The Stables
Source: Ethos Urban

07 Southern Paddock
Source: Ethos Urban

1.0 Key Views & Impact Assessment

1.4 Understanding of the View Corridor

As per the Gateway Determination received on 23 January 2019 the following understanding of the view corridor as well as the views shown in section 1.5 aim to address any potential impact of the additional height of 34-72 Tallawong Road (Subject Site), on the view corridors from Rouse Hill House and Estate.

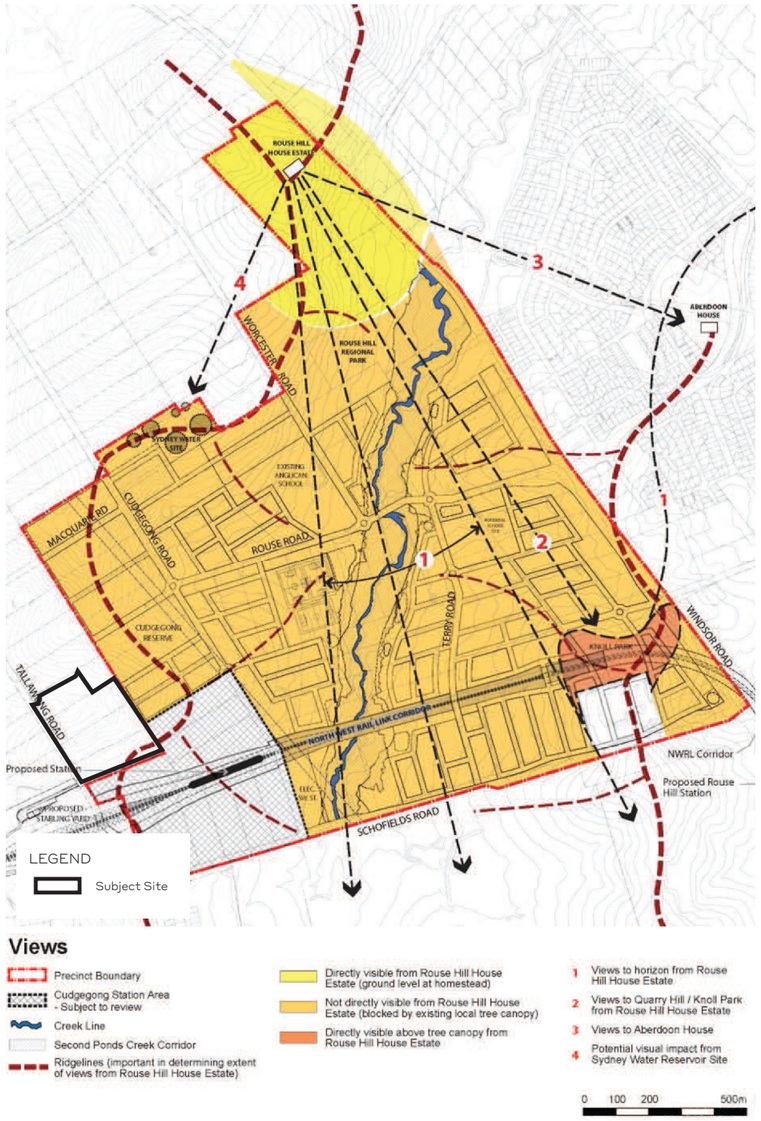
The Subject Site is located approximately 1.6km from Rouse Hill House & Estate with a bearing of 197 degrees facing south-west. Rouse Hill House is located on a hilltop along a ridge at RL 71.

As shown in figures 8 and 9 there are a range of obstructions present which have the potential to limit visibiliy from Rouse Hill House and Estate.

