# ETHOS URBAN

### Response to City of Ryde

A response to the key issues raised by the City of Ryde is detailed at **Section 1.1** below. It is considered that these key issues concisely summarise the range of issues raised in Council's detailed response and that the proposed amendments to the Master Plan will respond to these issues. In addition to this, further detailed responses are provied in relation to comments on biodiversity/trees, community space, master plan design and traffic issues at **Sections 1.2 1.4** below. This is in accordance with the request by the Department.

## 1.1 Key Issues

Issue	Response
The revised proposal does not satisfactorily deal with the matter of tree loss from the site and still results in significant loss of trees many of which have high retention value and belong to an endangered ecological community - Sydney Turpentine Ironbark Forest	As per the updated Biodiversity Assessment Report (BAR) prepared by Ecological ( <b>Appendix J</b> ), impacts to STIF have been significantly reduced. The amendments will result in a significant reduction to biodiversity impacts with a reduction from 0.41 hectares to 0.05 hectares of STIF to be impacted representing an 88% reduction in the area of STIF originally proposed to be impacted. Accordingly, 94% of the existing STIF will be retained within the development site.
Basement parking extends beyond than the footprints of the buildings above (Refer Ryde DCP part 9.3 Parking). Basement parking extends under proposed open space on the site impacting on the future potential of the site to support replacement trees.	The basement footprint has been reduced to align with the building footprints above. As a result, open space and deep soil will have sufficient depth to support replacement trees. Adequate depths for planting above basement structures will be demonstrated as part of the subsequent detailed design of buildings on the site.
The Arborists Report cannot be relied upon for the reasons that the number of trees shown to be retained seem to be inaccurate and is further detailed in Attachment 1.	The refined Masterplan will allow for the retention of an additional 179 trees, resulting in a total of 442 trees to be retained across the development site. Overall, the refined Masterplan will result in the removal of 796 trees (including up to 445 trees that are being removed by the demolition works). Refer to the revised Arboricultural Impact Assessment (AIA) prepared by Ecological ( <b>Appendix I</b> ) which has also been revised to incorrect inconsistencies.
Impact on the trees as a result of the proposed slip lane off Epping Road	The access road is now removed from the proposal and all trees in its vicinity are retained.
Inadequate building setback to the boundaries (including basement and podiums) and from the proposed roads	In relation to main street (Road 1):  Ryde Council's Ivanhoe Estate Redevelopment Urban Design Guidelines state a strict 5m setback from the road reserve but does not contemplate different setbacks for active or main streets.
	Under the RDCP, 0 setbacks are nominated to primary active frontages, although Ivanhoe's main street was not nominated as this use, we strongly believe with the school, aged care, childcare, village green and future community centre this should be considered a primary active frontage. This would allow 0 setbacks subject to detailed design. For

Issue	Response
	Example, refer to the stage 1 detailed DA, which in some instances increases the setback beyond Ryde's requirements and in some instances reduces it, resulting in an enhanced streetscape interface.
	<ul> <li>In relation to the neighbourhood streets (Roads 2 and 3):</li> <li>Ryde Council's Ivanhoe Estate Redevelopment Urban Design Guidelines state a strict 5m setback from the road reserve, with 'front yards' allowed to protrude 2m into this space. It also notes this 5m setback is to allow for "where required, a widened footpath". The Masterplan allows for the widened verge of 3m.</li> </ul>
	• The consultant team have also benchmarked suitable setbacks based on FSR and other precincts and has allowed a reduction in the setback to a minimum of 2m (subject to detailed design). This will allow the flexibility for design excellence and a diverse and interesting streetscape to be provided. For example, refer to the stage 1 detailed DA, which in some instances increases the setback beyond Ryde's requirements and in some instances reduces it, resulting in an enhanced streetscape interface.
Insufficient setback from the Riparian Corridor	RDCP requires a 5m setback to all parks (existing and proposed - subject to providing a Riparian Corridor in accordance with the NSW Office of Water's Guidelines for Riparian Corridors on Waterfront Land). The NSW office of water guideline also states "Cycle ways or paths no wider than four metres total disturbance footprint can be built in the outer 50 per cent of the VRZ."
	Section 4.4 of Ryde Council's Ivanhoe Estate Redevelopment Urban Design Guideline, includes images that shows the VRZ 30m from the creek, 6m of shared paths and a proposed park adjacent. In section 4.2, it then states a 20m VRZ and a natural buffer of approximately 10m is to be provided.
	The NSW Office of Water's <i>Water Management Act 2000</i> (WM Act) confirms that a Vegetated Riparian Zone (VRZ) is to be established from the top of the highest bank of the watercourse. Shrimpton's creek is a second order watercourse and therefore the Masterplan has allowed for a 20m VRZ from the top of bank as surveyed. In addition to this, the Masterplan includes a minimum 5m setback to the Riparian zone, with an average setback of over 10m (subject to detailed design) which seeks to preserve vegetation and trees within the riparian zone as much as possible. Refer to the RTS submission design report in <b>Appendix E</b> .
Insufficient deep soil zone	The RDCP states that both a "minimum 20% consolidated area of the open space area should be provided as deep soil zone to establish large trees" and "a minimum 20% of a site must be provided as deep soil area".
	We note however that Ryde Council's Ivanhoe Estate Redevelopment Urban Design Guideline refers to the Apartment Design Guide when referencing deep soil. Part 1 of the ADG allows for communal space and deep soil to be consolidated in precincts; under Section 3E-1 of the ADG, deep soil requirements are 7% of site area for sites greater than 1,500m2.
	As per drawing DA02.MP.200[6] of the Masterplan Drawings prepared by Bates Smart ( <b>Appendix D</b> ), the Masterplan will accommodate more than 22% of the site area as deep soil zones, substantially exceeding the ADG.
Non-compliance with RDCP in regards to the road width and width of the bridge	The Masterplan has been refined to accommodate the road widths required by the RDCP however it is important to note that the internal road network has been designed to accommodate buses requiring a minimum 3.5m travel lanes. Arup (DPE's peer review traffic consultant) concurred with this approach. Should the lanes be reduced to 3.0 metres, the ability to provide bus services through the development will not be possible.

