



**INGLESIDE URBAN RELEASE AREA
INGLESIDE STRUCTURE PLAN
LANDSCAPE VISUAL ASSESSMENT - REPORT**



Prepared by: Richard Lamb and Associates
April, 2016

Contents

	EXECUTIVE SUMMARY	3
1.0	PURPOSE OF THIS REPORT	4
2.0	STUDY AREA AND PHYSICAL SETTING	6
2.1	SUB-REGIONAL VISUAL CONTEXT	6
2.2	GEOLOGY	7
2.3	NATIVE VEGETATION	7
3.0	LOCAL VISUAL CONTEXT	8
3.1	WEST PRECINCT	8
3.2	NORTH PRECINCT	8
3.3	SOUTH PRECINCT	9
4.0	PROCESS OF VISUAL ANALYSIS	9
4.1	ENTRIES, NODES AND VISUAL CORRIDORS	9
4.2	EXPOSURE TO EXTERNAL AND INTERNAL VIEWS	14
4.3	SCENIC NATURAL LANDSCAPES AND GREEN FINGERS OF VEGETATION	15
4.4	ISOLATED AREAS	15
4.5	EXISTING DEVELOPMENT CHARACTER AREAS, CONSISTENT OR MIXED	15
4.6	INDIVIDUAL CHARACTER AREAS	20
4.7	VISUAL CHARACTER AREA BOUNDARIES	20
	Area 1	20
	Area 2	24
	Area 3	28
	Area 4	31
	Area 5	34
5.0	INTEGRATING VISUAL CHARACTER AREAS AND LVA ANALYSIS	38
5.1	COMPATIBILITY CRITERIA OF THE PROPOSED LAND USES WITH THE LVA	38
6.0	RESPONSE OF THE STRUCTURE PLAN TO RLA COMPATIBILITY ANALYSIS	44
6.1	AREA 1	44
6.2	AREA 2:	47
6.3	AREA 3:	49
6.4	AREA 4:	50
6.5	AREA 5:	52
7.0	CONCLUSION	54

Executive Summary

- Richard Lamb and Associates (RLA) were engaged to prepare the Landscape Visual Assessment for the strategic planning process which has led to the Ingleside Structure Plan.
- RLA provided the base-line analysis and staged, refined assessment of the visual character, visual resources, constraints and opportunities to be taken into account in planning for the area.
- RLA worked closely in association with the principal urban and landscape design consultants, Cox Richardson and Place Design, in formulating the principles that underpin the Structure Plan.
- Five character areas defined on the Visual Character Areas Key Map provide a basis for recommendations on future residential development.
- The Key Attributes for each character areas, its opportunities for residential development and the response of the Master Plan are summarised in this report.
- Area 1
 - Highly constrained by its high intrinsic natural and visual landscape quality, seclusion, poor access and steep terrain, the Structure Plan maintains existing character with large rural lots and large areas for environmental conservation.
- Area 2
 - Least constrained by external visibility and existing landscape quality and character, the higher capacity for housing including houses, low-rise apartments/town houses, neighbourhood and community centre uses is reflected in appropriate land uses in the Structure Plan.
- Area 3
 - Constrained by high visual quality scenic natural landscapes with isolated rural areas, Area 3 forms a visual buffer to the national park to the north and north-west, the character of which can be protected by the land uses proposed in the Structure Plan.
- Area 4
 - Visually prominent from the east in parts, because of steep topography, vegetation and impact of existing isolated residences, the area is an important interface with the Warriewood Escarpment and entry to the study area from the east, the character of which will be protected primarily by environmental conservation land use in the Structure Plan.
- Area 5
 - Semi-suburban and rural in character with low overall visibility from outside the precinct, the area is of lower constraint for houses and low-rise apartments/town houses, where appropriate and also associated uses such as school and neighbourhood shops. The distribution of land uses proposed in the Structure Plan is compatible with retaining the low external visibility of development in Area 5 and appropriate character.
- Landmark and heritage values of the adjacent Ingleside Chase Reserve, Baha'i Temple and Ingleside House will be acknowledged by appropriate land uses in the Structure Plan.

1.0 Purpose of this report

Richard Lamb and Associates (RLA) have been engaged by the Department of Planning and Environment (Department) to prepare the Landscape Visual Assessment (LVA) for the strategic planning process which has led to the preparation of the Ingleside Structure Plan. RLA are specialist consultants in visual analysis and assessment. We were one of several consultancies providing technical advice at various stages of development of the Structure Plan. We do not have expertise in strategic and statutory planning and accordingly have not proposed specific development controls.

Various other constraints have been taken into account in the land uses proposed in the Structure Plan other than visual assessment, including requirements for fauna corridors, biodiversity, bushfire, water quality, non-indigenous heritage, servicing restrictions and practical considerations, for example siting of facilities such as sports fields. As a result, there are instances where there are apparent inconsistencies between the findings of the LVA and the Structure Plan, which result from priority being given to other factors.

In early April 2014 RLA began the preparation of the visual analysis of the Ingleside Urban Release Area. At that time, the likely possible future land uses, densities and forms of built development had not been determined or debated. Some of our preliminary advice included assessment of the general capacity of all of the land in the study area to support a wide range of uses, from a visual point of view, ignoring all other constraints. That advice is now redundant, as later refinements of our findings and views emerging from the consultative process supporting development of the Structure Plan has clarified the range of acceptable potential land uses and some aspects of the densities and building heights considered to be feasible.

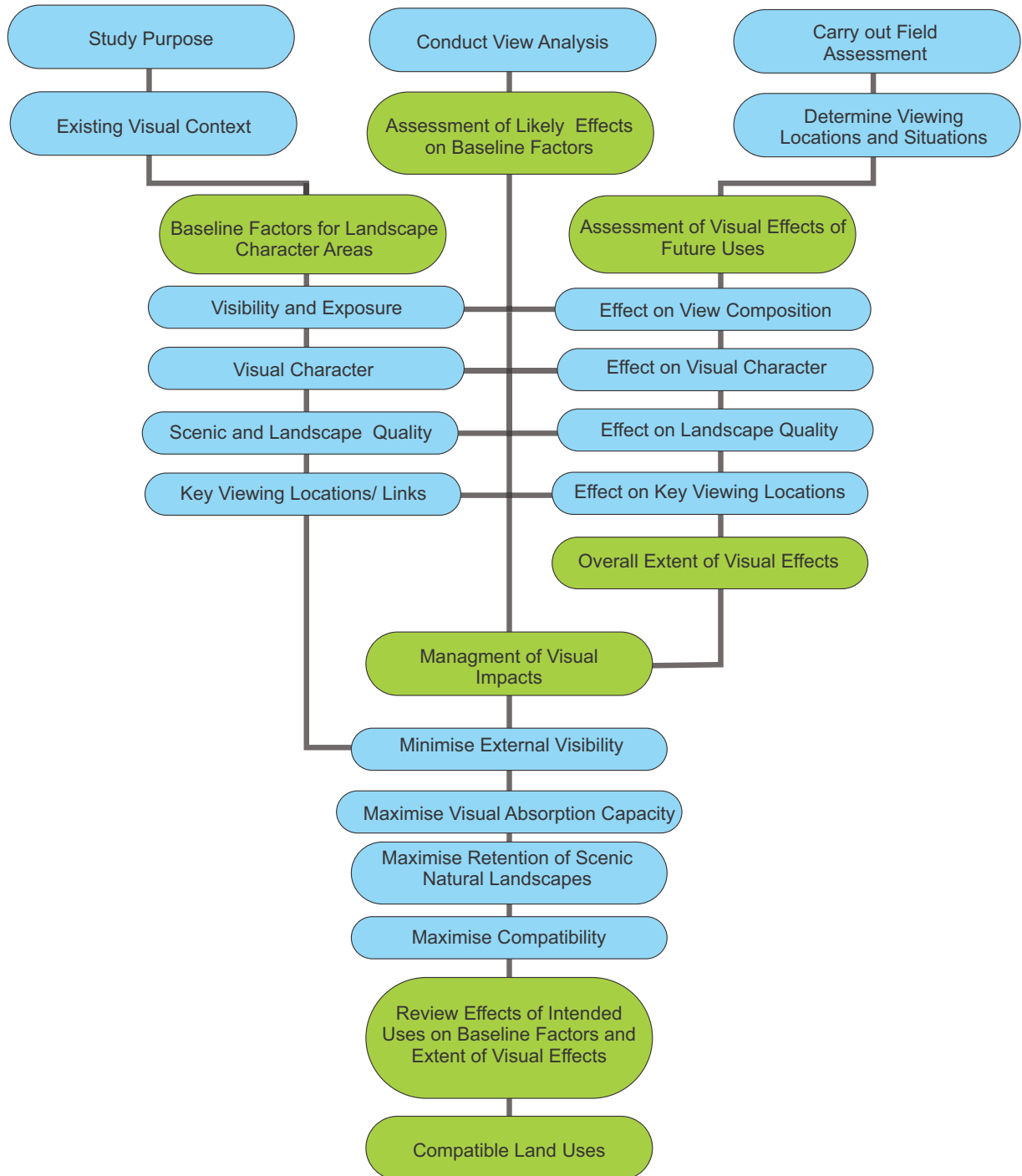
RLA developed and followed a methodology designed to ensure that the visual and landscape character and qualities of the subject land were identified, analysed, and assessed. A flow chart showing a graphic representation of the method followed is below. A summary of the application of the methodology also follows, along with a series of maps which we used to illustrate our findings.

We have now been requested to provide a review of the LVA in relation to the Structure Plan. This report is that review. It is not a full technical study, as this did not arise out of our role in advising Cox on opportunities and constraints at the earliest stages of development of what was then an Indicative Layout Plan (ILP) and which has gone through various iterations to become the Structure Plan.

Our assessment identified opportunities and constraints for urban development of the land primarily for residential and associated purposes, based on the existing visual character of areas of the subject land, their external and internal visibility and the potential visual effects and impacts that would occur with the range of desired forms of future development in each character area. Our methodology, field work and analysis provided a level of base information which was provided to community workshops and the Reference Group at the early stages of development of the Structure Plan. The analytical work was reviewed and further refined at various stages, in particular in response to emerging views on the acceptable densities and heights of development.

This review assumed that the specific controls over built form and density of development in the relevant land use categories proposed are those proposed by Pittwater Council: ie.,

- Low Density Residential, 12-13 dwellings/Ha, maximum height 8.5m.
- Medium Density Residential, 25-27 dwellings/Ha, maximum height 10.5m.
- Community Centre, maximum height 11m.
- Neighbourhood Centre, maximum height 8.5m.



Richard Lamb and Associates Visual Analysis and Assessment Method Flow Chart

RLA provided the base-line analysis and refined assessment of the visual character, visual resources, constraints and opportunities which should be taken into account in planning for the Ingleside Urban Release Area. This analysis and assessment based on the LVA principles outlined below is reflected in the Structure Plan, following design development and public participation. RLA worked closely in association with the principal urban and landscape design consultants, Cox Richardson and Place Design, in formulating the advice which are illustrated in the series of maps that follow in this review.

This report is a review of the findings of our LVA work in relation to the Ingleside Structure Plan. We have reviewed our process of assessment, principles and recommendations and prepared a summary of the findings.

2.0 Study area and physical setting

Map 1 shows the study area outlined in red and the underlying existing subdivision pattern, in grey overlay. It is evident from inspection of the subdivision pattern, notwithstanding many of the subdivisions shown have never been taken up, that the lot sizes vary greatly. Over most of the study area the lots are large, rural lots in a relatively simple grid-like pattern. However south of the alignment of the early Lane Cove and Ingleside Roads, the subdivision pattern is markedly different, with substantial areas of smaller, residential sized lots on the slopes north east and south west of the valley through which Powderworks Road runs north-west from Elanora Heights to meet Mona Vale Road.

2.1 Sub-regional Visual Context

The study area is located at moderate elevation across a number of ridgelines, spurs and plateaus. It is surrounded by areas of high quality scenic natural landscapes including those in the densely vegetated slopes of the Ku Ring Gai Chase and Garigal National Parks.

To the west, the study area includes the Wirreanda/Tumbarra valley area which is oriented northeast to southwest and bounded by steep topography within the Ku Ring Gai Chase National Park to the west toward Duffys Forest. The steep valley side to the east extends up toward Addison Road and beyond to the ridgeline on part of which, adjacent to Mona Vale Road, is the Baha'i Temple. The Baha'i Temple is a local heritage item on a prominent ridgeline location, surrounded by vegetation and gardens. The temple is highly visible from outside the study area, particularly to the north and south. It is visible from as far as Killcare to the north and South Head to the south, but is not widely visible in the study area itself.

Mona Vale Road provides the main east-west access to the study area. North of Mona Vale Road and east of the ridge on which the Baha'i Temple sits is a relatively gently sloped plateau-top area that forms the largest part of the study area, extending to the north to Ku Ring Gail Chase National Park and Bayview Heights and to the east to the northern extension of what is now the Ingleside Chase Reserve.

Running south east from Mona Vale Road in the vicinity of its intersection with Manor Road is a shallow valley along the southern side slopes of which runs Powderworks Road. This valley falls gently to the south east to an escarpment interface with the naturally vegetated Ingleside Chase Reserve. Prior to construction of Mona Vale Road, the main road access from the north into the valley was Ingleside Road, which runs along the eastern edge of the study area at the foot of the valley and formerly then travelled north-west to meet Lane Cove Road. Lane Cove Road was the earlier main road through the study area to the coast to the east.

Beyond the escarpment and eastern edge of the study area the landform falls away towards the east and coastal plain. Almost the entire eastern boundary of the study area adjoins areas of natural topography and vegetation in a number of reserves. From north to south these areas are the Katandra Bushland Reserve, Ingleside Chase Reserve, Ingleside Park, Irrawong Reserve and Epworth Park.

2.2 Geology

The underlying geology within the study area is a significant influence on the visual environment. Geologically, the study area is part of the Hornsby Plateau land system and the surface geology consists of the Triassic Hawkesbury Sandstone series of sediments with thin ridge cappings of Ashfield Shale. The underlying Narrabeen series sandstones and shales are exposed in valleys and along the coast and have little influence on the visual environment of the study area.