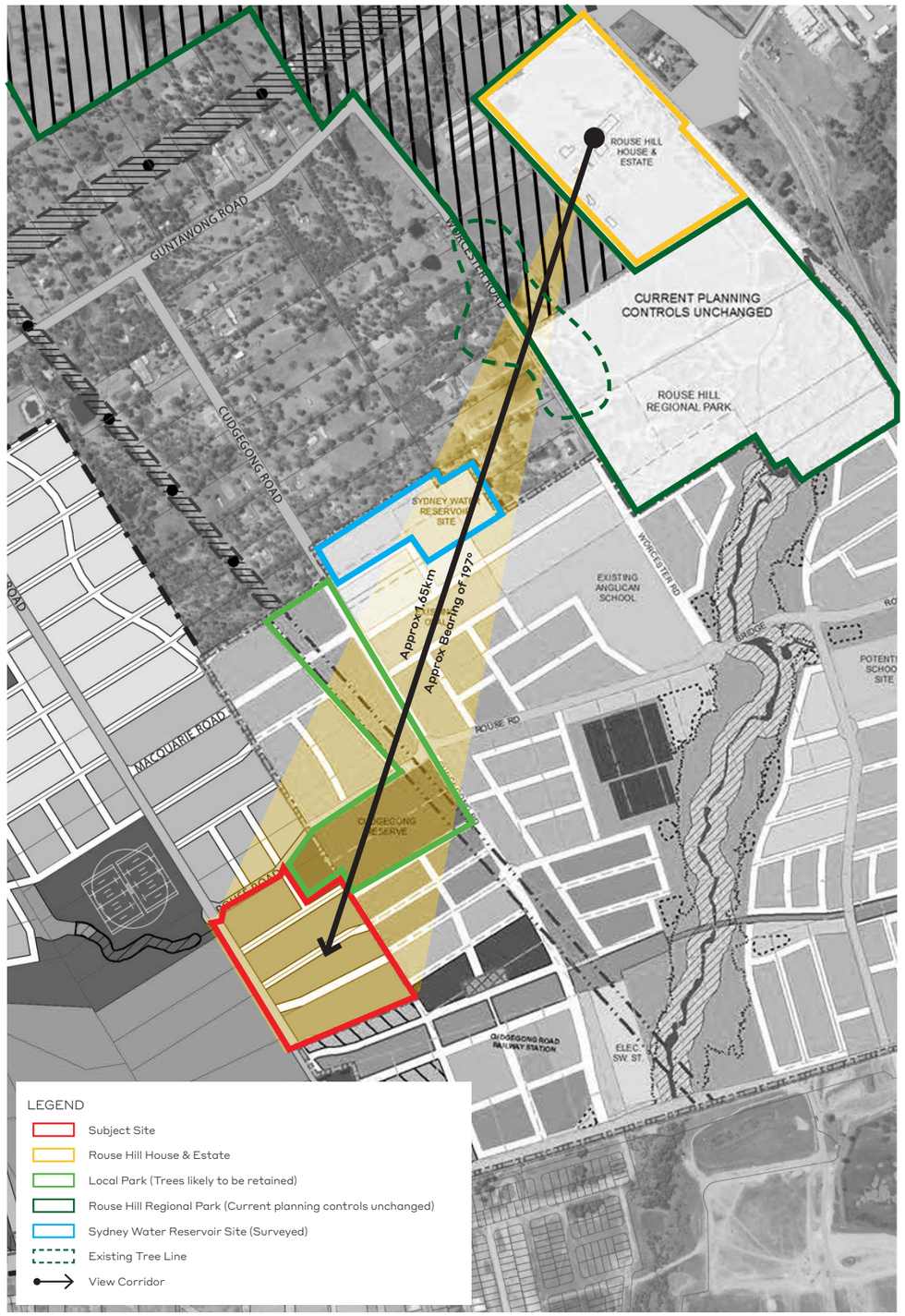
This includes:

- Sydney Water Reservoir roofline which has a surveyed RL of 88.68;
- Existing tree line which has a surveyed RL of 88.53;and
- Proposed Local Parks where trees are likely to be retained.

The subject site top of envelope ranges from RL 89.77-72.41 with ground level RL ranging from RL 50-65.



08 Views Map, Area 20 Precinct - Public Domain and Landscape Strategy. Source: LFA on behalf of Department of Planning and Infrastructure



09 Riverstone East Precinct Map 2016 with overlays by Ethos Urban

1.0 Key Views & Impact Assessment

1.5 Selected Key Views

Viewpoints selected in this assessment of visual impact have been informed by ground-truthing on site as well as identified through background document review and desktop analysis.

A site inspection was undertaken on 11/04/19 where Ethos Urban, Weir Phillips Heritage, Sydney Living Museums and SDG Surveyors were present.

Through the collective intelligence of the above specialists, the views shown to the right are believed to be of most significance to Rouse Hill House & Estate.

