HOUSING & DEVELOPMENT BOARD

Summary of Response to Feedback on Environmental Impact Assessment (EIA) for Woodlands Neighbourhood 1

I. Site context & milestones

The Government recently announced plans to provide more housing opportunities within the North region, which will offer existing and future residents a sizeable supply of affordable housing options and new supporting amenities.

The Woodlands Neighbourhood 1 (N1) site is about 7.27 ha and has been zoned 'Residential (Subject to Detailed Planning)' and 'Road' in URA's Master Plan since 1980 (see Figure 1).

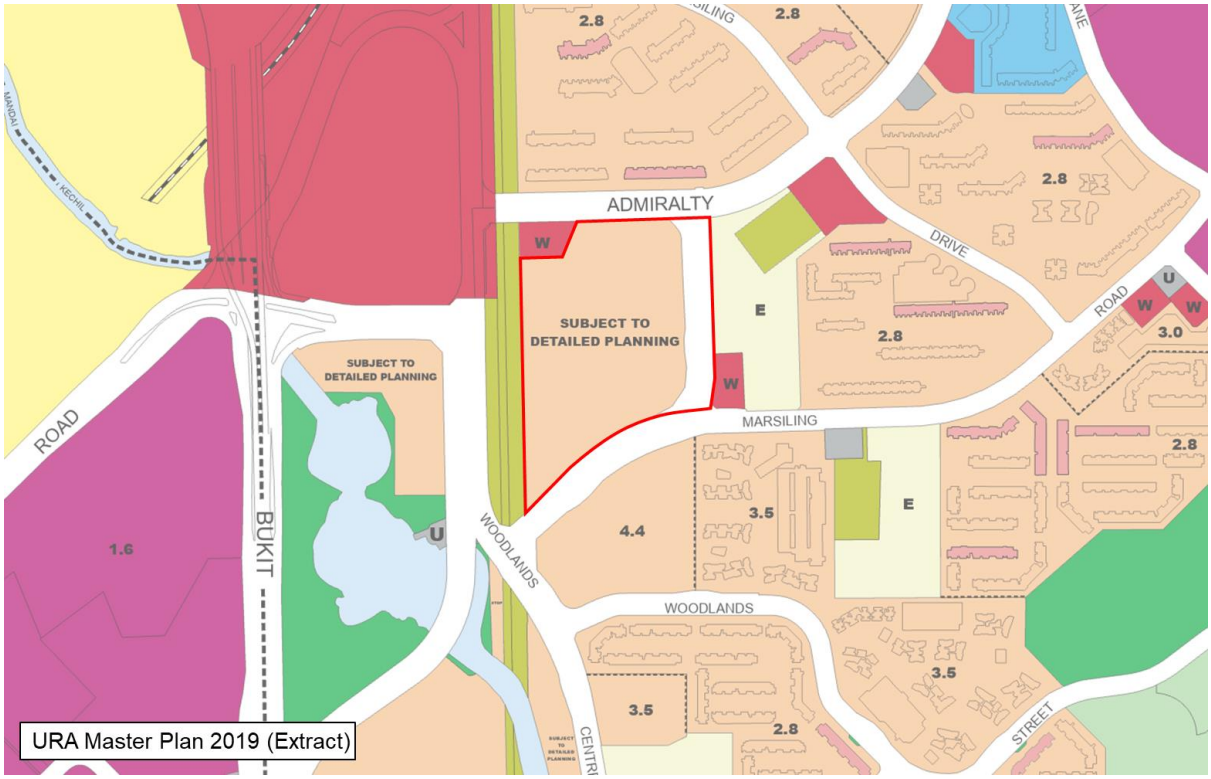

Figure 1: Zoning of Woodlands N1 in the Master Plan 2019.

II. Engagement with stakeholders

An Environmental Impact Assessment (EIA) was carried out in 2023 to assess the potential impacts of the proposed development on biodiversity and the environment for the Woodlands N1 site. Together with NParks and URA, HDB held an engagement session with various Nature Group (NG) representatives in Apr 2024. The session provided an opportunity for various parties to come together to share their perspectives and reach a common

understanding on Singapore's land use needs and challenges, and to co-create solutions to address the various concerns.