Issue Response

In Attachment 1 of Ryde City Council's response (item 17) and with respect to Road No 3 (14.5m wide road), the width can be accommodated as per the submitted design. In Attachment 2 of Council's response, we note that proposed DA conditions for a 20m wide road which cannot be accommodated.

In relation to the bridge, the width detailed in RDCP's requirements for the length of the bridge only can be accommodated, however as the land beyond the bridge (2-4 Lyon Park Road) is constrained by the adjoining properties, a wider width beyond the bridge cannot be accommodated.

The road profile at the bridge is:

South side – 2.5m

Road carriageway - 2x3.5m travel lanes

North side – 4.5m.

This then tapers to the following at Lyonpark Road:

South side - 2.5m

Road carriageway – 2x3.5m travel lanes

North side - 1.0m.

The reason this was adopted was to ensure the width was consistent from the bridge to Lyonpark Road on the southern side with the full 4.5m width on the northern side being able to be provided with any future development of the adjoining lot to the north. Please refer stage 1 civil engineering drawings for further details

Further, the design of Main Street (21m) and Neighbourhood Streets (14.5m) have been designed to align with the RDCP objectives including; improved connectivity, accommodating vehicular circulation, provision of on-street parking, promotion of active transport (walking, cycling and buses) as well as meeting the sustainability objectives set out in the RDCP 'Aims and Purpose'.

Main Street (21m)

- The proposed road reserve design aligns with the principle dimensions set out in the DCP. The 4.5m verge allocation is consistent with the DCP in providing a 2.8m footpath and a 1.5m lighting/planting zone. The 200mm kerb width has been subtracted from the 3m footpath dimension to equal 2.8m. The kerb width has not been subtracted from the 1.5m lighting/ planting zone to ensure the health and vitality of street trees/ verge planting.
- An additional 1.25m 'Street Activation Zone' has been provided along the primary length of Main Street. This zone is set within the lot boundaries. The purpose of this zone is to meet the objectives set out in the RDCP 'Aims and Purpose' – "convenient pedestrian environment that encourages public transport use and social interaction" while maintaining movement in the streetscape.

Neighbourhood Street (14.5m)

Issue	Response
	• The proposed 14.5m road reserve design aligns with the overall dimensions set out in the DCP including 3m traffic lanes and 2.5m parking blisters located on a single side of the street.
	• The verge widths have been designed to allow for a consistent a 3.0m zone on both sides of the street, ensuring equal streetscape experience for all pedestrian routes. This dimension allows for a 1.8m footpath for safe and convenient pedestrian connectivity, as well as a 1m planting/ lighting zone on both street sides.
	The 1m planting zone has been introduced to meet the objectives set out in the RDCP 'Aims and Purpose' – "To create a centre that is sustainable and that incorporates the principles of ecologically sustainable development". The planting zone on both street sides is critical in providing solar amenity, habitat connection and mitigation of the urban heat island.
Lack of drop-off pick up zones	Internal drop-off within the school site cannot be accommodated and the design of Main Street includes provisions for loading zones and bus parking to service the school. On-street parking directly adjacent to the School will accommodate moderate drop-off and pick-up demands. This parking would provide for short- term parking during the School arrival and departure peaks. It is considered that the provision of this on-street parking provides both an efficient and safe design outcome.
	The provision of off-street spaces is not considered suitable due to the requirement for vehicles to leave the road network and cross pedestrian desire lines adjacent to the school access and bus pick up / drop off areas. The Masterplan will provide approximately 25 spaces for school pick up / drop-off. We note that both Ason and Arup (DPIE peer review) confirms this level of pick-up / drop off is appropriate.
Lack of adequate open space and community facilities	The RDCP identifies the need for open space in two key areas:
<ul> <li>Insufficient open space for residents and the school.</li> <li>Additional passive and active open space should be provided.</li> <li>Limited open space for the school site will put additional pressure on surrounding public recreation facilities.</li> </ul>	1. Along Shrimptons Creek: approximately 3.8ha with a multi-function park that provides for active transport, fitness trail, walking, and cycling, active recreation (informal sport, skateboarding), passive recreation and children's play; 2. Shrimptons Creek Core Riparian Corridor: 20m from the top of the creek embankment including Privately Owned Public Space (POPS), passive recreation, and a vegetated riparian corridor that provides diverse native vegetation and connectivity between habitats.
	Section 4.2 of Ryde Council's Ivanhoe Estate Redevelopment Urban Design Guideline identifies for an increase of total open space from 11,00m <sup>2</sup> to 18,500m <sup>2</sup> . Please refer to attached drawing DA02.MP.202(B) with the Indicative reference scheme that details the active and passive open spaces for the site.
Lots A1 and B3 do not provide public or communal open space.	Communal open space is to be assessed on a lot by lot basis as part of subsequent detailed development applications. The indicative design scheme proposes a mix of public and communal open space totalling a minimum of 25% of the overall site area. Whilst B3 is proposed to be provided with rooftop open space under the revised Masterplan, Building A1 cannot accommodate communal open space. As detailed in the separate Stage 1 application, this design outcome is considered to be appropriate as Building A1 accommodates a large landscaped external terrace to be used by the childcare centre, providing other benefits such as an activated street frontage and access to services for future residents, workers and visitors to the Estate, and all residents are provided with private balconies that achieve the ADG requirements and as such an appropriate degree of amenity has been achieved for all dwellings.