Views A and B are focused on prominent views which are obtainable from inside Rouse Hill House. These views represent the highest most assessable vantage point in which views can be obtained over the landscape facing south-west. View C and D on the other hand are from the estate grounds which focus on the natural landscape setting and the uninterrupted vistas across the estate.

Table 1 – View Summary

View/Receptor	Coordinates	Bearing to site
1 View A	-33 ° 40 ' 33.19294 '' 150 ° 54 ' 29.86011 ''	197°52'
2 View B	-33 ° 40 ' 33.59053 '' 150 ° 54 ' 29.29096 ''	197°33'
3 View C	-33 ° 40 ' 36.10839 '' 150 ° 54 ' 28.16239 ''	197°28'
4 View D	-33 ° 40 ' 36.24686 '' 150 ° 54 ' 26.04994 ''	195°45'

10 Selected Views (A,B,C & D)

11 Location Plan

1.0 Key Views & Impact Assessment

1.6 View A - Impact Assessment

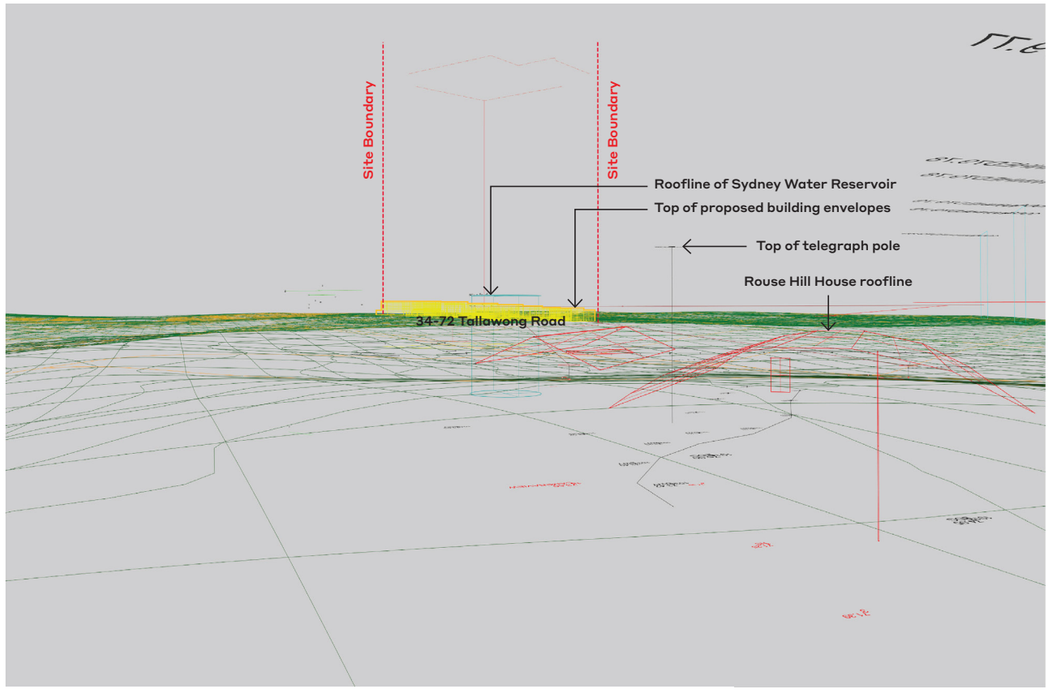
1.6.1 Summary

- View A has been taken from a prominent second floor window within Rouse Hill House which aligns itself with an internal staircase.
- Due to the presence of existing trees, slope in terrain and the Sydney Water Reservoir within close proximity to this viewpoint, the proposal is completely obscured from the view resulting in no view impact.

