Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN		yes	Potential	Potential habitat for the wedge-tailed eagle comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is a wide variety of forest (including areas subject to native forest silviculture) and non-forest habitats. Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest. Nest trees are usually amongst the largest in a locality. They are generally in sheltered positions on leeward slopes, between the lower and mid sections of a slope and with the top of the tree usually lower than the ground level of the top of the ridge, although in some parts of the State topographic shelter is not always a significant factor (e.g. parts of the northwest and Central Highlands). Nests are usually not constructed close to sources of disturbance and nests close to disturbance are less productive. More than one nest may occur within a territory but only one is used for breeding in any one year. Breeding failure often promotes a change of nest in the next year. [see FPA's Fauna Technical Note 1 and FPA's Fauna Technical Note 6 for more information]Significant habitat for the wedge-tailed eagle is all native forest and native non-forest vegetation within 500 m or 1 km line-of-sight of known nest sites (where the nest tree is still present).	no suitable habitat

Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Catadromus lacordairei	Green Lined Ground				yes	Potential	Potential habitat for the Green-lined Ground Beetle is open, grassy/sedgy, low altitude grasslands and woodlands associated with wetlands and low-lying plains or flats adjacent to rivers/streams. Key habitat elements that need to be present include sheltering sites such as patches of stones, coarse woody debris and/or cracked soils. The species is a highly active and mobile flyer that often comes to ground close to water sources and is rarely found further than 250 m from such a source.	no suitable habitat
Dasyurus maculatus subsp. maculatus	spotted-tail quoll	r	VU			Core	Potential habitat for the spotted-tailed quoll is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and blackwood swamp forest (mature and regrowth), particularly where structurally complex areas are present, and includes remnant patches in cleared agricultural land or plantation areas.Significant habitat for the spotted-tailed quoll is all potential denning habitat within the core range of the species.Potential denning habitat for the spotted-tailed quoll includes 1) any forest remnant (>0.5ha) in a cleared or plantation landscape that is structurally complex (high canopy, with dense understorey and ground vegetation cover), free from the risk of inundation, or 2) a rock outcrop, rock crevice, rock pile, burrow with a small entrance, hollow logs, large piles of coarse woody debris and caves. FPA's Fauna Technical Note 10 can be used as a guide in the identification of potential denning habitat.	potential foraging,no suitable denning sites

Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Dasyurus viverrinus	eastern quoll		EN			Core	Potential habitat for the Eastern quoll includes rainforest, heathland, alpine areas and scrub. However, it seems to prefer dry forest and native grassland mosaics which are bounded by agricultural land.Potential range for the Eastern Quoll is the whole of mainland Tasmania and Bruny Island. Core range for the Eastern Quoll is a specialist-defined area based primarily on modelling work published in Fancourt et al 2015 and additional expert advice.	potential foraging,no suitable denning sites
Galaxias fontanus	Swan galaxias					Potential	Potential habitat for the Swan Galaxias is slow to moderately fast flowing streams containing permanent water (even when not flowing), which have good instream cover from overhanging banks and/or logs, and shade from overhanging vegetation. A population can only be maintained where barriers have prevented establishment of trout and redfin perch. The nature of these barriers is variable and can include permanent natural structures such as waterfalls and chutes and also low flow-dependent features such as marshes, ephemeral water-losing and remnant channels, braided channel floodplain features. Significant habitat for the Swan galaxias is all potential habitat and a 30m stream-side reserve within the core range. This includes the Wildlife Priority Areas (Fauna Special Management Zones) on the upper Swan River, Tater Garden Creek and upper Blue Tier Creek, and other upper catchments of tributaries of the Macquarie, Blackman and Isis Rivers.	no suitable habitat

Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Haliaeetus leucogaster	white-bellied sea-eagle	v			yes	Potential	Potential habitat for the White-Bellied Sea-eagle species comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is any large waterbody (including sea coasts, estuaries, wide rivers, lakes, impoundments and even large farm dams) supporting prey items (fish). Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest within 5 km of the coast (nearest coast including shores, bays, inlets and peninsulas), large rivers (Class 1), lakes or complexes of large farm dams. Scattered trees along river banks or pasture land may also be used.Significant habitat for the white-bellied sea-eagle is all native forest and native non-forest vegetation within 500 m or 1 km line-of-sight of known nest sites (where nest tree still present).	potential foraging,no suitable nesting sites
Lathamus discolor	swift parrot	e	CR	yes	yes	outside breeding range	Potential breeding habitat for the swift parrot comprises potential foraging habitat and potential nesting habitat, and is based on definitions of foraging and nesting trees. Potential foraging habitat comprises E. globulus or E. ovata trees that are old enough to flower. Potential nesting habitat is considered to comprise eucalypt forests that contain hollow-bearing trees.	no suitable breeding season habitat

Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Litoria raniformis	green and gold frog	v	VU		yes	Core	Potential habitat for the green and gold frog is permanent and temporary waterbodies, usually with vegetation in or around them. Potential habitat includes features such as natural lagoons, permanently or seasonally inundated swamps and wetlands, farm dams, irrigation channels, artificial water-holding sites such as old quarries, slow-flowing stretches of streams and rivers and drainage features.Significant habitat for the green and gold frog is still or very slow flowing water bodies, with at least some vegetation, and a lack of obvious pollutants (oils, chemicals, etc). See FPA Fauna Technical Note 18 for further guidance on assessing significant habitat for the green and gold frog.	marginal in farm dam
Perameles gunnii	eastern barred bandicoot		VU		yes	Core	Potential habitat for the eastern barred bandicoot is open vegetation types including woodlands and open forests with a grassy understorey, native and exotic grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland. Significant habitat for the Eastern Barred Bandicoot is dense tussock grass-sagg-sedge swards, piles of coarse woody debris and denser patches of low shrubs (especially those that are densely branched close to the ground providing shelter) within the core range of the species.	marginal habitat in gorse clumps, limited cover.

Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Sarcophilus harrisii	tasmanian devil	e	EN		yes	Potential	Potential habitat for the Tasmanian devil is all terrestrial native habitats, forestry plantations and pasture. Devils require shelter (e.g. dense vegetation, hollow logs, burrows or caves) and hunting habitat (open understorey mixed with patches of dense vegetation) within their home range (4-27 km2). Significant habitat for the Tasmanian devil is a patch of potential denning habitat where three or more entrances (large enough for a devil to pass through) may be found within 100 m of one another, and where no other potential denning habitat with three or more entrances may be found within a 1 km radius, being the approximate area of the smallest recorded devil home range (Pemberton 1990). Potential denning habitat for the Tasmanian devil is areas of burrowable, well-drained soil, log piles or sheltered overhangs such as cliffs, rocky outcrops, knolls, caves and earth banks, free from risk of inundation and with at least one entrance through which a devil could pass. FPA's Fauna Technical Note 10 can be used as a guide in the identification of potential denning habitat	potential foraging,no suitable denning sites

Species	Common Name	SS	NS	known within 500m	known within 5km	Range Class	Habitat Description	Habitat suitability
Tyto novaehollandiae subsp. castanops	masked owl (tasmanian)	e	VU		yes	Core	Potential habitat for the masked owl is all areas with trees with large hollows (â‰¥15 cm entrance diameter). Remnants and paddock trees (in any dry or wet forest type) in agricultural areas may also constitute potential habitat. Significant habitat for the masked owl is any area of native dry forest, within the core range, with trees with large hollows (â‰¥15 cm entrance diameter). Remnants and paddock trees (in any dry or wet forest type) in agricultural areas may also constitute significant habitat. See FPA Fauna Technical Note 17 for guidance on assessing masked owl habitat using 'on-ground' and remote methods.	potential foraging, no suitable nesting sites

ADDENDUM

An updated Natural Values Atlas Report and Protected matters report were accessed on 18/1/2022, to establish if any additional threatened flora or fauna species had been recorded nearby or added to listing sine the original reports on 17/8/2020.

No new threatened flora have been recorded within 500m of the site or listed as threatened. The table below list the 49 additional species that have been recorded within 5km of the site, of these most have no suitable habitat and the rest have only marginally suitable habitat. Four spies no longer occur on the list, *Caladenia tonellii, Juncus amabilis and Rytidosperma indutum*,

,

Species	Common Name	SS	NS	known within 500m	Habitat description	Habitat suitability
Anogramma leptophylla	annual fern	v			Anogramma leptophylla grows in shallow soil layers over rock, on exposed or semi-exposed outcrops in dry or damp sclerophyll forest. Plants are mostly found on rock ledges, often on, or just inside, the drip line of the overhead rock-face. The substrate is variable, including dolerite, basalt and sandstone.	no suitable habitat
Blechnum spinulosum	small raspfern	e			Blechnum rupestre is associated with major rivers in northern Tasmania. It is strictly riparian, occurring on shaded banks (e.g. Pipers River), amongst the shade of boulders (e.g. First Basin, Cataract Gorge) and on steep soil banks in wet forest above the high flood zone (e.g. River Leven).	no suitable habitat
Boronia gunnii	river boronia	v	VU		Boronia gunnii is strictly riparian in habitat, occurring in the flood zone of the Apsley, St Pauls, and Dukes rivers (where extant) and the Denison Rivulet and South Esk River (where presumed extinct) in rock crevices or in the shelter of boulders. The base substrate is always dolerite.	no suitable habitat
Callitris oblonga subsp. oblonga	south esk pine	v	EN		Callitris oblonga subsp. oblonga occurs predominantly in riparian scrub, woodland and forest (where it can extend away from rivers) in areas with low precipitation and usually sandy soil. It is local on the East Coast, particularly on the margins of the Swan, Apsley, South Esk, Cygnet and St Pauls rivers. A small population is also present in Cataract Gorge.	no suitable habitat
Calocephalus lacteus	milky beautyheads	r			Calocephalus lacteus occurs in open, dry sites in lowland areas of eastern and northern Tasmania and on lower altitudes of the Central Plateau. It requires bare ground for recruitment, and may benefit from disturbance. It is often found on roadsides and beside tracks.	marginal habitat
Calochilus campestris	copper beard-orchid	e			On mainland Australia, Calochilus campestris occurs on ridges and slopes in forest and woodland and can also be found in coastal heath and headlands. The species is known to colonise embankments and road verges. The habitat in Tasmania is poorly understood.	marginal habitat
Calystegia sepium subsp. sepium	swamp bindweed	r			Calystegia sepium has been recorded from riverbanks and the margins of forests in the north of the State around the Tamar region, where it mainly occurs in Melaleuca ericifolia swamp forest and amongst Phragmites australis swampland.	no suitable habitat

Carex gunniana	mountain sedge	r			The habitat of Carex gunniana is poorly understood and highly variable. It includes wet eucalypt forest, sandy heathlands, margins of streams, littoral sands, shingle with seepage, damp grasslands within dry forest and rough pasture.	marginal habitat
Carex longebrachiata	drooping sedge	r			Carex longebrachiata grows along riverbanks, in rough grassland and pastures, in damp drainage depressions and on moist slopes amongst forest, often dominated by Eucalyptus viminalis, E. ovata or E. rodwayi.	marginal habitat
Chiloglottis trapeziformis	broadlip bird-orchid	e			Chiloglottis trapeziformis is known from near Wynyard on sandy soil in damp sclerophyll forest. There is a historical record from dry open forest near Legana. It has also been recorded from Leptospermum (teatree) and Allocasuarina (sheoak) scrub on sandy humus overlying granite on Great Dog Island (Furneaux group).	no suitable habitat
Coronidium gunnianum	swamp everlasting	?e			In Tasmania, Coronidium gunnianum occurs in eastern and central parts of the State from the Cambridge to Hadspen in grasslands on heavy soils and riverine woodlands in areas often inundated	no suitable habitat
Craspedia paludicola	swamp billybuttons	?r			Craspedia paludicola grows in open wet swampy areas or at the edges of water bodies or courses	no suitable habitat
Deyeuxia lawrencei	lawrences bentgrass	x	EX		Deyeuxia lawrencei is known only from the type specimen collected around 1831 from an unknown location, possibly from the Launceston area. Habitat is unknown because the precise location of the only collection is not known. Deyeuxia lawrencei is presumed extinct.	presemed extinct/ unknown
Diuris lanceolata	large golden moths	e	EN		Diuris lanceolata occurs in the north-west of Tasmania in coastal scrub and windswept coastal grassland and heathland among dwarfed shrubs and sedges on moist to well-drained sandy and clay loam, sometimes on rocky outcrops.	no suitable habitat
Diuris palustris	swamp doubletail	e			Diuris palustris occurs in coastal areas in grassy open eucalypt forest, sedgy grassland and heathland with Leptospermum (teatree) and Melaleuca (paperbark) on poorly- to moderately-drained sandy peat and loams, usually in sites that are wet in winter.	no suitable habitat

Epacris exserta	south esk heath	e	PEN		Epacris exserta occurs along the lower reaches of the South Esk, North Esk and Supply rivers. It is a strictly riparian species that grows in areas subject to periodic inundation, mainly on alluvium amongst dolerite boulders within dense riparian scrub, and occasionally in open rocky sites. It has been recorded from 10-310 m above sea level.	no suitable habitat
Euphrasia collina subsp. deflexifolia	eastern eyebright	r			Euphrasia collina subsp. deflexifolia occurs in open woodland or heath (sometimes extending to forest), often associated with road edges, tracks and depressions near the headwaters of creeks. Its habitat is associated with the availability of open patches of ground maintained by fire or other disturbance, the proximity of low vegetation and relatively high soil moisture in spring.	no suitable habitat
Euphrasia scabra	yellow eyebright	e			Euphrasia scabra occurs in moist herb/sedge communities in grassy leads in marshes and in drier open grassy areas at the headwaters of creeks. Its habitat is associated with gaps created by grazing, flooding or other disturbance. It has been recorded from scattered sites throughout lowland areas of Tasmania, including the north-west coast, central north, Midlands, Eastern Tiers and around Hobart. However, it is considered to be extinct from many of these sites, and populations are low and transient in areas (Eastern Tiers and Hobart) with the greatest probability of still supporting the species.	no suitable habitat
Glycine latrobeana	clover glycine	v	VU		Glycine latrobeana occurs in a range of habitats, geologies and vegetation types. Soils are usually fertile but can be sandy when adjacent to or overlaying fertile soils. The species mainly occurs on flats and undulating terrain over a wide geographical range, including near-coastal environments, the Midlands, and the Central Plateau. It mainly occurs in grassy/heathy forests and woodlands and native grasslands.	marginal habitat
Hovea tasmanica	rockfield purplepea	r			Hovea tasmanica occurs in central and north-eastern regions. It is usually found on dry, rocky ridges or slopes (mostly dolerite) in forest and riverine scrub.	no suitable habitat

Hypolepis muelleri	harsh groundfern	r			Hypolepis muelleri occurs along watercourses, swampy areas or deep, rich, alluvial soils below 120 m elevation in northern Tasmania (including King and Flinders islands). It has also been recorded from forest dominated by Acacia melanoxylon (blackwood), Melaleuca (paperbark) or Eucalyptus species.	no suitable habitat
Juncus vaginatus	clustered rush	r			Juncus vaginatus is a species of low-lying poorly-drained sites such as the margins of still and slow-flowing waterbodies and areas where water lies for parts of the year such as "wet pasture".	no suitable habitat
Lachnagrostis punicea subsp. punicea	bristle blowngrass	r			Lachnagrostis punicea subsp. punicea occurs in moist depressions in grassy woodlands/forests and grasslands, and on the edges of swamps and saline flats.	no suitable habitat
Lepidium hyssopifolium	soft peppercress	e	EN		The native habitat of Lepidium hyssopifolium is the growth suppression zone beneath large trees in grassy woodlands and grasslands (e.g. over- mature black wattles and isolated eucalypts in rough pasture). Lepidium hyssopifolium is now found primarily under large exotic trees on roadsides and home yards on farms. It occurs in the eastern part of Tasmania between sea-level to 500 metres above sea level in dry, warm and fertile areas on flat ground on weakly acid to alkaline soils derived from a range of rock types. It can also occur on frequently slashed grassy/weedy roadside verges where shade trees are absent.	marginal habitat
Leucopogon virgatus var. brevifolius	shortleaf beardheath	r			Leucopogon virgatus var. brevifolius occurs mainly on low undulating terrain in the drier parts of the State (e.g. Northern Midlands) in heathy forest and woodland extending to open grassland and grassy woodland in disturbed habitats, often associated with rock outcrops (e.g. sandstone patches).	no suitable habitat
Mentha australis	river mint	e			Mentha australis is known from riparian habitats along the lower reaches of the South Esk River, Lake Trevallyn and the Rubicon River, where it occurs along the rocky (dolerite) margins of rivers and lakes.	no suitable habitat
Parietaria debilis	shade pellitory	r			Parietaria debilis occurs around muttonbird rookeries, on cliffs/rocks in the salt spray zone, in moist shaded areas in dune scrubs, and under rock overhangs in forested gullies.	no suitable habitat

Phyllangium divergens	wiry mitrewort	v			Phyllangium divergens occurs in a wide variety of near-coastal habitats on a range of substrates, a common feature usually being bare ground (e.g. tracks) and rock exposures (e.g. outcrops, coastal cliffs, etc.).	no suitable habitat
Pimelea curviflora	curved riceflower	p			Pimelea curviflora var. gracilis occurs in a range of vegetation types from wet and dry sclerophyll forest to hardwood plantations. Understories vary from open and grassy to densely shrubby. It can densely colonise disturbed sites such as firebreaks, log landings and tracks.	marginal habitat
Prasophyllum robustum	robust leek-orchid	e	CR		Prasophyllum robustum is now known only from one small site in grassy and shrubby Eucalyptus amygdalina forest on well-drained brown loam derived from basalt. The species has a much wider historical distribution.	no suitable habitat
Pterostylis squamata	ruddy greenhood	v			Pterostylis squamata occurs in heathy and grassy open eucalypt forest, woodland and heathland on well-drained sandy and clay loams.	marginal habitat
Schenkia australis	spike centaury	r			Schenkia australis has been recorded from rainforest, wet sclerophyll forest, dry sclerophyll forest and heathland in the east and north of the State. It has also been recorded from forest sites which were cleared for pasture. Several recent sites are from windswept coastal heathland/scrub.	marginal habitat
Schoenoplectus tabernaemontani	river clubsedge	r			Schoenoplectus tabernaemontani inhabits the margins of lagoons on King Island, Flinders Island and on some riverbanks in the Midlands.	no suitable habitat
Scutellaria humilis	dwarf skullcap	r			Scutellaria humilis is found in moist, shady places in the north-east and south-east of the State. Recent sites have been associated with rocky slopes and rises.	no suitable habitat
Senecio campylocarpus	bulging fireweed	v			Senecio campylocarpus occurs on grassy margins of permanent rivers in the Midlands and on broad floodplains.	no suitable habitat
Senecio psilocarpus	swamp fireweed	e	VU		Senecio psilocarpus is known from six widely scattered sites in the northern half of the State, including King and Flinders islands. It occurs in swampy habitats including broad valley floors associated with rivers, edges of farm dams amongst low-lying grazing/cropping ground, herb- rich native grassland in a broad swale between stable sand dunes, adjacent to wetlands in native grassland, herbaceous marshland and low- lying lagoon systems.	no suitable habitat

Spyridium eriocephalum var. eriocephalum	heath dustymiller	e			Spyridium eriocephalum var. eriocephalum is known to be extant at a single subpopulation within East Risdon State Reserve where it grows on mudstones in open shrublands or low open eucalypt woodlands, the species being closely associated with Aboriginal middens, with abundant crushed and burnt shell. The dominant eucalypt is Eucalyptus amygdalina, with Eucalyptus risdonii occurring at the small inland site. Allocasuarina verticillata (drooping sheoak) is also prominent at one site. The aspect of the East Risdon sites ranges from west to north-west, the slope from 2-25 degrees, elevation above sea level from 5-30 m above sea level, while the majority of plants are within 150 m of the River Derwent.	no suitable habitat
Spyridium vexilliferum var. vexilliferum	helicopter bush	r			Spyridium vexilliferum occurs in a range of vegetation types, including sandy heaths, rock plates and dry sclerophyll forest and woodland (mainly dominated by Eucalyptus amygdalina). It is found on a range of substrates (e.g. mudstone, granite, laterite gravels) from near-coastal areas in the east, north and west of the State, to the Midlands and lower Derwent Valley. It is most abundant in open or disturbed areas, as it can proliferate from soil-stored seed after disturbance.	marginal habitat
Tetratheca ciliata	northern pinkbells	r			Tetratheca ciliata occurs from near-coastal areas in the State's north at elevations below 70 m, ranging from Rocky Cape in the west to Tomahawk/Boobyalla in the east, and an outlying site near Liffey about 60 km inland and 320 m above sea level. It has been recorded from heathlands and heathy woodlands on sandy well-drained soils, the woodland dominated by Eucalyptus amygdalina.	no suitable habitat
Teucrium corymbosum	forest germander	r			Teucrium corymbosum occurs in a wide range of habitats from rocky steep slopes in dry sclerophyll forest and Allocasuarina (sheoak) woodland, riparian flats and forest.	marginal habitat
Trithuria submersa	submerged watertuft	r			Trithuria submersa occurs in the Northern Midlands, near-coastal areas in the east and north-east, King Island, Flinders Island and Cape Barren Island, with an isolated record from the Central Highlands. Habitat includes areas subject to flooding, such as the margins of wetlands, small watercourses, shallow temporary depressions and wet heathlands.	no suitable habitat

Utricularia australis	yellow bladderwort	r			Utricularia australis has a widespread distribution, ranging from the Gordon River in the south-west to the northern part of Flinders Island in the far north-east (and also reportedly from the Derwent River in the State's south). It grows in stationary or slow-moving water, including natural lakes, farm dams and reservoirs, where it has been reported as forming 'locally dense swards'.	no suitable habitat
Veronica plebeia	trailing speedwell	r			Veronica plebeia typically occurs in dry to damp sclerophyll forest dominated by Eucalyptus amygdalina on dolerite or Tertiary sediments, but can also occur in Eucalyptus ovata grassy woodland/forest and Melaleuca ericifolia swamp forest.	no suitable habitat
Viola caleyana	swamp violet	r			The habitat of Viola caleyana in Tasmania is poorly understood but includes lowland wet grasslands, possibly wet heathlands and a variety of forest types.	no suitable habitat
Vittadinia gracilis	woolly new-holland-daisy	r			Vittadinia gracilis occurs in native grassland and grassy woodland.	marginal habitat
Westringia angustifolia	narrowleaf westringia	r			Westringia angustifolia occurs mainly in mid elevations, always on dolerite (but can be close to dolerite-sediment contact zones), in dry to wet sclerophyll forest on broad ridges, slopes and dense riparian shrubberies.	no suitable habitat
Wilsonia rotundifolia	roundleaf wilsonia	r			Wilsonia rotundifolia is found in coastal and inland saltmarshes in the eastern part of the State.	no suitable habitat
Xerochrysum bicolor	eastcoast paperdaisy	r			Species of Xerochrysum are poorly understood in Tasmania, especially the identification of coastal species (X. bicolor and X. bracteatum). X. bicolor may be restricted to stabilised dune systems.	no suitable habitat
Xerochrysum palustre	swamp paperdaisy	v	VU		Xerochrysum palustre has a scattered distribution with populations in the north-east, east coast, Central Highlands and Midlands, all below about 700 m elevation. It occurs in wetlands, grassy to sedgy wet heathlands and extends to associated heathy Eucalyptus ovata woodlands. Sites are usually inundated for part of the year.	no suitable habitat

Australian Government
Department of Agriculture, Water and the Environment

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 18-Jan-2022

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	26
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	13
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	4
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text
Tasmanian Forests and Woodlands dominated by black gum or Brookers gum (Eucalyptus ovata / E. brookeriana)	Critically Endangered	Community likely to occur within area
Tasmanian white gum (Eucalyptus viminalis) wet forest	Critically Endangered	Community likely to occur within area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text
BIRD		
Aquila audax fleayi Tasmanian Wedge-tailed Eagle, Wedge-tailed Eagle (Tasmanian) [64435]	Endangered	Species or species habitat likely to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Ceyx azureus diemenensis Tasmanian Azure Kingfisher [25977]	Endangered	Species or species habitat may occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text
Lathamus discolor		
Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pterodroma leucoptera leucoptera		
Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Tyto novaehollandiae castanops (Tasmanian population)		
Masked Owl (Tasmanian) [67051]	Vulnerable	Breeding known to occur within area
FISH		
Prototroctes maraena		
Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
FROG		
Litoria raniformis		
Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog [1828]	Vulnerable	Species or species habitat likely to occur within area
MAMMAL		
Dasyurus maculatus maculatus (Tasmanian population)		
Spotted-tail Quoll, Spot-tailed Quoll, Tiger Quoll (Tasmanian population) [75183]	Vulnerable	Species or species habitat known to occur within area
Dasyurus viverrinus		
Eastern Quoll, Luaner [333]	Endangered	Species or species habitat may occur within area
Perameles gunnii gunnii		
Eastern Barred Bandicoot (Tasmania) [66651]	Vulnerable	Species or species habitat likely to occur within area
Sarcophilus harrisii		
Tasmanian Devil [299]	Endangered	Species or species habitat likely to occur within area
PLANT		
Acacia axillaris		
Midlands Mimosa, Midlands Wattle [13563]	Vulnerable	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Caladenia caudata Tailed Spider-orchid [17067]	Vulnerable	Species or species habitat may occur within area
Colobanthus curtisiae Curtis' Colobanth [23961]	Vulnerable	Species or species habitat may occur within area
Dianella amoena Matted Flax-lily [64886]	Endangered	Species or species habitat may occur within area
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat likely to occur within area
Lepidium hyssopifolium Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed [16542]	Endangered	Species or species habitat likely to occur within area
Leucochrysum albicans subsp. tricolor Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat may occur within area
Pterostylis commutata Midland Greenhood [64535]	Critically Endangered	Species or species habitat may occur within area
Pterostylis ziegeleri Grassland Greenhood, Cape Portland Greenhood [64971]	Vulnerable	Species or species habitat likely to occur within area
Senecio psilocarpus Swamp Fireweed, Smooth-fruited Groundsel [64976]	Vulnerable	Species or species habitat likely to occur within area
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area

Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		

Scientific Name	Threatened Category	Presence Text
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area
Neophema chrysostoma Blue-winged Parrot [726]		Species or species habitat likely to occur within area overfly marine area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Extra Information

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included.