Issue	Response	
The location of the community centre below ground is not supported due to lack of sunlight and amenity reasons.	The community centre will be an active space that caters for a range of activities from swimming, casual dining to public meetings and entertainment. It will accommodate a green roof to maximise the extent of landscape when viewed from above, which will be sensitively constructed into the side of the hill with the intent that this roof (or a portion) will be trafficable. As such, it will not be constructed entirely underground, and will achieve an appropriate level of amenity which can be demonstrated at the appropriate detailed design stage.	
Clarify the location and management procedures for the swimming pool. A pool is not supported within the community centre.	The swimming pool is to be provided as part of the community centre on the north-western edge of the Village Green. The management procedures as well as the detailed design of the community centre and pool will be the subject of separate and future applications, as well as the ongoing VPA negotiations with Ryde Council.	
Exceedance of the floor space ratio	A Clause 4.6 Justification was prepared by Ethos Urban and is attached at <b>Appendix F</b> . The document notes that case of the proposed development, compliance with the FSR development standard is considered to be unreason and unnecessary in the circumstances of the case and there are sufficient environmental planning grounds to just contravention of the standard. It is noted that the exceedance to the development standard has been significantly given the reduction to overall gross floor area across the site. The previous RTS response proposed 278,000m <sup>2</sup> of floor area which is being reduced to 268,000m <sup>2</sup> , representing a variation of 2.5% to the development standard. Specifically, the 4.6 variation notes:	
	<ul> <li>The exceedance results in a better planning outcome by strategically redistributing bulk and scale;</li> <li>The exceedance achieves the objectives of Clause 4.4 notwithstanding the compliance;</li> <li>The exceedance will not result in adverse environmental impacts as a result of the variation and is considered to be in the public interest; and</li> </ul> The exceedance will allow for the provision of additional space for community facilities, and therefore provides public	
	benefit.	
Overdevelopment of the site	The built form of the proposed Masterplan is generally in accordance with the zoning for the site, which was implemented following the finalisation of the Herring Road Precinct Plan undertaken by the Department of Planning and Environment. State government strategic planning for the area has sought to increase height and density controls around train stations and major road intersections to deliver integrated land use and transport outcomes. The exhibited EIS included an assessment against the relevant strategic plans for the area and this is updated as relevant in the covering Response to Submissions report to demonstrate that the built form outcome is consistent with the desired future character of the area.	

# 1.2 Biodiversity/trees

Issue	Response
It would seem that the amendments made to the concept proposal are only tokenistic. Based on the minor changes shown on the Concept Plan not many trees can be retained. Only 11 of the additional trees to be retained are from STIF community, thus it would seem that the setback along Epping Road and along the western boundary has to be increased further to save more trees within the contiguous vegetation along Epping Road. The proposed removal of the Sydney Turpentine-Ironbark Forest and contiguous vegetation to facilitate the development is not supported by City of Ryde.  Consistent with the concerns previously raised by Council regarding the extent of impact on trees, Council Resolution of 26 February 2019 seeks that:  Director City Planning and Environment ensure all available steps are taken to protect the Shrimptons Creek Corridor and the significant trees along Epping Road to ensure their long term conservation.	The master plan has been amended to provide increased retention of the STIF along Epping Road, providing a contiguous vegetation corridor within the site.  This results in a total of 442 trees being retained.
The changes made to the Concept Plan are not significant enough to enable protection of the contiguous vegetation comprising Sydney Turpentine Ironbark Forest within the site especially along the Epping Road and the western and northern sides of the site;	The master plan has been amended to provide increased retention of the STIF along Epping Road, providing a contiguous vegetation corridor within the site.
Council seeks that the building and basement setback along Epping Road be increased to reflect the general location of significant vegetation along Epping Road. Such a setback must be in the vicinity of 18-42m along Epping Road, generally reflecting the location of the trees.	The setback along Epping Road has been increased under the revised scheme, as illustrated in the revised Masterplan Drawings prepared by Bates Smart at <b>Appendix D</b> .
Trees located on Lot 11 DP861433 & north western end of the site (adjacent to 137-147 Herring Road) be retained. This will ensure contiguous vegetation for ecological integrity of the threatened ecological community.	The revised Arboricultural Impact Assessment outlines the trees to be retained. The revised proposal retains a total of 442 trees, which results in contiguous vegetation to protect the ecological integrity of the threatened ecological community.
The trees located between Buildings D2 & D3 along Epping Road should also be protected. Thus the basement needs to be further setback in line with the location of existing vegetation.	The basement setback has been increased to allow for additional tree retention.
Arborists Report has picked up additional 117 trees that were previously unaccounted for. The methodology used for tree survey is highly questionable. It is still difficult to quantify/ locate the exact number of trees that are newly 'being retained' versus those which were (as admitted in the Arborists Report) mistakenly counted or not counted entirely in the first submission. For this reason Council does not have faith in the final numbers claimed for retention under the new submission. The new submission continues to not include the full extent of the polygon A & B areas despite species in these areas forming part of the STIF community. Area A is located along the northern boundary and Area B is located along the common boundary of 137 Herring Road site. All trees located in Polygon A and B will be subject to high impact and are proposed for removal;	A revised Arboricultural Impact Assessment has been prepared by Ecological at <b>Appendix</b> I with previous discrepancies and issues rectified.