1.6.2 Assessment of view

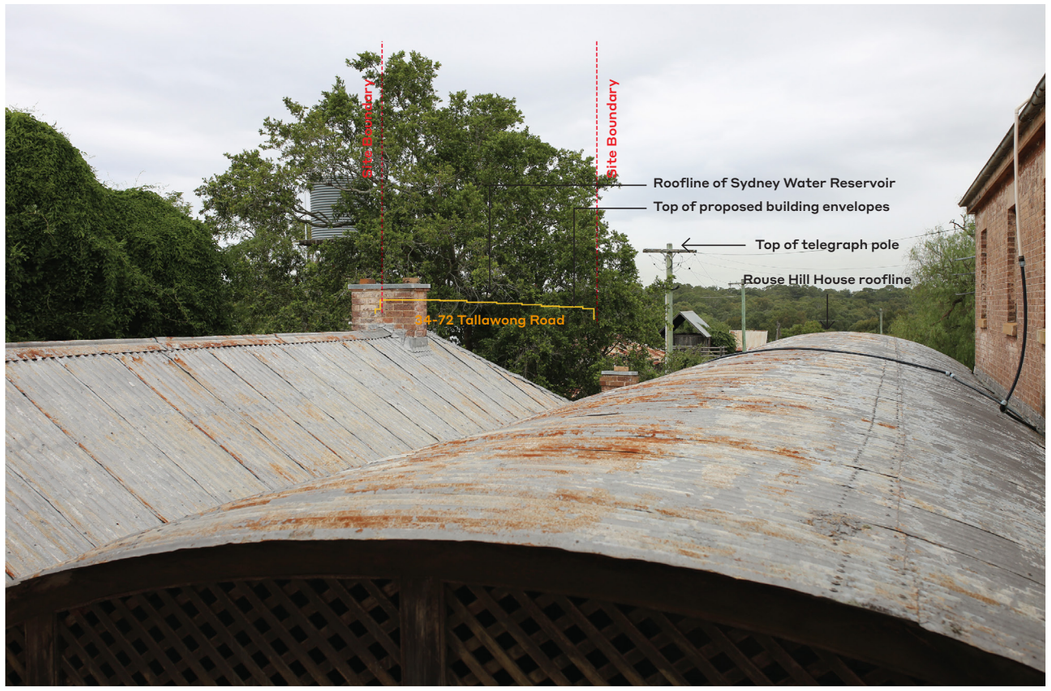
Table 2 – View Assessment Summary

Element	Category	Comment	Level of effect
Category of view	Private	N/a	N/a
View composition type	Restricted	Roof structures and vegetation occupying almost full width of view. View composition is retained.	Nil
Relative viewing level	In line with site	Viewpoint elevation is RL 78.42 with highest envelope at RL 89.77 within subject site	Nil
Viewing distance	Long Range	The proposal is 1.65km away	Nil
View loss or blocking	Nil	No view loss or blocking	Nil
Overall			**Nil**