RFA Name	State
Tasmania RFA	Tasmania

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status
Controlled action			
Tasmania Natural Gas Project - Stage 2	2001/211	Controlled Action	Post-Approval
Tasmania Natural Gas Project - Stage 3	2001/212	Controlled Action	Post-Approval
Not controlled action			
2-D seismic data survey	2001/135	Not Controlled Action	Completed
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

Department of Agriculture Water and the Environment
GPO Box 858
Canberra City ACT 2601 Australia
+61 2 6274 1111

Natural Values Atlas Report

Authoritative, comprehensive information on Tasmania's natural values.

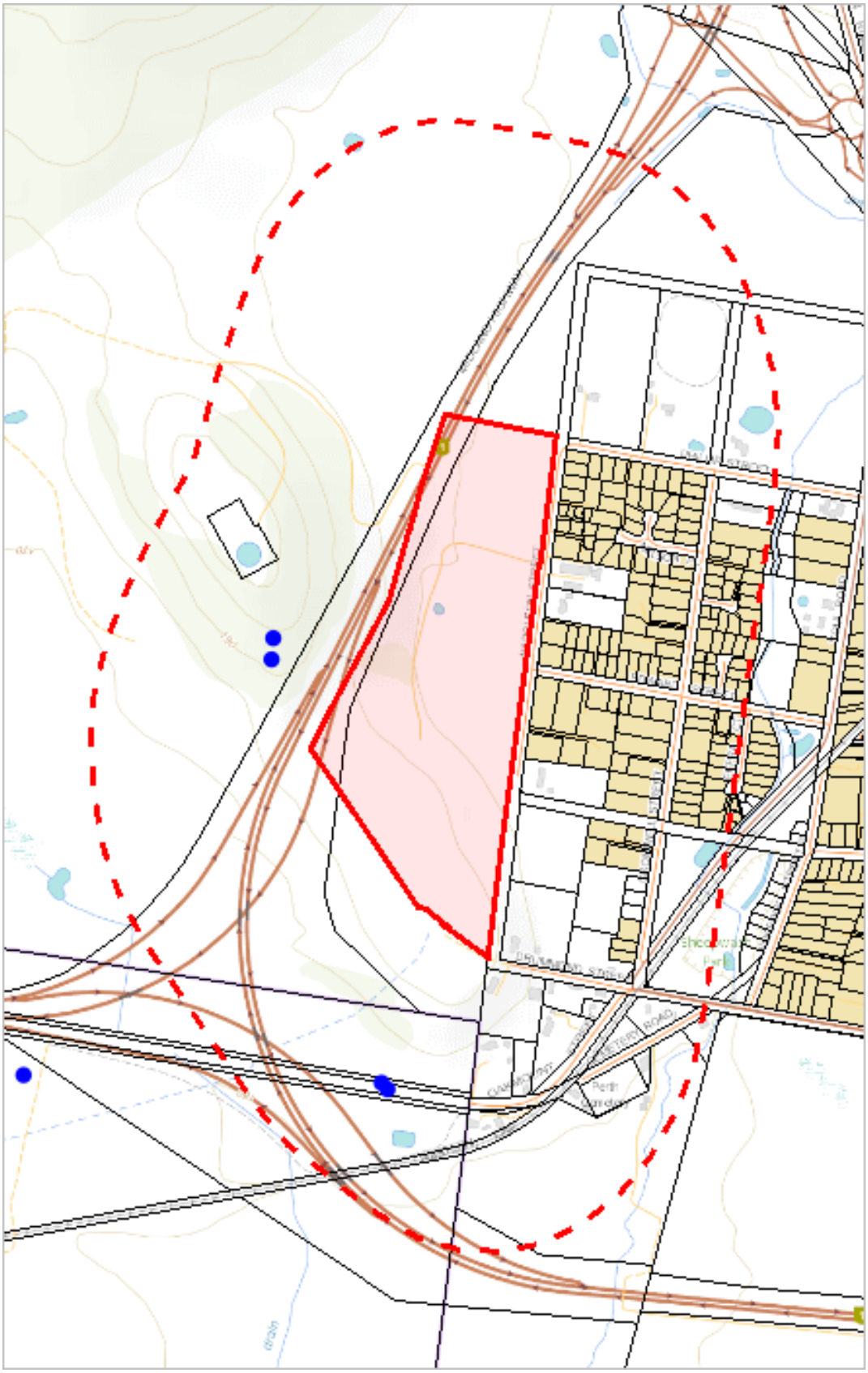
Reference:	
Requested For:	115 Napoleon St Perth
Report Type:	Summary Report
Timestamp:	03:37:41 PM Tuesday 18 January 2022
Threatened Flora:	buffers Min: 500m Max: 5000m
Threatened Fauna:	buffers Min: 500m Max: 5000m
Raptors:	buffers Min: 500m Max: 5000m
Tasmanian Weed Management Act Weeds:	buffers Min: 500m Max: 5000m
Priority Weeds:	buffers Min: 500m Max: 5000m
Geoconservation:	buffer 1000m
TASVEG:	buffer 1000m
Threatened Communities:	buffer 1000m
Tasmanian Reserve Estate:	buffer 1000m

The centroid for this query GDA94: 513137.0, 5397761.0 falls within:

Property: 9539821

Threatened flora within 500 metres

513848, 5398903



512375, 5396581

Please note that some layers may not display at all requested map scales

Threatened flora within 500 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened flora within 500 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Caesia calliantha	blue grasslily	r		n	2	20-Nov-2014
Haloragis heterophylla	variable raspwort	r		n	4	19-Nov-2014

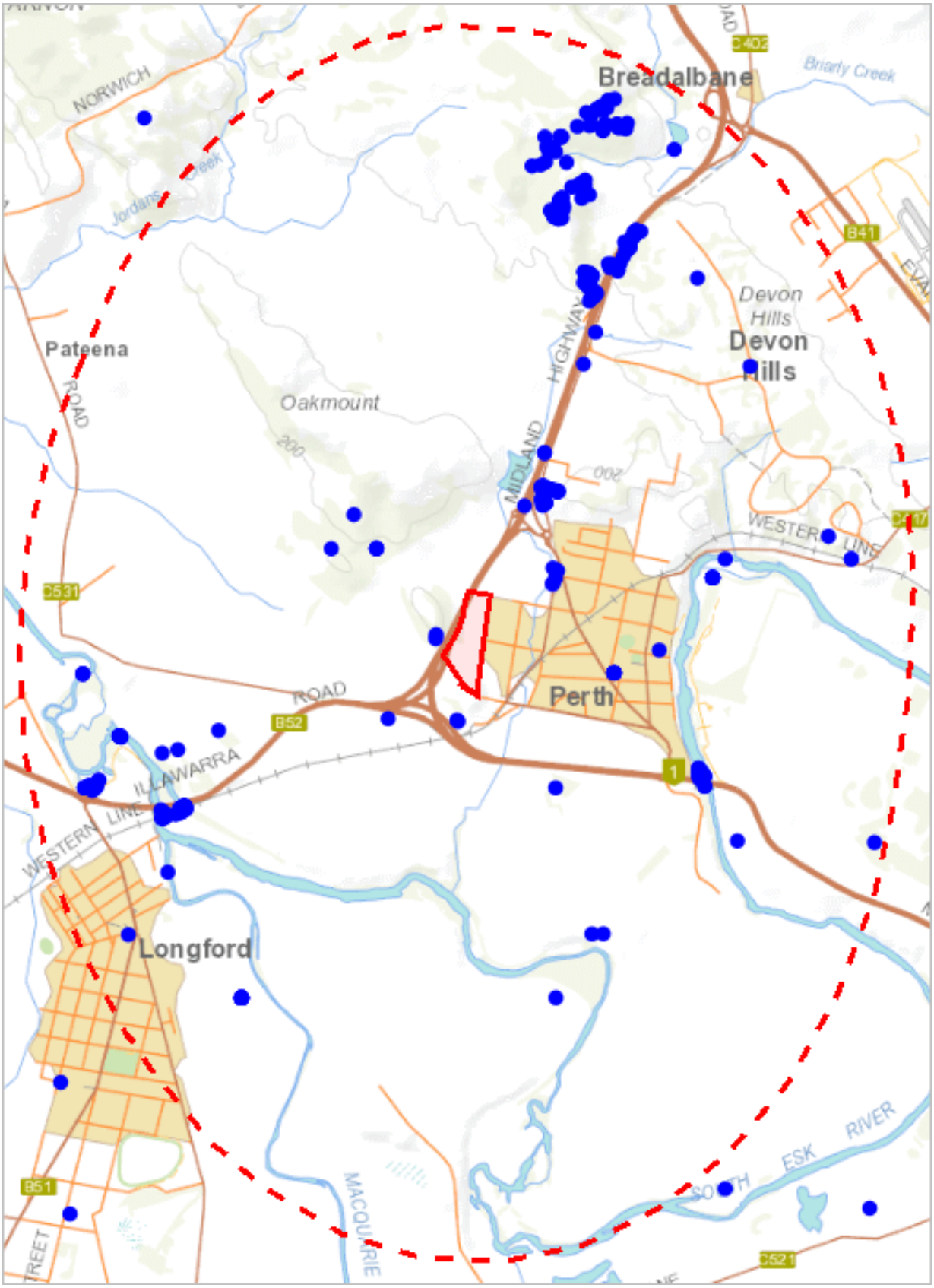
Unverified Records

No unverified records were found!

For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened flora within 5000 metres

517236, 5403400



508993, 5392083

Please note that some layers may not display at all requested map scales

Threatened flora within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened flora within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Alternanthera denticulata	lesser joyweed	e		n	472	07-Jan-2020
Anogramma leptophylla	annual fern	v		n	6	19-Oct-1984
Aphelia gracilis	slender fanwort	r		n	36	27-Nov-2021
Aphelia pumilio	dwarf fanwort	r		n	70	13-Nov-2021
Asperula subsimplex	water woodruff	r		n	7	13-Oct-2015
Blechnum spinulosum	small raspfern	e		n	26	26-Feb-2018
Bolboschoenus caldwellii	sea clubsedge	r		n	32	11-Jun-2019
Boronia gunnii	river boronia	v	VU	e	18	25-Oct-1961
Brunonia australis	blue pincushion	r		n	612	12-Nov-2021
Caesia calliantha	blue grasslily	r		n	112	08-Nov-2021
Caladenia filamentosa	daddy longlegs	r		n	3	29-Oct-1893
Caladenia patersonii	patersons spider-orchid	v		n	4	03-Oct-2007
Callitriche umbonata	winged waterstarwort	r		n	2	15-Feb-1985
Callitris oblonga subsp. oblonga	south esk pine	v	EN	e	17	19-Mar-2010
Calocephalus lacteus	milky beautyheads	r		n	1	24-Dec-1844
Calochilus campestris	copper beard-orchid	e		n	1	12-Nov-2012
Calystegia sepium subsp. sepium	swamp bindweed	r		n	62	02-Jun-2020
Carex gunniana	mountain sedge	r		n	1	15-Dec-2009
Carex longebrachiata	drooping sedge	r		n	3	18-Jul-2006
Centipeda cunninghamii	erect sneezeweed	r		n	11	14-Feb-2018
Chiloglottis trapeziformis	broadlip bird-orchid	e		n	3	27-Oct-1974
Coronidium gunnianum	swamp everlasting	?e		n	1	01-Jan-1600
Corunastylis nuda	tiny midge-orchid	r		n	1	01-Mar-1945
Craspedia paludicola	swamp billybuttons	?r		n	1	01-Jan-1911
Deyeuxia lawrencei	lawrences bentgrass	x	EX	e	1	01-Jan-1831
Dianella amoena	grassland flaxlily	r	EN	n	45	23-Apr-2020
Discaria pubescens	spiky anchorplant	e		n	6	12-Dec-2003
Diuris lanceolata	large golden moths	e	EN	e	1	18-Sep-1892
Diuris palustris	swamp doubletail	e		n	4	24-Oct-1946
Epacris exserta	south esk heath	e	PEN	e	40	18-Mar-2010
Euphrasia collina subsp. deflexifolia	eastern eyebright	r		e	1	31-Aug-1892
Euphrasia scabra	yellow eyebright	e		n	1	21-Nov-1887
Glycine latrobeana	clover glycine	v	VU	n	2	22-Apr-2020
Gratiola pubescens	hairy brooklime	r		n	3	11-Feb-2011
Gynatrix pulchella	fragrant hempbush	r		n	1	17-Jul-1996
Gyrostemon thesioides	broom wheelfruit	r		n	13	26-Jul-2001
Haloragis heterophylla	variable raspwort	r		n	23	19-Dec-2018
Hovea tasmanica	rockfield purplepea	r		e	9	14-Jan-2021
Hypolepis muelleri	harsh groundfern	r		n	1	10-Mar-1981
Isoetes elatior	tall quillwort	r		e	3	15-Apr-1972
Juncus prismatocarpus	branching rush	r		n	6	07-Feb-1979
Juncus vaginatus	clustered rush	r		n	1	17-Feb-1998
Lachnagrostis punicea subsp. punicea	bristle blowngrass	r		n	2	14-Dec-1999
Lepidium hyssopifolium	soft peppercress	e	EN	n	2	19-Mar-2020
Leucopogon virgatus var. brevifolius	shortleaf beardheath	r		n	1	14-Oct-2013
Lobelia pratioides	poison lobelia	v		n	3	26-Mar-1964
Lycopus australis	australian gypsywort	e		n	39	11-Jun-2019
Lythrum salicaria	purple loosestrife	v		n	102	26-Dec-2018
Mentha australis	river mint	e		n	61	15-Jan-2016
Muehlenbeckia axillaris	matted lignum	r		n	4	02-Apr-1980
Myriophyllum integrifolium	tiny watermilfoil	v		n	4	15-Nov-2014
Parietaria debilis	shade pellitory	r		n	2	03-Nov-1992
Persicaria decipiens	slender waterpepper	v		n	90	08-Dec-2020
Persicaria subsessilis	bristly waterpepper	e		n	203	09-Mar-2017
Phyllangium divergens	wiry mitrewort	v		n	1	07-Nov-1949
Pilularia novae-hollandiae	australian pillwort	r		n	1	27-Nov-1988
Pimelea curviflora	curved riceflower	p		n	1	22-Mar-1996
Poa mollis	soft tussockgrass	r		e	120	05-Dec-2020
Prasophyllum robustum	robust leek-orchid	e	CR	e	4	04-Nov-2020
Prostanthera cuneata	alpine mintbush	x		n	5	01-Jan-1896
Prostanthera rotundifolia	roundleaf mintbush	v		n	50	03-Oct-2021
Pterostylis grandiflora	superb greenhood	r		n	1	01-May-1938

Threatened flora within 5000 metres

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Pterostylis squamata	ruddy greenhood	v		n	1	12-Jan-1979
Pterostylis ziegeleri	grassland greenhood	v	VU	e	1	05-Nov-1992
Pultenaea prostrata	silky bushpea	v		n	3	01-Feb-2019
Ranunculus pumilio var. pumilio	ferny buttercup	r		n	3	01-Jan-2000
Rumex bidens	mud dock	v		n	9	18-Jan-2009
Schenkia australis	spike centaury	r		n	1	01-Nov-1943
Schoenoplectus tabernaemontani	river clubsedge	r		n	8	14-Feb-2018
Scleranthus fasciculatus	spreading knawel	v		n	1	06-Dec-2013
Scutellaria humilis	dwarf skullcap	r		n	18	05-Dec-2020
Senecio campylocarpus	bulging fireweed	v		n	22	26-Feb-2018
Senecio longipilus	longhair fireweed	v		n	1	01-Jan-1837
Senecio macrocarpus	largefruit fireweed	x	VU	n	1	01-Jan-1837
Senecio psilocarpus	swamp fireweed	e	VU	n	2	28-Jan-2018
Senecio squarrosus	leafy fireweed	r		n	35	19-Oct-2020
Siloxerus multiflorus	small wrinklewort	r		n	46	20-Oct-2019
Spyridium eriocephalum var. eriocephalum	heath dustymiller	e		n	5	20-Oct-1880
Spyridium vexilliferum var. vexilliferum	helicopter bush	r		n	13	18-Sep-2021
Stylidium despectum	small triggerplant	r		n	6	24-Nov-2021
Tetratheca ciliata	northern pinkbells	r		n	1	01-Jan-1896
Teucrium corymbosum	forest germander	r		n	1	01-Jan-1911
Tricoryne elatior	yellow rushlily	v		n	22	15-Jan-2014
Triptilodiscus pygmaeus	dwarf sunray	v		n	54	14-Nov-2018
Trithuria submersa	submerged watertuft	r		n	1	11-Dec-1998
Utricularia australis	yellow bladderwort	r		n	7	05-Mar-2014
Vallisneria australis	river ribbons	r		n	10	15-Oct-2013
Velleia paradoxa	spur velleia	v		n	5	01-Sep-1992
Veronica plebeia	trailing speedwell	r		n	40	05-Dec-2020
Viola caleyana	swamp violet	r		n	1	18-Jan-1993
Vittadinia burbidgeae	smooth new-holland-daisy	r		e	19	12-Nov-2013
Vittadinia cuneata var. cuneata	fuzzy new-holland-daisy	r		n	1	01-Nov-1984
Vittadinia gracilis	woolly new-holland-daisy	r		n	2	01-Jan-1868
Vittadinia muelleri (broad sense)	narrow leaf new holland daisy	p		n	1	24-Dec-1946
Westringia angustifolia	narrowleaf westringia	r		e	1	20-Nov-2003
Wilsonia rotundifolia	roundleaf wilsonia	r		n	2	09-Dec-2017
Xerochrysum bicolor	eastcoast paperdaisy	r		n	9	25-Oct-1992
Xerochrysum palustre	swamp paperdaisy	v	VU	n	14	02-Dec-2015

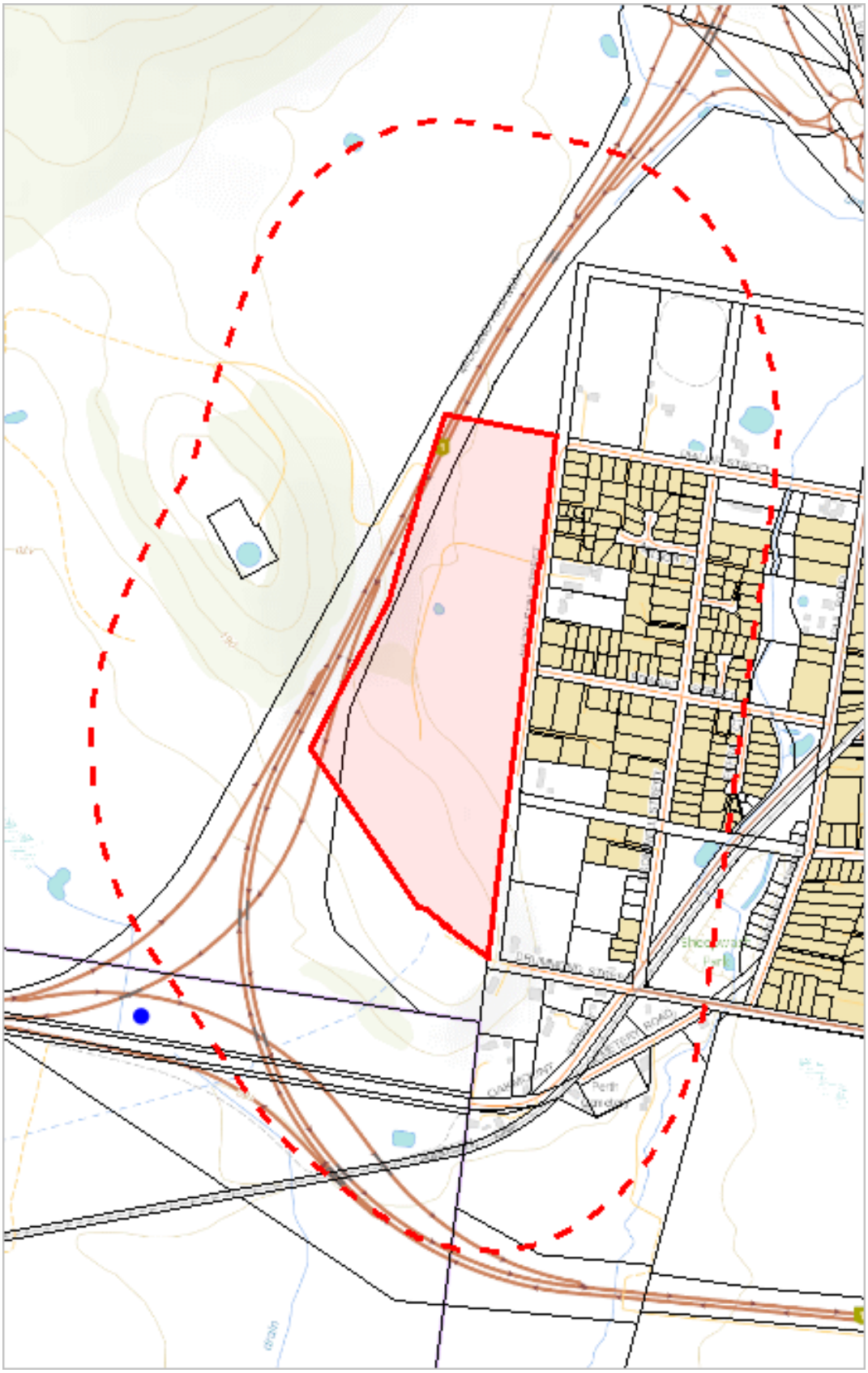
Unverified Records

No unverified records were found!

For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened fauna within 500 metres

513848, 5398903



512375, 5396581

Please note that some layers may not display at all requested map scales

Threatened fauna within 500 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened fauna within 500 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Lathamus discolor	swift parrot	e	CR	mbe	1	05-Oct-1988

Unverified Records

No unverified records were found!