The visual characteristics of the Hornsby Plateau landscape are those of a residual and dissected sandstone plateau formed predominantly of quartz sandstone with occasional shale caps. The residual plateau is overlain by deep yellow earth soils on flatter sites, or shallow skeletal soils or rocky outcrops on plateau tops or eroded side slopes.

2.3 Native Vegetation

The National Parks' main plant communities are represented within the northern and western fringes of the study area where topography, development pattern and variable land ownership has allowed significant stands to remain along with substantial areas of remnant and re-growth heath, woodland and forest vegetation.

Areas of woodland exist on upper side slopes for example above Addison Road and across drier tops and upper slopes of the Mona Vale Road corridor, Chiltern Road and Cicada Glen plateau and fringes, and in the north of the study area along Walter Road. Woodland trees include eucalypts such as scribbly gums and red bloodwoods together with several species of she-oak.

Open forests can be found in the gully slopes and more sheltered moist valleys within the study area, for example west of Addison Road and within and adjacent to The Ingleside Chase Reserve.

On the lower slopes and across gentle terrain, remnants of taller more dense forest exist and can be seen intermittently close to riparian corridors which cross Cicada Glen Road, and the west and northern fringes of Cicada Glen and Cabbage Tree Roads where the landscape falls away into steeper sheltered and wet gullies.

Areas of Heathland exist intermittently within the study area on areas exist of thin soils above rock or shale and are characterised by a low, shrubby community of plants approximately two metres in height.

Part of the eastern boundary of the study area adjoins the top of the Ingleside Chase Reserve vegetation within which can be seen areas to the east beyond the study area, in the North Narrabeen area. A number of suburban areas are located near or at the fringes of the study area including Duffys Forest and Terrey Hills to the west, intermittent development along McCarrs Creek Road to the north and the southern and western fringes of the suburb of Bayview and Bayview heights to the north east. The Monash Country Club and parts of the suburb of Elanora Heights are located south of the study area.

3.0 Local Visual Context

In previous reports, the Ingleside Urban Release Area has been divided into 3 geographical precincts which for consistency RLA used in initial assessment for of our report. The precinct boundaries appear to be based on physical features such as roads or landforms and do not necessarily relate to existing land uses or visual character.

3.1 West Precinct

This precinct area is accessed from Mona Vale Road by either Addison Road or Tumburra Street. A ridge to the east of and approximately parallel to Addison Road physically separates the West Precinct from the other two precincts. The West Precinct slopes significantly to the west and north and is essentially part of the side slope of the Ingleside plateau to its east and south east.

The western and northern fringes of the precinct comprise a number of different land uses including rural land, hobby farms, commercial nurseries, landscape supply companies, quarry and storage facilities. Limited residential uses also occur. Views into the area from the public domain are limited by topography, extensive areas of natural vegetation and by limited access. The precinct is exposed to views from Ku Ring Gai Chase National Park in the Duffys Forest locality, but not significantly from roads such as McCarrs Creek Road. It is of low visual exposure to Mona Vale Road as a result of screening of views by topography and wide, naturally vegetated areas north of the road reserve. Natural landscape character dominates the views into the precinct.

3.2 North Precinct

The North Precinct is the largest and is essentially east of Addison and Chiltern Roads and north of Mona Vale Road. Differently from the West Precinct, the North Precinct is serviced by well-used internal roads connecting to adjacent urban areas including Minkara Road, Cabbage Tree Road, Walter Road, Lane Cove Road and Cicada Glen Road.

Contrasting with the variable and often steep topography of the West Precinct, the North Precinct is predominantly gently sloping other than at the north west and eastern edges. Extensive areas of the precinct have been cleared of vegetation for rural and other non-urban uses including rural residential, commercial and special uses such as schools and religious establishments.

Significant areas on the north-west margin however, retain a largely natural and vegetated character, tending to confine views to the interiors of the precinct. The eastern edge of the precinct is predominantly of natural visual character when seen from the urban areas to the east, as it is dominated by bushland reserves including the Katandra Bushland Sanctuary and Ingleside Chase Reserve.

The precinct area includes the Baha'i Temple, a local and regional landmark, which although not a tall structure is widely visible from distant vantage points because of its distinctive radially symmetrical plan with its simple, domed form emerging above its surrounding vegetation, its white colouring and its location on a high point. The dome, emerging above surrounding tree canopy, is visible from as far as Manly to the south and Killcare to the north. By contrast, the Temple is not widely visible in the study area itself, as views are commonly blocked by topography and vegetation, including vegetation in the immediate setting. Its main visual exposure to the precinct is to Mona Vale Road across lawns and a circular garden of low, colourful plants which is on the axis of its entrance.

3.3 South Precinct

This precinct is situated in the floor of a shallow valley on the plateau top, which drains to the south east. It is traversed by road corridors including Powderworks Road and Manor Roads and smaller sub-parallel local roads McLean Street and Wattle Road. Similarly to the North Precinct, the land is of overall of gentle topography and has been predominantly cleared in the past. A variety of urban and rural or semi-rural uses are present, including low and medium density residential, rural residential, rural and rural-commercial uses.

Areas of natural vegetation occur on the northern fringes and centre of the precinct area and the eastern edge of the precinct is predominantly of natural visual character when seen from the urban areas to the east, as it is dominated by bushland in the Ingleside Chase Reserve.

The precinct is more exposed to views from the public domain from vantage points on Mona Vale Road than the North Precinct.

4.0 Process of visual analysis

The visual analysis is undertaken at two levels, firstly across the whole study area at a broad level and then at a more detailed level in relation to individual landscape character areas which were identified during the refinement of the process of assessment. Base-line assessments across the entire study area are summarised in a series of maps (Maps 1-5) below. Consideration of the findings of these initial analysis steps led to the initial identification of individual character areas, which are either of consistent or of mixed character (Map 6). Areas of consistent character can include those with a consistent mix of individual attributes.

The initial categorisation of character areas was then refined by close consideration of each of the base-line attributes that are considered most significant to the visual character of the area, in particular natural landscape features such as scenic natural landscapes, green fingers of vegetation, consistency of character or distinctive mixture or character attributes (Map 7).

Boundaries of the individual character areas were then determined (Map 8), to clarify potential areas for future land uses. The base-line attributes of entries, nodes and visual corridors, visual exposure, scenic natural landscapes and green fingers and isolated character areas were applied to each character area.

Special consideration was to be given to transitions between areas, edges and existing or required future buffers, as although the areas have internal consistency, in the visual environment they merge or transition into other areas as one moves through the study area.

Following Map 8 are five sub-maps, which show the boundaries of each of the five overall areas identified, over a recent aerial image. A summary analysis of the attributes of each character area is below.

4.1 Entries, nodes and visual corridors

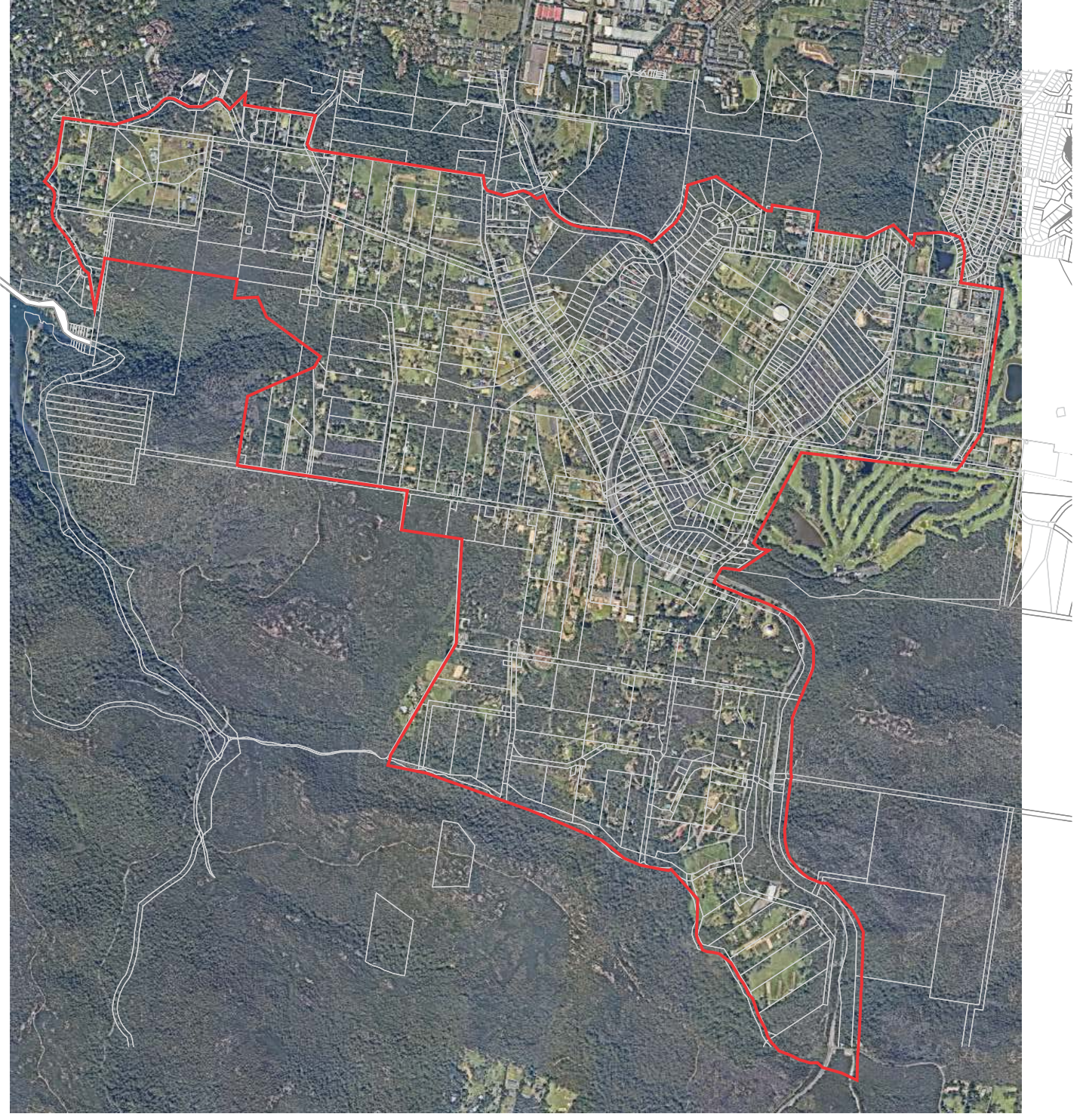
Entries and nodes, places where alternative routes or views can be taken, help to define one significant aspect of the visual experience of the study area.

Map 2 shows identified entries nodes and visual corridors as part of the initial exploration of the visual exposure and visual experience of the study area. View corridors are commonly the source of the

Study area boundary
(approximate, not to scale)