13 3D Wireframe Image - 35mm Lens - Second floor window of Rouse Hill House

12 Location Plan



14 Canon 6D - 35mm Lens - Second floor window of Rouse Hill House

1.0 Key Views & Impact Assessment

1.7 View B - Impact Assessment

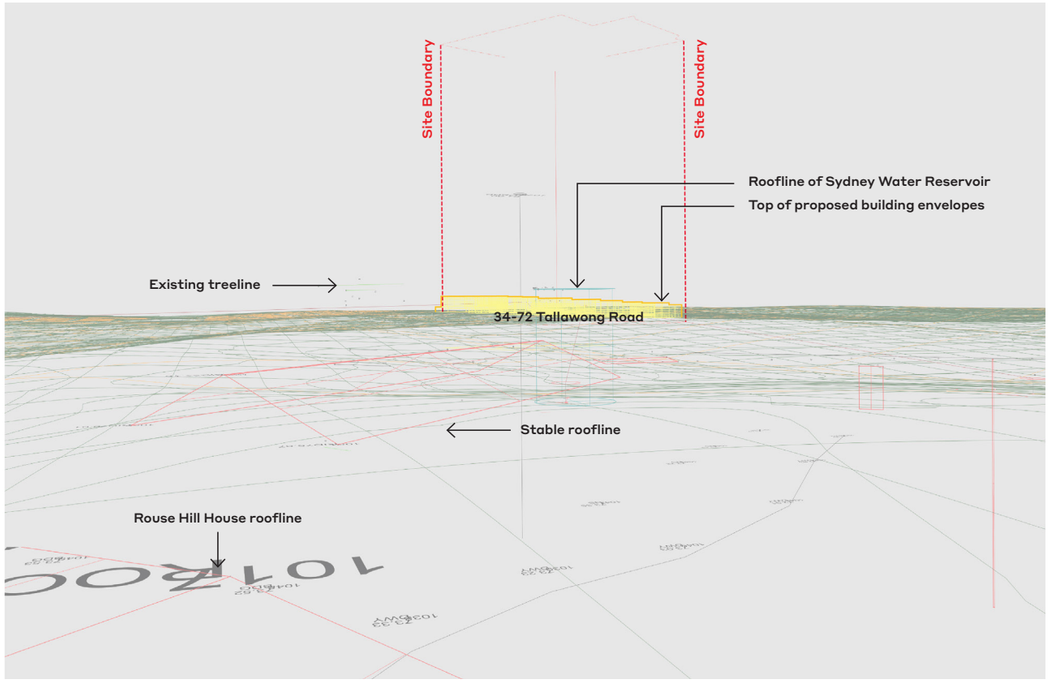
1.7.1 Summary

- View B has been taken from the second floor window from within the western wing of Rouse Hill House.
- Due to the presence of existing trees, slope in terrain and the Sydney Water Reservoir within close proximity to this viewpoint, the proposal is completely obscured from the view resulting in no view impact.

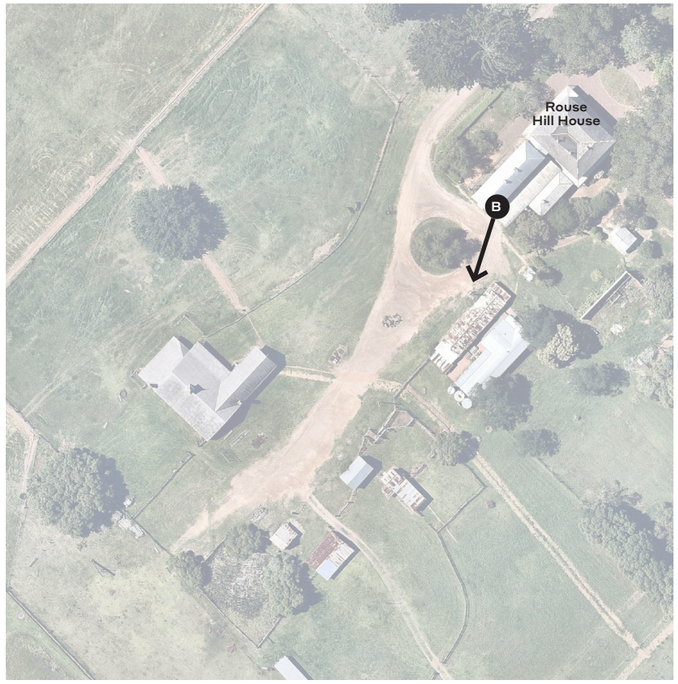
1.7.2 Assessment of view

Table 3 – View Assessment Summary

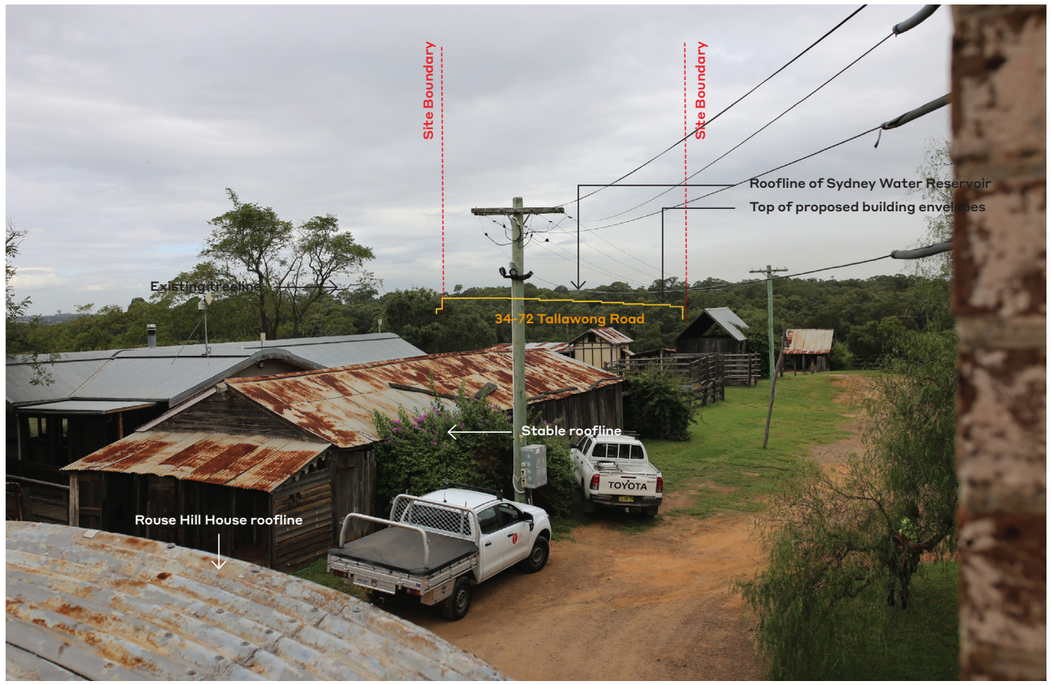
Element	Category	Comment	Level of effect
Category of view	Private	N/a	N/a
View composition type	Restricted	Roof structures and vegetation occupying almost full width of view. View composition is retained.	Nil
Relative viewing level	In line with site	Viewpoint elevation is RL 78.46 with highest envelope at RL 89.77 within subject site	Nil
Viewing distance	Long Range	The proposal is 1.65km away	Nil
View loss or blocking	Nil	No view loss or blocking	Nil
Overall			**Nil**