Threatened fauna within 500 metres

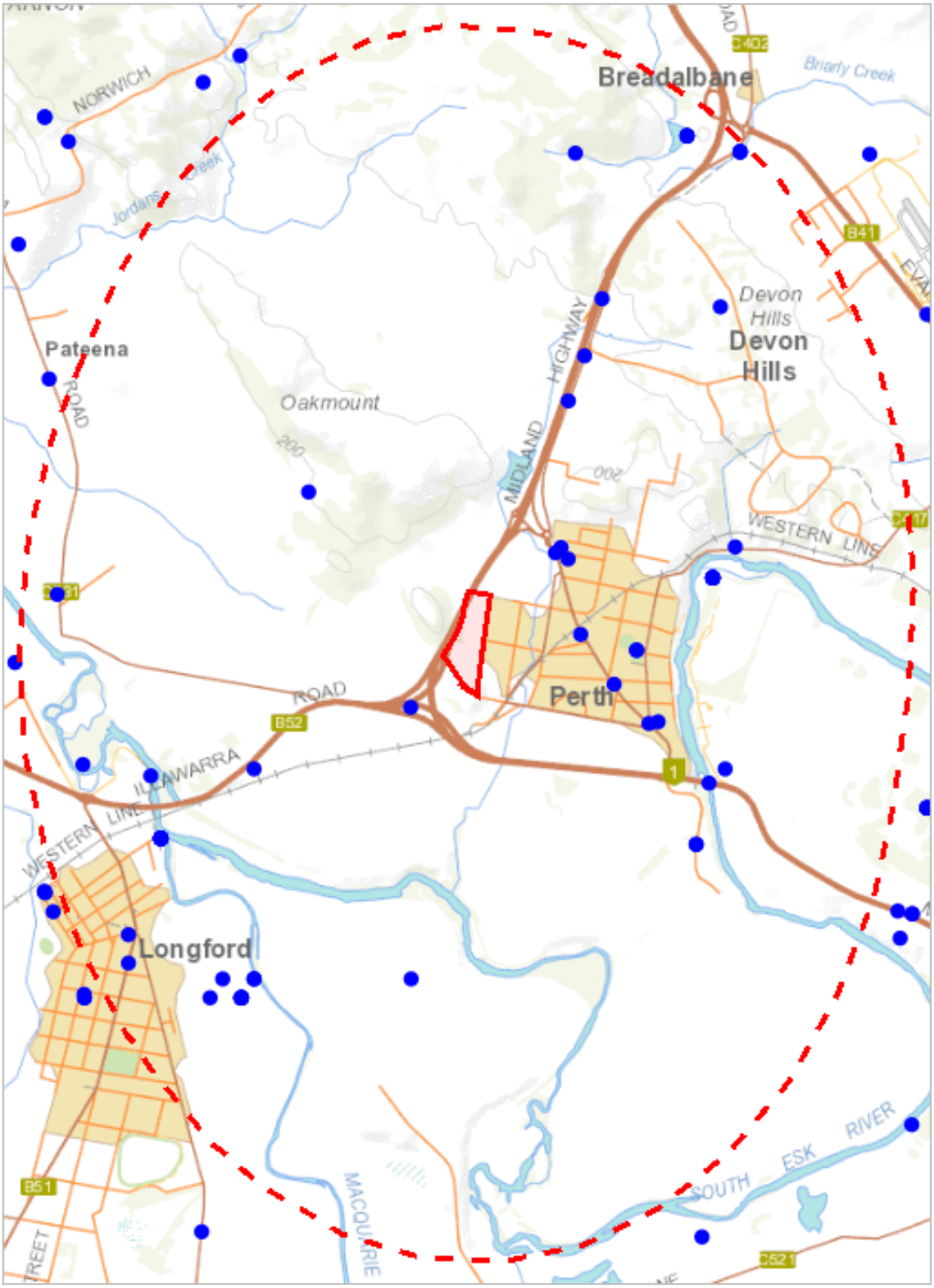
(based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
Litoria raniformis	green and gold frog	v	VU	n	1	0	1
Dasyurus maculatus subsp. maculatus	spotted-tail quoll	r	VU	n	1	0	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	0
Galaxias fontanus	swan galaxias	e	EN	e	1	0	0
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	e	VU	e	1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	1	0	0
Catadromus lacordairei	Green-lined ground beetle	v		n	1	0	0
Sarcophilus harrisii	tasmanian devil	e	EN	e	1	0	0
Accipiter novaehollandiae	grey goshawk	e		n	1	0	0
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	1
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	1	0	0
Dasyurus viverrinus	eastern quoll		EN	n	0	0	1

For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened fauna within 5000 metres

517236, 5403400



508993, 5392083

Please note that some layers may not display at all requested map scales

Threatened fauna within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened fauna within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Accipiter novaehollandiae	grey goshawk	e		n	56	25-Oct-2021
Aquila audax	wedge-tailed eagle	pe	PEN	n	38	31-Aug-2018
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	45	11-Sep-2021
Beddomeia launcestonensis	hydrobiid snail (cataract gorge)	e		eH	25	01-Jan-2001
Botaurus poiciloptilus	australasian bittern		EN	n	20	02-Jul-2018
Dasyurus maculatus	spotted-tail quoll	r	VU	n	48	05-Jun-2021
Dasyurus maculatus subsp. maculatus	spotted-tail quoll	r	VU	n	20	01-Aug-2021
Dasyurus viverrinus	eastern quoll		EN	n	26	21-Jul-2021
Eagle sp.	Eagle	e	EN	n	1	03-Oct-2017
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	119	26-Mar-2021
Hirundapus caudacutus	white-throated needletail		VU	n	25	25-Feb-2018
Lathamus discolor	swift parrot	e	CR	mbe	35	24-Jan-2019
Litoria raniformis	green and gold frog	v	VU	n	78	13-Oct-2020
Migas plomleyi	Plomley's trapdoor spider or spider (cataract gorge)	e		e	10	05-Sep-2005
Pasmaditta jungermanniae	Cataract Gorge Pinhead Snail	v		e	29	22-Apr-2019
Perameles gunnii	eastern barred bandicoot		VU	n	89	13-Jun-2021
Perameles gunnii subsp. gunnii	eastern barred bandicoot		VU		8	23-Aug-2021
Podiceps cristatus	great crested grebe	v		n	3	08-May-2017
Poliocephalus cristatus subsp. australis	great crested grebe	pv			8	31-Aug-1980
Prototroctes maraena	australian grayling	v	VU	ae	10	09-Feb-2016
Pseudalmenus chlorinda myrsilus	tasmanian hairstreak(butterfly)	r		eH	1	20-Nov-1994
Pseudemoia pagenstecheri	tussock skink	v		n	2	26-Feb-2019
Pseudemoia rawlinsoni	glossy grass skink	r		n	5	21-Jan-2021
Pteropus poliocephalus	grey-headed flying-fox		VU	n	1	20-Apr-2010
Sarcophilus harrisii	tasmanian devil	e	EN	e	167	13-Nov-2021
Thylacinus cynocephalus	thylacine	x	EX	ex	1	01-Jan-1969
Tyto novaehollandiae	masked owl	pe	PVU	n	39	01-Dec-2016
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	e	VU	e	5	26-Aug-2019

Unverified Records

No unverified records were found!

Threatened fauna within 5000 metres

(based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
Hydroptila scamandra	caddis fly (upper scamander river)	r		n	1	0	0
Oecetis gilva	caddis fly (south esk river)	r		n	1	0	0
Litoria raniformis	green and gold frog	v	VU	n	1	0	1
Dasyurus maculatus subsp. maculatus	spotted-tail quoll	r	VU	n	1	0	0
Prototroctes maraena	australian grayling	v	VU	ae	1	0	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	0
Galaxias fontanus	swan galaxias	e	EN	e	1	0	0
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	e	VU	e	1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	1	0	0
Catadromus lacordairei	Green-lined ground beetle	v		n	1	0	0
Sarcophilus harrisii	tasmanian devil	e	EN	e	1	0	0
Accipiter novaehollandiae	grey goshawk	e		n	1	0	0
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	1
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	1	0	0
Dasyurus viverrinus	eastern quoll		EN	n	0	0	1

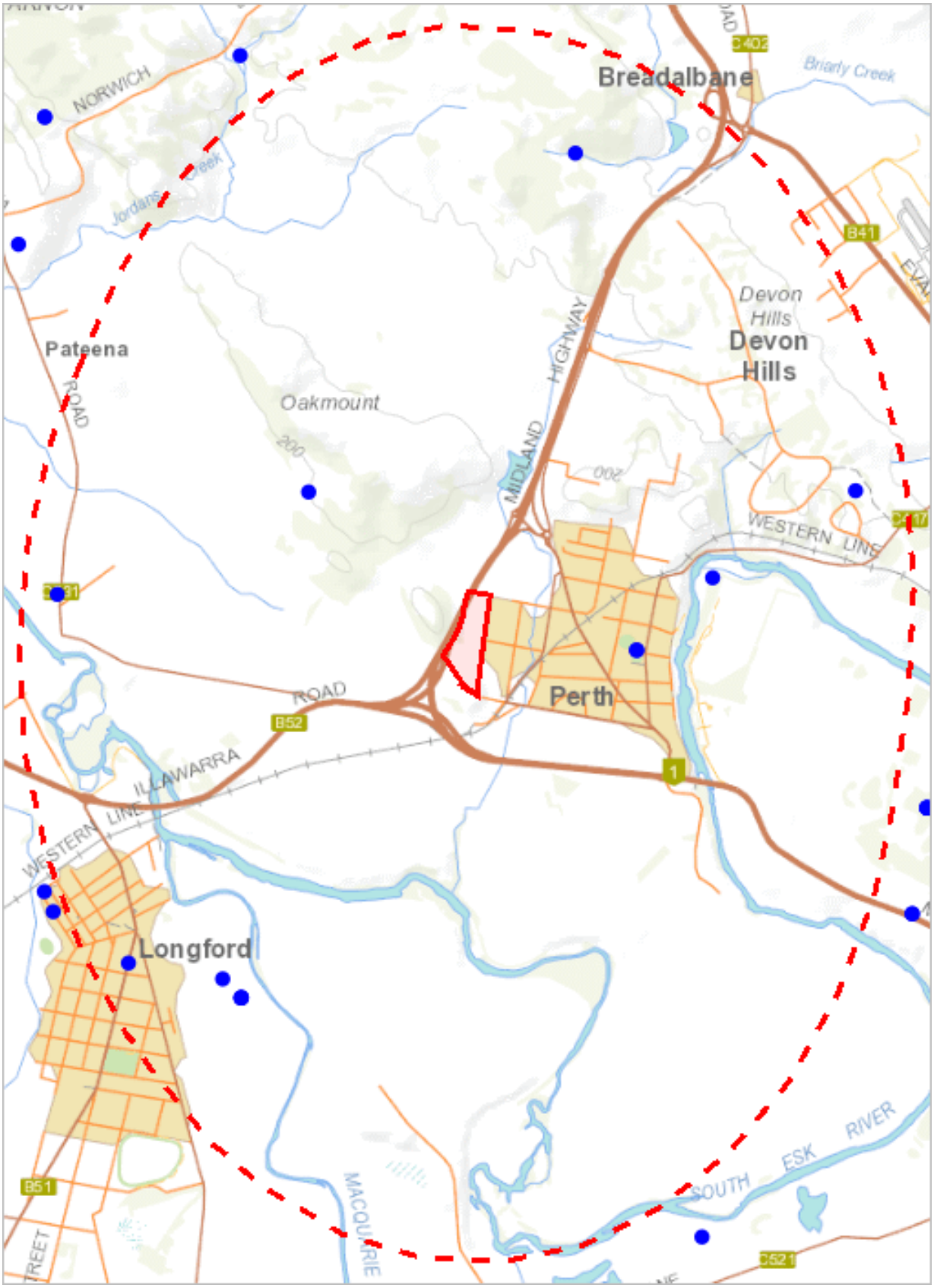
For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

*** No Raptor nests or sightings found within 500 metres. ***

Raptor nests and sightings within 500 metres

Raptor nests and sightings within 5000 metres

517236, 5403400



508993, 5392083

Please note that some layers may not display at all requested map scales

Raptor nests and sightings within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Raptor nests and sightings within 5000 metres

Verified Records

Nest Id/Location Foreign Id	Species	Common Name	Obs Type	Observation Count	Last Recorded
1109	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	20-Nov-2002
114	Falco peregrinus	peregrine falcon	Nest	1	01-Jan-1985
1282	Accipiter novaehollandiae	grey goshawk	Nest	2	17-Jun-2015
145	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	4	20-Dec-2000
1691	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	14-Jul-2008
1692	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	2	03-Jan-2019
1827	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	08-May-2009
1913	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	2	12-Nov-2010
1944	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	29-Nov-2010
1993	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	2	06-Feb-2020
2150	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	1	15-Jun-2014
2219	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	26-Jun-2015
2329	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	09-Nov-2016
2514	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	29-Nov-2016
2543	Eagle sp.	Eagle	Nest	1	03-Oct-2017
2697	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	14-Aug-2019
2701	Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	Nest	1	26-Aug-2019
2702	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	4	06-Jul-2020
2723	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	06-Feb-2020
2724	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	06-Feb-2020
2774	Accipiter cirrocephalus subsp. cirrocephalus	collared sparrowhawk	Nest	1	08-Feb-2020
2845	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	22-Feb-2021
2961	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	11-Sep-2021
518	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	8	15-Dec-2014
630	Tyto novaehollandiae	masked owl	Nest	1	30-Aug-1996
634	Tyto novaehollandiae	masked owl	Nest	1	01-Jan-1985
732	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	3	20-Nov-2002
742	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	01-Jan-1985
758	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	1	01-Jan-1985
843	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	1	01-Jan-1985
969	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	4	14-Oct-2004
	Accipiter novaehollandiae	grey goshawk	Carcass	2	15-Nov-2015
	Accipiter novaehollandiae	grey goshawk	Image	3	16-May-2020
	Accipiter novaehollandiae	grey goshawk	Not Recorded	24	06-Jul-2017
	Accipiter novaehollandiae	grey goshawk	Sighting	26	25-Oct-2021
	Aquila audax	wedge-tailed eagle	Carcass	1	13-Feb-2014
	Aquila audax	wedge-tailed eagle	Not Recorded	34	31-Aug-2018
	Aquila audax	wedge-tailed eagle	Sighting	3	23-Nov-2015
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Carcass	1	09-Dec-2015
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Sighting	10	14-Jun-2020
	Falco longipennis	australian hobby	Sighting	5	02-Nov-1995
	Falco peregrinus	peregrine falcon	Not Recorded	13	19-Jan-2018
	Falco peregrinus	peregrine falcon	Sighting	5	25-Feb-2016
	Haliaeetus leucogaster	white-bellied sea-eagle	Not Recorded	75	04-Jun-2018
	Haliaeetus leucogaster	white-bellied sea-eagle	Sighting	33	26-Mar-2021
	Tyto novaehollandiae	masked owl	Not Recorded	17	01-Dec-2016
	Tyto novaehollandiae	masked owl	Sighting	20	01-Dec-1999

Unverified Records

No unverified records were found!

Raptor nests and sightings within 5000 metres

(based on Range Boundaries)

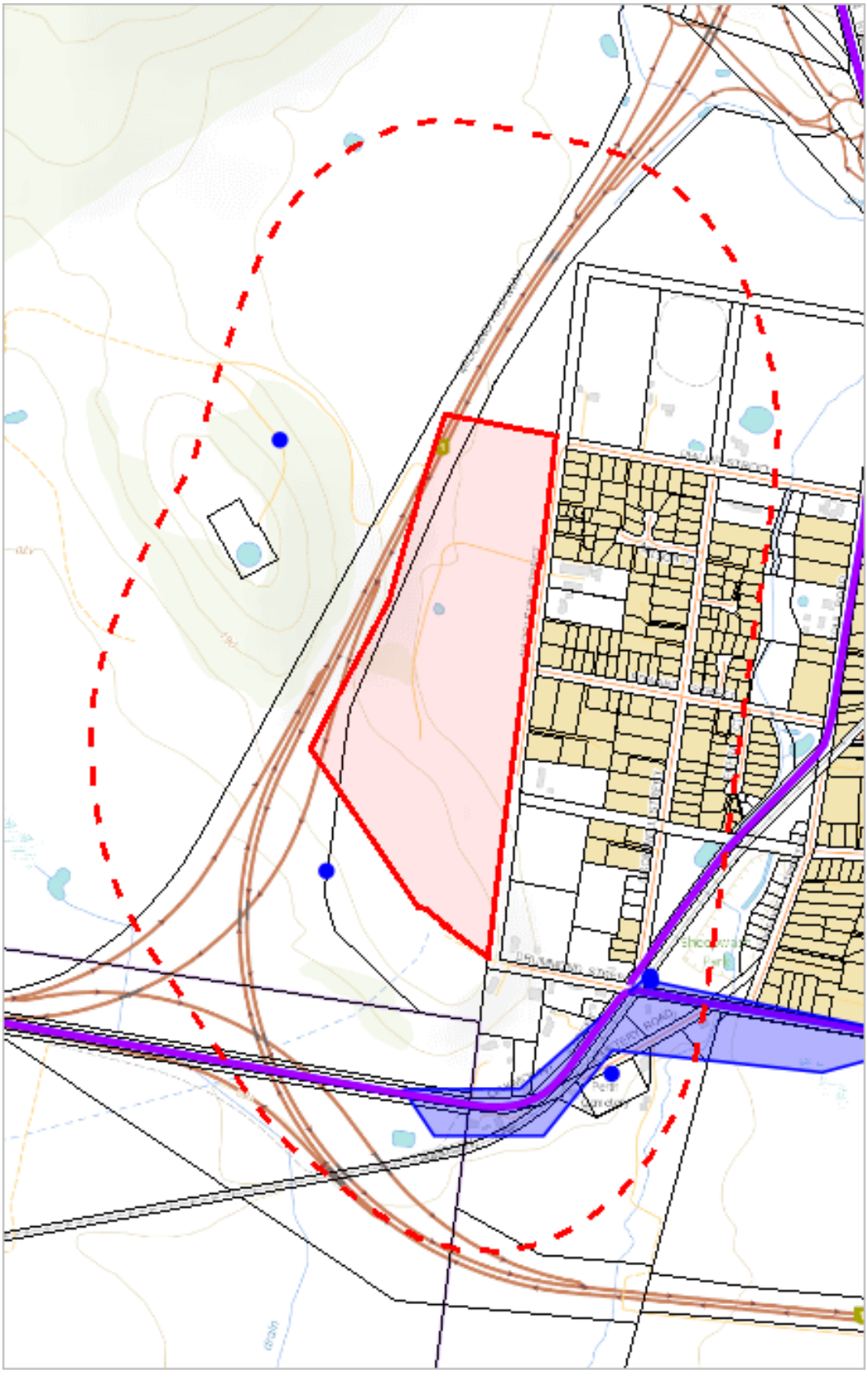
Species	Common Name	SS	NS	Potential	Known	Core
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	1	0	0
Accipiter novaehollandiae	grey goshawk	e		1	0	0
Haliaeetus leucogaster	white-bellied sea-eagle	v		1	0	0

Raptor nests and sightings within 5000 metres

For more information about raptor nests, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Tas Management Act Weeds within 500 m

513848, 5398903



512375, 5396581

Please note that some layers may not display at all requested map scales

Tas Management Act Weeds within 500 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Tas Management Act Weeds within 500 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Cytisus scoparius	english broom	1	08-Feb-2021
Echium plantagineum	patersons curse	1	01-Jan-1900
Onopordum acanthium	scotch thistle	1	01-Jan-1993
Rubus anglocandicans	blackberry	1	08-Feb-2021
Rubus fruticosus	blackberry	1	08-Jan-1995
Ulex europaeus	gorse	5	08-Feb-2021

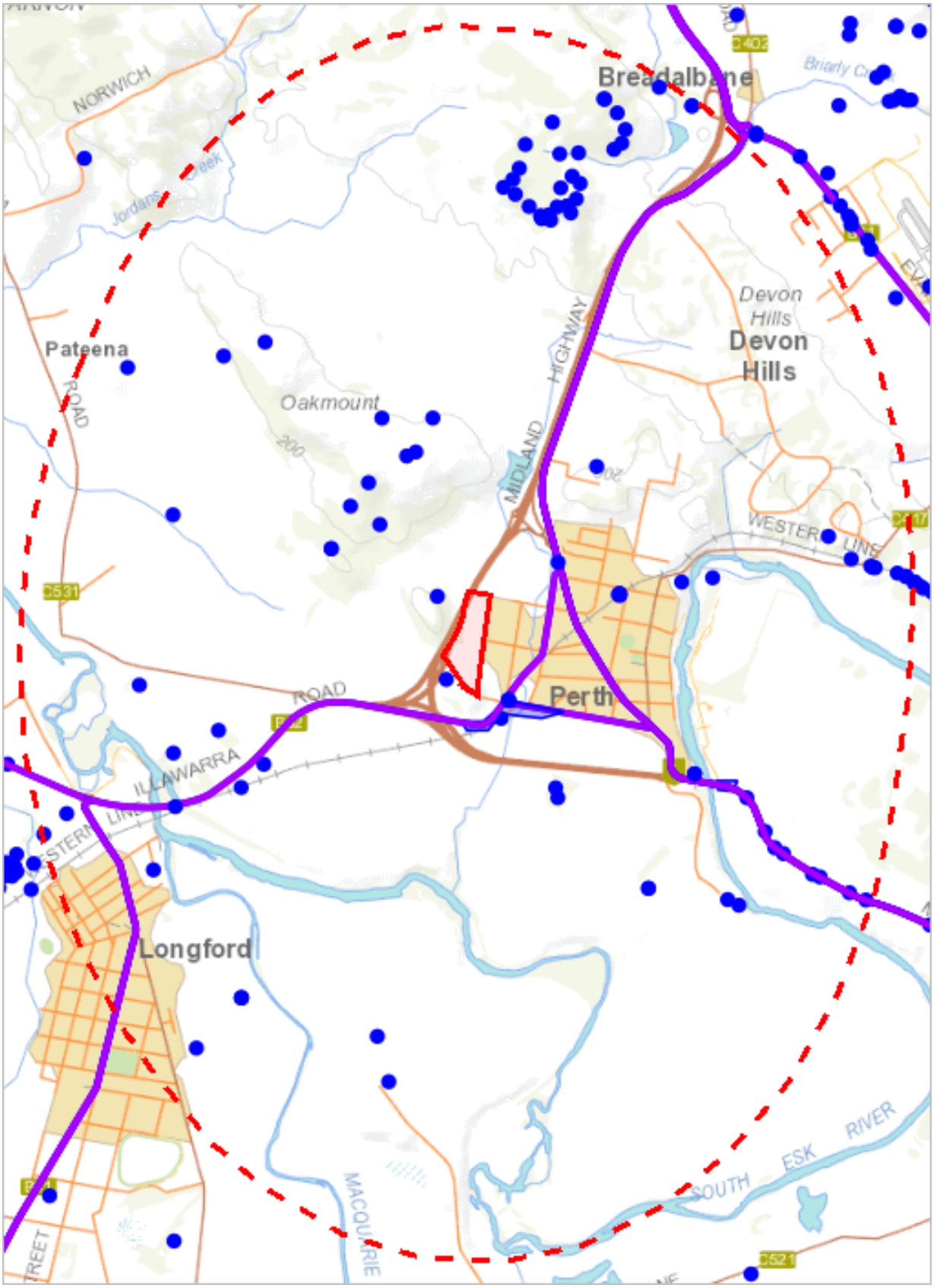
Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.nre.tas.gov.au/invasive-species/weeds

Tas Management Act Weeds within 5000 m

517236, 5403400



508993, 5392083

Please note that some layers may not display at all requested map scales

Tas Management Act Weeds within 5000 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Tas Management Act Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Amaranthus albus	tumble pigweed	1	12-Feb-2010
Anthemis cotula	stinking chamomile	5	03-Jun-2015
Asparagus asparagoides	bridal creeper	33	11-May-2019
Asphodelus fistulosus	onion weed	6	26-Feb-2008
Carduus nutans	nodding thistle	1	01-Jan-1993
Carduus pycnocephalus	slender thistle	36	05-Nov-2018
Carduus tenuiflorus	winged thistle	3	30-Mar-1996
Carthamus lanatus	saffron thistle	22	14-Jan-2015
Cenchrus longisetus	feathertop	3	28-Apr-2020
Centaurea calcitrapa	star thistle	1	24-Mar-1981
Chrysanthemoides monilifera subsp. monilifera	boneseed	79	06-Oct-2020
Cirsium arvense var. arvense	creeping thistle	4	09-Oct-2020
Cortaderia jubata	pink pampasgrass	2	15-Feb-1988
Cortaderia selloana	silver pampasgrass	8	09-Oct-2018
Cortaderia sp.	pampas grass	2	10-Feb-2016
Cuscuta epithymum	lesser dodder	1	01-Jan-1864
Cytisus scoparius	english broom	12	19-Sep-2021
Datura stramonium	common thornapple	2	06-Feb-1981
Echium plantagineum	patersons curse	28	09-Dec-2018
Echium vulgare	vipers bugloss	6	18-Nov-2019
Elodea canadensis	canadian pondweed	5	25-Jan-2020
Eragrostis curvula	african lovegrass	12	11-Apr-2018
Erica lusitanica	spanish heath	144	24-Aug-2021
Erica scoparia	twig heath	150	24-May-2018
Foeniculum vulgare	fennel	3	04-May-2020
Genista monspessulana	montpellier broom	12	06-Oct-2020
Hypericum perforatum	perforated st johns-wort	16	08-Dec-2020
Hypericum perforatum subsp. veronense	perforated st johns-wort	1	01-Jan-1900
Ilex aquifolium	holly	17	04-Nov-2020
Lepidium draba	hoary cress	2	28-Oct-1978
Leycesteria formosa	himalayan honeysuckle	2	01-Nov-2015
Lycium ferocissimum	african boxthorn	2	11-Jun-2019
Moraea flaccida	oneleaf cape tulip	1	15-Oct-2013
Myriophyllum aquaticum	parrotfeather	2	09-Dec-2017
Oenanthe pimpinelloides	dropwort	339	27-Feb-2017
Onopordum acanthium	scotch thistle	25	01-Jan-1993
Rubus anglocandicans	blackberry	30	08-Feb-2021
Rubus fruticosus	blackberry	155	08-Oct-2020
Rubus leucostachys	blackberry	2	23-Jan-1997
Salix alba var. caerulea		1	01-Nov-2003
Salix alba var. vitellina	golden willow	2	01-Nov-2003
Salix matsudana	sallow willow	1	01-Nov-2003
Salix x fragilis nothovar. fragilis	crack willow	32	04-May-2020
Salix x sepulcralis nothovar. chrysocoma	golden weeping willow	5	20-Nov-2006
Senecio jacobaea	ragwort	36	02-Feb-2017
Solanum marginatum	white-edged nightshade	1	21-Apr-1977
Ulex europaeus	gorse	345	27-Sep-2021
Xanthium spinosum	bathurst burr	52	22-Mar-2018

Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.nre.tas.gov.au/invasive-species/weeds

*** No Priority Weeds found within 500 metres ***

Priority Weeds within 5000 m

517236, 5403400

508993, 5392083

Please note that some layers may not display at all requested map scales

Priority Weeds within 5000 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Priority Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Acacia baileyana	cootamundra wattle	5	04-Aug-2021
Achillea millefolium	yarrow	2	20-Oct-2004
Anredera cordifolia	madeira vine	1	03-May-1965
Dipsacus fullonum	wild teasel	6	16-Jan-2021
Iris pseudacorus	yellow flag iris	2	14-Dec-2010
Juncus acutus	sharp rush	2	18-Jan-2009
Pittosporum undulatum	sweet pittosporum	3	11-Apr-2018
Prunus laurocerasus	cherry laurel	5	21-Sep-2018
Reseda luteola	weld	2	18-Jan-2020
Spartina anglica	common cordgrass	5	13-Feb-2009
Tradescantia fluminensis	wandering creeper	3	09-Oct-2018
Verbascum thapsus	great mullein	1	11-Jun-2010
Watsonia meriana var. bulbillifera	bulbil watsonia	2	11-Aug-2018
Zizania palustris	wild rice	2	04-Mar-2005

Unverified Records

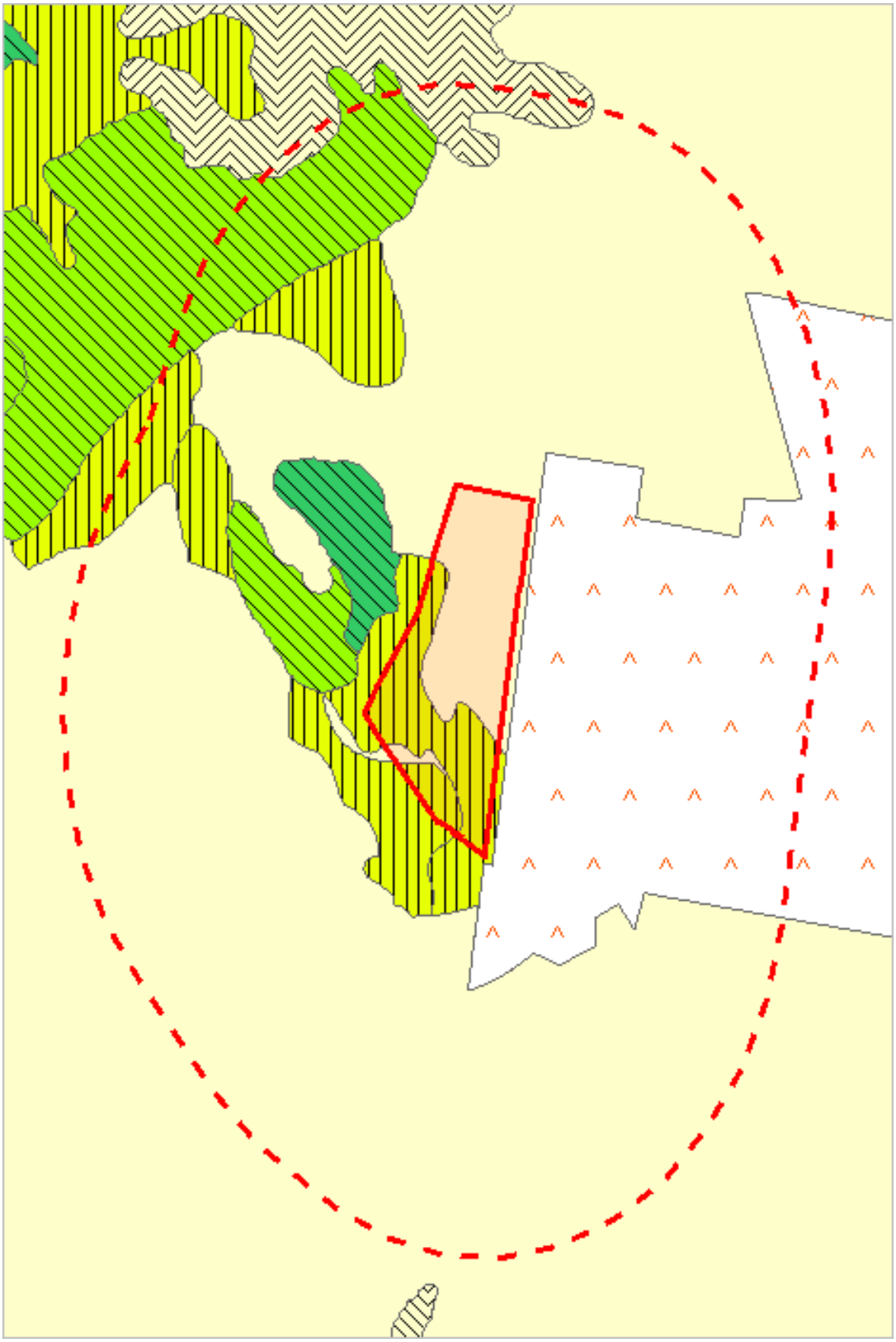
For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.nre.tas.gov.au/invasive-species/weeds

*** No Geoconservation sites found within 1000 metres. ***

TASVEG 4.0 Communities within 1000 metres

514224, 5399402



511999, 5396081

Please note that some layers may not display at all requested map scales

TASVEG 4.0 Communities within 1000 metres

Legend: TASVEG 4.0

- (AAP) Alkaline pans
- (AHF) Freshwater aquatic herbland
- (AHL) Lacustrine herbland
- (AHS) Saline aquatic herbland
- (ARS) Saline sedgeland / rushland
- (ASF) Fresh water aquatic sedgeland and rushland
- (ASP) Sphagnum peatland
- (ASS) Succulent saline herbland
- (AUS) Saltmarsh (undifferentiated)
- (AWU) Wetland (undifferentiated)
- (DAC) Eucalyptus amygdalina coastal forest and woodland
- (DAD) Eucalyptus amygdalina forest and woodland on dolerite
- (DAM) Eucalyptus amygdalina forest on mudstone
- (DAS) Eucalyptus amygdalina forest and woodland on sandstone
- (DAZ) Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits
- (DBA) Eucalyptus barberi forest and woodland
- (DCO) Eucalyptus coccifera forest and woodland
- (DCR) Eucalyptus cordata forest
- (DDE) Eucalyptus delegatensis dry forest and woodland
- (DDP) Eucalyptus dalrympleana - Eucalyptus pauciflora forest and woodland
- (DGL) Eucalyptus globulus dry forest and woodland
- (DGW) Eucalyptus gunnii woodland
- (DKW) King Island Eucalypt woodland
- (DMO) Eucalyptus morrisbyi forest and woodland
- (DMW) Midlands woodland complex
- (DNF) Eucalyptus nitida Furneaux forest
- (DNI) Eucalyptus nitida dry forest and woodland
- (DOB) Eucalyptus obliqua dry forest
- (DOV) Eucalyptus ovata forest and woodland
- (DOW) Eucalyptus ovata heathy woodland
- (DPD) Eucalyptus pauciflora forest and woodland on dolerite
- (DPE) Eucalyptus perriniana forest and woodland
- (DPO) Eucalyptus pauciflora forest and woodland not on dolerite
- (DPU) Eucalyptus pulchella forest and woodland
- (DRI) Eucalyptus risdonii forest and woodland
- (DRO) Eucalyptus rodwayi forest and woodland
- (DSC) Eucalyptus amygdalina - Eucalyptus obliqua damp sclerophyll forest
- (DSG) Eucalyptus sieberi forest and woodland on granite
- (DSO) Eucalyptus sieberi forest and woodland not on granite
- (DTD) Eucalyptus tenuiramis forest and woodland on dolerite
- (DTG) Eucalyptus tenuiramis forest and woodland on granite
- (DTO) Eucalyptus tenuiramis forest and woodland on sediments
- (DVC) Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland
- (DVF) Eucalyptus viminalis Furneaux forest and woodland
- (DVG) Eucalyptus viminalis grassy forest and woodland
- (FAC) Improved pasture with native tree canopy
- (FAG) Agricultural land
- (FMG) Marram grassland
- (FPE) Permanent easements
- (FPF) Pteridium esculentum fernland
- (FPH) Plantations for silviculture - hardwood
- (FPS) Plantations for silviculture - softwood
- (FPU) Unverified plantations for silviculture
- (FRG) Regenerating cleared land
- (FSM) Spartina marshland
- (FUM) Extra-urban miscellaneous
- (FUR) Urban areas
- (FWU) Weed infestation
- (GCL) Lowland grassland complex

TASVEG 4.0 Communities within 1000 metres

(GHC) Coastal grass and herbfield
(GPH) Highland Poa grassland
(GPL) Lowland Poa labillardierei grassland
(GRP) Rockplate grassland
(GSL) Lowland grassy sedgeland
(GTL) Lowland Themeda triandra grassland
(HCH) Alpine coniferous heathland
(HCM) Cushion moorland
(HHE) Eastern alpine heathland
(HHW) Western alpine heathland
(HSE) Eastern alpine sedgeland
(HSW) Western alpine sedgeland/herbland
(HUE) Eastern alpine vegetation (undifferentiated)
(MBE) Eastern buttongrass moorland
(MBP) Pure buttongrass moorland
(MBR) Sparse buttongrass moorland on slopes
(MBS) Buttongrass moorland with emergent shrubs
(MBU) Buttongrass moorland (undifferentiated)
(MBW) Western buttongrass moorland
(MDS) Subalpine Diplarrena latifolia rushland
(MGH) Highland grassy sedgeland
(MRR) Restionaceae rushland
(MSW) Western lowland sedgeland
(NAD) Acacia dealbata forest
(NAF) Acacia melanoxylon swamp forest
(NAL) Allocasuarina littoralis forest
(NAR) Acacia melanoxylon forest on rises
(NAV) Allocasuarina verticillata forest
(NBA) Bursaria - Acacia woodland
(NBS) Banksia serrata woodland
(NCR) Callitris rhomboidea forest
(NLA) Leptospermum scoparium - Acacia mucronata forest
(NLE) Leptospermum forest
(NLM) Leptospermum lanigerum - Melaleuca squarrosa swamp forest
(NLN) Subalpine Leptospermum nitidum woodland
(NME) Melaleuca ericifolia swamp forest
(OAQ) Water, sea
(ORO) Lichen lithosere
(OSM) Sand, mud
(RCO) Coastal rainforest
(RFE) Rainforest fernland
(RFS) Nothofagus gunnii rainforest scrub
(RHP) Lagarostrobos franklinii rainforest and scrub
(RKF) Athrotaxis selaginoides - Nothofagus gunnii short rainforest
(RKP) Athrotaxis selaginoides rainforest
(RKS) Athrotaxis selaginoides subalpine scrub
(RKX) Highland rainforest scrub with dead Athrotaxis selaginoides
(RML) Nothofagus - Leptospermum short rainforest
(RMS) Nothofagus - Phyllocladus short rainforest
(RMT) Nothofagus - Atherosperma rainforest
(RMU) Nothofagus rainforest (undifferentiated)
(RPF) Athrotaxis cupressoides - Nothofagus gunnii short rainforest
(RPP) Athrotaxis cupressoides rainforest
(RPW) Athrotaxis cupressoides open woodland
(RSH) Highland low rainforest and scrub
(SAL) Acacia longifolia coastal scrub
(SBM) Banksia marginata wet scrub
(SBR) Broad-leaf scrub
(SCA) Coastal scrub on alkaline sands
(SCH) Coastal heathland
(SCL) Heathland on calcareous substrates

TASVEG 4.0 Communities within 1000 metres

(SED) Eastern scrub on dolerite
(SHS) Subalpine heathland
(SHW) Wet heathland
(SKA) Kunzea ambigua regrowth scrub
(SLG) Leptospermum glaucescens heathland and scrub
(SLL) Leptospermum lanigerum scrub
(SLS) Leptospermum scoparium heathland and scrub
(SMM) Melaleuca squamea heathland
(SMP) Melaleuca pustulata scrub
(SMR) Melaleuca squarrosa scrub
(SRE) Eastern riparian scrub
(SRF) Leptospermum with rainforest scrub
(SRH) Rookery halophytic herbland
(SSC) Coastal scrub
(SSK) Scrub complex on King Island
(SSW) Western subalpine scrub
(SSZ) Spray zone coastal complex
(SWR) Western regrowth complex
(SWW) Western wet scrub
(WBR) Eucalyptus brookeriana wet forest
(WDA) Eucalyptus dalrympleana forest
(WDB) Eucalyptus delegatensis forest with broad-leaf shrubs
(WDL) Eucalyptus delegatensis forest over Leptospermum
(WDR) Eucalyptus delegatensis forest over rainforest
(WDU) Eucalyptus delegatensis wet forest (undifferentiated)
(WGK) Eucalyptus globulus King Island forest
(WGL) Eucalyptus globulus wet forest
(WNL) Eucalyptus nitida forest over Leptospermum
(WNR) Eucalyptus nitida forest over rainforest
(WNU) Eucalyptus nitida wet forest (undifferentiated)
(WOB) Eucalyptus obliqua forest with broad-leaf shrubs
(WOL) Eucalyptus obliqua forest over Leptospermum
(WOR) Eucalyptus obliqua forest over rainforest
(WOU) Eucalyptus obliqua wet forest (undifferentiated)
(WRE) Eucalyptus regnans forest
(WSU) Eucalyptus subcrenulata forest and woodland
(WVI) Eucalyptus viminalis wet forest

Legend: Cadastral Parcels

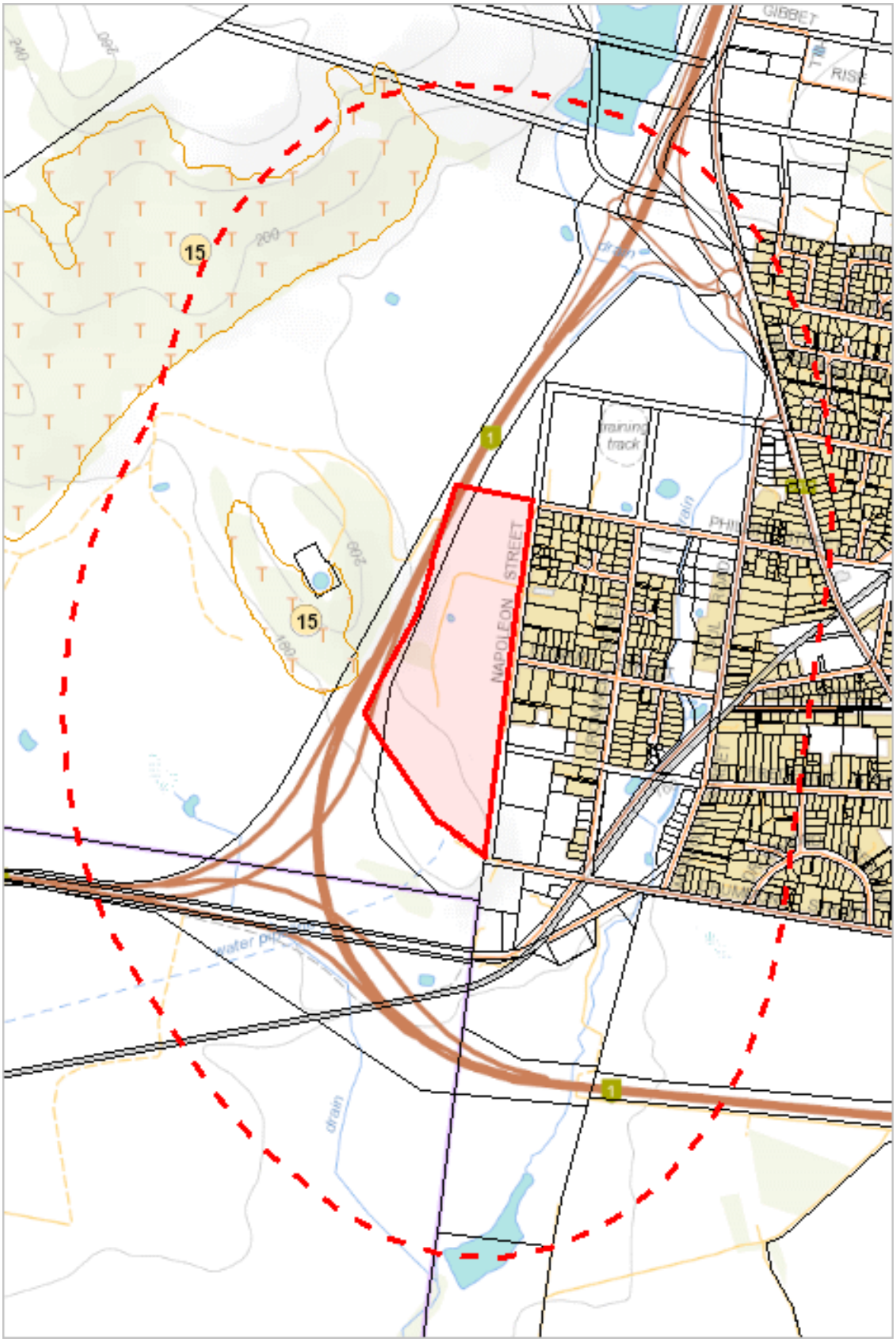
TASVEG 4.0 Communities within 1000 metres

Code	Community	Canopy Tree
DAZ	(DAZ) Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
DVG	(DVG) Eucalyptus viminalis grassy forest and woodland	
FAG	(FAG) Agricultural land	EA
FAG	(FAG) Agricultural land	
FUR	(FUR) Urban areas	
FWU	(FWU) Weed infestation	
GCL	(GCL) Lowland grassland complex	EA
GCL	(GCL) Lowland grassland complex	

For more information contact: Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.
Telephone: (03) 6165 4320
Email: TVMMPSupport@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened Communities (TNVC 2020) within 1000 metres

514224, 5399402



511999, 5396081

Please note that some layers may not display at all requested map scales

Threatened Communities (TNVC 2020) within 1000 metres

Legend: Threatened Communities

- 1 - Alkaline pans
- 2 - Allocasuarina littoralis forest
- 3 - Athrotaxis cupressoides/Nothofagus gunnii short rainforest
- 4 - Athrotaxis cupressoides open woodland
- 5 - Athrotaxis cupressoides rainforest
- 6 - Athrotaxis selaginoides/Nothofagus gunnii short rainforest
- 7 - Athrotaxis selaginoides rainforest
- 8 - Athrotaxis selaginoides subalpine scrub
- 9 - Banksia marginata wet scrub
- 10 - Banksia serrata woodland
- 11 - Callitris rhomboidea forest
- 13 - Cushion moorland
- 14 -Eucalyptus amygdalina forest and woodland on sandstone
- 15 - Eucalyptus amygdalina inland forest and woodland on cainozoic deposits
- 16 - Eucalyptus brookeriana wet forest
- 17 - Eucalyptus globulus dry forest and woodland
- 18 - Eucalyptus globulus King Island forest
- 19 - Eucalyptus morrisbyi forest and woodland
- 20 - Eucalyptus ovata forest and woodland
- 21 - Eucalyptus risdonii forest and woodland
- 22 - Eucalyptus tenuiramis forest and woodland on sediments
- 23 - Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland
- 24 - Eucalyptus viminalis Furneaux forest and woodland
- 25 - Eucalyptus viminalis wet forest
- 26 - Heathland on calcareous substrates
- 27 - Heathland scrub complex at Wingaroo
- 28 - Highland grassy sedgeland
- 29 - Highland Poa grassland
- 30 - Melaleuca ericifolia swamp forest
- 31 - Melaleuca pustulata scrub
- 32 - Notelaea - Pomaderris - Beyeria forest
- 33 - Rainforest fernland
- 34 - Riparian scrub
- 35 - Seabird rookery complex
- 36 - Sphagnum peatland
- 36A - Spray zone coastal complex
- 37 - Subalpine Diplarrena latifolia rushland
- 38 - Subalpine Leptospermum nitidum woodland
- 39 - Wetlands

Legend: Cadastral Parcels

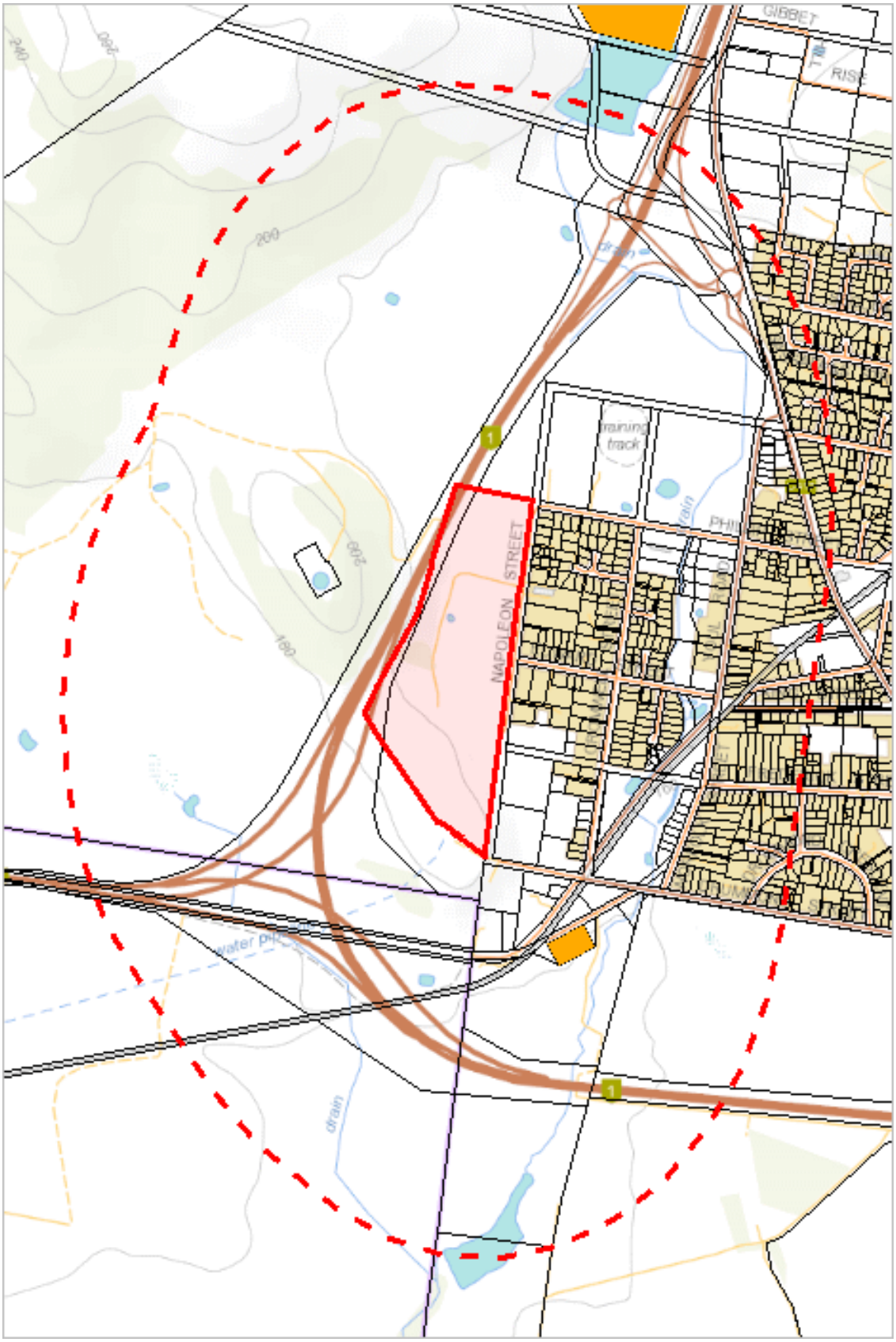
Threatened Communities (TNVC 2020) within 1000 metres

Scheduled Community Id	Scheduled Community Name
15	Eucalyptus amygdalina inland forest and woodland on cainozoic deposits

For more information contact: Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.
Telephone: (03) 6165 4320
Email: TVMMPSupport@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Reserves within 1000 metres

514224, 5399402



511999, 5396081

Please note that some layers may not display at all requested map scales

Reserves within 1000 metres

Legend: Tasmanian Reserve Estate

- Conservation Area
- Conservation Area and Conservation Covenant (NCA)
- Game Reserve
- Historic Site
- Indigenous Protected Area
- National Park
- Nature Reserve
- Nature Recreation Area
- Regional Reserve
- State Reserve
- Wellington Park
- Public authority land within WHA
- Future Potential Production Forest
- Informal Reserve on Permanent Timber Production Zone Land or STT managed land
- Informal Reserve on other public land
- Conservation Covenant (NCA)
- Private Nature Reserve and Conservation Covenant (NCA)
- Private Sanctuary and Conservation Covenant (NCA)
- Private Sanctuary
- Private land within WHA
- Management Agreement
- Management Agreement and Stewardship Agreement
- Stewardship Agreement
- Part 5 Agreement (Meander Dam Offset)
- Other Private Reserve

Legend: Cadastral Parcels

Reserves within 1000 metres

Name	Classification	Status	Area (HA)
	Informal Reserve on other public land	Informal Reserve	0.62516666

For more information about the Tasmanian Reserve Estate, please contact the Natural Values Science Services Branch.
Email: LandManagement.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Our ref: PLN-22-0037

NORTHERN MIDLANDS COUNCIL

6 April 2022

Allan Brooks
PO Box 284
LAUNCESTON TAS 7250

By email: allan.brooks@pda.com.au

Dear Mr Brooks

Planning Application PLN-22-0037- Additional Information Required for 116 Lot Subdivision at Lot 1 Drummond Street (174678/1) accessed from Napolon Street, Perth

Thank you for your application.