Visual Analysis Map 1
Site boundary and existing
subdivision pattern

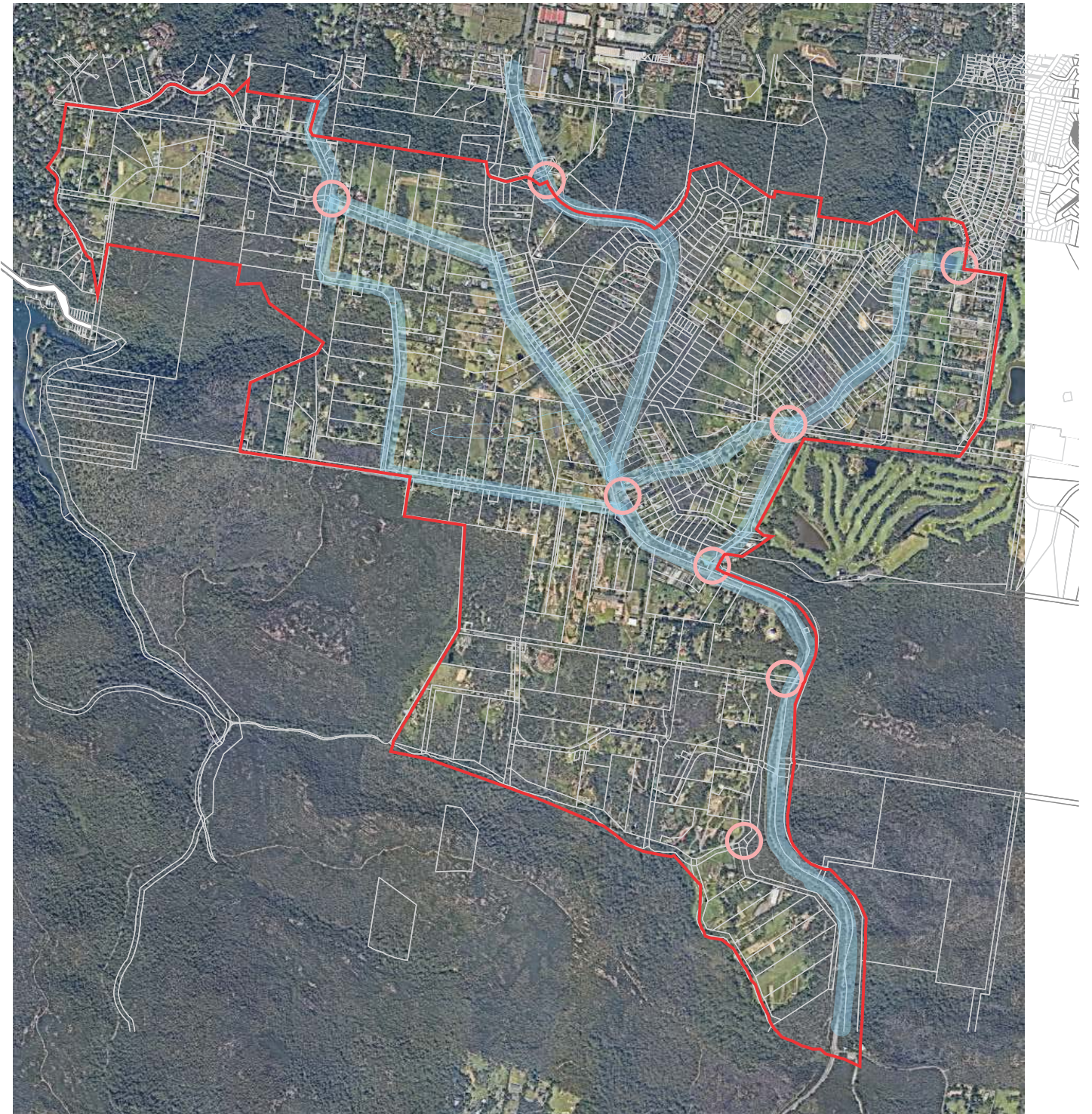





Significant entries/ nodes

Scenic corridors

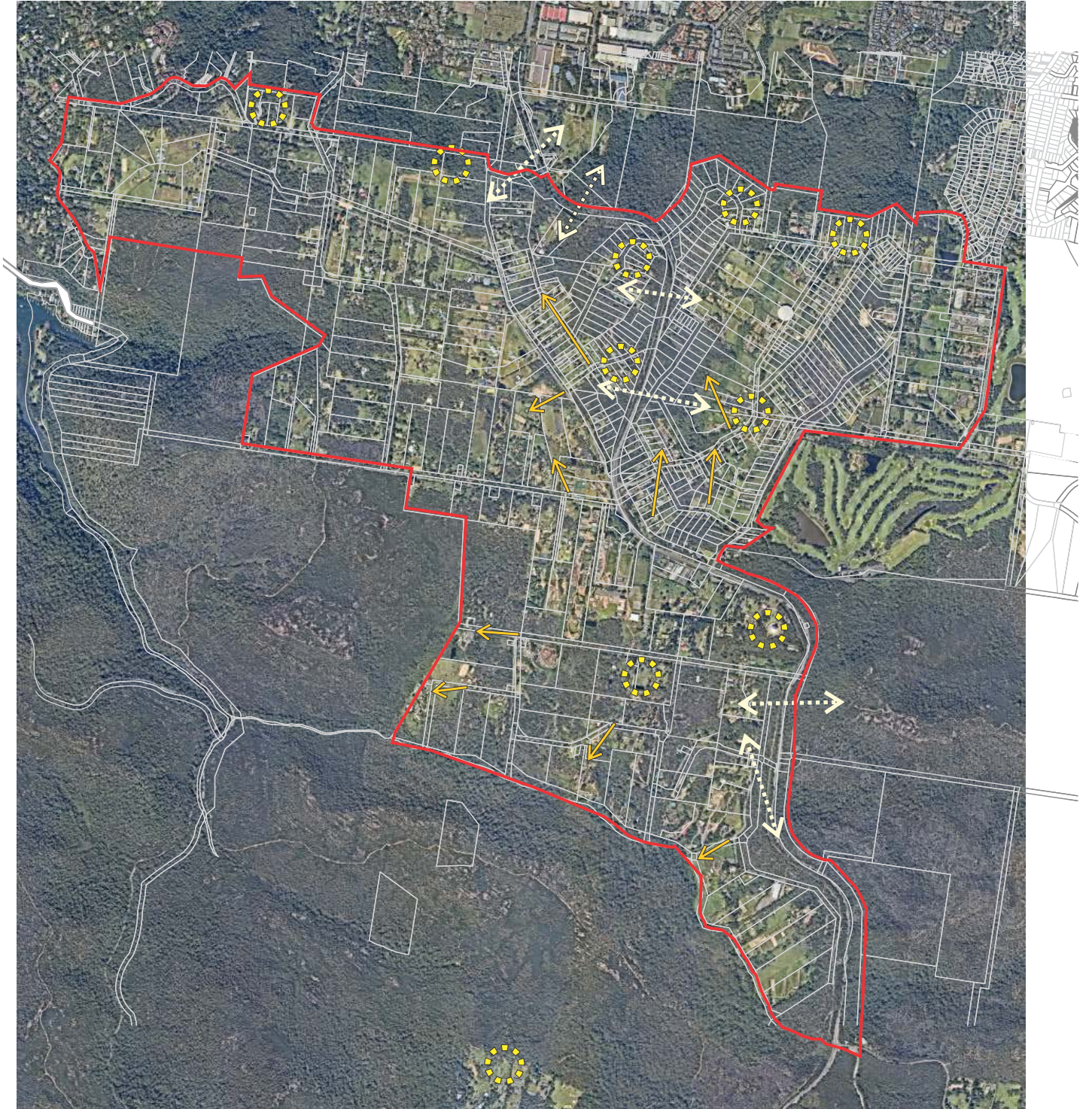


Visual Analysis Map 2 Entries, nodes and visual corridors



- Exposed to external views 
- Filtered corridor views 
- Public views outward 

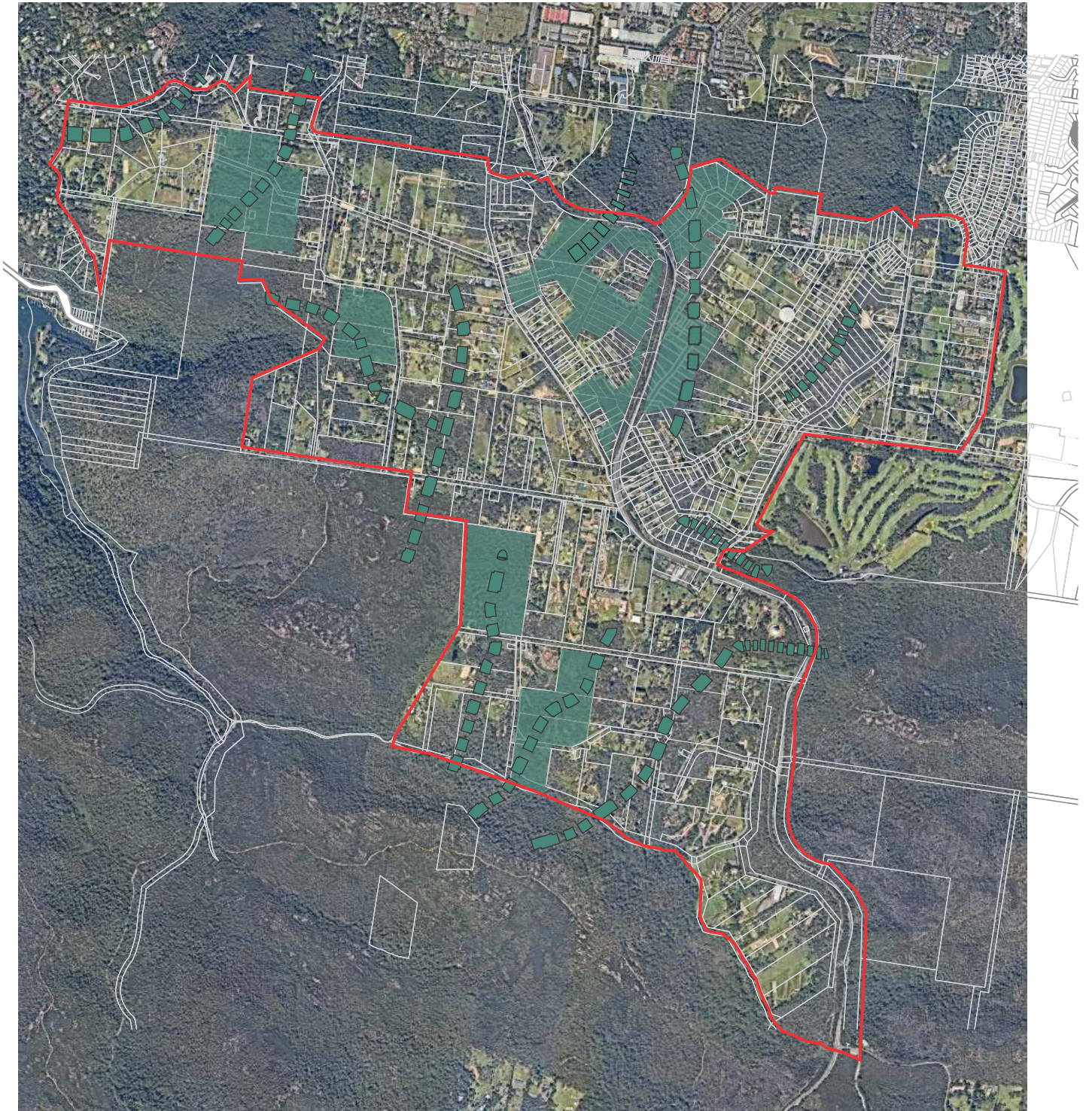
Visual Analysis Map 3
Visual exposure



Green fingers of vegetation
Scenic natural landscapes



Visual Analysis Map 4
Scenic natural landscapes
in study area



dynamic experience of moving through an area in which a viewer assembles an image or its overall character, as well as experiencing its diversity.

The main visual access to those other than residents to the study area is via Mona Vale Road, which climbs the eastern escarpment from Mona Vale. Leaving the industrial area behind, the experience is dominated by natural vegetation and topography on both sides of the road. Travelling from Duffys Forest which is to the west, Mona Vale Road traverses steep valleys before also climbing to the plateau top in the vicinity of the Baha'i Temple. The views are also dominated by natural vegetation and topography on both sides of the road and there is little evidence of settlement in the Wirreanda Valley on the left.

Only a short section of Mona Vale Road provides views into the study area, predominantly downward, south-east toward Elanora Heights, as there is a level difference on the north side of the road that prevents extensive views into the adjacent landscape.

The pattern of road corridors illustrates a significant feature among potential development areas. This is the relative isolation of the western and the far northern parts of the study area. In these areas there are no through routes from adjacent residential or urban areas. There are minor entry nodes nearby, but the internal road network is discontinuous.

By contrast, the remainder of the northern and southern parts of the area provide through routes to and from adjacent urban centres, as well as alternative routes, such as the Cabbage Tree Road/ Cicada Glen Road corridor and alternative Walter Road/ Lane Cove Road corridor in the northern part. In the southern part of the study area, the Powderworks Road and alternative Manor Road corridors are through routes connecting to Mona Vale Road and to the northern areas.

The character of the corridors vary along with the land use, settlement pattern and topography. However the informal character, narrow carriageways, unformed edges and often either grassy and mown, or densely vegetated but informal road reserves, are relatively consistent attributes.

4.2 Exposure to external and internal views

Map 3 shows a simplified representation of exposure of the study area to external and internal views. What is notable is that while the study area has distinctive internal characters as detailed later in this review, it has relatively little direct exposure to views from external locations.

The western part of the study area is of little visibility from outside, however it is exposed to relatively close range views from elevated locations in the Ku Ring Gai Chase National Park to its west, on well used fire trails below Duffys Forest. It is also visible to filtered views from the margins of Duffys Forest itself. The ridge in the vicinity of Addison Road and on which the Baha'i Temple is situated is prominent and forms a natural barrier to view into the study area further east. The upper part of the Baha'i Temple is also prominently visible, above its fringing vegetation.

Isolated locations on the eastern edge of the study area are of some visibility from the coastal areas, predominantly in the Mona Vale and North Narrabeen areas. The features that are identifiable in views inward are mostly individual dwellings or parts of these, visible among a heavily vegetated landscape. Most prominent are a small number of residences in Laurel Road West area which appear isolated in an otherwise natural bushland setting.

There are relatively few outward view opportunities from the western part of the study area, but those that do exist are dominated by natural landscape of the Ku Ring Gai Chase National Park.

The northern part of the study area also has limited outward view opportunities, other than adjacent

to the eastern edge, for example in the Katandra Bushland Sanctuary and the eastern limb of Walter Road. Views north-west and north are screened by vegetation between the viewer and the study area boundary.

The southern part of the area has some limited outward view opportunities from Mona Vale Road and high points in Waratah Road and an existing open section of Manor Road, where views toward the distant coast to the south east are possible.

4.3 Scenic natural landscapes and green fingers of vegetation

Map 4 shows two associated attributes of the landscapes of the study area; scenic natural landscapes and green fingers of vegetation. These are associated, because the scenic natural landscapes are dominated by natural vegetation character and often demonstrate other consistent natural attributes on the western northern and eastern margins of the study area, such as steep or rocky topography. The areas we mapped as scenic natural landscapes have high consistency of those attributes. Substantial areas of vegetated landscape of lower integrity and scenic quality also occur in the study area, in places, in particular in the western part.

We made a distinction between these areas of coherent high quality scenic landscape and fingers of vegetation, as the latter are more variable, may be less continuous and in some cases are formed of groups rather than discrete bands or blocks of vegetation. Importantly, green fingers often cross boundaries and link to external or adjacent character areas, unifying visual character with areas outside the study area.

Green fingers may include but are not analogous to riparian areas identified by other technical specialists, which in some cases have no significant vegetation canopy or are of low visual integrity because they are weed invaded or degraded in appearance.

4.4 Isolated areas

Map 5 shows visually distinctive areas which are isolated physically or in relation to access (see Map 2), or are distinctive and also isolated within an area of a different character. Four of these areas form part of the western and northern edges of the study area, in areas of transition between land of rural or semi-rural character and Ku Ring Gai Chase National Park to the north-west.

One visually distinctive area isolated within another of more uniform character is a rocky, heath-covered low ridge parallel to part of Powderworks Road in the southern part of the study area.