16 3D Wireframe Image - 35mm Lens - Second floor window of Rouse Hill House



15 Location Plan



17 Canon 6D - 35mm Lens - Second floor window of Rouse Hill House

1.0 Key Views & Impact Assessment

1.8 View C - Impact Assessment

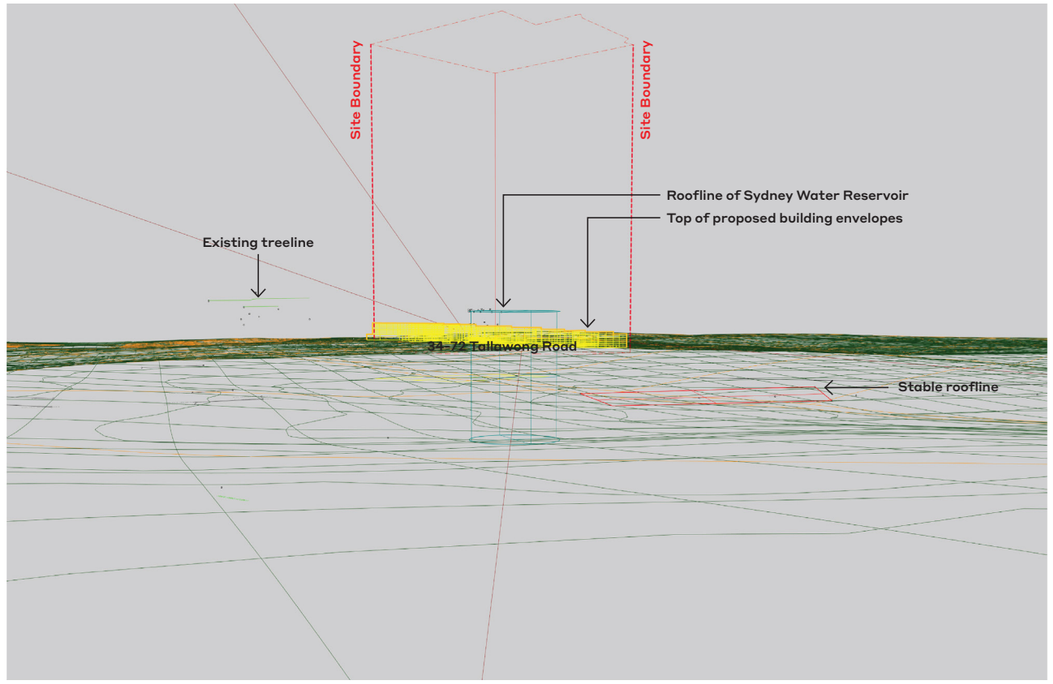
1.8.1 Summary

- View C has been taken from a paddock south of Rouse Hill House.
- Due to the presence of existing trees, slope in terrain and the Sydney Water Reservoir within close proximity to this viewpoint, the proposal is completely obscured from the view resulting in no view impact.