Issue	Response
Arborists Report states that an additional 119 trees will be saved but falls short of stating where these additional trees are located. A review by City of Ryde indicates that out of the 119 trees, 117 trees are those that were previously unaccounted for and all of the 117 trees will be removed since they are located in Polygon A & B. Arborist Report indicates that a total of 350 trees will be retained (an increase of 119 trees from previously 231 trees); Based on the above it is not clear how it can be claimed that an additional 119 trees would be retained	A revised Arboricultural Impact Assessment has been prepared by Ecological at <b>Appendix</b> I with previous discrepancies and issues rectified, including the identification of the location of all trees on site in Figures 1 – 4.
It is further noted that of the 350 trees earmarked for retention 38 will be subject to medium level construction impact and 52 will be subject to minor impact. In absence of detailed root mapping and details on the proximity of the tree from the basement it is highly questionable if the number of trees indicated to be retained will ever be capable of retention.	36 trees are subject to a medium level construction impact under the revised scheme. The proposed development is for a Concept Masterplan only and further detailed assessment, including root investigation through non-destructive measures, will be employed during subsequent detailed design applications. This issue is further addressed in the Arboricultural Impact Assessment prepared by Ecological at <b>Appendix I</b> .
Council does not have faith in the final number of trees claimed for retention under the revised scheme. It is not possible to reconcile and quantify the exact number of trees that are newly 'being retained' versus those which were (as admitted below) mistakenly counted or not counted entirely in the first submission. The new submission continues to not include the full extent of the polygon A & B areas despite species in these areas forming part of the STIF community. ELA Report states; ELA notes that the field data capture for this AIA has been undertaken by multiple Registered Surveyors and Multiple Arborists, with several datasets merged together. This is further compounded by the time since survey, as many of the tree tags have been removed since surveys began in June 2017. As such there are data anomalies within the shapefile, whereby there may be duplications of tree points that may not exist on the ground.	A revised Arboriculture Impact Assessment has been prepared by Ecological at <b>Appendix</b> I with previous discrepancies and issues rectified, including
No details of the Habitat Assessment provided but mentioned – information on this required to support submission – this includes hollow bearing tree identification.	The Biodiversity Assessment Report and Offset Strategy that accompanies the Masterplan application identifies hollow-bearing trees and details the impact to such trees, with appropriate mitigation measures nominated in the Masterplan response. A total of two (2) hollow-bearing trees will be impacted through the redevelopment of the Estate, and as such it is recommended that nest boxes be installed within retained vegetation in Shrimptons Creek.
Despite revision of footprints the newly revised setbacks continue to fail to ensure that impacts are avoided and mitigated as per the NSW Biodiversity Offsets policy (Principle and as nominated by the feedback of the OEH from the first submission. The Framework for Biodiversity Assessment (FBA) requires proponents to 'identify and avoid direct impacts to threatened ecological communities'.	The revised proposal has further increased setbacks to reduce impacts on the threatened ecological community, in accordance with the NSW Biodiversity Offsets policy.
Report states that it is recommended that a monitoring program that assesses ongoing impacts to the Sydney Turpentine Ironbark Forest is implemented as part of a future Vegetation Management Plan. It is unclear as to who and how this can be done. Considering the building proximity from the trees, potential impacts will be unavoidable and is likely to result in further impact on trees earmarked for retention.	This detail would be provided as part of the Vegetation Management Plan.

Issue	Response
Building setbacks along Epping road corridor to be amended to push back to retain EEC corridor. Carpark basement opportunity to be provided under internal roadway	The setback along Epping Road has been increased under the revised scheme of between 12-43 metres, as confirmed in the revised Masterplan Drawings prepared by Bates Smart at <b>Appendix D</b> , to enable the retention of the EEC corridor.
Further to this, in section "4.1 Trees requiring detailed assessment." The Arborist states that 2 trees require detailed assessment, yet in section "3. Results" Medium Impact (<20%)" the report states that 38 trees will require "further detailed assessment". No justification is given to why the number has reduced from 38 to 2. Also the Arborist as not nominated which are the 2 trees requiring further investigation	A revised Arboricultural Impact Assessment has been prepared by Ecological at <b>Appendix</b> I with previous discrepancies and issues rectified.
Pg 17 – 'Impacts on Retained Vegetation' - As a result, it is recommended that a monitoring program that assesses ongoing impacts to the Sydney Turpentine Ironbark Forest is implemented as part of a future Vegetation Management Plan. Who is to do this and outcome from monitoring considering building footprints and any potential impacts will be unavoidable post construction. The OEH from the first submission note that baseline data monitoring must be set up to capture any effects of the project over the time on the STIF. When is this proposed to commence?	This detail would be provided as part of the Vegetation Management Plan.
Pg 47 – Response to Submissions doc: A Biodiversity Management Plan and Construction Environment Management Plan will be implemented prior to construction, which will include operational measures relating to clearance supervision and vegetation management. How is this to be enacted and contain what? What purpose?	This detail will be provided as part of future detailed development applications.
Planting of 'Forest Park' to the adjoining STIF EEC to 'maintain and strengthen' the biodiversity corridor through species selection that is complementary to the community and maximise through including the existing STIF community through reducing impacts on the existing corridor and building footprint	Noted.
Landscape plan species do not follow DCP. Landscape plan delivery difficult for species planted along areas with carpark underneath. Planting outcomes will not be able to be achieved as nominated.	Landscaping has been designed in accordance with the Landscape Concept Plan and has included species complementary to the site, and which are appropriate for the nominated soil zones.
Shrimptons Creek: staging upgrade – to be undertaken in one stage to minimise disruption;	Noted. The detailed design of this area will be subject to a future separate approval.
As the space will be handed to council. Council to be the final design determining authority for this area. Council will not accept handover unless previously approved; Remove boardwalk and consolidate with footpath. Two paths further fragment and reduce ecological integrity of the biodiversity corridor long term through disturbance which will not serve to protect and enhance. One path can provide a shared user experience and must be placed in the upper 50% of the vegetated riparian zone (VRZ) as per the Office of Water Guidelines for permissible activity within a riparian zone.	

Issue	Response
The Office of Environment and Heritage also support the removal of the slip access road from Epping road into the site as it will severe the connectivity of the corridor. Council supports the Office of Environment and Heritage submission in prioritizing the retention of the ecological community and adjoining vegetation	The slip access road from Epping Road has been removed under the revised scheme.
Council has concerns with respect to applicant's disregard for the serious impact the proposed development will have on the existing trees and EEC vegetation. Of particular importance are the stands of trees located along the Epping Road frontage and northeastern boundaries. These stretches of buffer planting are considered to be a high priority for retention due to their contribution to the landscape character of the site and locality and it forms part of the STIF that has high ecological value and worthy of retention. Further, its ability to provide screening and softening to the proposed built form along the corridor of Epping Road and other site boundaries should not be disregarded. It is considered that these tracts of vegetation should be strengthened as part of the proposal rather than diminished as is currently the case.	The Masterplan has been revised to increase the setback to Epping Road, and therefore significantly increase the amount of EEC vegetation retained.
Council contends that the building footprints are not sympathetic to the existing vegetation on site and it is considered a more sensitive approach which considers trees as an important asset would result in a reduced level of tree loss. Given there appears opportunity to modify building envelopes, increased setbacks to Epping Road and the north- eastern boundaries are recommended.	The Masterplan has been revised to increase the setback to Epping Road, and therefore significantly increase the amount of EEC vegetation retained.
Proposed basement and building setback from Epping Road be increased to reflect the existing vegetation line with the intent of retention and protection of majority of the trees.	The Masterplan has been revised to increase the setback to Epping Road, and therefore significantly increase the amount of EEC vegetation retained.
Create contiguous deep soil zone along all boundaries of the site. This will require design changes to both the built forms and the basement carparks, to create deep soil zones that will support retention of existing trees and promote new tree plantings.	A revised deep soil zone plan has been provided with the updated Masterplan.
Refer to the comments under "Impact on trees".	The slip lane has been removed from the master plan.
Even though the slip lane may have benefits on traffic grounds, Council objects to the slip lane on the basis of its cumulative impact on the EEC vegetation along Epping Road, especially when the applicant has not shown any genuine attempt to increase the basement setback to retain additional trees. Council does not support the proposed slip road in light of the overall impact the development and the proposed slip road is likely to have on the high value vegetation along Epping Road.	
Drawing here conflicts tree retention nominated by the Arborist Plan and will result in the loss of trees if basin size is indicative of the footprint plus the batter of the basin slope. Size and dimensions not specified.	The master plan drawings and Arboricultural Impact Assessment have been updated to reflect the revised design.
The Arborist in "section 4.3 Offsetting" the Arborist nominates tree species to offset trees to be removed, only one species has been used in Indicative Tree Schedule. Council seeks that Tree Schedule be amended to includes more local native species.	Multiple native tree species have been nominated for offset planting.

