Threatened ecological communities considered for potential impact.

Threatened Ecological Community	Distribution and Habitat Information	Structure and Floristics	Occurrence in relation to the subject lot	Potential for impact
Blue Gum High Forest of the Sydney Basin Bioregion	This community is endemic to Sydney's northern suburbs. It occurs high in the landscape (at altitudes greater than 100m ASL) where annual rainfall is high (generally more than 1100mm), and on deep shale soils derived from Wianamatta Shale. Some examples may extend onto associated Hawkesbury Sandstone, the Mittagong formation or diatremes. Will intergrade with Turpentine-Ironbark Forest in drier sites, and shares many species with this community.	Moist tall forest, with a canopy that may reach heights of 30 metres plus, over a mid storey of shrubs and small trees, with a diverse ground layer, commonly with terrestrial ferns. The canopy is usually dominated by *Eucalyptus pilularis* and / or *Eucalyptus saligna*. Other associated canopy species include *Angophora costata* and *Eucalyptus paniculata.*	Occurs on the subject lot and in adjacent Cumberland State Forest.	Potential for direct and indirect impact.
Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion	Occurs primarily in the Castlereagh area in the north-west of the Cumberland Plain, with other known occurrences near Holsworthy, Kemps Creek and Longneck Lagoon. It occurs primarily on Tertiary sands and gravels of the Hawkesbury-Nepean river system. These ancient alluvial soils were deposited by the rivers in sites that can be quite distant from the present-day flood zones and at Agnes Banks it primarily occurs on aeolian sands overlying Tertiary alluvium. The soils are typically low in nutrients, unlike more recent alluvial deposits, and may be almost pure sand. The sand deposits often transition to, and include, areas of gravel and clay.	It is typically a low woodland. The canopy is often dominated by *Angophora bakeri, Eucalyptus racemose,* and *Eucalyptus parramattensis* subsp*. parramattensis.* Melaleuca species – particularly *Melaleuca decora* - may also be prominent in the canopy and *Eucalyptus fibrosa* may is also be present. The understorey is usually diverse and made up of several layers of sclerophyllous shrubs, graminoids, and forbs.	Does not occur on site. The necessary habitats are absent from the subject lot. Does not occur on local vicinity.	No potential for direct or indirect impact arising from the proposal.
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Occurs in temperate to subtropical coastal valleys of Australia's east coast, from Gladstone in Queensland to the south coast of NSW. It typically occurs in low-lying coastal alluvial areas with minimal relief, such as swamps, depressions, and alluvial flats, and most commonly at elevations below 20m	Its structure varies from open woodland to closed forest with a crown cover of at least 10% and typically no more than 70%. Intact examples have a sub-canopy of Melaleuca species Canopy is dominated by Melaleucas and / or *Eucalyptus robusta*.	Does not occur on site. The necessary habitats are absent from the subject lot. Does not occur on local vicinity.	No potential for direct or indirect impact arising from the proposal.