1.8.2 Assessment of view

Table 4 – View Assessment Summary

Element	Category	Comment	Level of effect
Category of view	Semi-public/ private	N/a	N/a
View composition type	Restricted	Existing vegetation/tree line occupying almost full width of view. View composition is retained.	Nil
Relative viewing level	In line with site	Viewpoint elevation is RL 71.98 with highest envelope at RL 89.77 within subject site	Nil
Viewing distance	Long Range	The proposal is 1.65km away	Nil
View loss or blocking	Nil	No view loss or blocking	Nil
Overall			**Nil**



20 3D Wireframe Image - 35mm Lens - View from paddock south of Rouse Hill House

18 Location Plan

19 Canon 6D - 35mm Lens - View from paddock south of Rouse Hill House

1.0 Key Views & Impact Assessment

1.9 View D - Impact Assessment

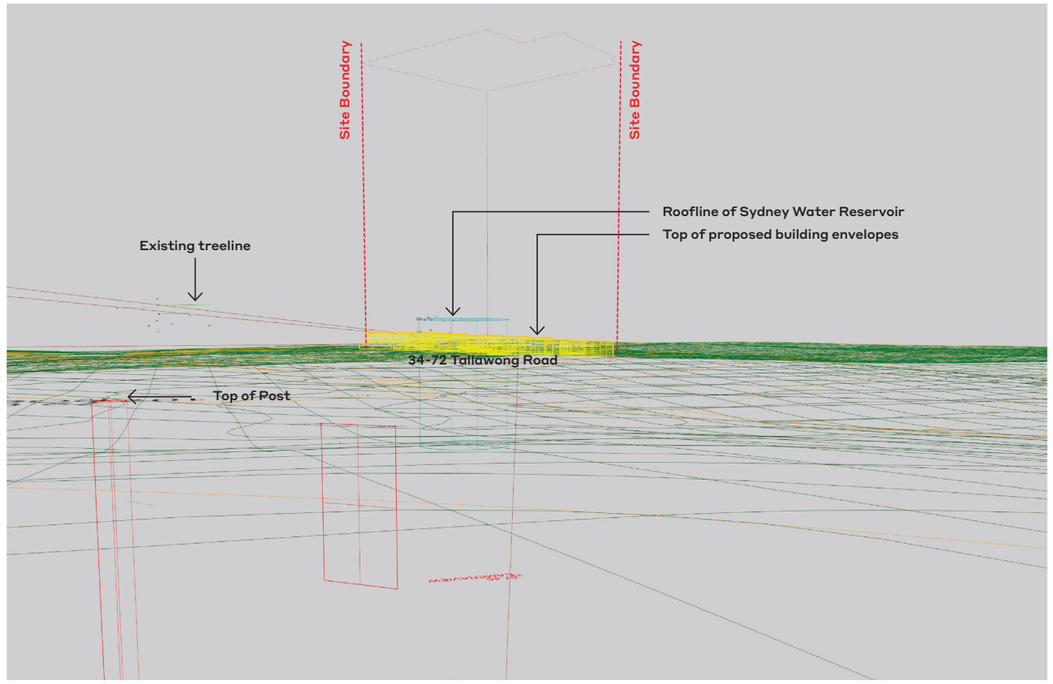
1.9.1 Summary

- View D has been taken from a paddock south-west of Rouse Hill House.
- Due to the presence of existing trees, slope in terrain and the Sydney Water Reservoir within close proximity to this viewpoint, the proposal is completely obscured from the view resulting in no view impact.