4.5 Existing development character areas, consistent or mixed

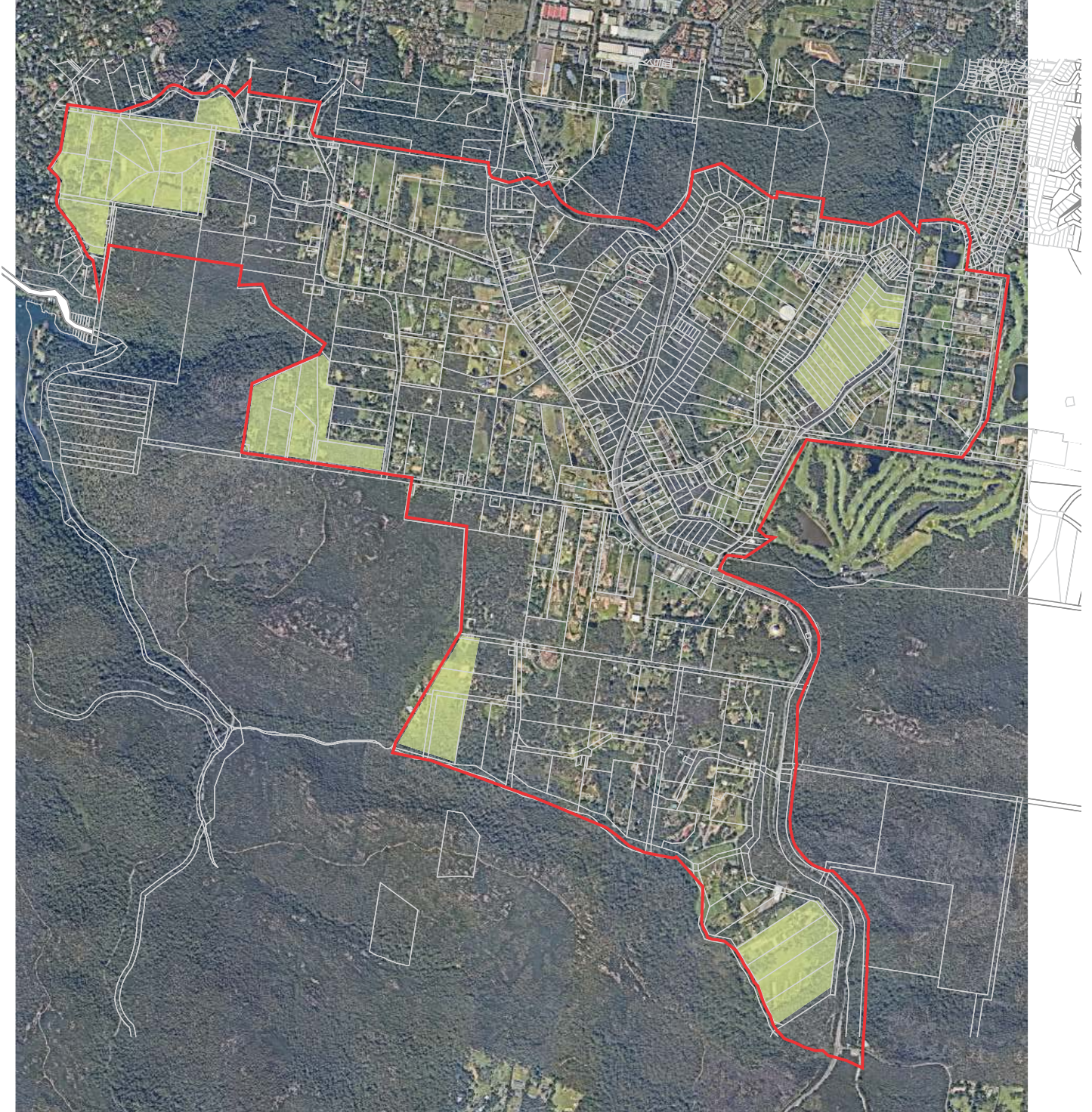
Map 6 shows the result of the visual analysis of consistent or mixed visual character across the study area as part of the preliminary stage of identification of individual character areas for closer consideration of appropriate land uses and potential controls.

Shown with an orange dotted outline are areas of mixed character, which predominantly exist along the north and east parts of the study area. These areas demonstrate a distinctive combination of scenic natural landscape attributes, along with contrasting existing rural or residential development.

Isolated character areas



Visual Analysis Map 5 Isolated areas

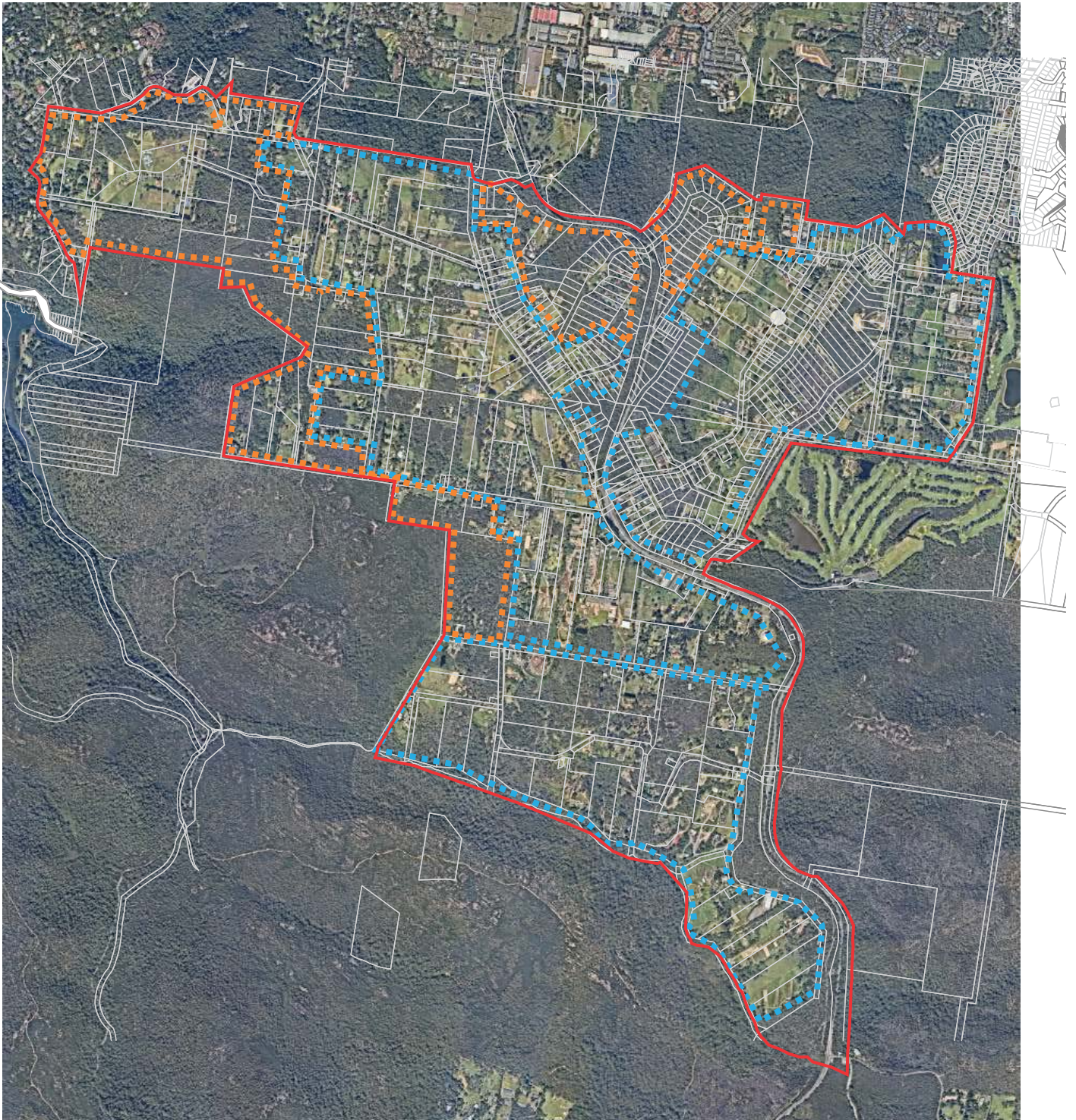




Areas of consistent character

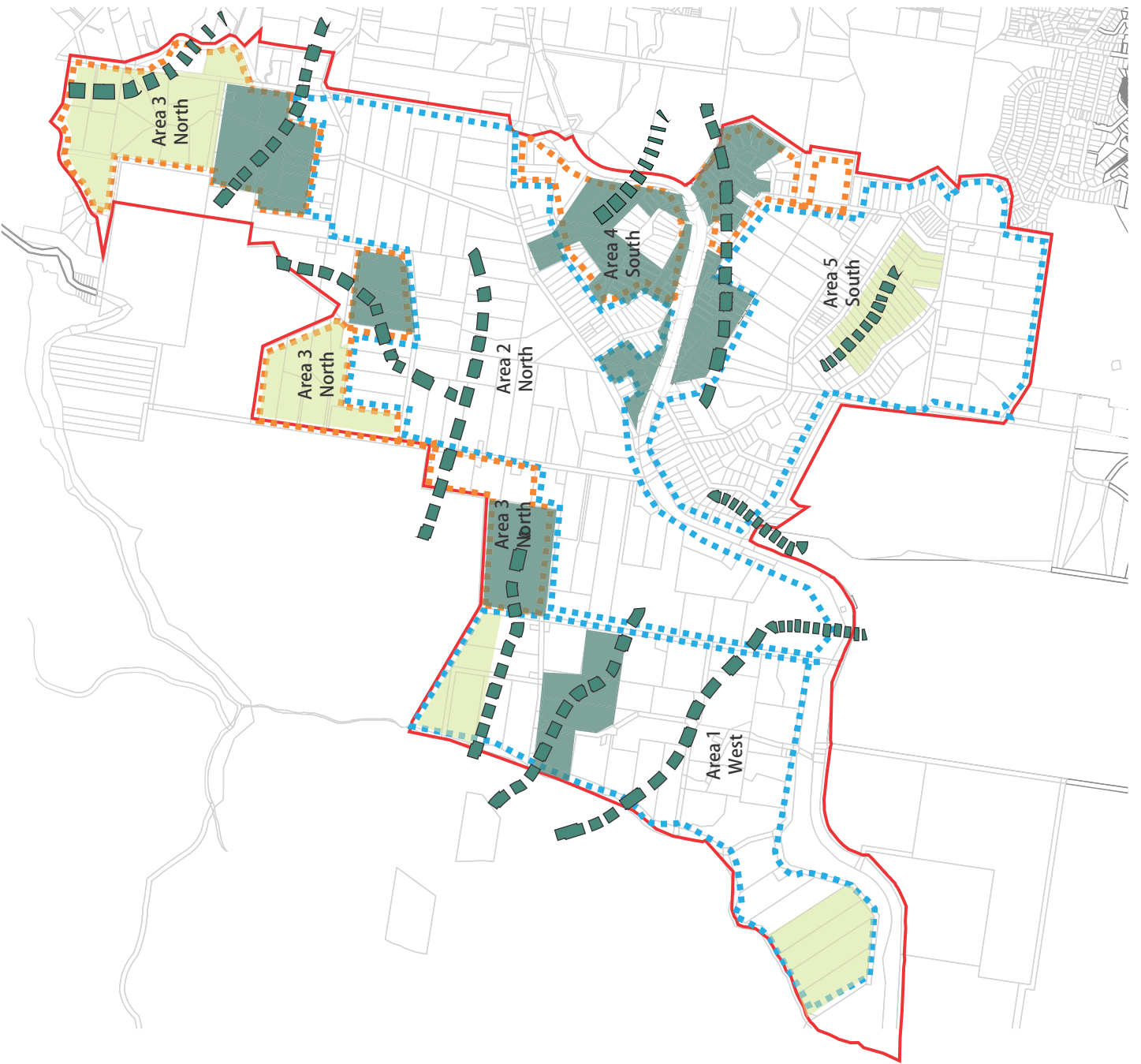
Areas of mixed character
(boundaries offset for clarity)

Visual Analysis Map 6 Existing development character areas



Visual Analysis Map 7
Key map to identification of individual character areas

- Areas of consistent character
- Areas of mixed character
- Isolated character areas
- Green fingers of vegetation
- Scenic natural landscape



- Area 1
- Area 2
- Area 3
- Area 4
- Area 5



Visual Analysis Map 8
Visual Character Areas



4.6 Individual character areas

Map 7 shows the underlying key to individual character areas and the main defining scenic attributes other than consideration of existing development, being visual consistency, isolation, green fingers of vegetation and scenic natural landscape.

4.7 Visual character area boundaries

Map 8 shows the boundaries defined for five identified visual character areas which form the basis for analysis of existing and potential future character as well as close consideration of interfaces between areas of distinctive character. The definition of these character areas is of special relevance to the boundaries proposed between land uses in the Structure Plan, which in many cases are either the same, or similar to our character area boundaries. Where there are differences, this is primarily because the locations have been refined or differently prioritised as a result of the requirements of other technical studies, for example biodiversity, bushfire controls or servicing.

Following Map 8 are five Visual Character Maps which show individual character areas over a recent aerial image with the underlying subdivision pattern shown in a darker colour for clarity.

Area 1

Maps 8, 1-5 show individual visual character areas over a recent aerial image with the underlying subdivision pattern shown in a darker colour for clarity.

Map 8 Key Map Area 1 shows the area identified as Area 1. This forms the western part of the study area. For convenience the east boundary is drawn on the general alignment of the discontinuous Addison Road, however the character of the area merges with the adjacent western part of Area 2 in the vicinity of the ridge on which the Baha'i Temple is situated, which also runs north sub-parallel to Addison Road for some distance. This area is considered to be an interface area that should remain largely a naturally vegetated visual buffer between the adjacent parts of Areas 1 and 2. The visibility of the ridge from the west is identified on the visual exposure map (Map 3) and the overall constraints Map (Map 10).

Area 1 features a range of existing land uses, but is predominantly rural and natural in character, with a significant proportion occupied by scenic natural landscapes, green fingers of vegetation linking through to the Ku Ring Gai Chase National Park and Garigal National Park and isolated and secluded rural areas at the margins. A wide buffer of naturally vegetated land exists north of Mona Vale Road beyond the existing and largely natural road reserve, which also serves to act as a visual buffer to views into Area 1 (see the overall constraints Map (Map 10). The high proportion of land with tree canopy can be seen on Map 8/1.

Overall, Area 1 is highly constrained by its internal scenic natural landscapes, green fingers, poor accessibility, lack of connection to scenic corridors and its resulting seclusion.

Area 2

Map 8, Key Map Area 2, shows the boundary and area identified as Area 2. Area 2 is north of Mona Vale Road, generally east of Addison and Chiltern Roads and south of Cicada Glen Road. Although

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5



Visual Character Areas

Area 1





Area 1
Emmaus Road view north



Area 1
Bloodwood Road area



Area 1
Tumburra Street view



Area 1
Addison Road view



Area 1
Addison Road view west



Area 1
Wirreanda Road view with Baha'i temple dome visible

it has a small component of commercial and institutional uses in the vicinity of Mona Vale Road and Chiltern Road, the area otherwise has a high internal consistency of visual character attributes. It is predominantly of rural character on large lots of cleared land with varying levels of native and cultural vegetation that is predominantly retained along the side or rear boundaries of rural lots.