The EIA report was published online for public feedback from 13 Nov 2024 to 10 Dec 2024. In total, **196** responses were received via HDB's feedback channels. Following closure of the feedback period, HDB also met with Woodlands Botanical Garden (WBG), a community-based group, in Feb 2025 to discuss the EIA findings and avenues for downstream collaboration to preserve some existing biodiversity and incorporate them in the future living environment where feasible.

III. Feedback received

We value the feedback from our partners and members of the public and have considered the suggestions that had been submitted.

Feedback on a wide range of issues were raised, including concerns over biodiversity loss, climate change, and environmental quality, and requests for development of other sites and re-development of existing estates, e.g., Voluntary Early Redevelopment Scheme (VERS). Others also suggested ways to relocate flora and made suggestions to explore innovative precinct designs that integrate with the broader ecology of the area.

Among the feedback received, there was support for the proposed retention of ~90% of the Area of High Ecological Value (AHEV). HDB also received feedback regarding the recommended 15-metres buffer, a zone that seeks to mitigate forest edge effects–measured from the last line of native trees within the AHEV.

IV. Responses to feedback

Taking into consideration the EIA findings and the feedback received, Agencies are committed to adopting the following key measures for the new housing estate to ensure a good balance between development and conservation needs:

A) **Retention of approximately 90% of the AHEV:** About 90% of the native-dominated secondary forest will be retained, along with a buffer of approximately 15-metres from the last line of native trees within the forest patch (see Figure 2). This is equivalent to approximately a quarter of the development area of Woodlands N1 (Figure 2). This proposed area to be retained was assessed to be sufficient – to avoid plant mortality for rare and threatened plant species, reduce impact to fauna from the loss of/ reduction in habitats and food sources, and serve as a stepping stone and buffer zone by fauna for ecological connectivity to Marsiling Park, the Mandai Mangrove Mudflat green areas, and Central Catchment Nature Reserve (CCNR). The retention of this area will help to balance conservation with development needs. Majority of the plants of conservation significance are located within the native dominated secondary forest to be retained. For conservation of significant plant species that are not located within the eventual conservation area, HDB will work with agencies to transplant the plant species, where feasible.

To mitigate forest edge effects, infill planting along the forest edge would be carried out to maintain the microclimate and environmental conditions. The planting palette could include flora species that would attract fauna species of conservation significance such as butterflies and birds.