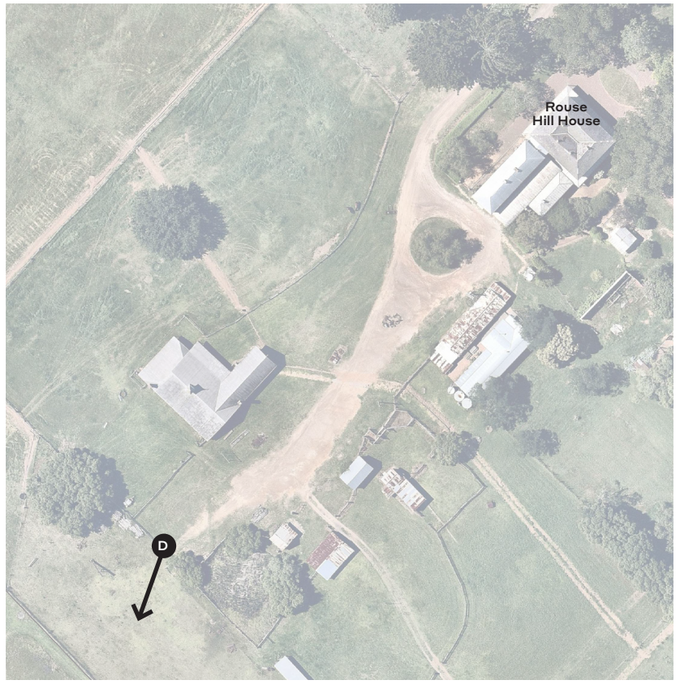
1.9.2 Assessment of view

Table 5 – View Assessment Summary

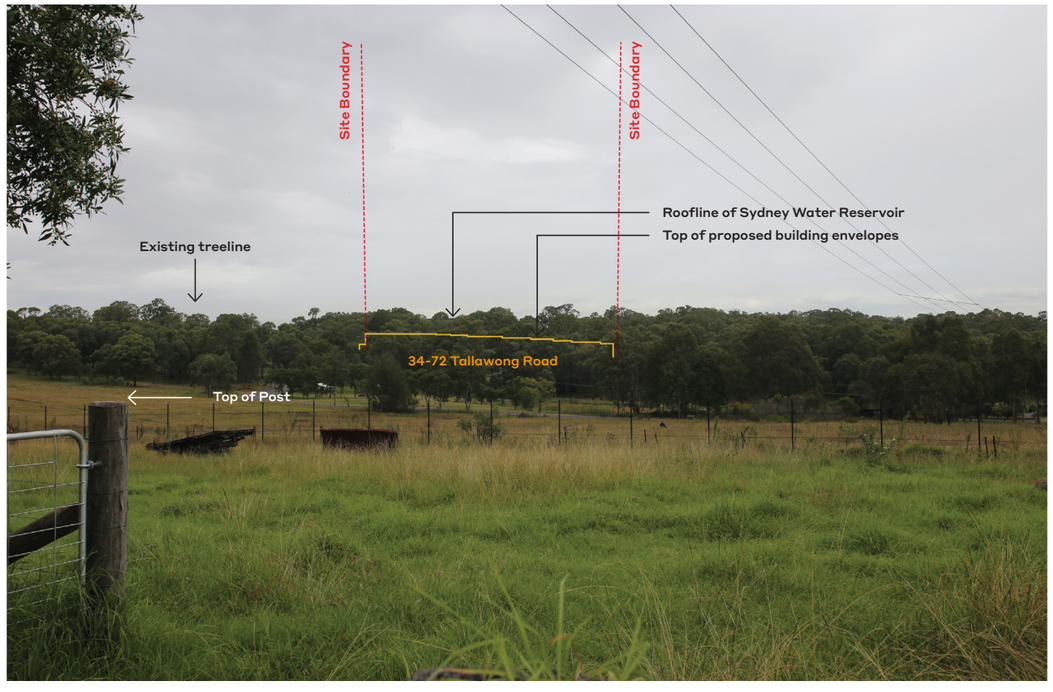
Element	Category	Comment	Level of effect
Category of view	Semi-public/ private	N/a	N/a
View composition type	Restricted	Existing vegetation/tree line occupying almost full width of view. View composition is retained.	Nil
Relative viewing level	In line with site	Viewpoint elevation is RL 70.33 with highest envelope at RL 89.77 within subject site	Nil
Viewing distance	Long Range	The proposal is 1.65km away	Nil
View loss or blocking	Nil	No view loss or blocking	Nil
Overall			**Nil**



22 3D Wireframe Image - 35mm Lens - View from paddock south-west of Rouse Hill House



21 Location Plan



23 Canon 6D - 35mm Lens - View from paddock south-west of Rouse Hill House

1.0 Key Views & Impact Assessment

1.10 Conclusion

As a result of the analysis undertaken, we have concluded that there is no view impact as a result of the additional height of 34-72 Tallawong Road, on the view corridors from Rouse Hill House and Estate for the following reasons:

- The proposal does not have negative effects on features which are associated with high visual significance or scenic quality within view corridor.
- The vegetation/existing tree line present in the photographs is assumed to be retained as they form part of proposed Local Parks and the Rouse Hill Regional Park.
- The proposal does not decrease the presence or conflict with existing visual character of built form, building scale and urban fabric.
- It is clear that there are other structures such as the Sydney Water Reservoir already established within the view corridor.
- The nature of the selected views does not change and the height/scale of the proposal is in line with the visual character of the Tallawong Station precinct.
- The view composition is retained in all views.
- No view loss or blocking is apparent.

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