As noted in relation the interface with Area 1, the low ridge east of Addison Road is considered to constitute a significant interface and potential visual buffer to be protected by appropriate land use controls, including building heights, setbacks and vegetation clearing so as to retain the dominance of vegetation in the views from the west.

The Baha'i Temple is an important feature of Area 2 as its most prominent built landmark. The building is not prominent in views from the public domain in Area 2, but may be visible from some private land to its north-east. The building is highly exposed to Mona Vale Road because of the geometry of its garden setting, which creates an open, axial view westward from the road, flanked by vegetation. The temple is symmetrical with nine equal sides signifying the unity of the nine prominent world religions. It is otherwise not formally orientated toward any specific features of the environment.

The upper part of the building is visible from two parts of Ingleside Road to the north east and east, in Areas 4 and 5 and partly visible from the node at the intersection of Lane Cove Road with Mona Vale Road. In those views, vegetation in land north west of the Elanora Country Club and golf course forms the foreground of the view and hides most of the Temple from view.

Two green fingers of vegetation intersect in the vicinity of and south east of the intersection of Cicada Glen Road and Chiltern Road, one being part of the riparian strip of Cicada Glen Creek (see Maps 7 and 9). The vegetated and natural appearance of land generally north of Cicada Glen Road is characteristic of the experience of travelling the road corridor between the Cabbage Tree Road node, while in Chiltern Road over most of its length, the views west are also largely of naturally vegetated background, also beyond a foreground of rural residential appearance.

Views from the Lane Cove Road/Walter Road corridor south of Cicada Glen Road are dominated by rural residential or rural character, many properties with stables, timber fenced yards and other facilities associated with equestrian establishments of various scales. Topography is gently sloping on the sides of a low ridge generally west of the corridor. One small and isolated rocky hill with natural vegetation exists north-west of the intersection of Lane Cove Road and Walter Road.

Area 3

Map 8, Key Map Area 3, shows the boundary and area identified as Area 3. Unlike Areas 1 and 2 which are continuous and relatively homogeneous internally, Area 3 is composed of areas of mixed

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5



Visual Character Areas
Area 2





Area 2
Baha'i Place of Worship seen from Mona Vale Road



Area 2
Mona Vale Road and Lane Cove Road intersection



Area 2
Chiltern Road character view



Area 2
Walter Road character view



Area 2
Cicada Glen Road character view



Area 2
Chiltern Road view east

and isolated character along the north edge of the study area.

Significant green fingers of vegetation and scenic areas of natural landscape form a predominantly nature appearance to views in Area 3. Isolated areas approached through areas of scenic natural landscapes exist at the ends of the only two roads that provide access to parts of Area 3 (Chiltern Road and Walter Road).

The predominant scenic background to views to the north from Area 2 is therefore composed predominantly of land in Area 3. This land is either of scenic natural landscape or land of a similar natural appearance because of the extent of native vegetation that has been retained under the existing land uses.

Some individual residences exist inside the isolated areas accessed by the northern sections of Chiltern Road and Walter Road. These do not have any significant negative effect on the overall scenic quality and character of views outward from Area 2. The existing landscape character of Area 3 acts as a natural buffer to views out from the existing and proposed future residential areas of the study area, and a filter to views inward from Ku Ring Gai Chase National Park.

Area 4

Map 8, Key Map Area 4, shows the boundary and area identified as Area 4. Area 4 has the highest proportion of scenic natural landscape of any of the character areas. Its underlying subdivision pattern indicates that in historical times the land was clearly thought to be desirable for housing.

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5



Visual Character Areas

Area 3





*Area 3
Walter Road scenic natural landscape with prominent rocky outcrops*



*Area 3
Isolated Walter Road area character*



*Area 3
Walter Road west scenic natural landscape*

Area 4 largely occupies a rocky promontory that trends south east from the edge of the plateau behind in the Boronia Road area. Two roads, Laurel Road on the north and Ingleside Road on the south, formerly ran along the side slopes and into what is described below as Area 5, but both connections were broken when the eastern part of Mona Vale Road was constructed.

A small number of residences have been constructed on both roads, in rocky, steep and inhospitable land, interspersed by areas of scenic natural landscape and green fingers of vegetation that link into the interface with the escarpment/ Ingleside Chase Reserve, to the east and outside the study area. The area is exposed to views from the east and is in the foreground of view outward from areas to the west and south in Area 5, as is evident in the composite visual analysis Map 9. Some of the residences in Area 4 can be identified from the coast, as a result of their location on the rocky promontory and their visual exposure, colours and materials.

The Mona Vale Road corridor runs through Area 4 and this section is proposed to be upgraded, although at this time the nature and extent of the effects of the upgrade are not known.

As Area A straddles the main entry to the study area from the east, contains two significant visual nodes, is exposed to views inward and outward and is characterised by scenic natural landscapes and green fingers of vegetation connecting to adjacent scenic areas, it deserves special protection by appropriate land use controls.

Area 5

Map 8, Key Map Area 5, shows the boundary and area identified as Area 5. The description above of the South Precinct at Section 3.3 aptly describes Area 5.

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5



Visual Character Areas
Area 4





*Area 4
Laurel Road West character view*



*Area 4
Boronia Road character view*



*Area 4
Ingleside Road north view with Baha'i
House of Worship dome visible*

The area has a complex underlying subdivision pattern composed partly of large rural lots of similar sizes to much of Area 2, as well as many historical or 'paper' subdivisions which have not been taken up. The road corridors are of a similar character to those in Areas 1 and 2, being narrow, with unformed edges and with naturally vegetated or grassy verges and no formal street plantings. Roadside vegetation varies from woodland to heath in form.

Rural, rural-commercial, large lot residential, low density residential and medium density residential development exist in the area, along with institutional and religious establishments. The predominant character however is rural, although significant areas of rural land and associated structures such as sheds and glasshouses often appear to be in a derelict condition.

The background horizon looking north in Area 5 is predominantly natural landscape in Area 4, which subject to appropriate land use controls should remain the dominant feature.

The southern part of Area 5, bounded by Wilga Street, Powderworks Road and Wilson Avenue features a range of land uses including some low-rise medium density residential, detached residential, and rural-commercial operations such as nurseries, as well as a Serbian Orthodox Church and associated buildings.

From the higher parts of the area in Manor Road, Waratah Street and Mona Vale Road, views toward the coast in the North Narrabeen Area are possible, over the lower valley and vegetation in the Ingleside Chase Reserve to the east of the study area. Views north east are blocked by higher land in Area 4. There is no significant visual connection to Areas 1, 2, or 3.

The view back toward Area 5 from the coast in elevated parts of North Narrabeen include glimpses or parts of some residences on large lots on the eastern side of the southern part of Ingleside Road, near the intersection with Powderworks Road. These are visible among the canopy of vegetation to the east on the escarpment face below Area 5 in the Ingleside Chase Reserve. Directly behind this area in the view line is a residential subdivision with 1 and 2-storey built form, which is not visible, indicating that subject to the building heights assumed in this review for detached residential development, this form of development would be unlikely to be of significant visibility from the coast.

Notably, other developments in Ingleside Road, including a Westpac training facility, are not visible, as they are effectively screened by vegetation in the Ingleside Chase Reserve.

Views that include part of the dome of the Baha'i Temple seen over vegetation between Mona Vale Road and the Monash Country Club land are possible from the north end of Ingleside Road near the eastern edge of the Study Area.

A local landmark is Ingleside House in Manor Road. Ingleside House, 1 Manor Road and 12 King Street, its curtilage including front fence, gate posts and garden plantings is listed as an item of local heritage significance on Schedule 5 of Pittwater LEP 2014. The site of the former house has historical and spatial associations with the archaeological site Ruins of Powder Works, also listed on Schedule 5, at 2 and 10 Manor Road.

The archaeological site formerly occupied by the Powder Works, for which Powderworks Road is named, may have been in view of the original Ingleside House. The historical associations between the two items is the subject of a technical report from GML Heritage. An appropriate land use control is required that will allow the continuing interpretation of the cultural significance of the Ingleside House item and its spatial connection to the Ruins of Powder Works site.

5.0 Integrating visual character areas and LVA analysis

Following the identification and analysis of the attributes of the individual character areas, the

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5



Visual Character Areas

Area 5





Area 5
Waratah Street view south east



Area 5
*Ingleside Road east view with dome of
Baha'i Place of Worship visible*



Area 5
Wilga Street view north



*Area 5
Wilson Avenue view*



*Area 5
Ingleside House view in Manor Road*



*Area 5
South Ingleside Road view*

composite visual analysis map, the sum of all the visual analysis criteria (Map 9) was overlain and considered in relation to each area. A resulting overall constraints map was then generated (map 10).

Finally, each assessment criterion, character area and constraint was assessed against the proposed land uses in the Structure Plan for compatibility of the proposed land uses, assuming building heights and densities above, against the following criteria.

5.1 Compatibility criteria of the proposed land uses with the LVA

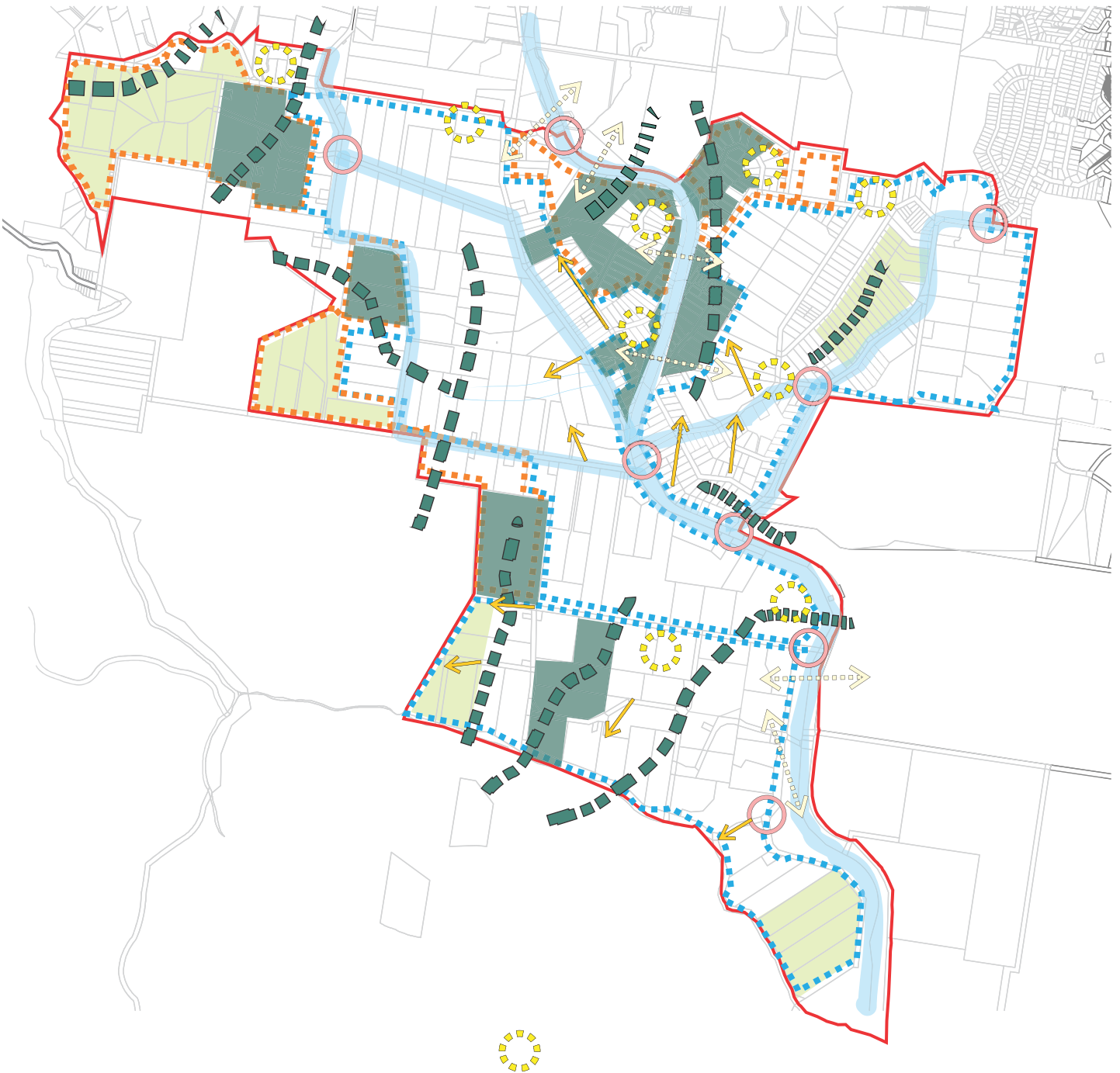
The following criteria were applied to advice on appropriate land use controls and review of the Structure Plan.

1. Visibility of development in different landscape character areas will vary, depending on topography, vegetation, landscape management and agricultural practices and also historic land use practices.
2. The visual effects of potential development with respect to siting and visibility was assessed from all locations from which they are reasonably capable of being viewed (their visual catchment).
3. Development is to be placed in locations on the land where visual impacts on views, features such as prominent ridge lines, hill tops, horizons, prominent slopes and topographic features, if so identified, will be minimised, when these are viewed from the public domain or areas of special significance.
4. Special significance applies to vantage points, nodes, landmarks and some heritage items, where these are either prominent in some views or have established visual relationships with other items.
5. The Baha'i Place of Worship (known locally as the Baha'i Temple) is a heritage item and a sub-regional landmark and is visible in some views inside the study area, for example from part of Area 1 (eg. Wirreanda Road West) and parts of Areas 4 (north section of Ingleside Road and the intersection of Lane Cove Road with Mona Vale Road) and Area 5 (east section of Ingleside Road).
6. Land use controls, including built form, building heights, subdivision design and location need to be responsive to promoting the landmark views. The appropriate objective is retaining the visibility of the dome of the building, which is seen above the vegetation in its curtilage and to its west and north.
7. Another significant heritage item is Ingleside House and its curtilage, fence, stone gate posts and garden setting, between Manor Road and King Road in Area 5, which has associations with the archaeological site, Ruins of Powder Works heritage item, north east of Manor Road. An appropriate land use is required for the setting that retains the potential for interpretation of the significance of both items and their spatial relationships.
8. Building heights and locations will be responsive to existing natural character such as vegetation height and vegetation's capacity to screen or soften views of adjacent land.
9. Land use controls will need to regulate building height to preserve appropriate character. However, the heights of existing natural vegetation other than low forms such as heath has been considered a bench mark in considering the suitability of land use controls for residential and associated development of the forms and heights assumed in this review.