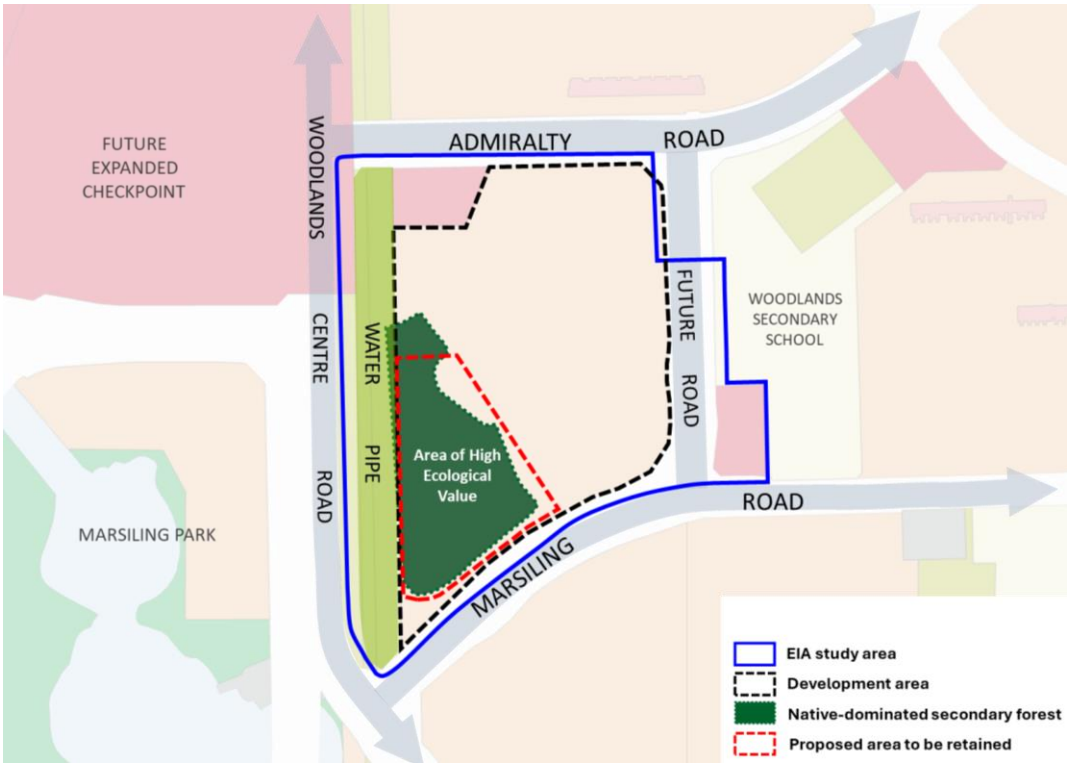

Figure 2. The proposed area to be retained (marked out by the dotted red boundary).

B) **Landscaping to attract biodiversity:** Transplanting of plants with conservation significance will be carried out where needed, and native plant species will be planted in the future housing development site to attract biodiversity. For example, the climbing vine, *Aristolochia acuminata*, can be planted to attract butterflies like the Common Birdwing. HDB will also work with the local community on the salvaging and transplanting of suitable small plants and saplings affected by the development.

C) **Green cover within new housing development:** Aside from the AHEV**,** the new development will be designed to provide 45% green cover, including trees, shrubs and lawns. Green cover is an indicator of land area covered by greenery as seen from the sky. This includes providing native plants to encourage biodiversity (e.g. birds and butterflies), rain gardens to cleanse surface run-off, heat mitigation from canopy trees, lush greenery, and community gardens. All greenery will be well integrated with precinct facilities and recreational spaces to allow residents to enjoy the full benefit of the ecosystem services provided by neighbourhood landscaping.

D) **Management of human-wildlife interactions:** HDB is working closely with NParks to explore measures to create an environment where residents in Woodlands N1 can co-exist with nature. Before the commencement of physical works on site, HDB will also be sending notices to residents living nearby and Woodlands Secondary School, to inform them of the upcoming works and the mitigation measures that will be adopted to minimise inconveniences arising from the construction works, as well as to educate residents on the proper response to human wildlife encounters.

E) **Implementing Environmental Management and Monitoring Plan (EMMP):** Specialist EMMP consultant will be engaged to develop an EMMP to mitigate and manage any potential environmental impact arising from development works, and closely monitor the works throughout the construction phase. Prior to development, flora of conservation significance will be evaluated for salvaging and transplantation. Pre-felling inspection will be carried out to identify any active nests, burrows, slow-moving animals or hatchlings before site clearance works are conducted. Felling of these trees can only take place after these animals have flown off or translocated safely. Vegetation will be cleared directionally to passively shepherd wildlife out of the active work zones and away from the roads. Hoardings will also be installed along the site boundary to avoid fauna movement towards roads. For Woodlands N1, the wildlife will be shepherded towards the proposed area to be retained.

V. Conclusion

The Government takes a holistic and long-term approach to planning as it allows us to judiciously steward Singapore's limited land resources and guide sustainable development, while achieving social, economic and environmental outcomes, and to meet the aspirations and needs of Singaporeans. This means continuing to carefully balance demand for land to meet a variety of needs, such as housing, green spaces, workplaces, schools and recreational spaces.