Issue	Response
On page 23 of the PDTM tree species for Residential Streets have been set out. The Indicative Tree Schedule only contains 3 species from this list. Amend Schedule which includes more Species from the PDTM.	The Tree Schedule is indicative only. Tree planting will be provided in accordance with the Public Domain Concept Plan and subject to future detailed development applications.
On page 30 of the PDTM tree species for Open Space Network have been set out The Indicative Tree Schedule only contains 3 species from this list. Amend tree schedule	The Tree Schedule is indicative only. Tree planting will be provided in accordance with the Public Domain Concept Plan and subject to future detailed development applications.
Tree Planting over Basement around building A1  The Landscape Plan shows planting of large native canopy trees such as Eucalyptus saligna (Sydney Blue Gum) around the western boundary of building A1. The planting of these type of trees is encouraged, however they are planted over basement car parking not in deep soil. These trees will fail to thrive or blow over in a strong wind. This is typical for the whole site as basement car parking extends to the boundary in a number of locations. Amend Landscape Plan Legend	The detailed planting design and levels of Building A1 is the subject of the separate detailed Stage 1 SSD DA. This application demonstrates that soil depths will be achieved in accordance with Part 4P of the ADGs.

#### 1.3 Open space and community centre

#### Issue Response

City of Ryde is still concerned with the lack of adequate open space provided on the site given the scale of development. Council seeks that:

Additional open space must be achieved within the development by further adjusting the built form.

The scheme must provide additional active and passive recreation throughout the development. Space must be made available on the ground plane by adjusting built form and not on the green roof.

No additional provision of active open space has been made. Limited capacity – given the proposed population density, types of uses and a school. Council raises concern in relation to this matter and the RTS. The existing sports fields are at capacity. It is not indicated as to how and which field should be boosted and by whom.

The Ivanhoe redevelopment meets best practice requirements for open space in high density areas through providing:

- · Access to open space within 250m for residents
- 2.4 hectares or nearly 30% of the site as public open space, not including communal and private open space
- Multi-functional and diverse play and recreational spaces suited to a range of age groups and all abilities
- Shared use of school open space and recreational facilities.

Given the demographics of the future population and the fact participation rates in structured sporting activities decline significantly after age 17, the greatest demand for open space from the future population at Ivanhoe will be for passive, unstructured open spaces. The amount of open space provided will allow university students and workers in the area to utilise these spaces and facilities.

Best practice planning for open space recognises that it is often not practical, nor efficient to incorporate active open space in higher density developments. This is due to the fact that active recreational space is best provided in sports hubs with multiple sporting fields that both provide a focus for the community and allow structured sporting activity to be organised efficiently.

Issue	Response
The following concerns are raised with request for further clarification:	The Masterplan drawings have been revised and clearly delineate the size of the community centre.
Further refinement of the drawings is required to better understand the spatial size of the 'Community Centre' within the 'Village Green'. The current drawing is misleading as the Village Green is not 6,000m2 as a significant component is taken up by the community centre as identified as C2 footprint;	
Further information is required regarding the lot boundaries of the 'Village Green' and basements if the 'Village Green' is to become publicly owned open space;	Parking associated with the C2 Community Centre is proposed in a basement structure, which will partially extend beneath the southern edge of the Village Green. The detailed design of this basement level and the Village Green will be subject to future and separate detailed applications as well as VPA discussions.
The lot would require stratum should the basements be located beneath publically owned open space;	Noted, will be subject to future development applications.
The location of the community centre in the basement level is not supported for lack of sunlight access and amenity reasons;	The community centre will be an active space that caters for a range of activities from swimming, casual dining to public meetings and entertainment. It will have a green roof to maximise the extent of landscape when viewed from above, which will be sensitively constructed into the side of the hill with the intent that this roof (or a portion) will be trafficable. As such, it will not be constructed entirely underground, and will achieve an appropriate level of amenity which can be demonstrated at the appropriate detailed design stage.
Provide clarity with respect to the proposed swimming pool. It is not clear from the plans as to where this is proposed and how this will be managed	edge of the Village Green. The management procedures as well as the detailed design of
Council will support the provision of approx. 2,900m² of community facility space adjacent to the Village Green. This space should cater for a range of community uses and activities. A pool is not supported within the area adjacent to the community centre. A pool is not seen as complimentary to the uses described earlier within the community centre and would create significant car parking issues	the community centre and the potential pool will be the subject of separate and future applications, as well as the ongoing VPA negotiations with Ryde Council.
Parking for community centre is inadequate.	The community centre is to service the local community and Ivanhoe Estate, and as such Ason Group assert that a high proportion of non-car travel is expected and to be encouraged for this building.
Concerns about natural light and ventilation for the community centre located next to a tall building.	The proposed community centre will achieve an appropriate level of amenity which will be demonstrated at the detailed design stage. Notwithstanding, the overshadowing plans demonstrate that the community centre will receive full or partial sunlight between 11am and 1pm during the winter solstice, which is the worst-case scenario when solar access is the most limited.