- Areas of consistent character
- Areas of mixed character
- Exposed to external views
- Isolated character areas
- Green fingers of vegetation
- Scenic natural landscape
- Significant entries/ nodes
- Scenic corridors
- Filtered corridor views
- Public views outward



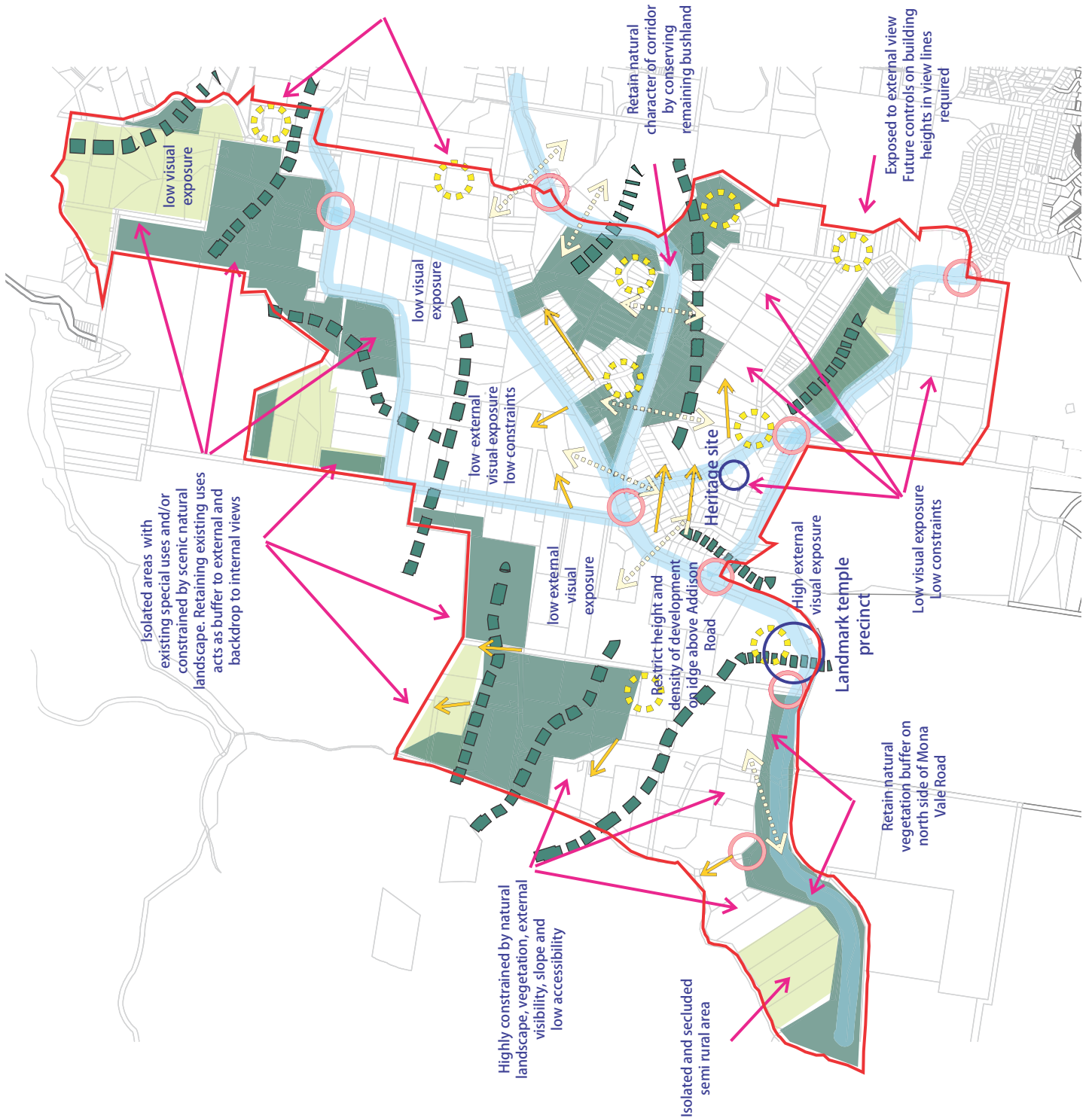
Visual Analysis Map 9
Composite visual analysis



Exposed to external view
Future controls on building
heights in view lines
required

	Exposed to external views
	Isolated character areas
	Green fingers of vegetation
	Scenic natural landscape
	Significant entries/ nodes
	Scenic corridors
	Filtered corridor views
	Public views outward

Visual Analysis Map 10 Overall Constraints



10. As natural vegetation heights in woodland and forest vegetation which dominates views is significantly greater than the heights proposed for residences in the Structure Plan at a maximum of 8.5m, a capability principle adopted that no buildings in residential areas will exceed the predominant vegetation canopy height is conservative.
11. Development consistent with a proposed land use category will generally be acceptable if it has a low impacts on its overall visual catchment, provided that it does not have significant impacts on individual viewing places or adjacent areas of scenic natural or heritage significance.
12. A criterion of capability is that a proposed land use and likely built form that follows will be responsive to the landscape character and scenic features of the locality in which it is situated.
13. Different approaches to design, siting and landscape will be appropriate to areas with predominantly pastoral character compared to others with a more natural character. Future infill subdivision designs would be judged on their individual merits against appropriate performance standards in the existing or site-specific DCP.
14. Areas where built forms can be situated on existing cleared land not requiring significant landform modifications or removal of significant indigenous native vegetation have higher capability to support higher density residential or community facility uses.
15. Areas exposed to external views are identified in the visual constraints analysis. These areas are of sensitivity and require appropriate land use controls so as to limit the potential impact on external views.
16. Residential development density needs to be responsive to landscape character and visual exposure. Lower densities, for examples houses on large lots, are required where there is potential visibility of built form on ridges, visible slopes or escarpment edges, for example in some locations identified along the eastern edge of the study area.
17. Individual applications for development in these and all other areas would also be subject to assessment on their individual merits against specific controls to be developed in the DCP. These could include varying setbacks, building form, scale and character and controls on vegetation clearing, consistent with provision for APZs.
18. Environmental management land use categories are appropriate for significant areas of green fingers of vegetation, to restrict future development potential. Green fingers are not to be interpreted as environmental conservation land uses, but should largely be contained in land in public ownership to the scenic values can be protected.
19. Environmental conservation land use controls are required to prevent future development from occurring in areas of high natural scenic value and prominence in external views.
20. Environment conservation land use controls can also be effective in preserving character of road corridors where the future effects of upgrades are uncertain, for example the eastern part of Mona Vale Road (east of the intersection with Lane Cove Road).
21. Visual buffer areas, provided primarily by topography and natural vegetation are required to protect views into the study area from high scenic and conservation value land to the west and north in the Garigal and Ku Ring Gai Chase National Parks.
22. The ridge east of Addison Road on part of which the Baha'I Temple is situated, is land that is considered appropriate to form a visual buffer. Naturally vegetated buffers also form a scenic natural backdrop to views from the interior of Areas 2 and 3 and should be protected by appropriate land use controls.

23. Significant natural buffers already exist along the eastern edge of the study area, including bushland reserves. These buffers if not already either in public ownership or conservation land uses require protection by appropriate land use controls.
24. Retention of existing vegetation will promote preservation of the scenic values of the study area.

Principles for future vegetation and landform modification

1. Housing including infill subdivisions will be accessed in ways that minimise impacts on views from public places, prominent landscape features, existing vegetation and culturally significant landscapes.
2. Buildings should be sited to minimise cut and fill requirements, and integrate with the landform.
3. Buildings will respond to the existing pattern of remnant and cultural vegetation in siting and in the mitigation of visual impacts. Buildings will be sited so as to retain existing vegetation and use it, whether with or without addition of new vegetation, to provide an appropriate setting or screen.
4. Buildings will be appropriately landscaped if necessary, with either indigenous native species or appropriate cultural plantings, to provide amenity, screening of views from critical viewing directions and to reduce the apparent scale of buildings when they are likely to be seen in the vicinity of horizons, hill tops or ridge lines.

Principles for future building form, materials and colours

1. Buildings that are visible from the public domain or other areas of special significance in the context of scenic features such as ridge lines, hill tops, horizons, prominent slopes and topographic features, or heritage items and landscapes, will be of forms that have the effect of minimising their bulk. Bulky, tall, unrelieved and unarticulated buildings or those with extensive areas of walls, simple prismatic shapes and unarticulated roof forms are not appropriate.
2. Buildings will respond in form to the character of the locality and the historic development of Ingleside. Traditional and vernacular building forms will generally be preferred. Other forms of building are permissible and will be assessed on their merits.
3. Where there are two or more buildings on a large or rural lot, for examples homes, sheds and ancillary buildings, they will be clustered to reduce the space that they occupy and be landscaped to reduce their accumulated impacts. Building groups that spread across the landscape and increase the visibility and bulk of the built form are not appropriate.
4. Buildings will minimise their impacts on views, if necessary, by being composed of appropriate materials. Appropriate materials are either natural components of the environment such as masonry, stone and timber or materials capable of being finished and coloured in a way that minimises their prominence in views.
5. Buildings will have roof materials, where necessary, that minimise visibility and prominence of the roof plane and surfaces. In general, roofs of tile or metal materials in appropriate colours will be permitted. Plain galvanised steel and unpainted aluminium roofing will generally not be accepted.

6. Buildings that are in prominent locations will be coloured in ways that reduce their visibility and help to blend into the existing natural and cultural landscape. Variations in colour between wall and roof and variations in colour of details is to be encouraged. Colours that emulate natural materials or earthy colours and that are darker and unsaturated will generally be permitted. Other colour schemes will be assessed on their merits.
7. Buildings that are in areas not subject to constraints of visibility and prominence will be coloured as appropriate. Light or saturated colours may be permitted on their merits.

Principles for future landscape

1. Landscape comprised of indigenous native plants and/or appropriate ornamental plants will be used to provide amenity, screening of views, if necessary and an attractive setting to buildings.
2. Where landscape is designed to blend the building into the visual setting of an area featuring remnant native vegetation, the species will be chosen from indigenous native species and the planting designed to provide a natural vegetation structure including shrubs, small and taller trees.
3. In landscape types predominantly of a pastoral character, landscape will reflect the predominant cultural plantings associated with farm buildings, homesteads and windrows. Development proposed with no amenity or ornamental landscape surrounding it should be discouraged.
4. Screen planting will not be relied upon as a sole means of mitigating the visual impact of buildings that are located on land where visual impacts on views, features such as ridge lines, hill tops, horizons, prominent slopes and topographic features will occur, when these are viewed from the public domain or other areas of special significance.
5. Landscape is not required to hide buildings from sight, provided that the buildings are located in ways that respond appropriately to the locality and minimise visual impacts in other ways. However, it will be considered that if a building requires hiding by vegetation because of its potential prominence that it is inappropriately designed and sited.

6.0 Response of the Structure Plan to RLA Compatibility Analysis

A summary of our key findings is represented graphically on our consolidated map of Visual Constraints (Map 10) and simplified Opportunities map (Map 11). Map 11 can be compared for consistency with the Ingleside Precinct Structure Plan (Map 12). Map 11 shows that that the visual and landscape analysis

has closely informed the land use distribution shown in the Structure Plan.

The 5 character areas identified by RLA within the precinct are summarised below. Although the areas are defined by some consistent visual characteristics we note that unique visual resources are also present in each area and these are also summarised below. Following the summary of key visual attributes for each area is an analysis of the response of the Structure Plan to the compatibility criteria for the LVA in Section 5.1 above.

6.1 Area 1: Key Attributes

The predominant visual characteristics for this precinct include;

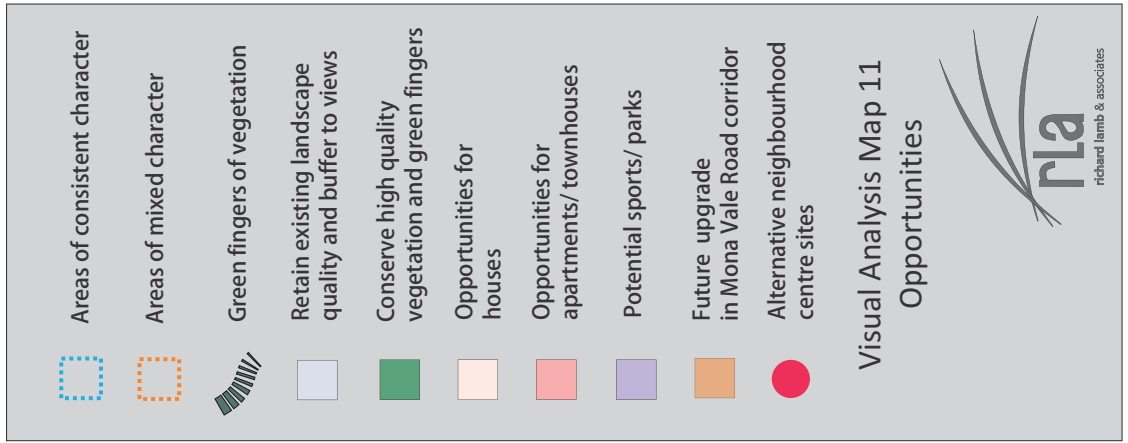
- 'Semi rural' and natural visual character with an overall low level of built development.
- Cleared areas on gentle topography for commercial uses eg nurseries, landscape supplies, quarrying etc and hobby farms and special uses by church groups etc.
- Intermittent cleared areas for houses on large lots within steep rocky terrain.
- Isolated examples of houses on large lots in areas of gentle topography.
- Visually significant stands, blocks or connected fingers of vegetation including riparian corridors.
- Visually constrained by scenic natural landscapes including vegetated ridgelines to the west and north within Ku Ring Gai National Park and inside the area.
- Includes isolated or secluded character areas.
- 'Semi-rural' streetscape character including unformed edges (no kerbs or gutters) vegetated verges and views constrained to the road corridor by roadside vegetation.
- Limited infrastructure and difficult physical access.
- Public views are outwards, with minimal or filtered public views into the area.