Currently, we continue to see healthy demand for public housing across Singapore. This is due to larger cohorts of Singaporeans born in the late 1980s to 1990s reaching marriageable age, and an emerging trend of smaller households as more young couples, singles, and seniors are choosing to have their own flats. To meet this demand, agencies adopt a range of development options such as increasing the density of developments while ensuring liveability, as well as prioritising the development of brownfield sites, where feasible.

As Singapore continues to develop, available land for new developments becomes increasingly scarce. Given Singapore's land-scarcity, the Government takes a measured approach and would develop greenfield sites only upon due consideration of all available options. Woodlands has been planned as a HDB town since post-independence, with the Woodlands N1 site intended for residential use since 1980. Over time, much of the town has been developed for housing, industries and community uses, with limited vacant sites remaining, such that greenfield sites like Woodlands N1 are required for development to meet the demand for affordable housing.

HDB had sought to balance development with conservation needs through retaining about 90% of the AHEV and the adoption of other mitigation measures. As responsible land stewards, agencies will continue to assess our various land use needs, as well as social, economic and environmental considerations when reviewing and implementing plans.

Annex: Key EIA Findings

In 2023, HDB engaged an external consultant to conduct an Environmental Impact Assessment (EIA) (for more details, please see the full report here). The purpose was to understand the existing topography, hydrology, flora and fauna, and assess the nature and extent of environmental impacts arising from upcoming development of the area. These findings guide HDB's development plans for N1 and inform mitigating measures to minimize potential impact. This process will help to improve how we co-exist with nature and wildlife and integrate greenery into our urban landscape. Any decision to proceed is made only after such studies have been reviewed with the relevant stakeholders to ensure our findings and strategies are rigorous and comprehensive.

The key EIA findings are summarised below:

1) **Habitats and Vegetation Distribution:** About half of the study area comprises native-dominated secondary forest (15.0%) and abandoned-land forest (38.1%). The remaining habitats include urban vegetation, scrubland, and others (farm, infrastructure and construction). No aquatic habitats were observed.

2) **Biodiversity:** Ten flora species and four fauna species of conservation significance were recorded respectively (see Figures 3 and 4). The fauna species of conservation significance include the bird species - Swinhoe's White-eye (*Zosterops simplex*), mammal species - Cave Nectar Bat (*Eonycteris spelaea*), and butterfly species - Sky Blue (*Jamides caeruleus caeruleus*) and Common Birdwing (*Troides helena cerberus*).

3) **Area of High Ecological Value (AHEV):** An AHEV is identified for conservation, comprising of the native-dominated secondary forest, and within it, are high density of old growth Tembusu trees (*Cyrtophyllum fragrans)* and flora species of conservation significance. The study also suggested for a buffer zone to reduce potential forest edge effects to the conservation area, and to reduce risk of tree fall.