Issue	Response
A 25-metre aquatic facility has been proposed. It is not clear from the plans as to where this is proposed and how this will be managed.	The swimming pool is to be provided as part of the community centre on the north-western edge of the Village Green. The management procedures as well as the detailed design of the community centre and the potential pool will be the subject of separate and future applications, as well as the ongoing VPA negotiations with Ryde Council.

## 1.4 Design

Issue	Response
Bulk and scale	
City of Ryde Urban Design Guidelines Ivanhoe Estate Redevelopment specifically require that buildings should not be greater than 40m long (section 4.4.2). However, not a single building complies with this provision;	The floorplates of the indicative buildings (recognising that this is a concept and will be subject to further refinement and detailed design) are capable of achieve high levels of amenity and have been designed to minimise potential impacts on surrounding areas. This is detailed in the Design Report and accompanying technical studies, which demonstrate that in particular:
	The proposed building envelopes are capable of accommodating buildings that can achieve key design criteria for solar access, cross ventilation and building separation.
	<ul> <li>Overshadowing impacts are limited to Epping Road, the front yard of residential properties on the opposite side of Epping Road and some portions of the Shrimptons Creek riparian corridor.</li> </ul>
	The revised building envelopes do not result in any significant visual impacts, as demonstrated by the Visual Impact Assessment at Appendix K.
	The wind conditions surrounding the site are appropriate or can be made appropriate for their intended uses.
Reducing the building length will also help comply with the building setbacks by providing appropriate setbacks from the road frontages;	Street setbacks have been established for Main Street and the Neighbourhood Streets in accordance with the updated Ivanhoe Masterplan Design Guidelines at <b>Appendix H</b> . Setbacks will be provided in accordance with this Design Guideline as well as the ADG, where applicable.

Issue	Response
The excessive building depths are likely to cause a range of amenity issues at the detailed design stage such as poor daylight access and poor natural ventilation in the deeper part of apartment units. It may lead to the reliance on snorkel bedrooms for air and encourage the creation of rooms without windows that end up being used for habitable purposes. The building depth must be reduced to comply with the ADG and this will also help minimize overshadowing to the EEC corridor and the open space area within the development;	The proposed building envelopes and indicative layouts have been tested, which confirm that they remain capable of complying with the ADGs and will achieve a high level of amenity. Notably:
	• Across the site, solar access is achieved to 70% of all dwellings. Within each block, the Indicative Design Scheme illustrates that the recommended solar access criteria can be achieved for all buildings, with the exception of A1 and A2.
	The preliminary assessment demonstrates that future buildings are capable of compliance with the majority of key design criteria recommended by the ADG, including solar access and cross ventilation.
Incorporate a slender built form for all buildings	See above. The detailed design of each building will seek to achieve an articulated and visually interesting built form, reducing the appearance of the bulk and scale of buildings.
Visual impacts	
Increase setbacks from Epping Road	The setback to Epping Road has been increased to retain the significant vegetation along this frontage. The setback varies from 12m to 43m under the revised scheme.
Provide upper level setbacks to all towers	Upper Level Setback requirements are addressed in Part 9 of the revised Ivanhoe Masterplan Design Guidelines are <b>Appendix H</b> .
Set back all buildings in accordance with the RDCP and the Guidelines	The proposed building envelopes have been set back in accordance with the requirements of the Ryde DCP and the Apartment Design Guide, where applicable. The Design Guidelines have been revised to require visual privacy measures will be incorporated to ensure that appropriate privacy is maintained between neighbouring buildings.
There is substantial bulk when viewed from important vantage points in the public domain	A revised Visual Impact Assessment has been provided at <b>Appendix K</b> confirming that the revised building envelopes will not result in any adverse visual impacts.
Solar Access	
Allow sunlight penetration to EEC and open space	The Supplementary Design Report at <b>Appendix E</b> confirms that the revised scheme allows for sunlight penetration into the EEC and public open spaces.
Ensure residential apartment building receive solar access	Across the site, solar access is achieved to 70% of all dwellings. Within each block, the Indicative Design Scheme illustrates that the recommended solar access criteria can be achieved for all buildings, with the exception of A1 and A2.
Cross Ventilation	
Confirm that cross ventilation requirements can be met	The preliminary assessment demonstrates that future buildings are capable of compliance with the majority of key design criteria recommended by the ADG, including solar access and cross ventilation.
	A revised preliminary assessment against the ADG is included at <b>Appendix E</b> and illustrates how cross ventilation has been calculated using the Indicative Design Scheme.

Issue	Response
Setbacks	
The setback of 12m - 18m from Epping Road is inadequate. The built forms, basement parking and podium must not be located within the EEC corridor and existing landscaped area along Epping Road.	The setback to Epping Road has been increased to enable the retention of vegetation along this frontage. The revised setback varies significantly between 12m to 43m, with the building basements also reduced to remain within the building envelopes.
Building setbacks from north eastern boundary (adjacent to lots fronting on Peach Tree Road) are inadequate	The revised Masterplan has considered the relationship to existing and future development on Peach Tree Road in the following ways:
	Setbacks and building separation are provided in accordance with the requirements of the ADG or the RDCP.
	Visual privacy will be maintained through the provision of adequate separation distance and future detailed design measures.
	Adjoining properties on Peach Tree Road are located north of the site and, as a result, development subsequent to the Masterplan will not cast shadow on the properties on Peach Tree Road.
Building setbacks to new roads should be 5 metres in accordance with the City of Ryde's Ivanhoe Design Guidelines	Street setbacks have been established for Main Street and the Neighbourhood Streets in accordance with the updated Ivanhoe Masterplan Design Guidelines at <b>Appendix H</b> . Setbacks will be provided in accordance with this Design Guideline as well as the ADG, where applicable.
	The Ivanhoe Masterplan Design Guidelines prescribe a 2m landscaped setback to neighbourhood streets and an average 2m setback to ground level on Main Street. This aligns closely with the recommendations of 'City of Ryde Urban Design Guidelines Ivanhoe Estate Redevelopment', which proposes a 2m landscape treatment for privacy beyond which is a 3m landscaped edge to the street.
	The only difference from Ryde's diagram is that the 3m landscaped edge is proposed within the public domain (in a wider footpath) rather than within the private domain. Envelope plans show zero setback to the streets to allow flexibility in the design on steeply sloping sites, but all future detailed DAs will need to comply with the design guidelines.
	The design intent for Main Street is to create a street wall that reflects the civic function of the space, with setbacks to be provided to ensure building separation in accordance with the ADG where applicable. On Neighbourhood Streets, upper floors will be set back a minimum of 4.75 metres from the lot boundary.