6.1.1 Summary of opportunities of Area 1

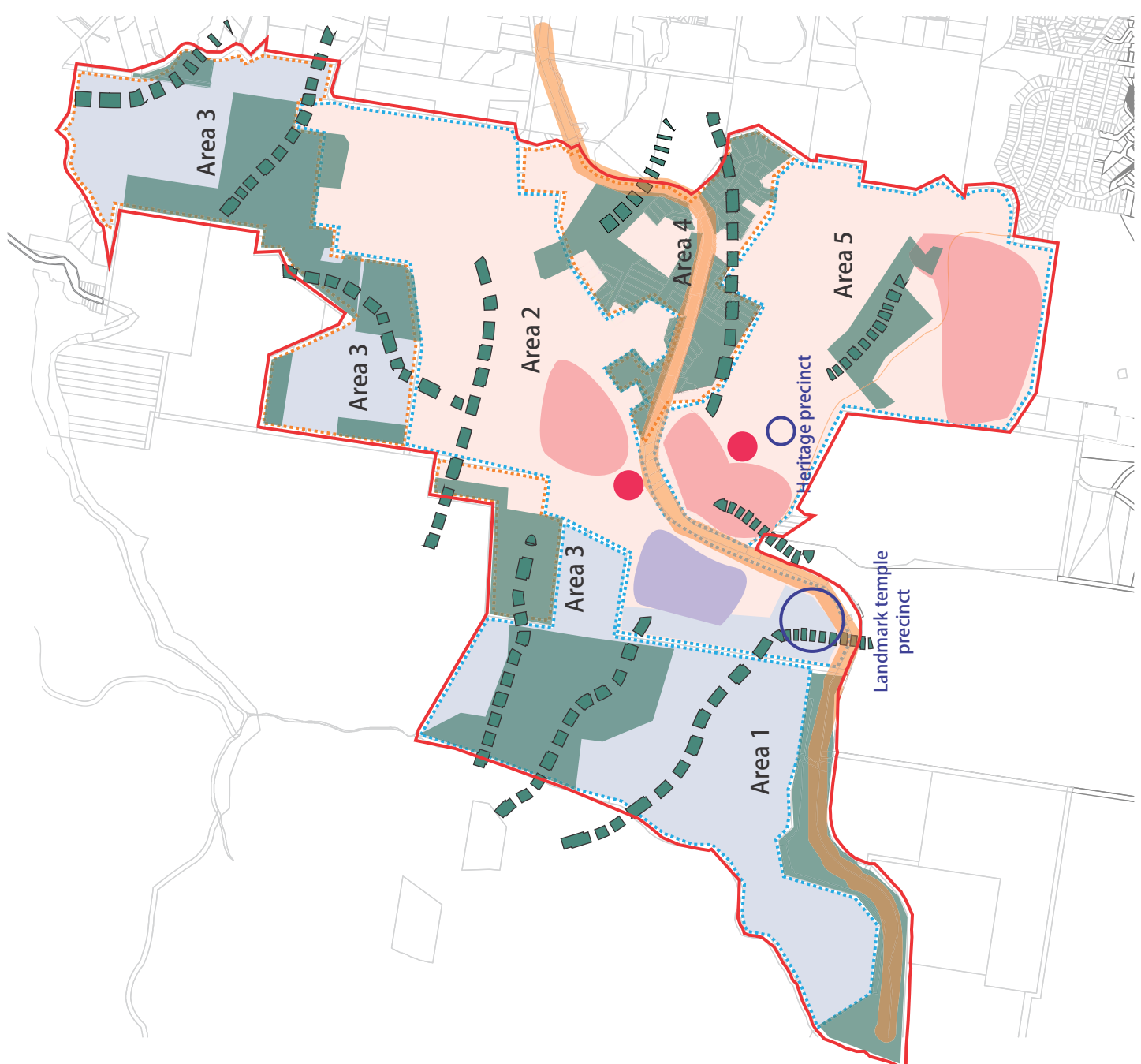
Vegetated west facing slopes located along both sides of Addison Road in Area 1 are externally visible from the west. The upper slope and ridge east of the road provide a visual buffer for views from this direction. This area is highly constrained by its natural and visual landscape, vegetation, external visibility, difficult access, lack of services and physical characteristics.

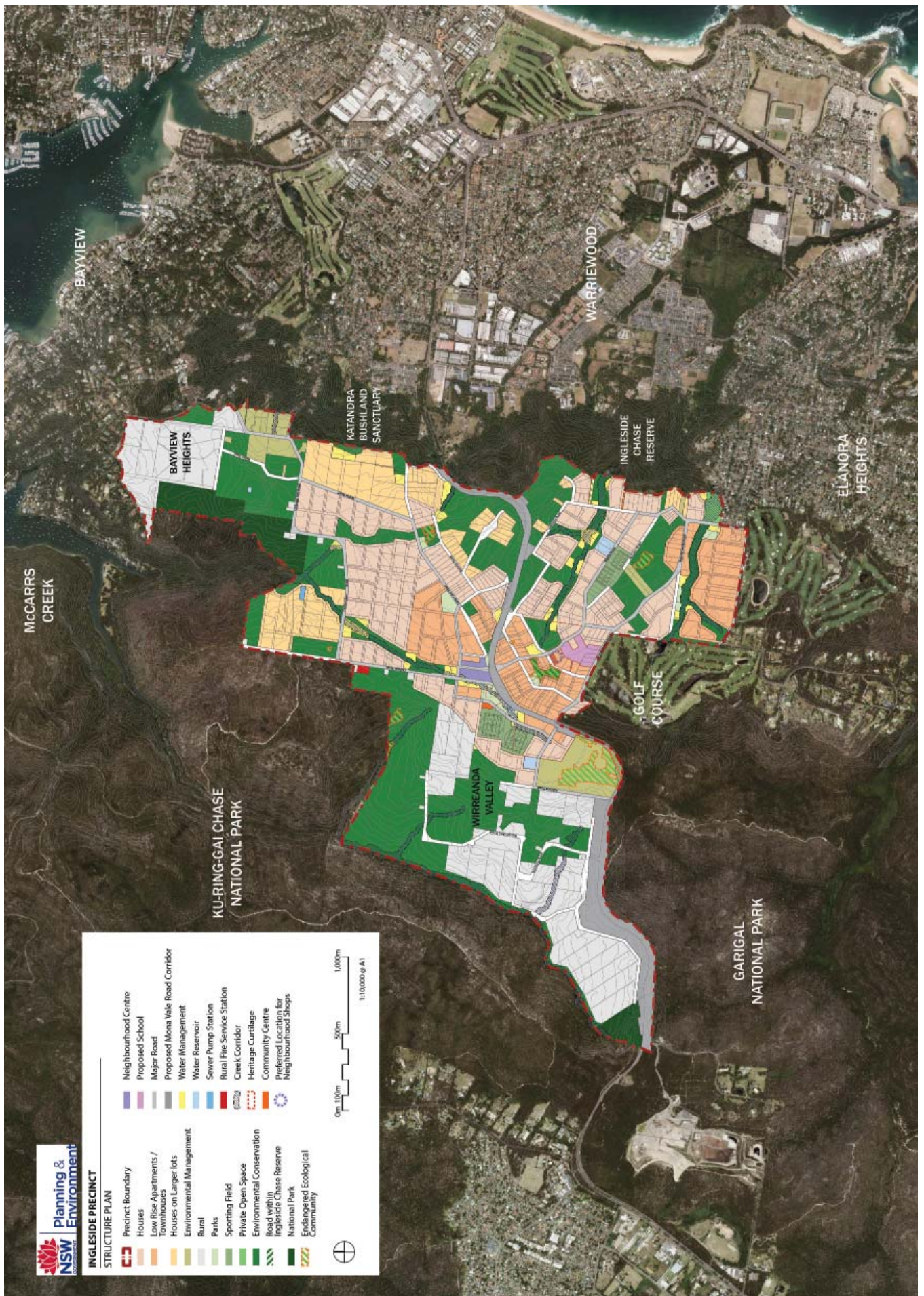
Unique visual resources to preserve in this area include its predominant natural appearance and its high quality vegetated landscapes sloping west below Addison Road and north of Mona Vale Road, as well as the isolated character areas of Emmaus Rd and the Timbarra Valley.

Significant visual features to conserve also include green fingers of vegetation that connect with Area 2.



Visual Analysis Map 11
Opportunities





Map 12: Ingleside Precinct Structure Plan

6.1.2 Response of the Structure Plan

The Structure Plan responds to the predominant natural appearance and semi-rural visual character of this area by maintaining large rural lots and areas for environmental conservation. Significant green fingers of vegetation will be retained by appropriate land use controls on both sides of the boundary with Area 2. Subject to appropriate development controls to augment the performance standards in Section 5.1 above, the land uses proposed within the Structure Plan will allow the overall character of Area 1 to remain and will not create significant negative visual effects or impacts on external views into this area.

6.2 Area 2: Key Attributes

The predominant visual characteristics for this precinct include;

- 'Semi-rural and rural-commercial' visual character, cleared areas used for commercial enterprises eg. landscape supplies, quarrying, education or religious purposes .
- Cleared areas for houses on large lots in areas of gentle topography.
- Predominance of equine uses and related ancillary structures.
- Intermittent, visually significant fingers of vegetation.
- Developed infrastructure and access on Mona Vale Road and Lane Cove Roads.
- High points near the Baha'i Temple and along the Lane Cove Road ridgeline are subject to higher visual exposure.
- There is low external visibility into the area generally and to existing residential areas west of Lane Cove Road.
- Scenic natural landscapes are natural visual buffers to views to the west and north.
- Generally low visual exposure to external views.
- Isolated areas on eastern edge partly visible from coastal locations.

6.2.1 Summary of opportunities of Area 2

Unique visual resources in this precinct to preserve include; scenic natural landscape buffers to outward views from the Lane Cove Road/ Walter Road and Cicada Glen Road corridors, views of the Katandra Bushland Sanctuary and Ingleside Chase Reserve, visual access to views of the the Baha'i Temple.

RLA determined that central areas close and adjacent to the intersections of Lane Cove and Ingleside Roads and to the north of Mona Vale Road at this intersection, including Area 2, demonstrate a higher potential visual capability for future residential uses and a neighbourhood centre with some commercial development, when compared to other parts of the precinct.

The interior of Area 2 is not significantly constrained by external visibility. It is screened from views from the west, north and south east by topography and vegetation. Area 2 includes exposure of existing commercial development and educational uses to close views from road corridors. It includes larger areas of gentle topography that is not significantly visible from external locations.

The eastern margin of Area 2 is partly exposed to potential view from the east and requires appropriate land use controls to minimise visibility of future residences. Controls are required on future subdivision design, building heights, landscape, setbacks and to ensure adequate vegetation retention.

Area 2 has a higher potential to absorb uses other than residential, such as larger playing fields and a neighbourhood centre than Area 5, as a result of the flatter topography, existing adjacent compatible uses and the ability to be screened, if necessary, from views from Mona Vale Road.

Area 2 contains the Baha'i Temple, a local landmark and heritage item. Its dominance of the hilltop setting and visibility from its very large visual catchment should be preserved by appropriate land use and controls to retain and enhance its landscape setting, including limiting the heights of adjacent buildings to below the canopy height. In addition, the adjacent land directly to the north of the temple on the ridge between Areas 1 and 2 should be managed to retain a vegetation canopy as a buffer to views.

The relatively uniform physical landscape of Area 2 will also limit internal visibility of structures such as low-rise apartment and town house built form which can be constructed without significant impact on views from the external environment.

The limited external and internal visibility of Area 2 combined with its other physical and visual characteristics compared to other visual character areas, identify it as the area with the overall least visual constraints and most potential for a range of residential development types.

6.2.2 Response of the Structure Plan

The Structure Plan responds to the opportunities presented by this area in that it allows for houses, low rise apartments/townhouses and a Neighbourhood Centre in areas which are not subject to high visual exposure and which already display similar visual components and overall visual character similar to that proposed. The Structure Plan aligns with RLA overall analysis of visual constraints shown on Map 10 and opportunities shown on Map 11.

Potential land uses within the Structure Plan respond to specific constraints and areas identified by RLA which have either high external visibility or are visually unique. Houses on large lots are proposed in key locations which RLA found to have high potential visual exposure along the eastern margin and west of the Ingleside Chase Reserve. In this way the Structure Plan has the potential to adequately protect existing and potential views from the east to the Escarpment.

Proposed development for houses and low-rise apartments/town houses will be concentrated in areas of low external visibility and will not create significant change to the predominant character of the area or create significant visual impacts on external views into this area, subject to appropriate performance standards being met in future development controls.

The setting of the Baha'i Temple is proposed to be protected by environmental management land use control. The vegetation in the immediate vicinity of the temple has also been identified as an endangered ecological community, ensuring its long-term protection.

Directly to the north of the boundary of this proposed land use is a small area proposed for housing

on the ridge east of Addison Road and west of a proposed reservoir location on the ridge top. This is contrary to the recommendations of our visual constraints and opportunities mapping that the existing landscape character here should be retained as a buffer to views. Closer consideration of this area and the adjacent reservoir would be required at the subdivision stage and appropriate controls implemented to control the visibility of both the reservoir and any building to its west.

6.3 Area 3: Key Attributes

This predominant visual characteristics for this area are mixed and include;

- 'Semi-rural to natural' visual character with low scale residential developments at low densities in isolated areas.
- Intermittent cleared areas for houses on large lots within steep rocky terrain or gentle topography.
- High visual quality scenic natural landscapes dominate the north-west margin of the area.
- Predominance of visually significant stands, blocks or connected fingers of vegetation, rock outcrops and steep vegetated slopes including areas of scenic natural landscape and fringe areas of Ku Ring Gai Chase National Park.
- Isolated areas of rural character surrounded by dense vegetation.
- Visually constrained by scenic natural landscapes including Ku Ring Gai Chase National Park and vegetated ridgelines to the west and north.
- Limited infrastructure and access.
- Public views are focussed inward by naturally vegetated land forming a natural buffer and backdrop to views outward.
- Views north from the Cicada Glen Road corridor are dominated by the scenic natural landscape character of land in Area 3.
- Minimal filtered public views exist into this area and there is low visibility into isolated character areas.
- Public views north into the National Park are available from high knolls at the northern end of Chiltern Road.
- Semi-rural streetscapes.