Drawing P09 shows proposed subdivision stormwater pipes discharging to the proposed detention basin, but also that same network linked to pipes which bypass the detention basin. Please provide a plan which shows a breakdown of the proposed subcatchments, including the existing Napoleon Street subcatchment, which clearly shows which will be directed to unmade Frederick Street and which will be via the proposed detention basin. On the plan please also confirm the location of all proposed major (1% AEP) overland flow paths.

There are culvert(s) which link the catchment above the Perth Bypass through to the proposed subdivision. As per Council's letter of 7 November 2019, please show the highway culvert crossings, their discharge points and how these will link to the subdivision drainage network.

It is noted in the Servicing Report (PDA, 20/12/2021) an impervious fraction of 0.5 has been adopted for this initial modelling. This may be suitable for if, in future, houses are built on the proposed lots. Given the size of the lots, however, it is possible that a significant number of them could become unit developments without a restriction on the titles.

Section 1 of the Servicing Report states the developed overflow from the detention basin in AEP 1% is 334 L/s, however Figure A3 showings the post development overflow rate at 543 L/s. It is unclear if this is conflicting information or if Figure A3 includes flows in addition to those from the basin. Given the overflow path immediately downstream of the detention basin is through private property, the range 1% AEP developed flows are required to be fully contained by the detention basin. Please provide updated modelling and plans which shows how this will be achieved. Please also provide evidence of how the stormwater system in Napoleon Street will function in both the 10% and 1% AEP.

Please provide surface and invert levels and diameters for the proposed pipework. A full design is not required at this stage but sufficient information is required to assess whether the design will work.

This information is required under section 54 of the *Land Use Planning and Approvals Act 1993*.

In accordance with section 54 (2) of the Act, the statutory period for determining the application will not recommence until the requested information has been satisfactorily supplied.

Please send any emails to planning@nmc.tas.gov.au including the reference **PLN-22-0037**.

If you have any questions, please contact me on 6397 7301, or e-mail planning@nmc.tas.gov.au

Yours sincerely

Paul Godier
Senior Planner

LAUNCESTON
J.W. Dent, OAM, B. SURV. (Tas.), M.SSSI. (Director)
M.B. Reid, B. GEOM.(HONS) (Tas.), M.SSSI M.AIPM (Associate)
HOBART
C.M. Terry, B. SURV. (Tas.), M.SSSI. (Director)
H. Clement, B. SURV. (Tas.), M.SSSI (Director)
M.S.G. Denholm, B. GEOM. (Tas.), M.SSSI (Director)
T.W. Walter, Dip. Surv & Map; (Director)
A.M. Peacock, B. APP. SC. (SURV), M.SSSI. (Consultant)
D. Panton, B.E. M.I.E. AUST., C.P.ENG. (Consultant)
A. Collins, Ad. Dip. Surv & Map, (Senior Associate)
L.H. Kiely, Ad. Dip. Civil Eng, Cert IV I.T., (Associate)
KINGSTON
A.P. (Lex) McIndoe, B. SURV. (Tas.), M.SSSI. (Director)
BURNIE/DEVONPORT
A.J. Hudson, B. SURV. (Tas.), M.SSSI. (Director)
A.W. Eberhardt, B. GEOM. (Tas.), M.SSSI (Director)

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325

PO Box 284 (3/23 Brisbane Street)
Launceston, Tasmania, 7250
Phone (03) 6331 4099

ABN 71 217 806 325
Email: pda.ltn@pda.com.au
www.pda.com.au

Received
09.05.2022

Our Ref: 44156

6 May 2022

PLANNING APPLICATION PLN-22-0037 - 116 Lot Subdivision at Lot 1 Drummond Street, Perth
SERVICING REPORT

Reference is made to the previous revision of the servicing report dated 20 December 2022 and to the AIR from Council dated 06 April 2022.

1. **Stormwater Drainage:**
The site is located between Napoleon Street and the Midland Highway Perth Link Road. The Midland Highway drainage design has been adopted from *MIDLAND HIGHWAY Perth Link Roads Submission to the Parliamentary Standing Committee on Public Works ver 1*. Stormwater drainage from the highway pavement and Mackinnons Hill is diverted through culverts and table drains at the base of the highway road embankments into the existing waterway. We confirm that this stormwater is not discharged into the subdivision drainage network.(see photos Appendix F)

The site is fairly flat with catchment size of approx. 20 Ha. The Catchment Plan in Appendix B shows the catchment breakdown. Currently flow from the development site discharges onto Napoleon Street and then into Council's existing subsurface drainage network, which in turn discharges into an unmade section of Fredrick Street into an existing open channel. When the subsurface network is at capacity, surface flow discharges from Napoleon Street via the existing overland flow path through private property. (33,33A Napoleon Street).

Post development, the stormwater (SW) system will be designed to retain flow within road reserve by providing additional capacity and detention to maximise the efficiency of the subsurface drainage network. This will enable flow to discharge onto road reserve in Fredrick Street, instead of as surface flow via existing overland flow path through private property. Thus, post development, flow via existing overland flow path from Napoleon Street, though private property, will be reduced.

To achieve the above improvement, it is proposed to divert some flow from the existing subsurface system in Napoleon Street, directly to Fredrick Street system, to thus reduce load and free capacity in the existing subsurface DN600 network in Napoleon Street. Therefore catchment A8 and R3 will discharge via a new DN375 stormwater main to outlet directly into the existing open drain in the unmade section of Frederick Street. Catchment A7 will discharge to the existing DN600 stormwater trunk main in Napoleon Street. Flow from all other lots (Catchments A1 to A6) will discharge via multiple outlet structures to a new detention basin, which will be located on public open space lot 305. The detention basin will discharge via a DN 525 headwall outlet, into the DN600 pipe and a low flow pipe (nominally DN225 @0.5%) will be accommodated in the basin, in order provide better drainage of the basin, so that the basin will be more suitable for recreation.

The stormwater detention basin will be designed and constructed so that peak surface overflows through private property are not increased by the development and thus there is no net worsening,

OFFICES ALSO AT:
- 16 Emu Bay Road, Deloraine, 7304 (03) 6362 2993
- 6 Queen Street, Burnie, 7320 (03) 6431 4400
- 63 Don Road, Devonport, 7310 (03) 6423 6875
- 127 Bathurst Street, Hobart, 7000 (03) 6234 3217
- 6 Freeman Street, Kingston, 7050 (03) 6229 2131
- 8/16 Main Road, Huonville, 7109 (03) 6264 1277

when compared to pre-development conditions, on downstream flooding for critical AEP 1% and 10% storms. Attached is a catchment plan (see Appendix B), along with outputs from the Drains concept SW models, showing the flows for pre-and post-development scenarios for both 1% and 10% AEP events (see Appendix C).

For concept SW modelling, regional infiltration data for initial and continuing losses from ARR Data Hub have been adopted and are not specific to the site. An impervious fraction of 0.5 for residential catchments (A1 to A8) has been adopted which accounts for road corridors, public open spaces and no-build areas. We note in this regard that Napoleon Street was modelled separately with 90% impervious area (R1 to R3). With regard to impervious fraction of 0.5 being used adopted for concept modelling, the site consists of an area of about 20ha, thus at a 0.5 ratio this equates to 10ha of impervious area, new roads will account for 2ha of available impervious area, thus 8ha of impervious area is available for 116 lots or 689sqm per lot. Typically allow for house and driveway coverage of about 400sqm per lot, therefor 0.5 seems conservative. With regard to unit development, additional detention requirements could be conditioned as part of building approvals, on an individual lot basis, if Council deemed it necessary. It should also be noted that the approx. 3ha of the site is for open space or no built area. With these assumptions, the pre and post development flows are summarised in table 1.1 below. Attached in the submission are the concept stormwater outputs from Drains for the pre-development and post development scenarios. 1% AEP overland flow paths are shown in Appendix D.

Table 1.1 Concept Drain modelling

AEP Event	Private Property Overland flow from Napoleon Street (l/s)	Unmade Road Fredrick Street(l/s)
Pre development peak flows		
10%	99	281
1%	280	480
Post development peak flows		
10%	0	763
1%	0	923

2. Water Supply:

The subdivision will be serviced by the Mackinnons Hill Reservoir (TWL 219.5, capacity 7.5ML) via existing water reticulation network. A new internal reticulation system will be provided, typically consisting of DN100 water mains, potentially some DN150 above contour 180m, connecting from DN150 UPVC water main (Asset IDA493548) at the intersection of Phillip Street and Napoleon Street, DN100 UPVC water main (Asset ID A493585) in Napoleon Street nearby Edward Street, and DN150 AC water main (Asset ID A493693) at the intersection of Drummond Street and Napoleon Street, back through the subdivision to DN150 AC water Main (Asset ID A493693) nearby road lot 206 of the proposal plan. Underground connection type is subject to confirmation of existing conditions.

Suitable fire protection coverage will be provided within the subdivision extents.

3. Sewage Disposal:

It is proposed to service the first 30 lots of the subdivision by connecting into the existing gravity sewer system at sewer manhole A535046 and as per SI 2017/00357.

Due to current constraints on the existing system, it was proposed that the developer would install a new sewer pump station, to be located on public open space lot 305 and rising main to discharge as per TasWater requirements, currently at the Perth Sewage Treatment Plant. However, obtaining owner consent, to date, for the proposed alignment of new rising main has proved to be unsuccessful. Therefor it is now proposed to connect additional lots, over and above 30, to the existing gravity system and accordingly contribute to or upgrade the existing system to TasWater's requirement.

Yours faithfully
PDA Surveyors

Received
09.05.2022

Appendix A: Stormwater Modelling Outputs

Figure A1: Detention Basin Storage Capacity vs Elevation

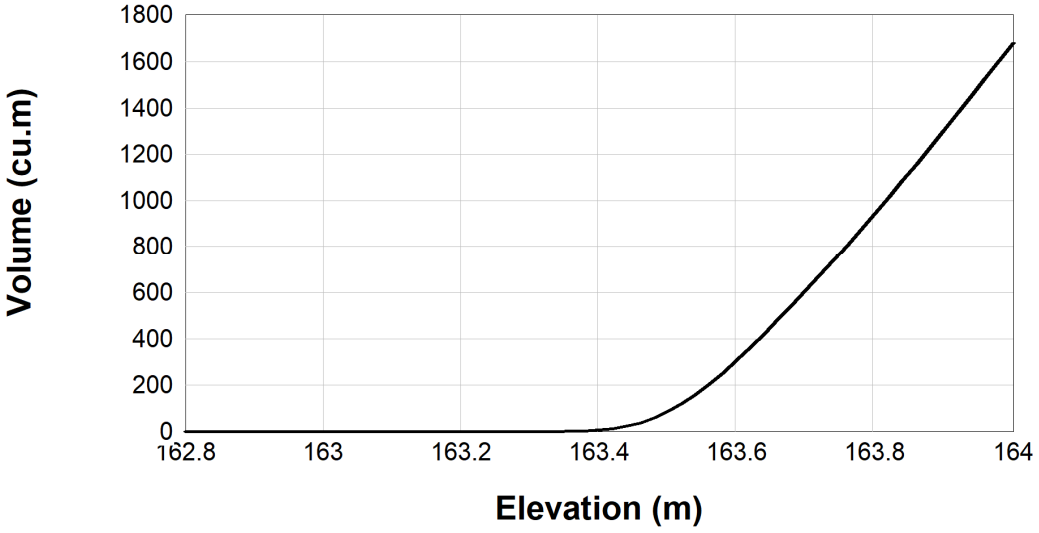
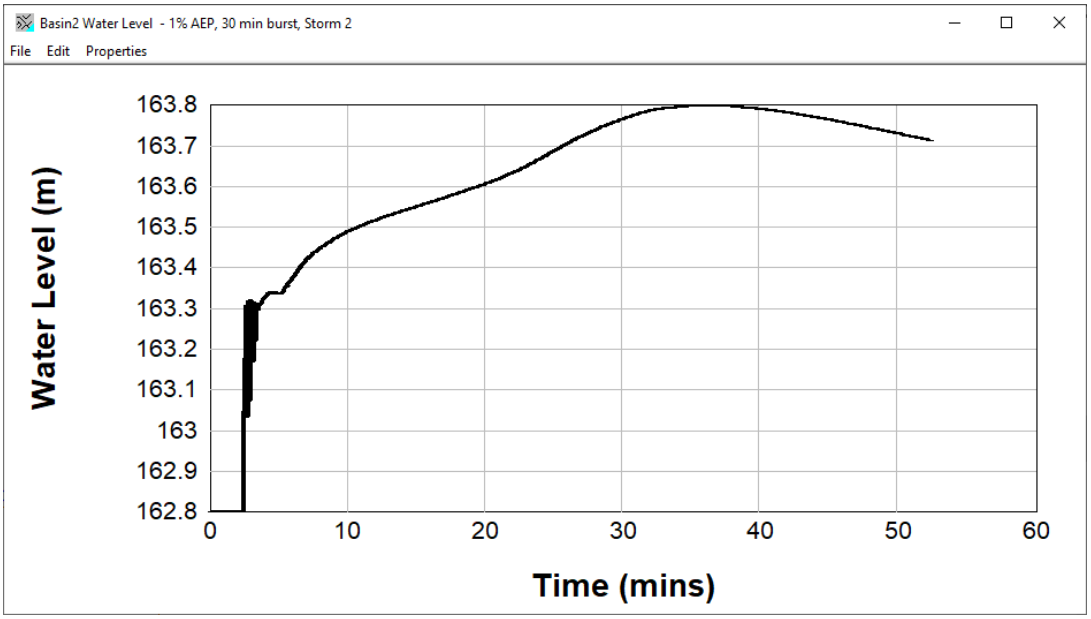


Figure A2: Detention Basin Water Level - 1% AEP Storm



Received
09.05.2022

Figure A3: Post Development Overflow Rate - 1% AEP Storm

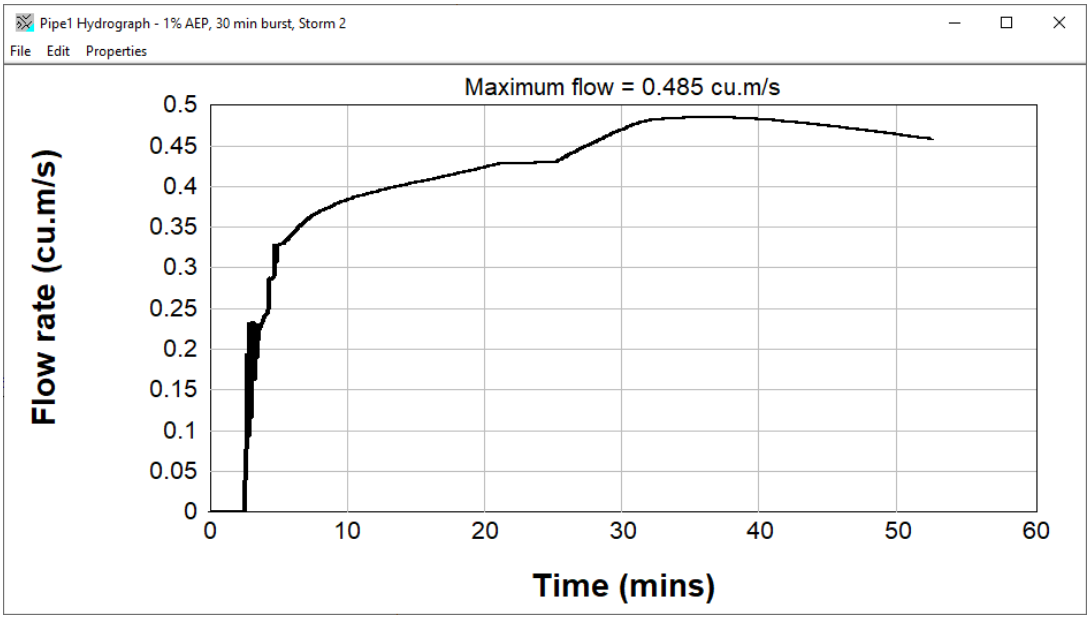


Figure A4: Detention Basin Water Level - 10% AEP Storm

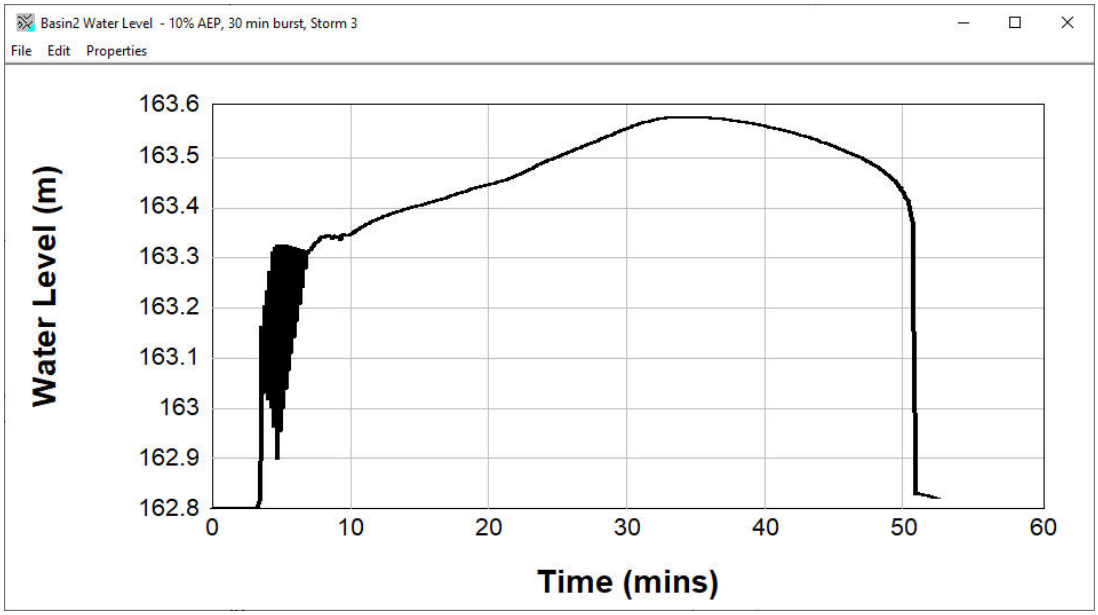
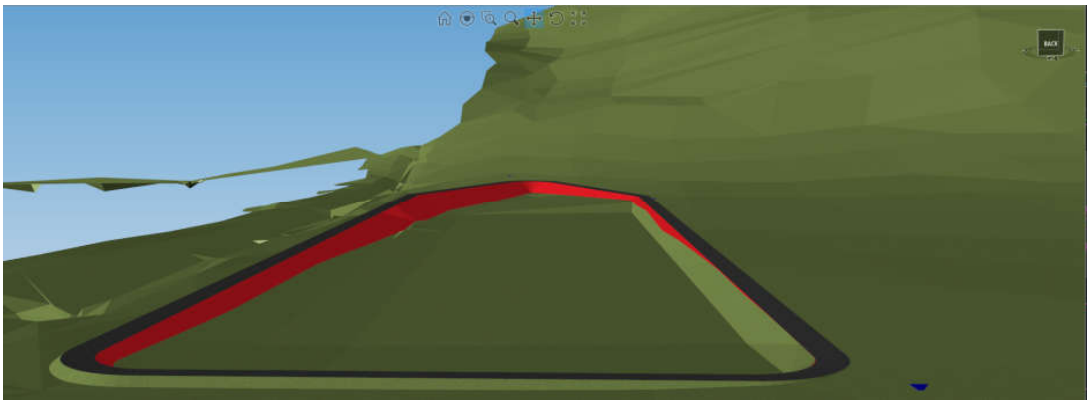
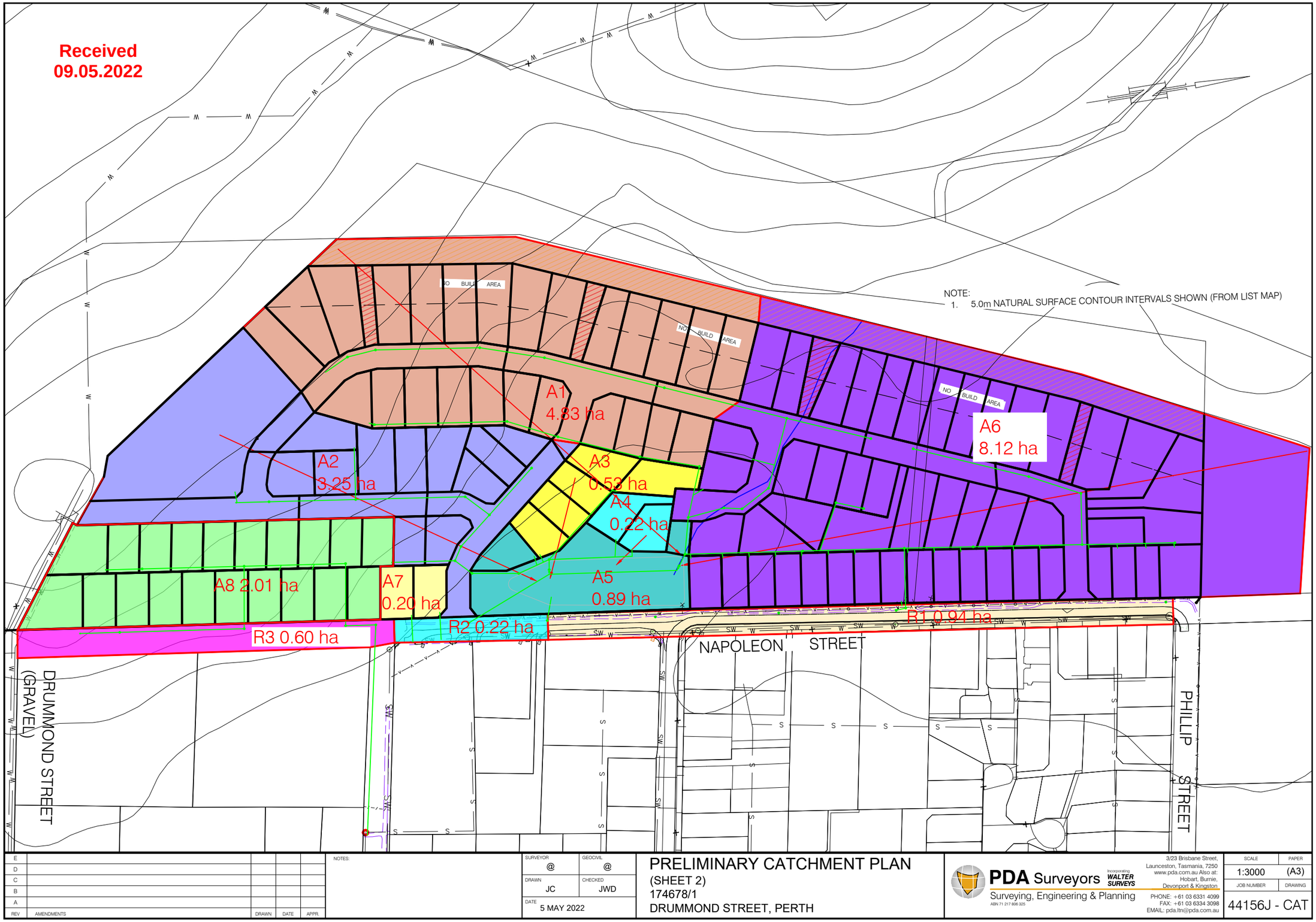