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	ASL. The frequency and duration of water inundation, salinity and nutrient content of the soil, and latitude influences the vegetation composition. Underlying soils are formed by unconsolidated sediments, alluvial deposits, as well as soils that are primarily marine or aeolian sand in origin, but where silts, clays and organic matter have been incorporated, such as inter-barrier creek deposits, within or along the margins of, coastal barrier systems			
Coastal Upland Swamps in the Sydney Basin Bioregion	Occurs on periodically waterlogged soils on Hawkesbury sandstone, specifically on poorly permeable sandstone plateaux in the low relief headwater valleys of streams and on sandstone benches with abundant seepage moisture. It is occasionally associated with weathered shale lenses and ironstone. The majority occur at elevations of 200-450 m ASL. In the south it occurs primarily occurs on the Woronora plateau, and in the north, predominantly on the Somersby-Hornsby plateaux. These two occurrences are separated by non-sandstone substrates and the urbanised parts of Sydney.	Vegetation types include open graminoid heath, sedgeland and tall scrub. Characterised by highly diverse and variable mosaics of vegetation depending on soil conditions, size of the site, recent rainfall conditions, fire regimes and disturbance history.	Does not occur on site. The necessary habitats are absent from the subject lot. Does not occur on local vicinity.	No potential for direct or indirect impact arising from the proposal.
Cooks River/Castlereagh Ironbark Forest of the Sydney Basin Bioregion	Occurs between Castlereagh and Holsworthy, as well as around the headwaters of the Cooks River. Associated with clay-rich soils derived from predominantly Tertiary alluvium and on Wianamatta Shale derived soils found next to Tertiary alluvium. It grades into other communities where clay soils are very poorly drained, and may show variation within the community where there are subtle grades in the substrate sourced from Tertiary sand, sandstone bedrock, shale and ironstone. In south-eastern areas of its	It occurs as a dry sclerophyll open-forest to low woodland, usually dominated by *Eucalyptus fibrosa* and *Melaleuca decora.* The understorey shrub stratum is variable, but often dense and dominated by *Melaleuca nodosa, Lissanthe strigosa*, and to a lesser extent *Melaleuca decora.* Other shrubs are often in the Fabaceae.	Does not occur on site. The necessary habitats are absent from the subject lot. Does not occur on local vicinity.	No potential for direct or indirect impact arising from the proposal.

Threatened Ecological Community	Distribution and Habitat Information	Structure and Floristics	Occurrence in relation to the subject lot	Potential for impact
	distribution, a sandstone influence is evident.			
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Extends from south east Victoria to north of Newcastle NSW, on alluvial landforms related to coastal river floodplains and associated sites where transient water accumulates, including floodplains, river-banks, riparian zones, lake foreshores, creek lines, floodplain pockets, depressions, alluvial flats, fans, terraces, and localised colluvial fans. Underlying soils are alluvial and of various textures, including silts, clay loams and sandy loams, gravel and cobbles.	Generally occurs as a tall open forest to woodland, but there may be localised areas of closed forest and/or low forest, often associated with disturbance (including flooding). Canopy composition is variable but characteristically *Angophora floribunda* and *Angophora subvelutina*, and Exsertaria eucalypts such as *Eucalyptus tereticornis* and *Eucalyptus amplifolia.*	Mapped as occurring in the local vicinity along Excelsior Creek, approximately 1.5km to the west of the subject lot. The necessary alluvial habitats are absent from the subject lot.	No potential for direct or indirect impact arising from the proposal.
Shale Sandstone Transition Forest of the Sydney Basin Bioregion	Found in a range of situations across the gradient between shale based and sandstone-based soils, with its expression reflecting the level of sandstone influence on the otherwise primarily shale-associated vegetation. Typically occurs at elevations less than 200 m ASL, although it may occur up to 350 m ASL in parts of the Lower Blue Mountains and western Woronora Plateau that are associated with the rainshadow extending south-west of the Cumberland Plain. It also may occur at approximately 600 m ASL at its southern limit in the Southern Highlands	Its structure may vary from tall to open forest or woodland, and may include minor areas of scrub associated with disturbance or drainage lines and seepage zones. Sites that are near to sandstone outcrops may have a more shrubby understorey, while those with less sandstone influence may have more herbs and grasses in the understorey. Its structure and composition are primarily determined by the transitional geology between Wianamatta shale and Hawkesbury sandstone and varies considerably depending on the degree and the source of shale influence. However, the canopy is typically a mix of two or more of the following tree species - *Eucalyptus punctata, Eucalyptus crebra, Eucalyptus fibrosa, Eucalyptus tereticornis, Eucalyptus resinifera, Eucalyptus eugenioides* (or *Eucalyptus globoidea* - depending on local species present and degree of sandstone influence) and *Angophora bakeri.*	Does not occur on site. The necessary habitats are absent from the subject lot. Does not occur on local vicinity.	No potential for direct or indirect impact arising from the proposal.