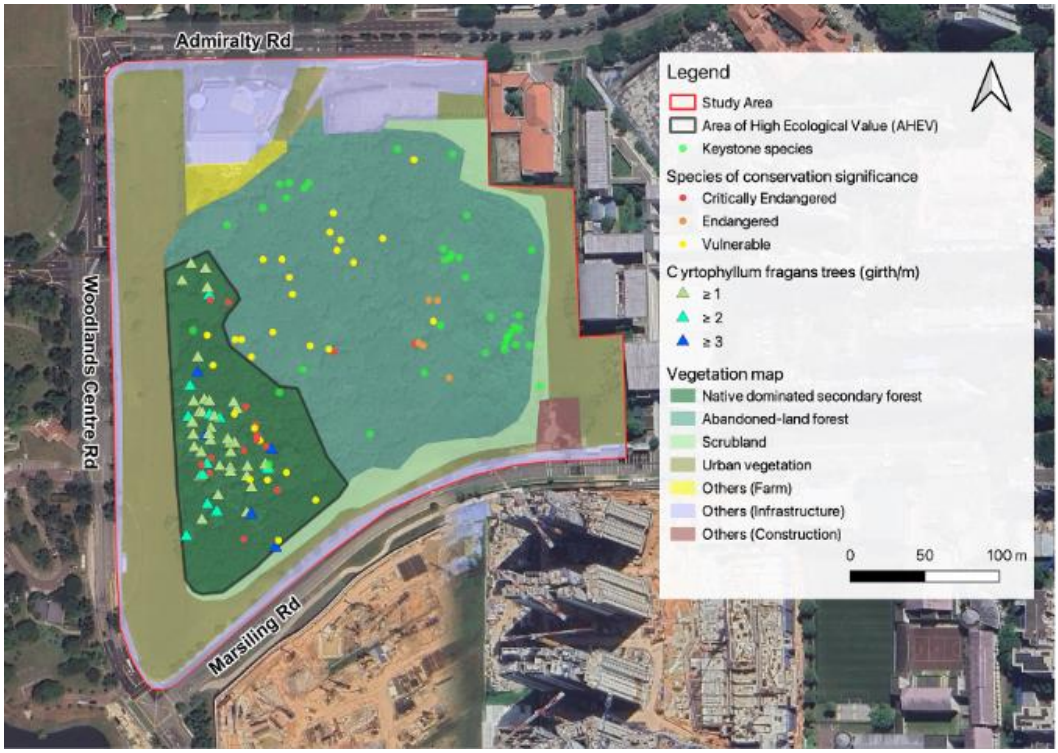

Figure 3. The Area of High Ecological Value (AHEV) identified in the EIA (marked out by the black boundary).

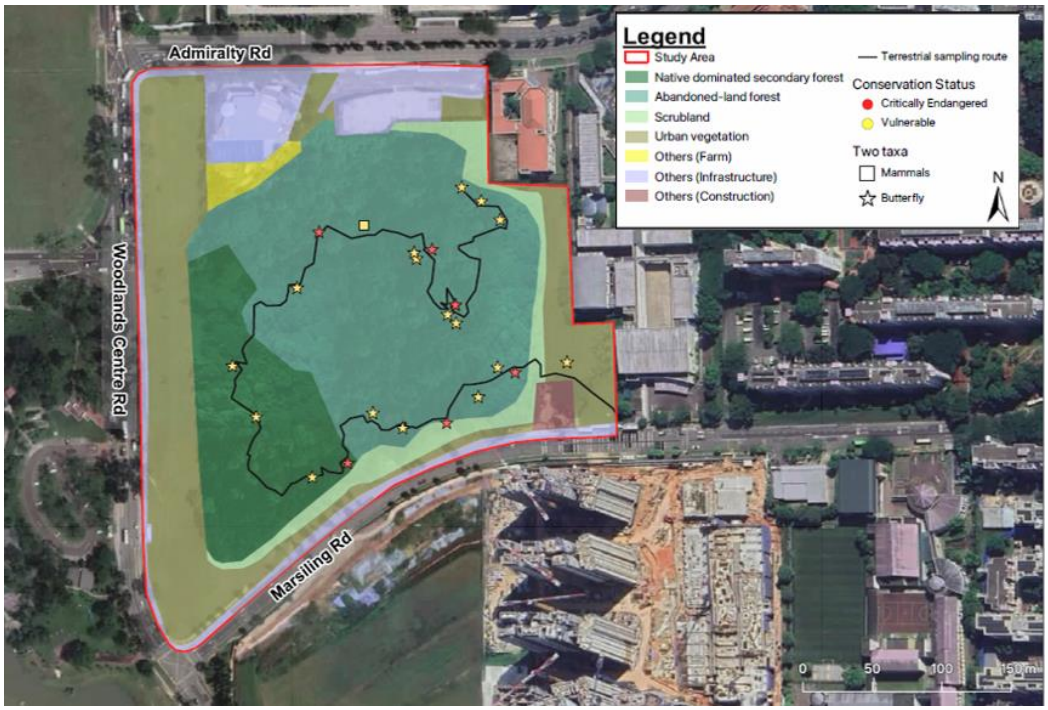

Figure 4. Location of faunal species of conservation in the Study Area.