Figure A5: Detention Basin Aerial View From North– 3x Height Exaggeration



Received
09.05.2022

APPENDIX B:CATCHMENT PLAN



APPENDIX C Concept Modelling Drains Outputs

Figure C1: Peak pre-development flows - 10% AEP storm

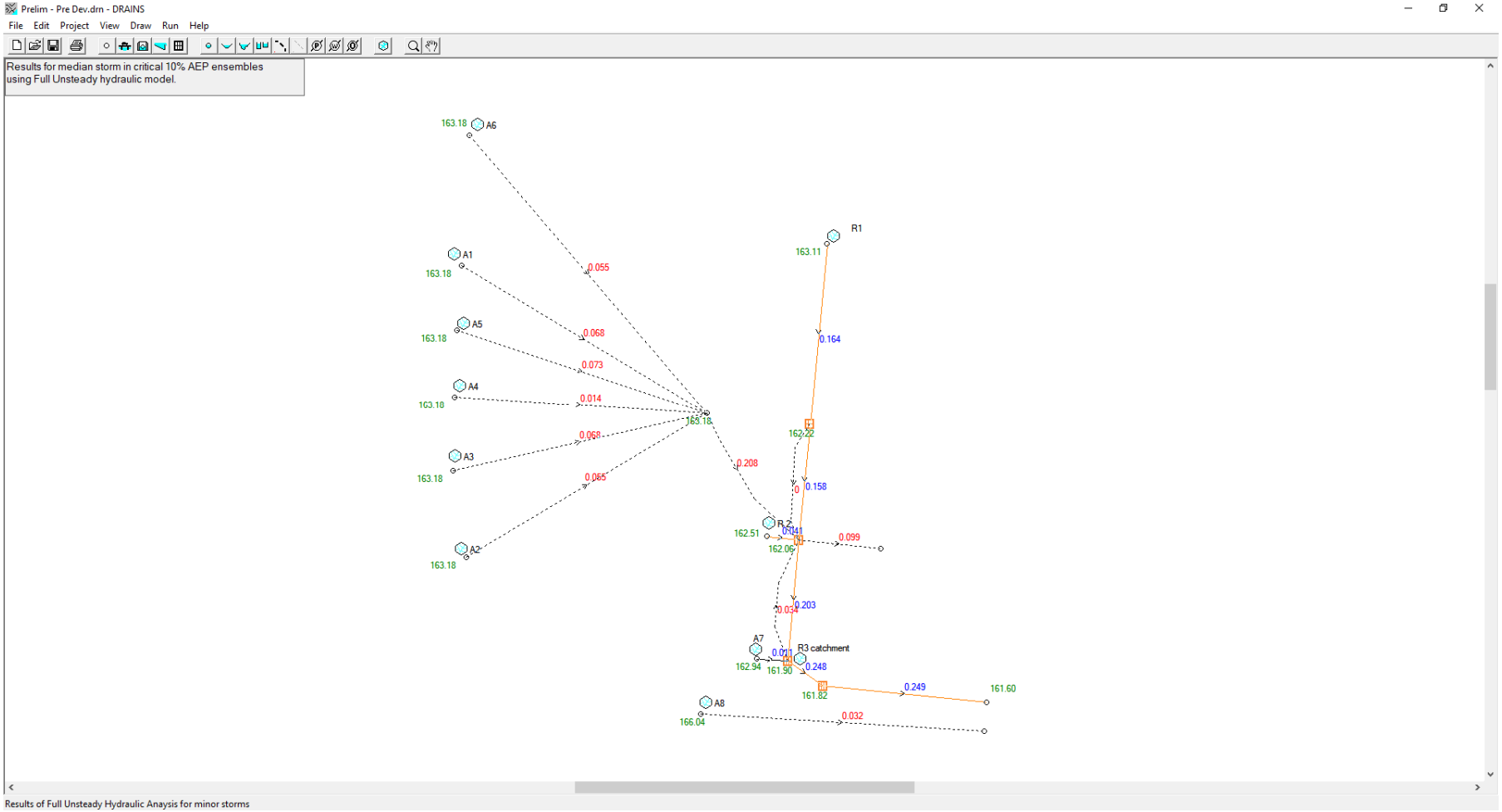
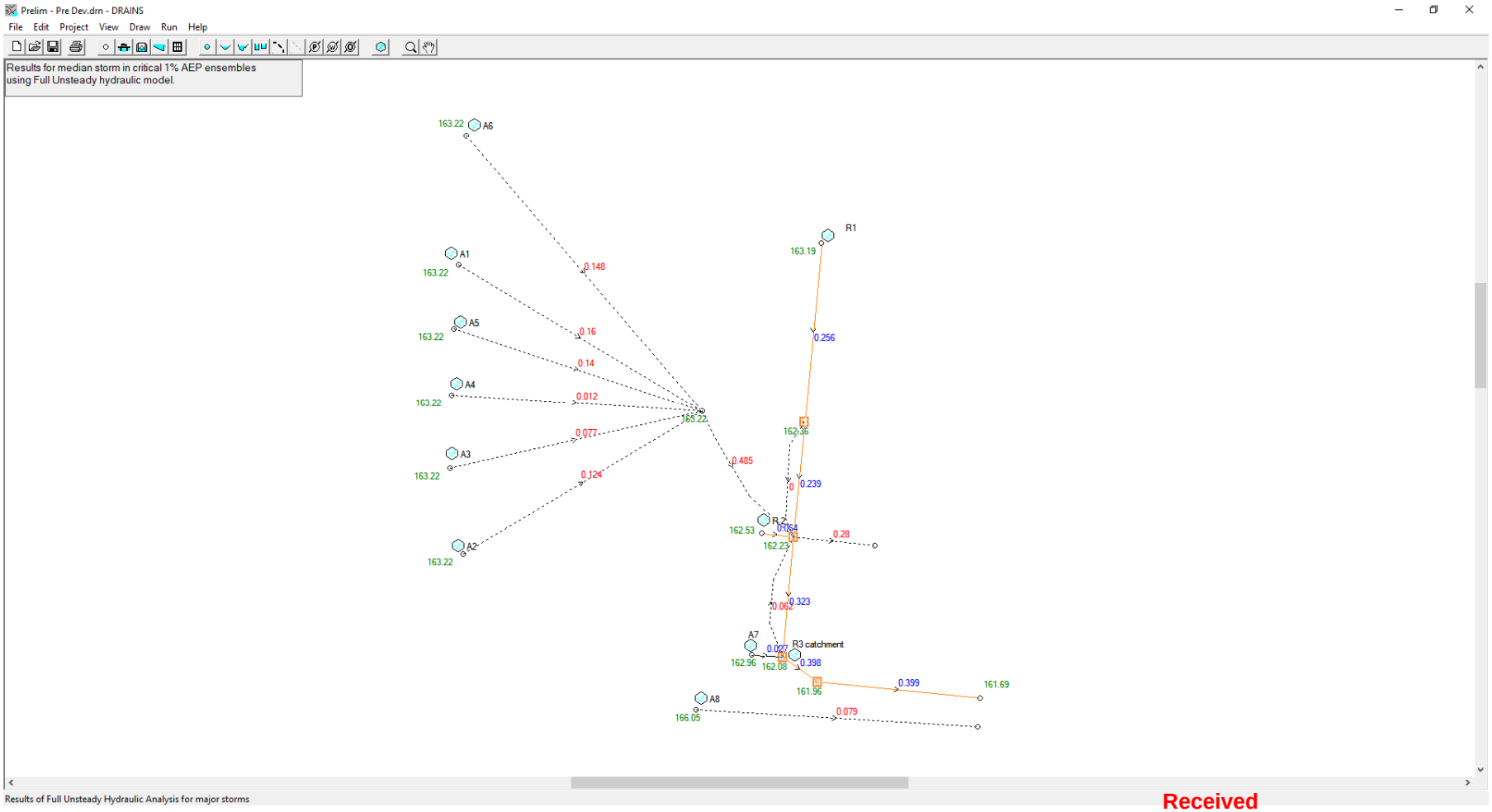
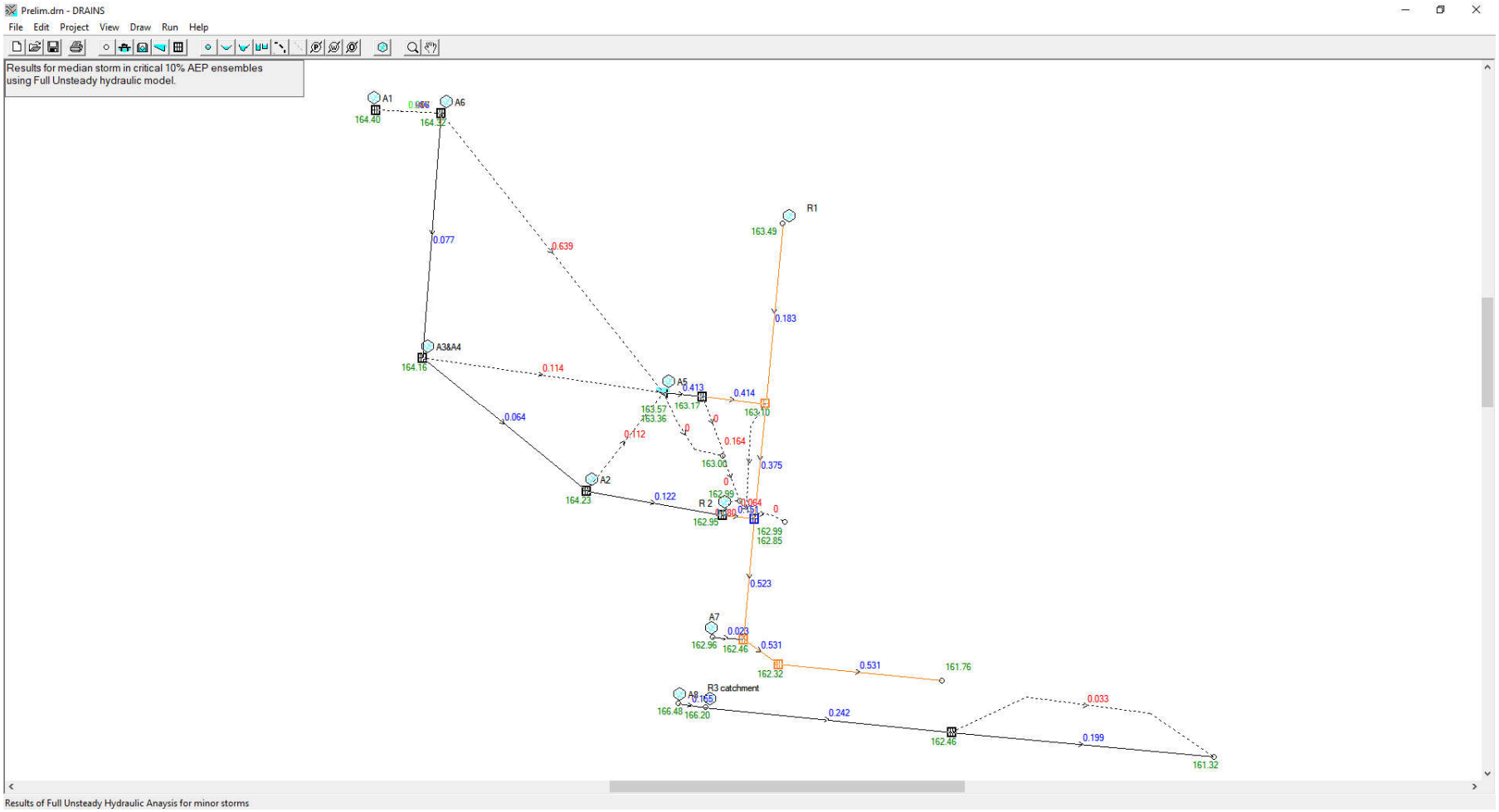


Figure C2: Peak pre-development flows - 1% AEP storm



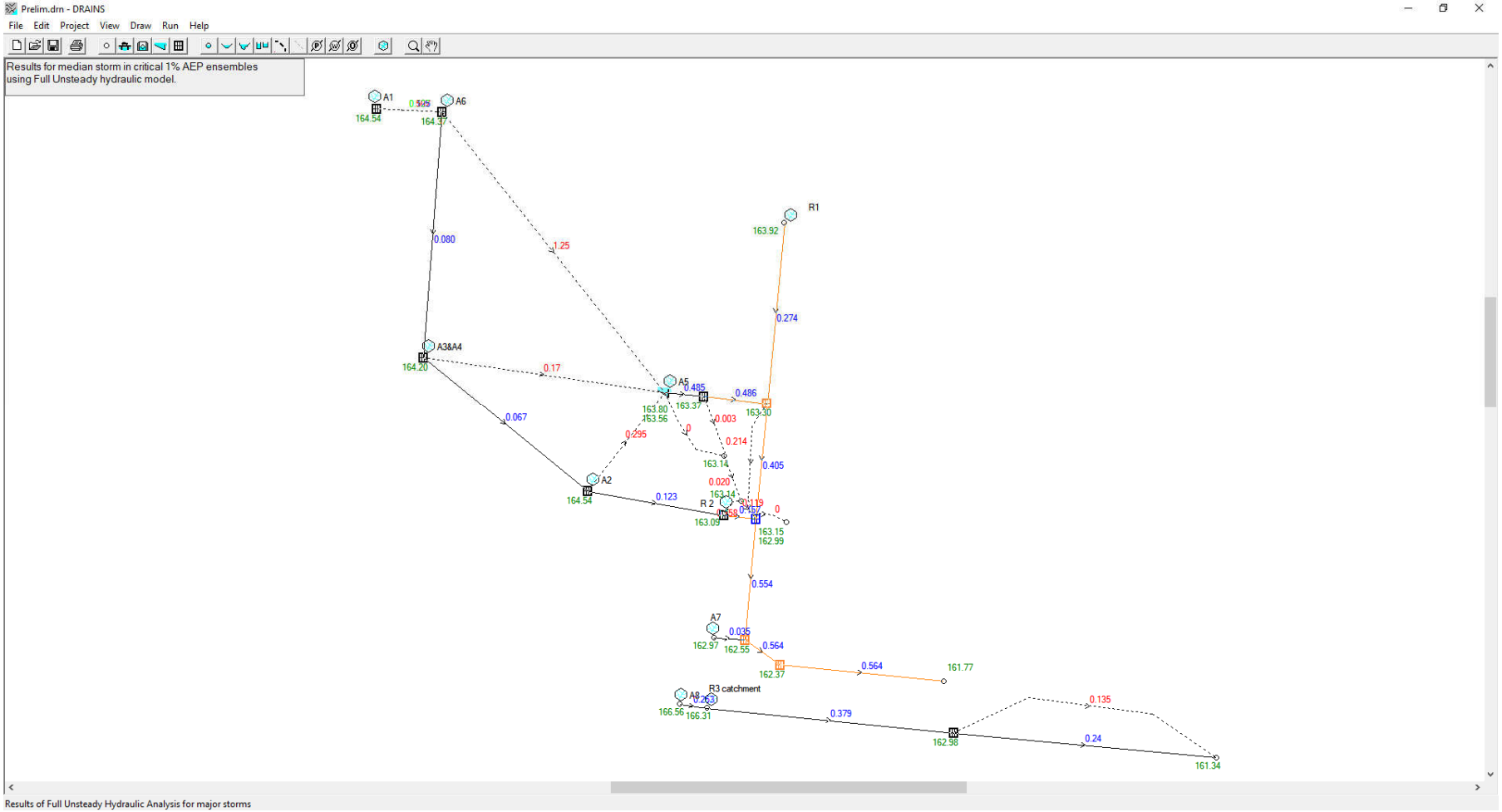
Received
09.05.2022

Figure C3: Peak post development flows - 10% AEP storm



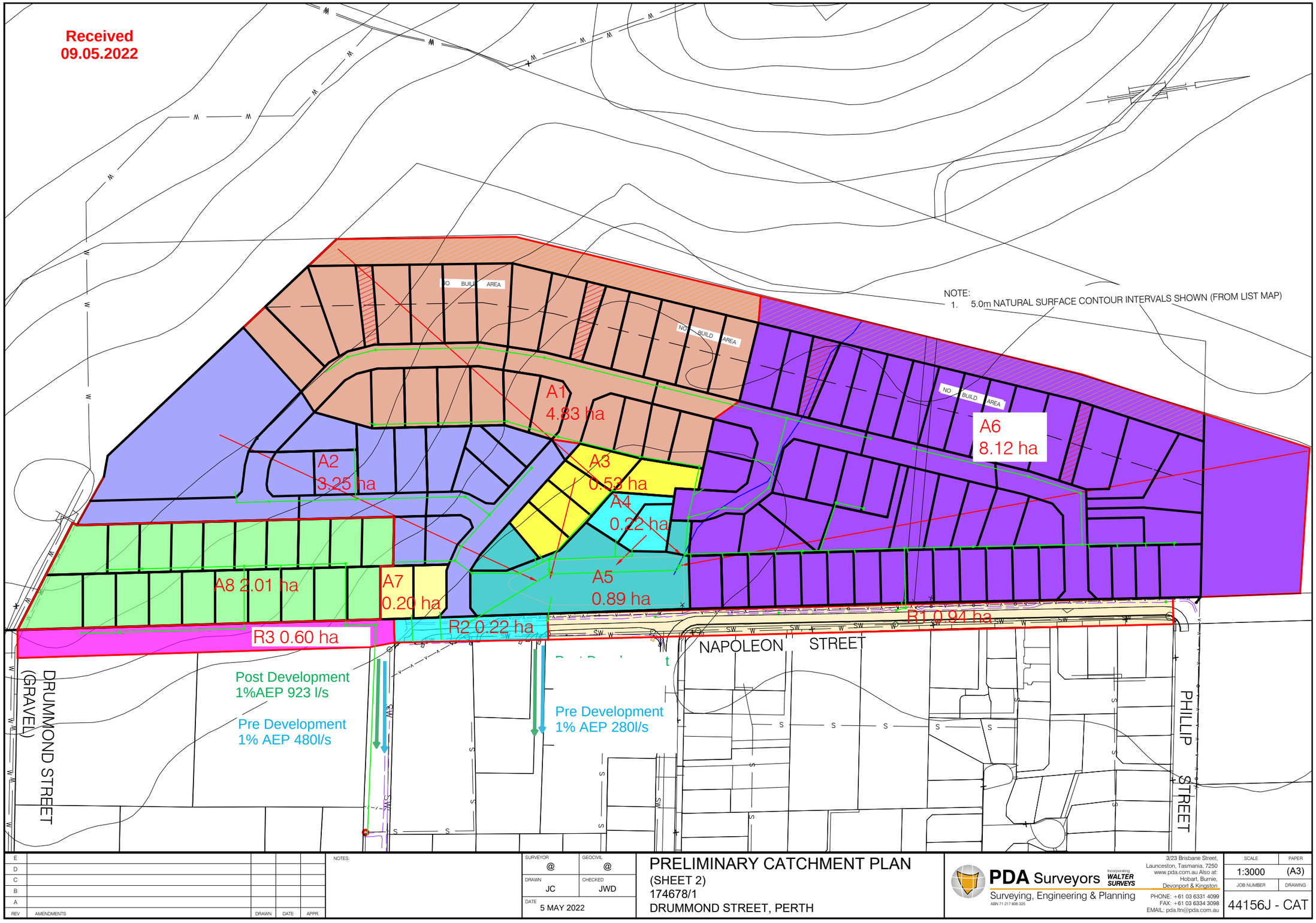
Received
09.05.2022

Figure C4: Peak post development flows - 1% AEP storm

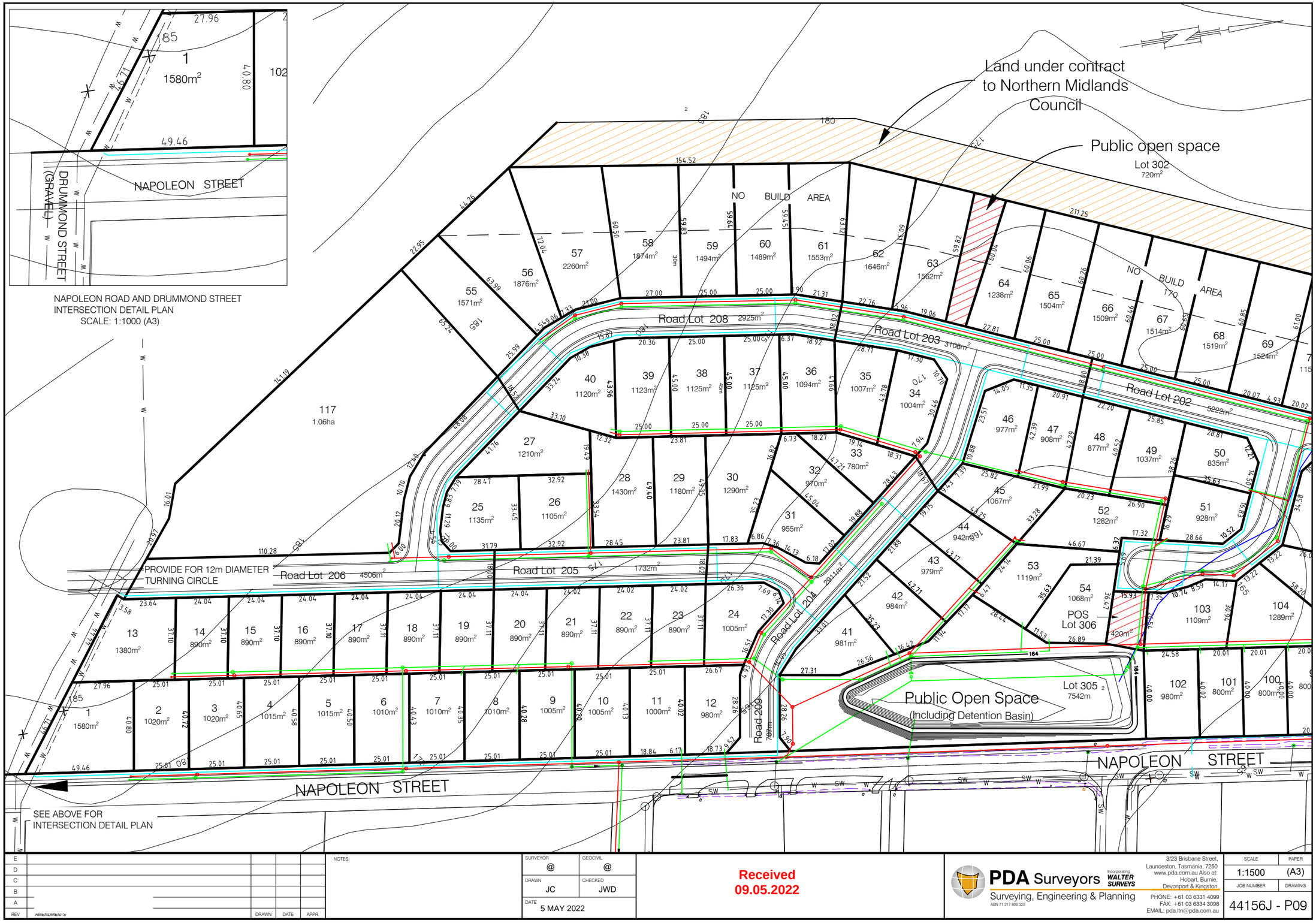


Received
09.05.2022

APPENDIX D:OVERLAND FLOWS 1% AEP



APPENDIX E:Concept Servicing Plan



REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

NOTES:

SURVEYOR	GEOCIVIL
@	@
DRAWN: JC	CHECKED: JWD
DATE: 5 MAY 2022	

Received
09.05.2022

PDA Surveyors
Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325

3/23 Brisbane Street, Launceston, Tasmania, 7250
www.pda.com.au Also at: Hobart, Burnie, Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:1500	(A3)
JOB NUMBER	DRAWING
44156J - P09	

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

NOTES:

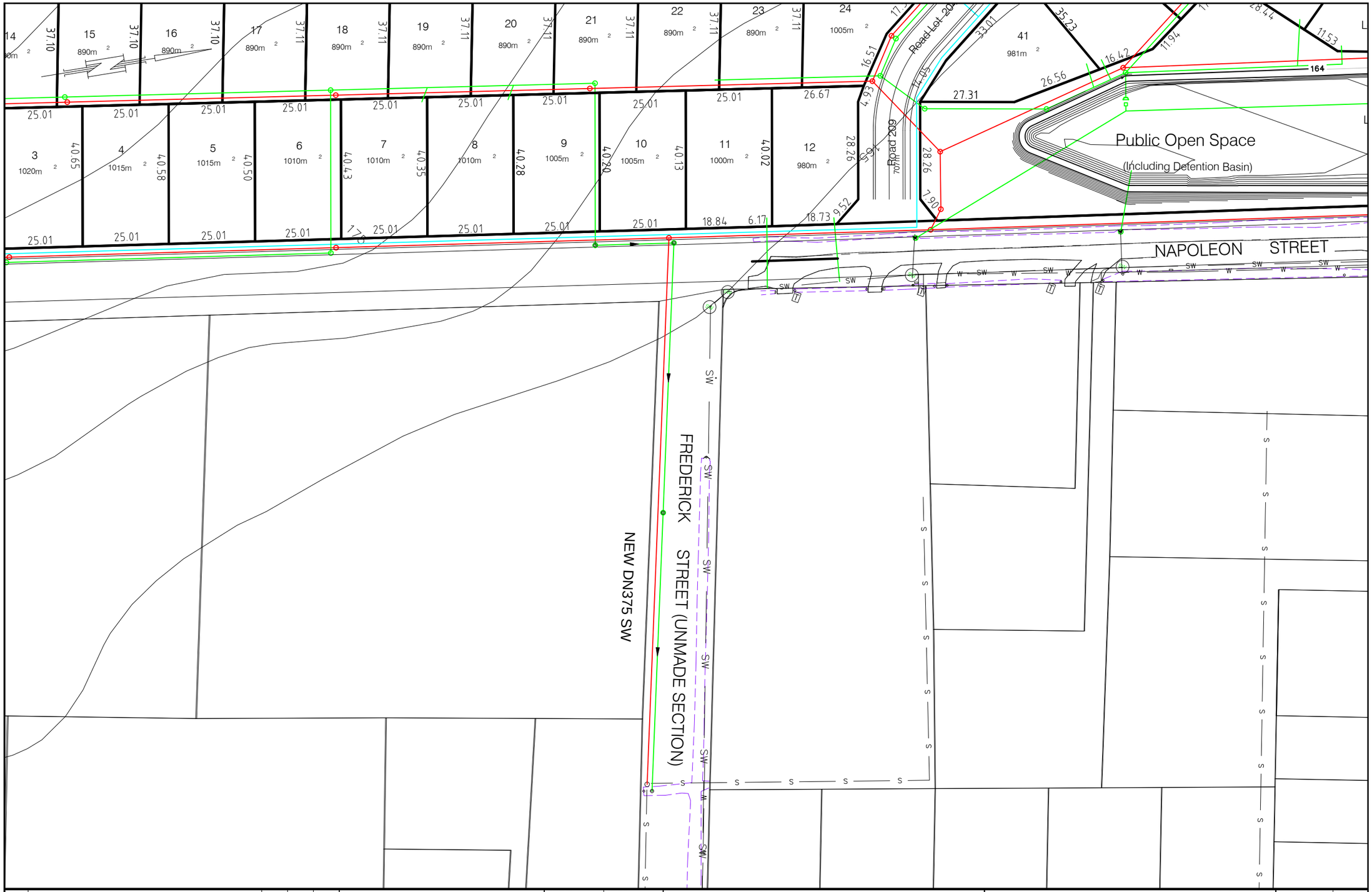
SURVEYOR	GEOCIVIL
@	@
DRAWN	CHECKED
JC	JWD
DATE	
5 MAY 2022	

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325

3/23 Brisbane Street,
Launceston, Tasmania, 7250
www.pda.com.au Also at:
Hobart, Burnie,
Devonport & Kingston

PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:1500	(A3)
JOB NUMBER	DRAWING
44156J - P09	



REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

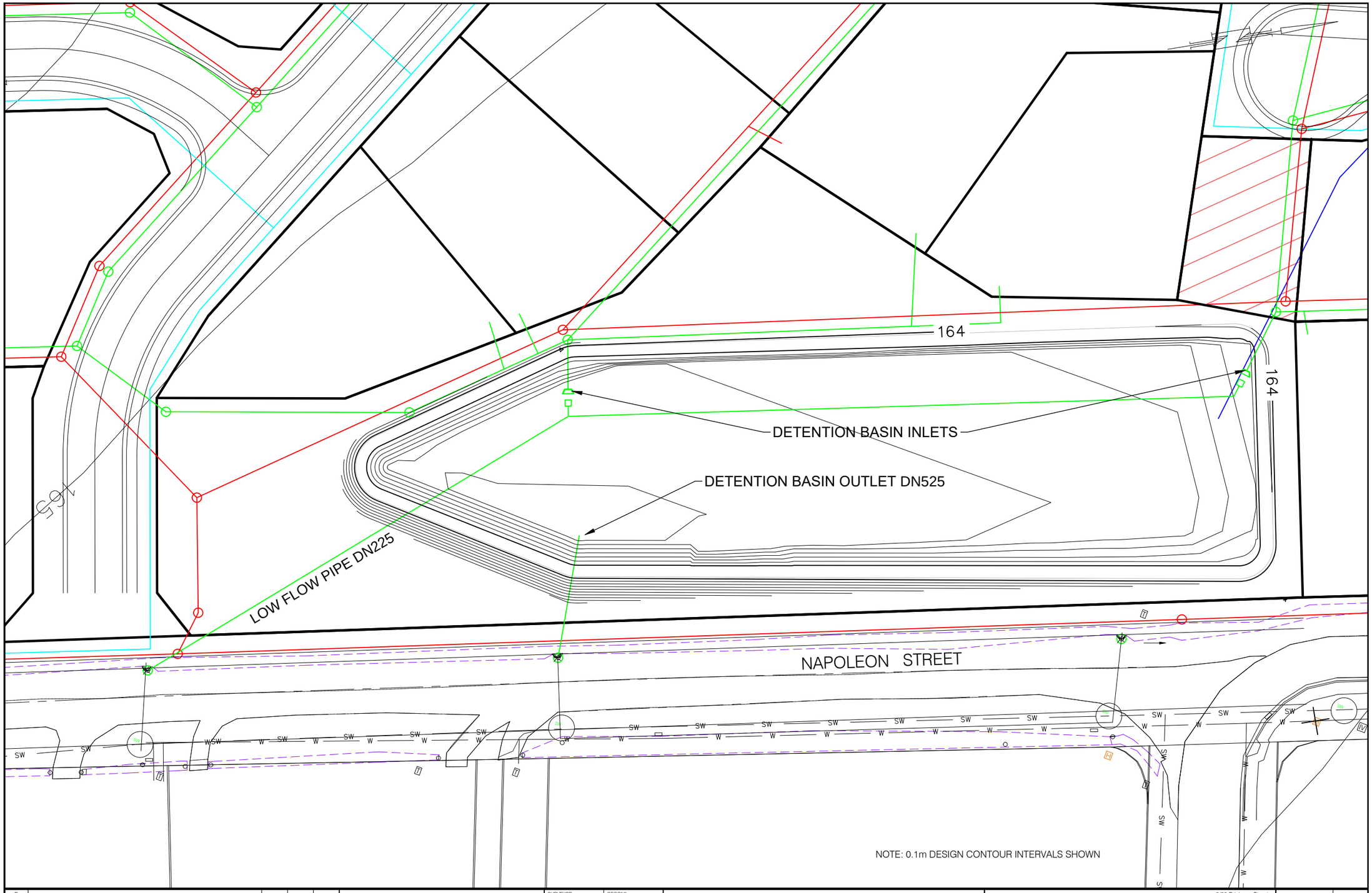
NOTES:

SURVEYOR	GEOCIVIL
@	@
DRAWN: JC	CHECKED: JWD
DATE: 5 MAY 2022	

Received 09.05.2022

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325
3/23 Brisbane Street, Launceston, Tasmania, 7250
www.pda.com.au Also at: Hobart, Burnie, Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:1000	(A3)
JOB NUMBER	DRAWING
44156J - P09	



REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

NOTES:

SURVEYOR	GEOCIVIL
@	@
DRAWN: JC	CHECKED: CW
DATE: 5 MAY 2022	

Received 09.05.2022

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325
3/23 Brisbane Street, Launceston, Tasmania, 7250
www.pda.com.au Also at: Hobart, Burnie, Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:500	(A3)
JOB NUMBER	DRAWING
44156J - P09	

APPENDIX F MIDLANDS HIGHWAY DRAINAGE

Received
09.05.2022

Karen Jenkins

From:	Allan Brooks <allan.brooks@pda.com.au>
Sent:	Monday, 9 May 2022 1:39 PM
To:	NMC Planning
Cc:	John Dent
Subject:	RE: Additional information required - CT 174678/1 Drummond Street, Perth - 116 Lot Subdivision
Attachments:	Servicing Report 6May22 inc attachments.pdf; AdditionalInformationRequest 6 April 2022.pdf

Hi Paul

Please find enclosed updated servicing report to address AIR 6/4/2022.

Report has been amended to address AIR as follows.

Section 1 of the service report has been amended to clearly explain the design philosophy with regard to management of stormwater flow to reduce overland flow from Napoleon street through private property. Concept modelling outputs have also been included(Appendix C) to show how the stormwater system is operating in Napoleon Street. We have also noted diameters of pipes used for concept modelling at critical points and the Drains outputs show hydraulic grade line levels. Any more detailed design at this stage(ie pipe sizing and levels within the development) is not considered beneficial given the concept stage of stormwater modelling and prior to agreement with Council of the design approach adopted, ie the increasing of peak flows within unmade road in Frederick Street to reduce peak flows on existing overland flow path through private property.

Drawing P09 has been updated to show a separate low flow pipe system for improved amenity of basin and diameters of new Stormwater(SW) pipe used in concept SW modelling. Appendix D shows a catchment plan with directional arrows for overland flow paths used in concept SW modelling and major overland flow paths from Napoleon Street.

Appendix F show photos of Perth Bypass drainage, which directs flow away from development site.

Regards,

PDA
SURVEYORS, ENGINEERS & PLANNERS
www.pda.com.au

Allan Brooks MPlanning, BAppSci (ME)
Planner

Phone: +61 (03) 6331 4099 | Mobile: 0448 453 971
allan.brooks@pda.com.au
PO Box 284, 3/23 Brisbane Street, Launceston TAS 7250

From: NMC Planning <planning@nmc.tas.gov.au>
Sent: Wednesday, 6 April 2022 4:52 PM
To: Allan Brooks <allan.brooks@pda.com.au>
Subject: Additional information required - CT 174678/1 Drummond Street, Perth - 116 Lot Subdivision

Please see the attached letter.

Regards,

Paul Godier

1

Our ref: PLN-22-0037

NORTHERN MIDLANDS COUNCIL

27 May 2022

Allan Brooks
PO Box 284
LAUNCESTON TAS 7250

By email: allan.brooks@pda.com.au

Dear Mr Brooks

Planning Application PLN-22-0037- Additional Information Required for 116 Lot Subdivision at Lot 1 Drummond Street (174678/1) & Napoleon St and Frederick St road reserves, Perth

Thank you for the updated servicing report provided on 9 May 2022.

Council's hydrologist, Cameron Oakley has reviewed the information. As a result, the following is advised and requested.

The assumed fraction impervious may be low, based on the likelihood that a large proportion of the blocks could hold multiple dwellings.

Breaking down the residential areas and roads with open space naturestrips determines a fraction impervious for the overall catchment around 0.52, assuming lots are developed with 70% impervious.

If the lots were just for houses the impervious fraction would drop considerably, but there is a risk most of the lots could be units. For example if an 80% impervious area is assumed for the lots, then that increases the overall fraction to 0.58, which would make a different to the basin sizing.

Please revise the 50% impervious assumption, and increase it to 70% for the residential lots, unless a Part 5 Agreement is placed on the titles which eliminates the possibility of multiple dwellings.

The report suggests that even if the assumed runoff levels are low, detention on a lot to lot scale can be required. Council officers have advised on similar proposals that lot based detention will not be accepted.

Catchment A2 (Appendix D in the report) has several lots fronting Napoleon Street. It is suggested that these lots will be able to drain to the detention basin. The lots fall to the road it is not clear how this could be achieved.

The basin has been sized at 2ML. No indicative dimensions for it are provided. It is assumed there would be no issues fitting this onto the available space. When the detail design is provided, Council will need to advise of the minimum grades, offsets etc to make sure it is maintainable.

A permit for dam works may be required under the Water Management Act 1999 from the Department of Natural Resources and Environment Tasmania.

Request comment on culverts linking the highway to the subdivision. Photos were provided which seem to show it is not linked, but formal comment on this is required

Please provide surface levels, inverts, diameters of pipework as requested

Catchment A2 is shown as discharging to the detention basin. 100 year flows will flow down the road. It is not clear how overland flows from here will enter the basin as stated, as the basin appears raised on the western side, relative to the overland flow path. This flow path is required, otherwise it will go through private property

The application includes works in Napoleon Street (land maintained by Council) and the Frederick Street reserved road (Crown Land).

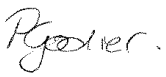
The General Manager has advised that the above information is required before he will sign the landowner consent section of the application form and provide written consent to the making of the application as require d by section 52 (1B) of the *Land Use Planning and Approvals Act 1993.*

To form a valid application, landowner consent from the General Manager and the Minister of the Crown administering the Frederick Street reserved road are required.

Please send any emails to planning@nmc.tas.gov.au including the reference **PLN-22-0037**.

If you have any questions, please contact me on 6397 7301, or e-mail planning@nmc.tas.gov.au

Yours sincerely



Paul Godier
Senior Planner

Received
17.06.2022

LAUNCESTON
J.W. Dent, OAM, B. SURV. (Tas.), M.SSSI. (Director)
M.B. Reid, B. GEOM.(HONS) (Tas.), M.SSSI M.AIPM (Associate)
HOBART
C.M. Terry, B. SURV. (Tas.), M.SSSI. (Director)
H. Clement, B. SURV. (Tas.), M.SSSI (Director)
M.S.G. Denholm, B. GEOM. (Tas.), M.SSSI (Director)
T.W. Walter, Dip. Surv & Map; (Director)
A.M. Peacock, B. APP. SC. (SURV), M.SSSI. (Consultant)
D. Panton, B.E. M.I.E. AUST., C.P.ENG. (Consultant)
A. Collins, Ad. Dip. Surv & Map, (Senior Associate)
L.H. Kiely, Ad. Dip. Civil Eng, Cert IV I.T., (Associate)
KINGSTON
A.P. (Lex) McIndoe, B. SURV. (Tas.), M.SSSI. (Director)
BURNIE/DEVONPORT
A.J. Hudson, B. SURV. (Tas.), M.SSSI. (Director)
A.W. Eberhardt, B. GEOM. (Tas.), M.SSSI (Director)

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325

PO Box 284 (3/23 Brisbane Street)
Launceston, Tasmania, 7250
Phone (03) 6331 4099

ABN 71 217 806 325
Email: pda.ltn@pda.com.au
www.pda.com.au

Our Ref: 44156

14 June 2022

PLANNING APPLICATION PLN-22-0037 - 116 Lot Subdivision at Lot 1 Drummond Street, Perth
SERVICING REPORT

Reference is made to the previous revision of the servicing report dated 20 December 2022 and to the AIR's from Council dated 06 April 2022 & 27 May 2022.

1. **Stormwater Drainage:**
The site is located between Napoleon Street and the Midland Highway Perth Link Road. The Midland Highway drainage design has been adopted from *MIDLAND HIGHWAY Perth Link Roads Submission to the Parliamentary Standing Committee on Public Works ver 1*. Stormwater drainage from the highway pavement and Mackinnons Hill is diverted through culverts and table drains at the base of the highway road embankments into the existing waterway. We confirm that this stormwater is not discharged into the subdivision drainage network. (see photos Appendix F). There is no link from the highway drainage or culvert system to the land in question.

The site is fairly flat with catchment size of approx. 20 Ha. The Catchment Plan in Appendix B shows the catchment breakdown. Currently flow from the development site discharges onto Napoleon Street and then into Council's existing subsurface drainage network, which in turn discharges into an unmade section of Frederick Street into an existing open channel. When the subsurface network is at capacity, surface flow discharges from Napoleon Street via the existing overland flow path through private property. (33,33A Napoleon Street).

Post development, the stormwater (SW) system will be designed to retain flow within road reserve by providing additional capacity and detention to maximise the efficiency of the subsurface drainage network. This will enable flow to discharge onto road reserve in Frederick Street, instead of as surface flow via existing overland flow path through private property. Thus, post development, flow via existing overland flow path from Napoleon Street, though private property, will be reduced.

To achieve the above improvement, it is proposed to divert some flow from the existing subsurface system in Napoleon Street, directly to the Frederick Street system, to thus reduce load and free capacity in the existing subsurface DN600 network in Napoleon Street. Therefore catchment A8 and R3 will discharge via a new DN375 stormwater main to outlet directly into the existing open drain in the unmade section of Frederick Street. Catchment A7 will discharge to the existing DN600 stormwater trunk main in Napoleon Street. Flow from all other lots (Catchments A1 to A6) will discharge via multiple outlet structures to a new detention basin, which will be located on public open space lot 305. The detention basin will discharge via a DN 525 headwall outlet, into the DN600 pipe and a low flow pipe (nominally DN225 @0.5%) will be accommodated in the basin, in order provide better drainage of the basin, so that the basin will be more suitable for recreation.

OFFICES ALSO AT:
- 16 Emu Bay Road, Deloraine, 7304 (03) 6362 2993
- 6 Queen Street, Burnie, 7320 (03) 6431 4400
- 63 Don Road, Devonport, 7310 (03) 6423 6875
- 127 Bathurst Street, Hobart, 7000 (03) 6234 3217
- 6 Freeman Street, Kingston, 7050 (03) 6229 2131
- 8/16 Main Road, Huonville, 7109 (03) 6264 1277

The stormwater detention basin will be designed and constructed so that peak surface overflows through private property are not increased by the development and thus there is no net worsening, when compared to pre-development conditions, on downstream flooding for critical AEP 1% and 10% storms. Attached is a catchment plan (see Appendix B), along with outputs from the Drains concept SW models, showing the flows for pre-and post-development scenarios for both 1% and 10% AEP events (see Appendix C).

For concept SW modelling, regional infiltration data for initial and continuing losses from ARR Data Hub have been adopted and are not specific to the site. An impervious fraction of 0.7 for residential catchments (A1 to A8) has been adopted which accounts for road corridors, public open spaces and no-build areas. We note in this regard that Napoleon Street was modelled separately with 90% impervious area (R1 to R3). With regard to impervious fraction of 0.7 being used adopted for concept modelling, the site consists of an area of about 20ha, thus at a 0.7 ratio this equates to 14ha of impervious area, new roads will account for 2ha of available impervious area, thus 8ha of impervious area is available for 116 lots or 689sqm per lot. Typically allow for house and driveway coverage of about 400sqm per lot, therefor 0.7 seems conservative. With regard to unit development, additional detention requirements could be conditioned as part of building approvals, on an individual lot basis, if Council deemed it necessary. It should also be noted that the approx. 3ha of the site is for open space or no built area. With these assumptions, the pre and post development flows are summarised in table 1.1 below. Attached in the submission are the concept stormwater outputs from Drains for the pre-development and post development scenarios. 1% AEP overland flow paths are shown in Appendix D.

Table 1.1 Concept Drain modelling

AEP Event	Private Property Overland flow from Napoleon Street (l/s)	Unmade Road Frederick Street(l/s)
Pre development peak flows		
10%	99	281
1%	280	480
Post development peak flows		
10%	0	756
1%	42	860

2. **Water Supply:**
The subdivision will be serviced by the Mackinnons Hill Reservoir (TWL 219.5, capacity 7.5ML) via existing water reticulation network. A new internal reticulation system will be provided, typically consisting of DN100 water mains, potentially some DN150 above contour 180m, connecting from DN150 UPVC water main (Asset IDA493548) at the intersection of Phillip Street and Napoleon Street, DN100 UPVC water main (Asset ID A493585) in Napoleon Street nearby Edward Street, and DN150 AC water main (Asset ID A493693) at the intersection of Drummond Street and Napoleon Street, back through the subdivision to DN150 AC water Main (Asset ID A493693) nearby road lot 206 of the proposal plan. Underground connection type is subject to confirmation of existing conditions.

Suitable fire protection coverage will be provided within the subdivision extents.

3. **Sewage Disposal:**
It is proposed to service the first 30 lots of the subdivision by connecting into the existing gravity sewer system at sewer manhole A535046 and as per SI 2017/00357.

Due to current constraints on the existing system, it was proposed that the developer would install a new sewer pump station, to be located on public open space lot 305 and rising main to discharge as per TasWater requirements, currently at the Perth Sewage Treatment Plant. However, obtaining owner consent, to date, for the proposed alignment of new rising main has proved to be unsuccessful. Therefor it is now proposed to connect additional lots, over and above 30, to the existing gravity system and accordingly contribute to or upgrade the existing system to TasWater's requirement.

Received
17.06.2022

Yours faithfully
PDA Surveyors

Received
17.06.2022

Appendix A: Stormwater Modelling Outputs

Figure A1: Detention Basin Storage Capacity vs Elevation

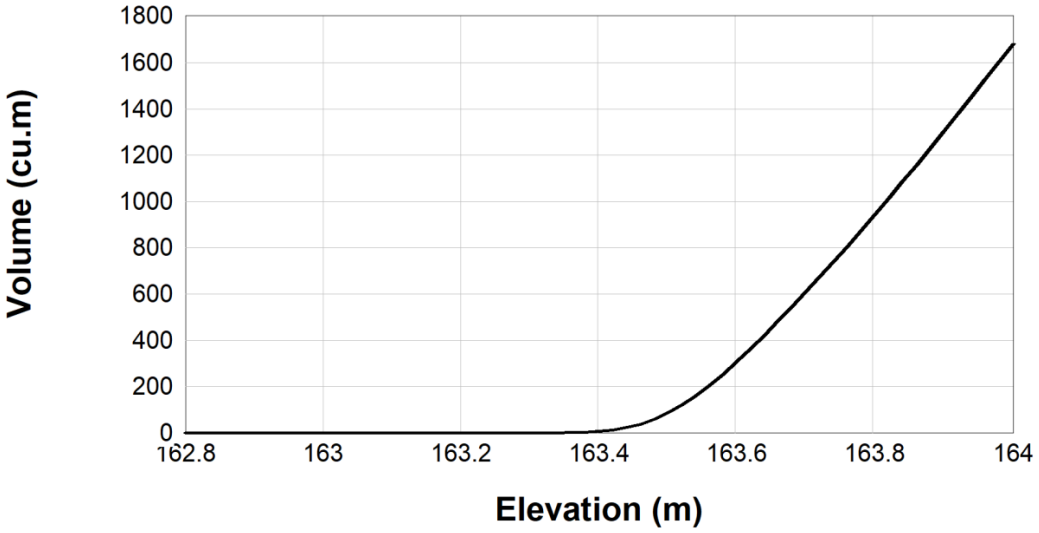
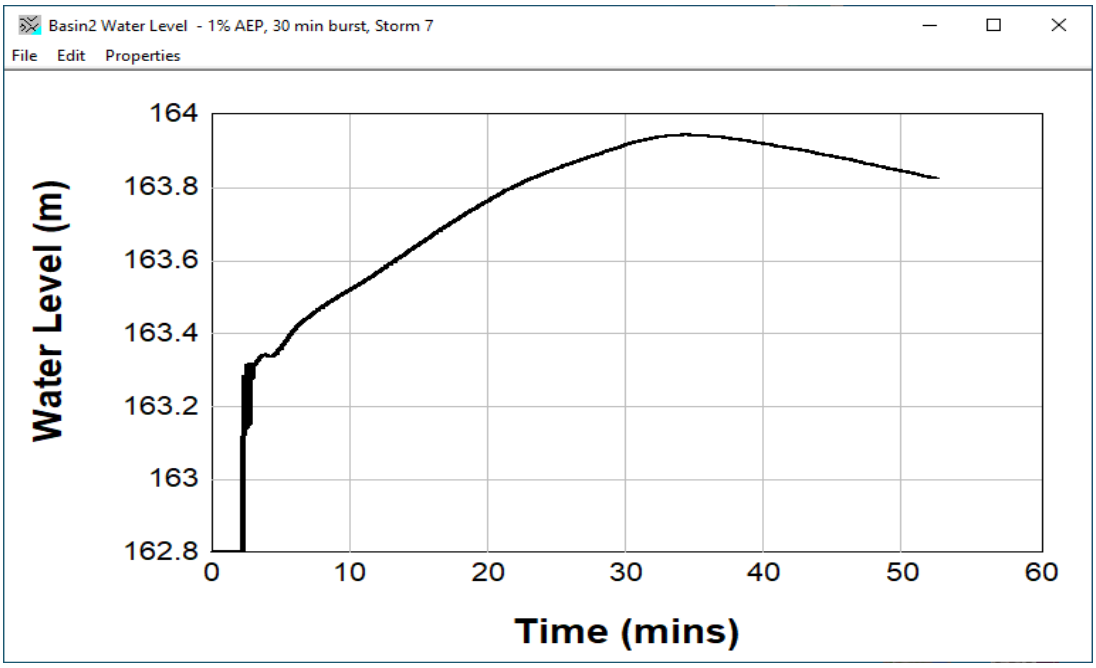