Threatened Ecological Community	Distribution and Habitat Information	Structure and Floristics	Occurrence in relation to the subject lot	Potential for impact
Turpentine-Ironbark Forest of the Sydney Basin Bioregion	This community is endemic to the Sydney Basin Bioregion. It is transitional between the woodlands and forests of the Cumberland Plain and the Blue Gum High Forest that occurs on the higher rainfall ridges surrounding the Plain. It predominantly occurs in areas with annual rainfall of between 800-1100 mm and at elevation from less than 320 m ASL on the Cumberland Plain up to 750 m ASL on shale caps of the surrounding Woronora, Blue Mountains and Hornsby Plateaux. This ecological community is predominantly associated with relatively fertile clay soils derived from Wianamatta shale, and clay lenses of shale within Hawkesbury sandstone, less commonly occurring on transitional areas between soils derived from the Wianamatta shale and Hawkesbury sandstone, or on soils derived from Holocene alluvium, or the Mittagong formation.	Open forest with trees that may reach a height of more than 30 metres, above a mid storey of shrubs and small trees, with a ground layer of herbs and grasses. Some sites may have a woodland structure, depending on past disturbances. Typically dominated by *Syncarpia glomulifera*, associated tree species varies with local site conditions. Ironbark species are commonly present, such as *Eucalyptus paniculata, Eucalyptus crebra* and/or *Eucalyptus fibrosa*. On the Cumberland Plain, *Eucalyptus punctata* is also common. On the plateaux shale caps, *Eucalyptus notabilis* may become common and at the upper end of its rainfall/elevation range, *Eucalyptus* saligna, *Eucalyptus cypellocarpa*, *Eucalyptus deanei* or *Eucalyptus punctata* may also be common canopy species. A stratum of small trees may occur, including *Pittosporum undulatum*, *Trema aspera,* and *Acacia parramattensis*. Where present, a shrub layer may include *Polyscias sambucifolia, Notelaea longifolia, Leucopogon juniperinus, Pittosporum revolutum, Breynia oblongifolia, Denhamia silvestris,* and *Ozothamnus diosmifolius*. Ground cover is often highly modified, but in its natural state, the ground layer may include *Oplismenus aemulus, Pseuderanthemum variabile, Echinopogon ovatus, Microlaena stipoides*, and *Themeda triandra*.	Occurs on the subject lot and in adjacent Cumberland State Forest.	Potential for indirect impact only arising from the proposal.

Threatened Ecological Community	Distribution and Habitat Information	Structure and Floristics	Occurrence in relation to the subject lot	Potential for impact
Western Sydney Dry Rainforest and Moist Woodland on Shale	This community is generally limited to elevations below 300 m ASL in gullies, on sheltered slopes and rugged terrain in isolated patches, largely at the edges of the Cumberland Plain, with some patches on undulating terrain in the central parts of the Cumberland Plain. It grades into the moist woodland form, generally on the upper slopes, also extending onto more gently, undulating terrain. It may be associated with riparian vegetation and creeks and drainage lines may cut through it. It occurs are almost exclusively on clay soils derived from Wianamatta Group shales, and its boundaries are sometimes sharply delineated by a change in soil, topography or moisture gradients.	It is typically a low closed forest, slightly more open in the moist woodland form, with emergent trees up to 25m and a lower tree layer. However, it is highly sensitive to fire and so the moist woodland form can be a stage in tis recovery. In sheltered gullies, it is generally a simple, low closed forest characterised by an interrupted canopy of *Melaleuca styphelioides* with scattered emergent *Eucalyptus* species, a predominantly mesic shrub stratum, some characteristic rainforest species (e.g. *Alectryon subcinereus*, *Streblus pendulinus*) and a sparse groundcover. Palms are typically absent and mosses and vascular epiphytes are rare. Vines and climbers are common and are a conspicuous and characteristic feature of the ecological community. Prickly shrubs are also common and characteristic.	Does not occur on site. The necessary habitats are absent from the subject lot. Does not occur on local vicinity.	No potential for direct or indirect impact arising from the proposal.