6.3.1 Summary of opportunities of Area 3

Area 3 which stretches along the north western boundary of the study area and is similar in visual character to the northern fringe of Area 1, with which it partially merges in the vicinity of Chiltern Road. Its west- and north-facing vegetated slopes also provide a visual and physical barrier for views

into the site from the west and north and a scenic backdrop to views outward.

Area 3 forms a scenic natural landscape buffer to Area the appearance of which should be protected by appropriate land use controls and in areas with development potential, with appropriate development controls to minimise vegetation loss and visibility of buildings.

Unique visual resources in this precinct to preserve include; Areas of high quality scenic natural landscape at the end of Bloodwood Rd and at Walter Road north of Cabbage Tree Road. These areas are characterised by dense roadside vegetation and Hawkesbury Sandstone woodland with prominent rock outcrops.

6.3.2 Response of the Structure Plan

The Structure Plan responds to the unique visual resources in this part of the study area by proposing land uses that have the potential to retain the visual continuity of the area as a predominantly naturally vegetated buffer to views from Area 2 and the northern side of Cicada Glen Road. It is also responsive to the constraints of external visibility on part of the eastern boundary by providing environmental management land use for an area adjacent to Katandra Reserve which we determined as being potentially visually exposed to views from the east. Further, an area of scenic natural landscape north of Cicada Glen Road and on the slopes west of Walter Road will be protected from development by an environmental conservation land use. Both of these responses embodied in the Structure Plan will ensure that the predominant visual character of these parts of Area 3 will be retained as recommended by RLA.

North of Cicada Glen Road in the vicinity of the intersection with Chiltern Road is an area proposed for houses on large lots which currently has a predominantly vegetated appearance as a result of existing land use practices and the presence of the Cicada Glen Creek riparian area, which form a visual barrier and natural buffer to views. Subject to controls on subdivision design, setbacks, vegetation retention and the proposed land use of the riparian area for environmental conservation, this area can retain its existing appearance and character.

6.4 Area 4: Key Attributes

The predominant visual characteristics for this area are mixed and include;

- 'Semi-rural natural' visual character with generally low scale residential development.
- Intermittent cleared areas for residential development on large lots within steep rocky terrain and in limited areas of gentler topography.
- Predominance of visually significant stands, blocks or connected fingers of vegetation, rock outcrops and steep vegetated slopes.
- Limited infrastructure and access.
- Public views outwards have significant opportunities for views over Area 5 and toward the coast to the south-east, with the potential for informal lookout sites.
- Public views into the area are possible from various parts of Area 5, where Area 4 forms a predominantly natural backdrop to views, with some individual prominent residences visible.

- Distant views to the vegetated slopes and isolated residences within the area from the east and south east on the coast are available with some individual isolated residences in prominent locations visible.
- The area is in an important and prominent visual interface with the Ingleside Chase Reserve and straddles the Mona Vale Road corridor entrance to the study area from the east.
- The area has high visual exposure of any potential future development from the east and south.

6.4.1 Summary of opportunities of Area 4

Area 4 is the smallest visual character area and is physically constrained, being located on east facing rocky and vegetated slopes with a predominance of high quality blocks and/or green fingers of vegetation. Its predominantly natural character with only limited residential development located within bushland settings limits the opportunity for further built development. With its limited extent of existing development and predominance of vegetation, it is an area which can act as a visual buffer to views into the study area from the east. The area also has the unique opportunity to retain the existing natural bushland character of the Mona Vale Road corridor and significant entry node to the study area from the east.

Unique visual resources in this precinct to preserve include; areas of high quality scenic natural landscape including a significant and scenic area which extend south and east from Lane Cove Road and low level of built form. The area forms an important buffer and screen to views of future development in the study area which deserves protection.

6.4.2 Response of the Structure Plan

- The Structure Plan responds to the unique visual resources of Area 4 by proposing environmental conservation land uses across all of the area identified as scenic natural landscape in the LVA (see Map 9). It also includes a limited number of houses on large lots isolated within that area, which responds to the existing layout and visual constraints, but future development potential will be limited. Small areas of houses are proposed as infill east of Boronia Road, which would be consistent with existing visual character. No significant change to the visual character of Area 4 in views from external locations would occur under the land uses proposed in the Structure Plan.

6.5 Area 5: Key Attributes

The predominant visual characteristics for this precinct include;

- 'Semi-rural and rural-commercial' visual character, including low to medium scale residential

and commercial development, large cleared areas used for commercial enterprises eg. landscape supplies, quarrying, education or religious purposes.

- The area bounded by Wilga Street, Powderworks Road and Wilson Avenue features a range of land uses including some low-rise medium density residential, detached residential, and rural-commercial operations such as nurseries, as well as a church and associated buildings.
- Cleared areas and bush blocks for houses on varying lot sizes on gentle to sloping topography.
- Evidence of historical horticultural uses.
- One significant isolated block of heathland vegetation including riparian corridors and prominent rock outcrops.
- Developed infrastructure and access.
- Predominantly 'semi-suburban' streetscape character (unsealed edges, either vegetated, cleared or mown road reserves) interspersed with areas of semi-rural and suburban streetscape character.
- Includes Ingleside House and Ruins of Powder Works heritage sites, area of former Carl Von Bierens Land (not visually distinctive) and St Sava Serbian Orthodox Church.
- Generally low visual exposure of the area to views from the east or into the existing low lying residential and rural areas in the centre.
- High potential visual exposure to the Escarpment interface on the east edge, however most structures, including the Sydney Conference Training Centre, are screened by vegetation and topography in views from the east.

6.5.1 Summary of opportunities of Area 5

Unique visual resources to preserve in this area include the existing capacity of vegetation, topography and low scale of development on the east side of the area to screen views of future development. It features the high scenic and natural landscape values of the Ingleside Chase Reserve, with fingers of vegetation which link to it, prominent vegetated slopes and rock outcrops.

RLA determined that the area close and adjacent to the intersections of Lane Cove and Ingleside Roads and to the south of Mona Vale Road in Area 5 demonstrate a higher potential visual compatibility with identified constraints for low-rise apartments/ town house uses and local shops, when compared to other parts of Area 5.

This was defined by overlaying a series of analyses of baseline information which has allowed RLA to identify certain areas within the subject site as being less visually constrained and more appropriate for residential development including houses and low rise higher density residential use (see Map 9).

We concluded that Area 5 has similar potential for some low-rise apartments/ townhouse development, based on the analysis of constraints summarised on Map 8. Significant areas in the lower part of Area 5 are not constrained by external visibility of future development. The heights for low-rise apartments/ townhouse development assumed would be sufficient to minimise visibility in views from the east.

The heritage curtilage and setting of Ingleside House in Manor Road and the need to acknowledge its historic associations with the archaeological site Ruins of Powder Works, to the north east of Manor Road, require an appropriate land use, that is compatible with the existing values and potential future

interpretation of the items. Future development controls would also be required.

The north-east part of Area 5 adjacent to Ingleside Road and north of Wattle Road has limited external visibility to it from the west, north and east largely due to the screening effects of intervening areas of topography and vegetation including the Ingleside Chase Reserve and Area 4 to the north. Potential filtered views will be available to this area from part of the Mona Vale Road and Manor Road visual corridors.

A finger of visually prominent heath vegetation on a rocky low ridge between Powderworks Road and McLean Street identified on RLA composite visual analysis Map 9, provides screening between the Wilga Street/ Wilson Avenue section of Area 5 and the north part of the area.

6.5.2 Response of the Structure Plan to Area 5

The majority of this area south of Mona Vale Road has low external visibility due to its gentle and low-lying topography, much of it set below or behind landforms of higher relief or which block or screen inward view opportunities. The Structure Plan responds to this opportunity by proposing houses through the central part of the area and low rise apartments/townhouses to the south in the Wilga Street/ Wilson Avenue area or adjacent to Mona Vale Road.

Low-rise apartments/ townhouses of the heights assumed would be compatible with the identified constraints of visibility and visual character in both areas proposed. They would not be of significant visibility from external view points in the Wilga Street/ Wilson Avenue area, as views are masked by adjacent development in Elanora Heights. There may be distant visibility of the margin of the area proposed for this use adjacent to Mona Vale Road in views from the coast. However the distance, upward viewing angles and foreground screening effect of vegetation in the Ingleside Chase Reserve and ultimately in landscape of intervening housing areas, would tend to minimise views.

While RLA considered on visual grounds that housing on most of the valley floor in Area 5 would be compatible with the visual constraints and opportunities, the Structure Plan shows that drainage and requirements to conserve riparian corridors are significant additional constraints, limiting areas for houses. Proposed playing field use for part of the valley floor north of McLean Street is compatible with existing visual character.

Consistent with RLA's advice, the isolated band of scenic natural landscape bounded largely by Powderworks Road and McLean Street will be protected by environmental conservation land uses in the Structure Plan. This area has the capacity to screen internal views between development in the north and south of this area.

The Structure Plan proposes a school be located within the curtilage of Ingleside House, which extends from Powderworks Road to Manor Road and includes the access handle to King Road. The existing house would be provided with a residential lot. The Structure Plan also shows a heritage curtilage boundary around a large approximately triangular area to the north of the proposed school site north of Manor Road. The curtilage shown includes some land with existing houses, but is largely in environmental conservation land uses and includes the head of a creek corridor. The archaeological site Ruins of Powder Works is in the environmental conservation land use area.

7.0 Conclusion

Our findings have been considered by Cox Richardson along with other technical studies prepared

for this project including biodiversity, water cycle management and indigenous and non-indigenous heritage. Where there are differences between our findings and the land uses proposed in the Structure Plan, these have generally arisen out of priorities being given to factors other than visual, as the LVA is only one of the inputs into the planning process leading to the Structure Plan. For example, while we have identified scenic natural landscapes and green fingers, a significant feature of both of which is vegetation, it is not within our expertise to assess this vegetation for biodiversity, wildlife corridor values, etc. As a result, the areas proposed for environment conservation reflect both visual and more objective scientifically derived data.

There is a close match overall between our findings at the general and specific character area level with the land uses proposed in the Structure Plan. Map 11, which has been abstracted for clarity, shows that the distribution of land uses in the Structure Plan closely relates to our analysis and compatibility assessment of each character area. Specific comments about the response of the Structure Plan to each of the character areas is included in Section 6 above.

The Structure Plan agrees with our findings that there is an overall low capacity for residential development in Area 1, west of the ridge that marks the east boundary. This is due to the predominance of significant areas of natural landscape and vegetation which are integral to its existing and most desirable future character, high conservation values, lack of infrastructure and services, isolation of disparate areas and difficult access.

The high intrinsic scenic quality of Area 1 and its isolated rural areas will be protected by the land uses in the Structure Plan.

The proposed retention of land in its existing character along most of the northern boundary of the Precinct in Area 3, including land north of Cicada Glen Road, also accords with our analysis of the scenic natural landscape values which should be protected by appropriate land uses as shown in the Structure Plan.

All of the land which we had identified as isolated either physically, or because of its high natural scenic character and which should generally be protected, will be retained in its existing character in the Structure Plan, in accordance with our analysis and findings. These areas are important backdrops to future development and buffers to adjacent land of high conservation value.

Areas 1, 3 and 4 all contain large visually significant blocks of and green fingers of high quality vegetation and scenic landscape, as well as small, isolated character areas. They also include a greater amount of steep or undulating topography, vegetated slopes and rocky terrain than in character areas 2 and 5. In our opinion these attributes contribute to a predominantly 'semi-rural' and natural visual character to be retained in future development of these parts of the Precinct. The land use distribution in the Structure Plan subject to appropriate controls to 'fine tune' implementation of the land use categories, should ensure that these scenic resources are preserved in the future development of the Precinct.

Land of the highest prominence and natural scenic quality in Area 4 will be retained by the environmental conservation land use in the Structure Plan, as recommended by RLA. This provides visual protection to the interior of the land in views from the coastal plain and to the scenic character of the Mona Vale Road corridor in the eastern part of the study area.

Areas 2 and 5, identified as potentially capable of supporting areas of low-rise apartment and town house development and a future Neighbourhood Centre in the Structure Plan, closely accord with

our analysis of visual constraints and opportunities. Both areas also include significant space for development of houses, which will be compatible with their existing constraints and will not create significant visual impacts on external views. Future built form developed in accordance with the heights assumed for the Structure Plan will provide opportunities for housing choices while preserving the existing visual character of the Warriewood Escarpment when viewed from the east.

We have considered the two heritage items of specific significance to the LVA (the Baha'i House of Worship and Ingleside House with the associated Ruins of Powder Works archaeological site).

We consider that the environmental management land use proposed for the Baha'i House of Worship site, in which additional development is prohibited, has the potential to retain the visual significance of the item and its vegetated surroundings. Recognition that the vegetation immediately surrounding the building is an endangered ecological community should also facilitate conservation of this aspect of the setting of the item. Significant spatial separation is proposed in the Concept Plan between the item and nearest proposed future buildings (houses), which would be limited to a maximum height of 8.5m. The building heights assumed for housing in the vicinity are significantly less than the canopy height of the item's surrounding vegetation. It is therefore reasonable to assume that the visual dominance of the item will be retained.

In relation to the visual setting of Ingleside House as appreciated from Manor Road, we consider that the proposed school and residential lot is a use that is potentially compatible with continued and potentially increased public appreciation of its values, as these relate primarily to the curtilage, fence, gates and garden plantings, the existing building we understand being of lesser significance. The Ingleside House item being proposed in public and educational use provides the potential for a public benefit in education concerning the heritage values of the item and its relationship to the Ruins of Powder Works site.

The identification of a heritage curtilage for the Ruins of Powder Works assists in public recognition of the significance of the spatial connection between the two items, while environmental conservation land use controls would assist in protection. GML Heritage have provided a report containing specific heritage conservation policies in this regard.

In our opinion the Ingleside Structure Plan will facilitate the protection of the high scenic quality visual resources of the Precinct and of views toward, in and from the Precinct in its future development.

Dr Richard Lamb

Richard Lamb & Associates