Issue	Response
Applicant's Concept Plan Design Guideline	
City of Ryde raises the following concerns that require further amendments of the Concept proposal:	A1 has a childcare facility located on its ground plane, which removes the ability to provide communal open space around the ground plane. To provide communal access to level 24, the lift overrun would breach the maximum height plane.
Application indicates that Lots A1 and B3 are not required to provide public or communal open space." The applicant does not seem to provide any justification for why Lot A1 is not required to provide public or communal open space. There is no planning justification to not provide open space within individual lots as private or communal spaces. Ryde DCP2014 requires 20% of the site to be deep soil area;	B3 contains a potential future communal rooftop area. Design Guideline 2, Provision 5 has been updated accordingly.
	A significant amount of publicly accessible open space is provided throughout the site, which will be accessible to all residents.
A large connected single basement is proposed with inadequate deep soil zone. The minimum dimension of 2.5m for deep soil zones is not acceptable. For a large site like this one, the minimum dimension should exceed 6m as recommended by the ADG (3E-1).	Provision 2 of the revised Ivanhoe Masterplan Design Guidelines at <b>Appendix K</b> stipulates that deep soil zones should have a minimum dimension of 6m, which is detailed in the new dimensioned envelope plans prepared by Bates Smart.
As stated earlier the public domain interface for residential units is inappropriate. The 2m setback from the lot boundary is inadequate.	As aforementioned, the design intent for Main Street is to create a street wall that reflects the civic function of the space, with setbacks to be provided to ensure building separation in accordance with the ADG where applicable. On Neighbourhood Streets, upper floors will be set back a minimum of 4.75 metres from the lot boundary.
The site's interface with Shrimptons Creek should be provided with secondary building entries to increase activation and passive surveillance. Council seeks that applicant provide a revised Design Guide to address Council's concerns pertaining to building design.	The proposal is for a Concept Masterplan only and this issue will be addressed in subsequent detailed design applications.
The guidelines generally indicate a street wall height of 2-4 storey on the lowest levels of the building. This is not specific enough to ensure that the future development will achieve a consistent streetscape character. The Design Guidelines must limit the length of the buildings and include building length provisions that are consistent with City of Ryde's Design Guidelines.	The guidelines aim to provide for a degree of flexibility with regards to future built form. 2-4 storeys is considered to be appropriate considering that different buildings within the scheme may respond to different surrounding contexts, therefore necessitating some variation. Subsequent detailed design applications will ensure that a consistent streetscape character is achieved.

# 1.5 Road, traffic and car parking matters

Issue	Response
Variation to Visitor Parking and car share	This issue is directly addressed in the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b> .
The car parking rate as provided in the RDCP2014 is already at a reduced rate as part of the most recent revisions of the parking rate in Macquarie Park. The number of visitor parking required for the development is being varied by 50%. This in real terms means approximately over 150 visitor car parking spaces not being provided on the site. It is expected that additional parking is provided on the site in accordance with the DCP requirement.	
The variation is likely to result in a significant parking undersupply that would impact on- street parking availability in the area and would also place pressure on Council to alter parking restrictions in the surrounding area or potentially implement a permit parking scheme. These ramifications are unacceptable.	
Parking levels for visitor spaces and car share spaces are to be strictly complied to align with RDCP2014. City of Ryde does not support any variations to the visitor parking and car share spaces required for the development.	
Variations to car share It is also noted that the number of car share spaces is being varied by 50%. Given that the development proposed 3,500 residential units, a variation of this scale is likely to result in more pressure on existing car parking and street parking spaces. Council seeks that a condition be imposed to ensure that the car share spaces be provided in accordance with RDCP2014 and that these spaces are:	This issue is directly addressed in the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b> .
Publicly accessible 24 hours a day seven days per week;	
Located together in the most convenient locations;	
<ul> <li>Located near and with access from a public road and integrated with the streetscape through appropriate landscaping where the space is external;</li> </ul>	
Designated for use only by car share vehicles by signage;	
Parking spaces for car share schemes located on private land are to be retained as common property by the Owners Corporation of the site	
Intersection Configuration along Road No. 1 and potential traffic flow conflicts: Council seeks that a condition be imposed requiring the applicant/ developer to construct a roundabout at the intersection of Road No. 1/Road No. 2 and Road No. 1/Road No. 3. This must be incorporated as part of the appropriate stages of construction. Suitably prepared civil plans shall be submitted to and approved by City of Ryde prior to the determination of any detailed application relevant to the particular stage.	

Issue	Response
School Drop-off/Pick-up Facilities: Council seeks that a condition be imposed requiring an internal drop-off/pick-up zone within the school boundary to accommodate private vehicles and buses.	This was discussed as part of the former RTS Report and technical studies lodged with the Department. Internal drop-off within the school site cannot be accommodated and the design of Main Street has included provisions for loading zones and bus parking to service the school. On street parking directly adjacent to the school will accommodate drop-off and pick-up demand. This parking would provide for short-term parking during school arrival and departure peaks. It is considered that the provision of this on-street parking provides both efficient and safe design outcome. The provision of off-street spaces is not considered suitable due to the requirement for vehicles to leave the road network and cross pedestrian desire lines adjacent to the school access and bus pick up / drop off area. It's also important to note that both Aspire traffic consultant and the Department's peer review traffic consultant confirm that the level of pick-up / drop off is considered appropriate. Please also refer to the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b>
Herring Road/Ivanhoe Place Traffic Signals: Council seeks that a condition be imposed requiring the applicant to provide monetary contribution to RMS for the upgrade of the intersection of Herring Road and Ivanhoe Road to traffic signals prior to the issue of the Construction Certificate for Stage 1 development of Ivanhoe Estate.	Noted.
Lyonpark Road/Main Road No. 1 Intersection Treatment  The applicant shall construct, as a minimum, a roundabout at the intersection of Road No. 1 and Lyonpark Road. Suitably prepared civil plans shall be submitted to and approved by City of Ryde prior to the release of any bonds associated with the civil infrastructure. Council seeks that the Concept Plan be amended to indicate this roundabout at the location and a condition be imposed requiring details to be submitted as part of any subsequent development application for approval by Council.	The provision of a roundabout at this intersection, using the absolute minimum design values form Austroads Guide to Road Design Part 4B, would result in the need for approximately 250m2 of land acquisition over three separate properties. The land acquisition would likely impact on the existing parking spaces within lot 511 DP 1153119 (Optus business Park). Please also refer to the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b>
<b>Lyonpark Road/Epping Road Intersection:</b> Council is concerned with this approach and seeks that this matter be reconsidered by the applicant.	This was discussed as part of the former RTS Report and technical studies lodged with the Department. Please also refer to the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b> .
Shared User Path (SUP) along Epping Road: Council seeks that the applicant construct a Shared User Path (SUP) link along the Epping Road frontage of the development site, including a pedestrian and bicycle crossing over the slip lane and connecting to the existing SUP on-ramp to Shrimptons Creek (southern boundary of the site) to the Herring Road signalised intersection, to a minimum width of 3.0 metres. This should be shown on the Concept Plan.	This was discussed as part of the former RTS Report and technical studies lodged with the Department. The implementation of this request would require removal of endangered ecological community, which is contrary to Councils position on the EEC. It is also noted that Council has constructed a shared user path on the opposite side of Epping Road, and the construction of a duplicate path in the requested location is not required to support the proposed development (given the removal of the connection through to Epping Road (formerly extension of Road No. 3).

Issue	Response
<b>Traffic Modelling:</b> The traffic generation is considered underestimated/discounted, which is expected to have a noticeable impact on the level of service of intersections immediately providing access to the development. Council's concerns raised in the previous submission have not been addressed. Council is of the view that the Transport Management and Accessibility Plan (TMAP) must be updated to reflect the impact of 800 vehicle trips during the AM peak hour.	This issue is directly addressed in the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b> .
Internal Road Assessment  Council is of the view that the Transport Management and Accessibility Plan (TMAP) must be updated to assess the implications of the level of traffic on the amenity and road user safety within the proposed internal road network.	This issue is directly addressed in the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b> .
<b>Pedestrian Crossing:</b> The applicant is to undertake necessary actions to obtain approval from RMS for the implementation of a 40km/h HPAA zone throughout the Ivanhoe Estate to ensure maximum safety for all road user types. Exact locations must be confirmed with City of Ryde during detailed design stage.	Noted.
Footpath/Shared User Path (SUP): Council seeks that a condition be imposed requiring the applicant/ developer to fund and operate the community bus services connecting the development with Macquarie Park employment zones and other local services. Details of how this is anticipated to be implemented and operated, on an ongoing basis must be provided prior to the issue of any Occupation Certificate.	A development funded bus will be provided to Mission Australia Housing to run as a community service at the completion of Building C1 which incorporates the first social building.
Developer Bus Service  Additional clarification must be provided in relation to this matter since updated traffic report does not discuss any details on the implementation of a new developer funded community bus.	FPA has agreed to make the provision of the community bus a condition of consent prior to issuing an Occupation certificate for building C1 in Stage 1.
<b>Bus Access to Ivanhoe Estate:</b> Council seeks that a condition be imposed on design the Main Road (Road No. 1) to accommodate the swept path of a 14.5m rigid bus with 0.5m clearance to kerb alignment, medians and centreline of the road way. Bus bays are to be designed to have a minimum width of 3.0m in accordance with Austroads Standard.	Bus parking bays have been designed to be 3m wide in accordance with Austroads standards.  Council has requested in their submission that the travel lanes of Main street are to be 3m wide for the full length. It is noted that a 14.5m bus is 2.5m wide and hence the requirement to cater for a 14.5m bus with the requested offsets is not feasible for 3m lanes. Accordingly, the travel lanes for Main Street have been designed as 3.5m wide in accordance with Austroads to cater for buses.
Indented Parking Bays on Road No. 3: The applicant should relocate the indented parking bays closer to the Road No. 2. If no suitable location can be accommodated, the deletion of this space would be recommended.	Is this comment referencing the parking bays on the deleted section of Road No.3? If so, no further action required as this issue has now been removed from the design. If referencing the parking bay further down (between Main Road and Road No. 2), ADWJ see no issue moving this bay closer to road No.2.

Issue	Response
Road Safety Audits  Council seeks that a condition be imposed requiring road safety audits of all new traffic facilities including intersections and traffic devices to be undertaken by a qualified road safety auditor by the applicant. The road safety audit must be undertaken for all project phases such as pre-construction, construction and post- construction.	This issue is directly addressed in the Technical Note prepared by Ason Group and appended to the RTS at <b>Appendix Q</b> .
Given that this development is rather expansive, and would be done in Stages over a relatively long period of construction activity, it is envisaged that a large volume of construction traffic will be required to travel over the newly constructed roads and infrastructure. Therefore, in regard to the road infrastructure and hand-over staging, it would be ideal for Council to request the Developer/Applicant dedicate to the Council, all roads that are intended to be public roads, prior to the issue of the Occupation Certificate of the final stage of the development (currently designated as Stage 8). Applicant must ensure this is included in the VPA. Bus stops and bus shelters shall also be provided at no cost to Council.	This matter can be negotiated as part of the Voluntary Planning agreement that the applicant has offered to enter into with Council.