Figure A2: Detention Basin Water Level - 1% AEP Storm



Received
17.06.2022

Figure A3: Post Development Overflow Rate - 1% AEP Storm

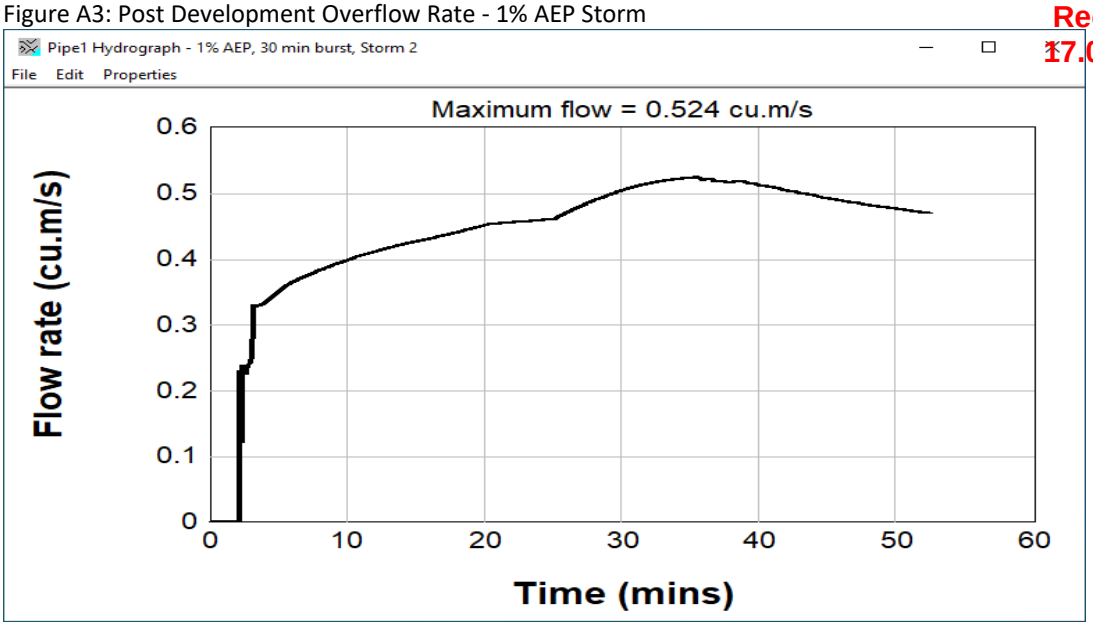


Figure A4: Detention Basin Water Level - 10% AEP Storm

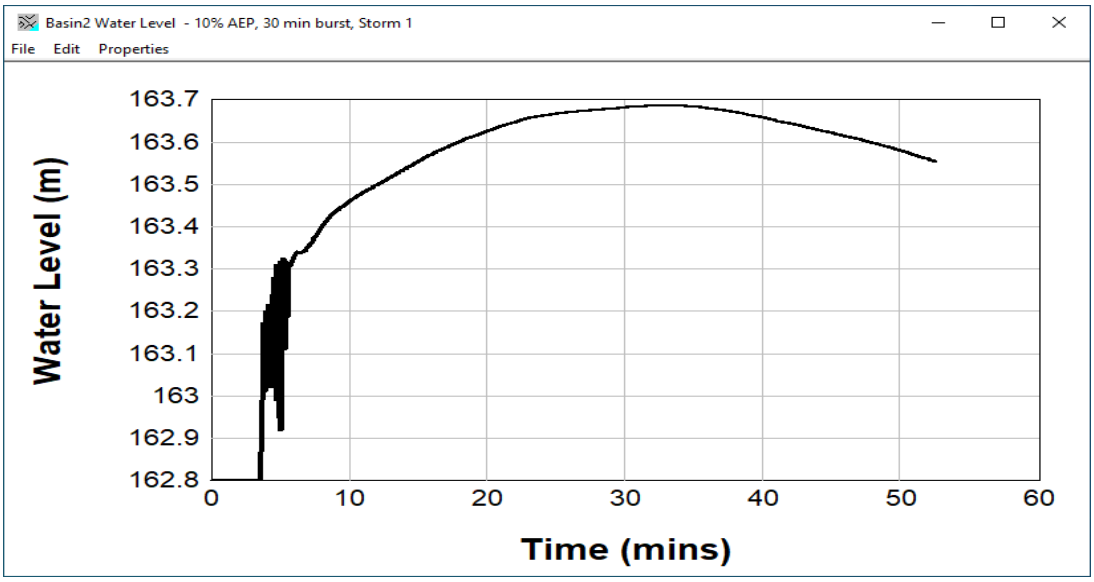
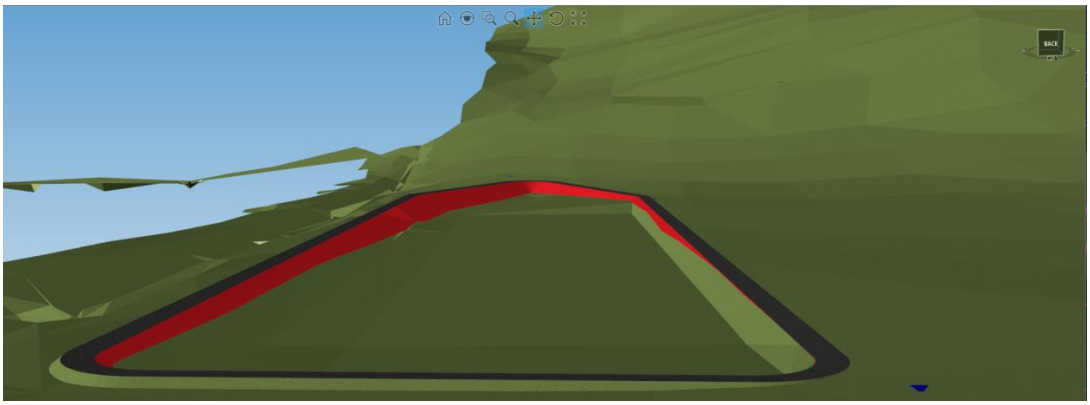


Figure A5: Detention Basin Aerial View From North– 3x Height Exaggeration



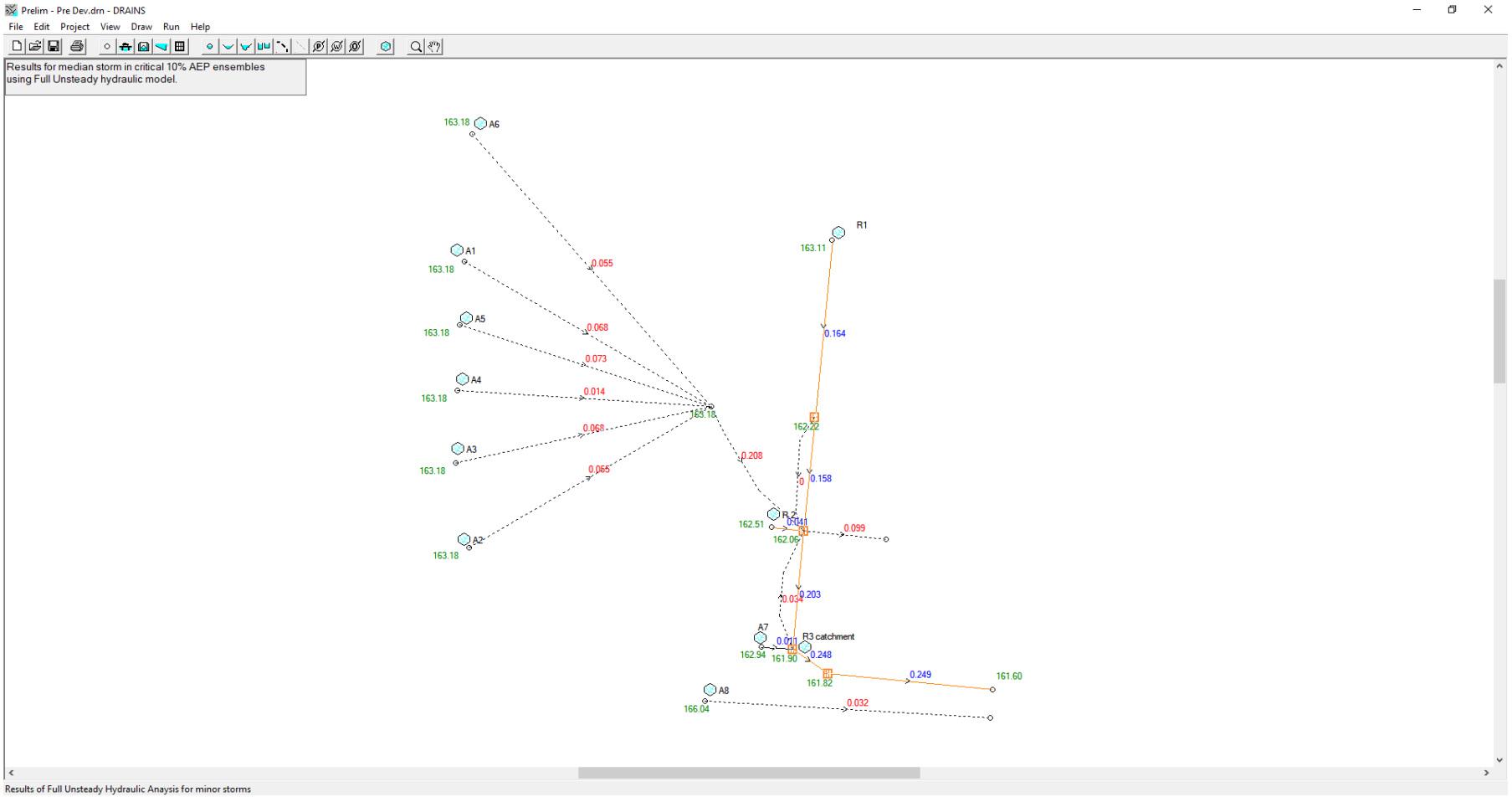
Appendix B: Catchment Plan

Received
17.06.2022

Received
17.06.2022

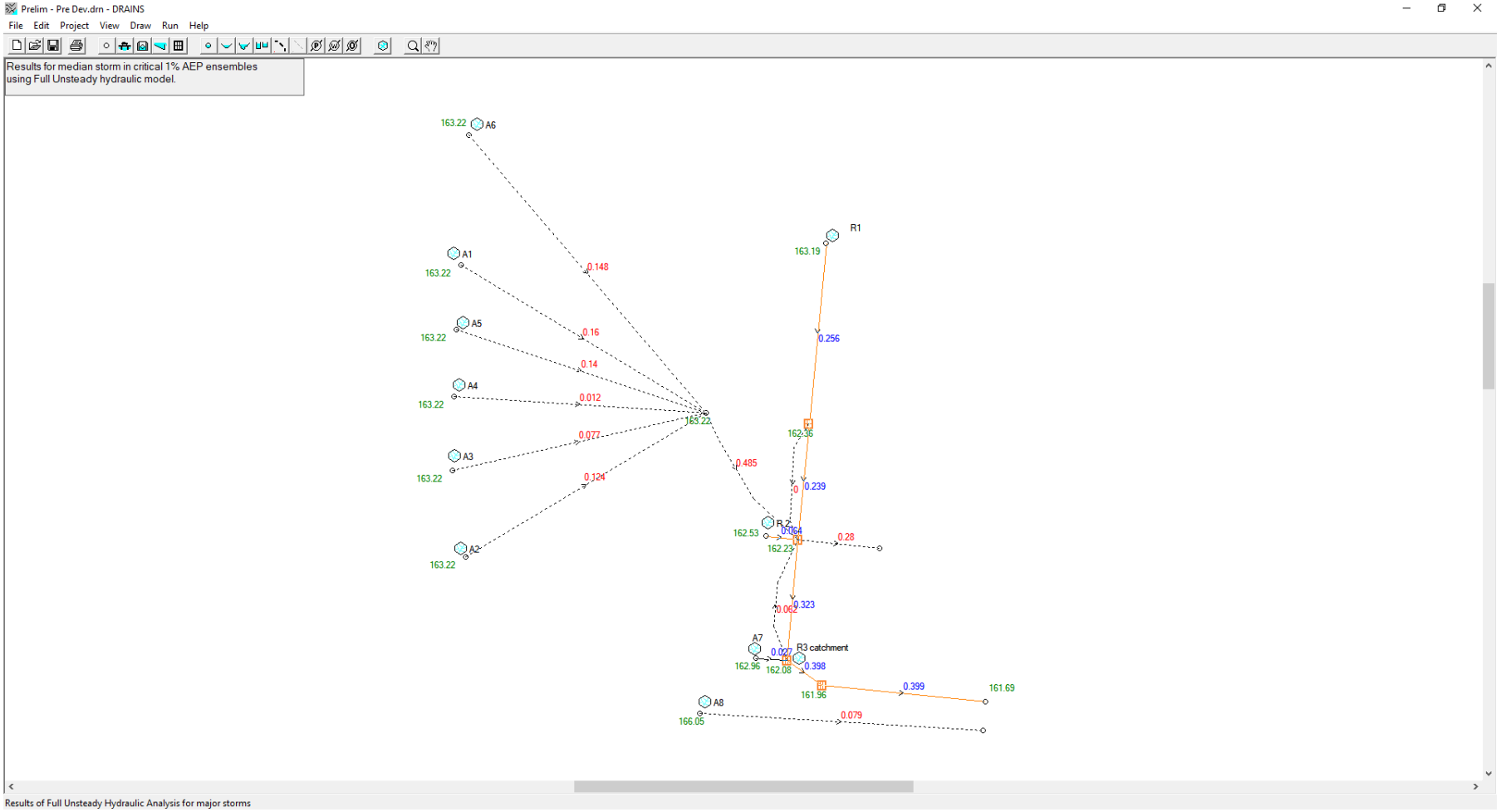
Appendix C: DRAINS outputs showing piped and overland flows.

Figure C1: Peak pre-development flows - 10% AEP storm



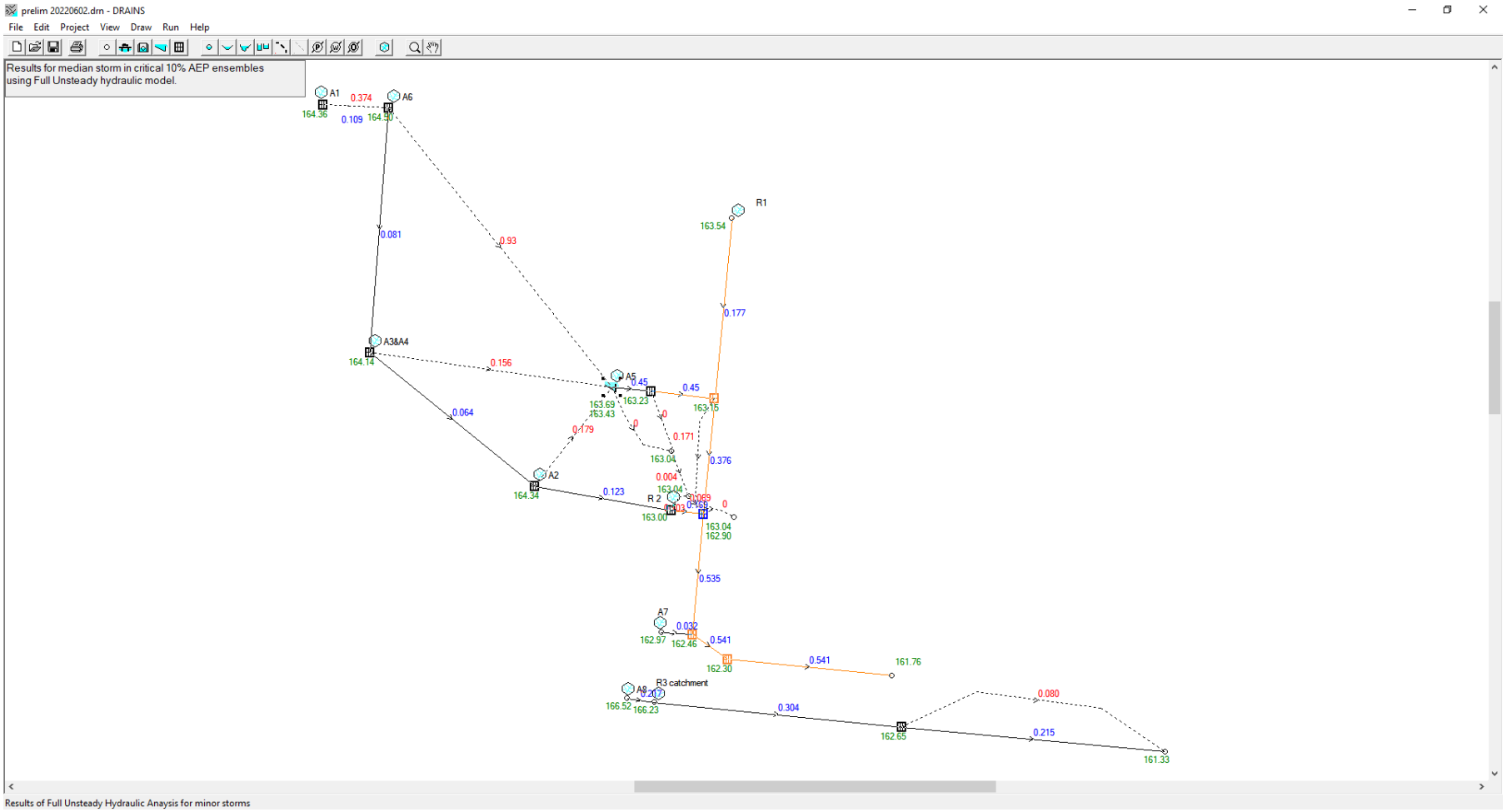
Received
17.06.2022

Figure C2: Peak pre-development flows - 1% AEP storm



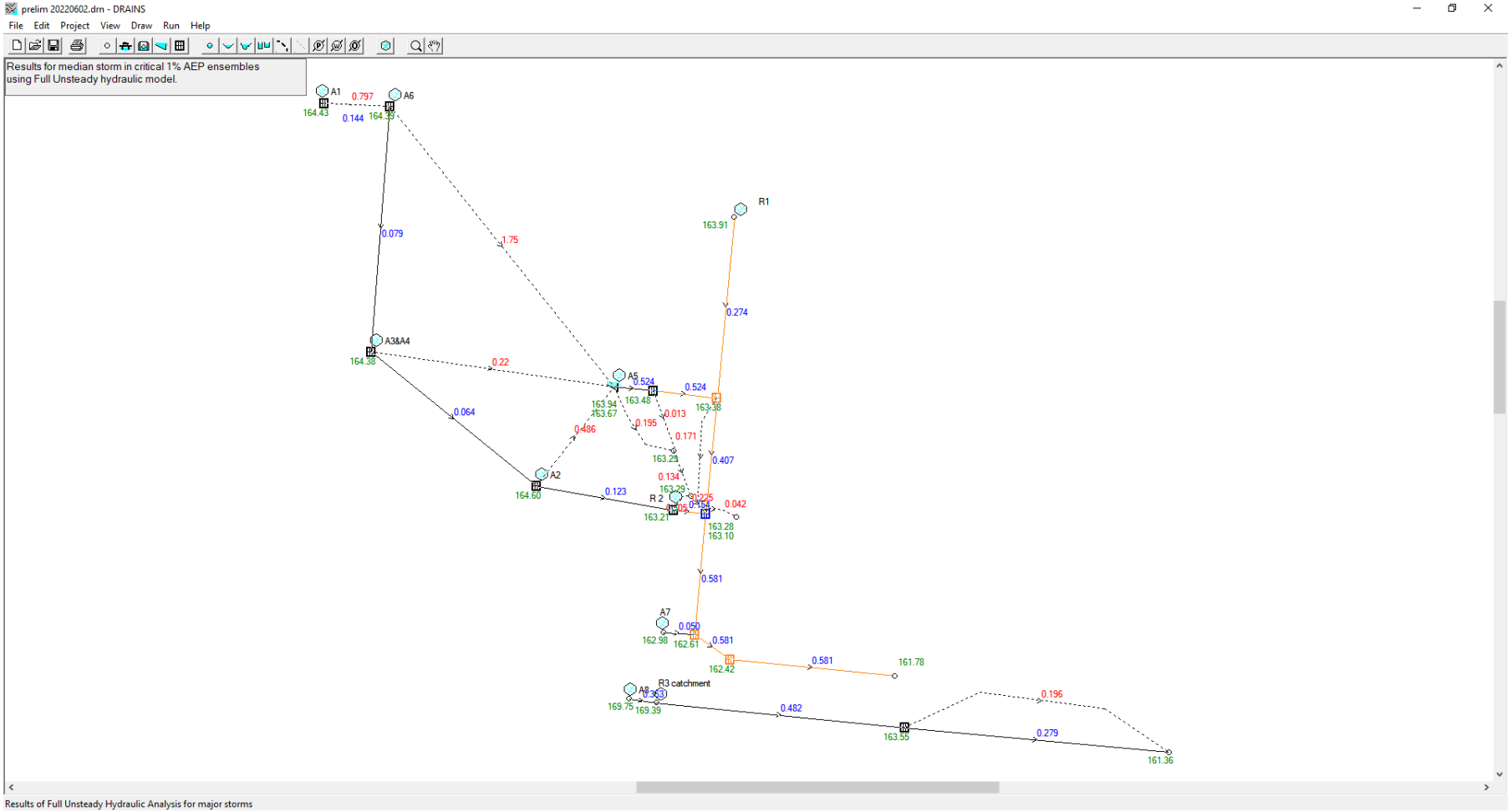
Received
17.06.2022

Figure C3: Peak post development flows - 10% AEP storm

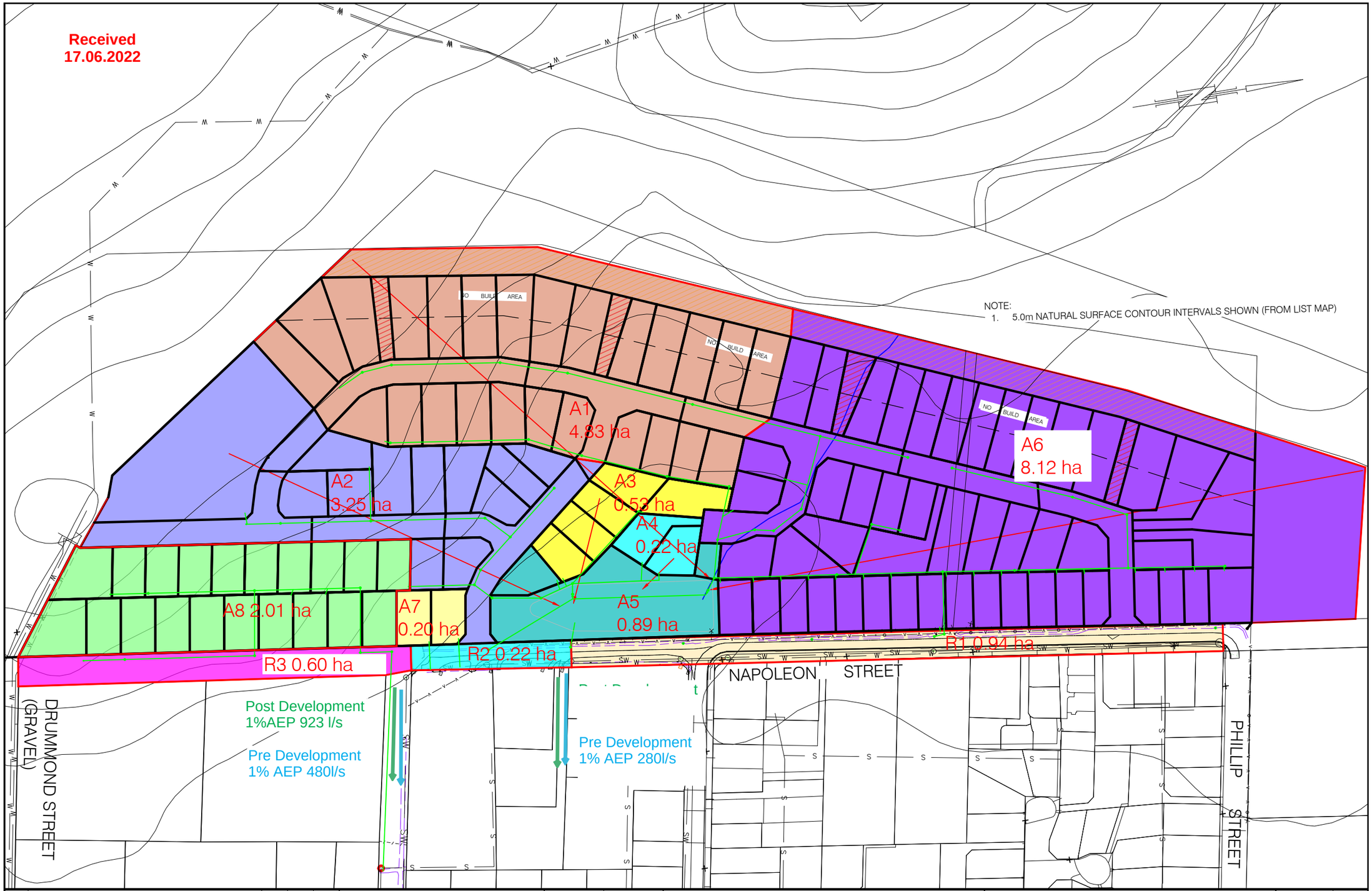


Received
17.06.2022

Figure C4: Peak post development flows - 1% AEP storm



APPENDIX D:OVERLAND FLOWS 1% AEP



REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

NOTES:

SURVEYOR @ | GEOCIVIL @
DRAWN JC | CHECKED JWD
DATE 5 MAY 2022

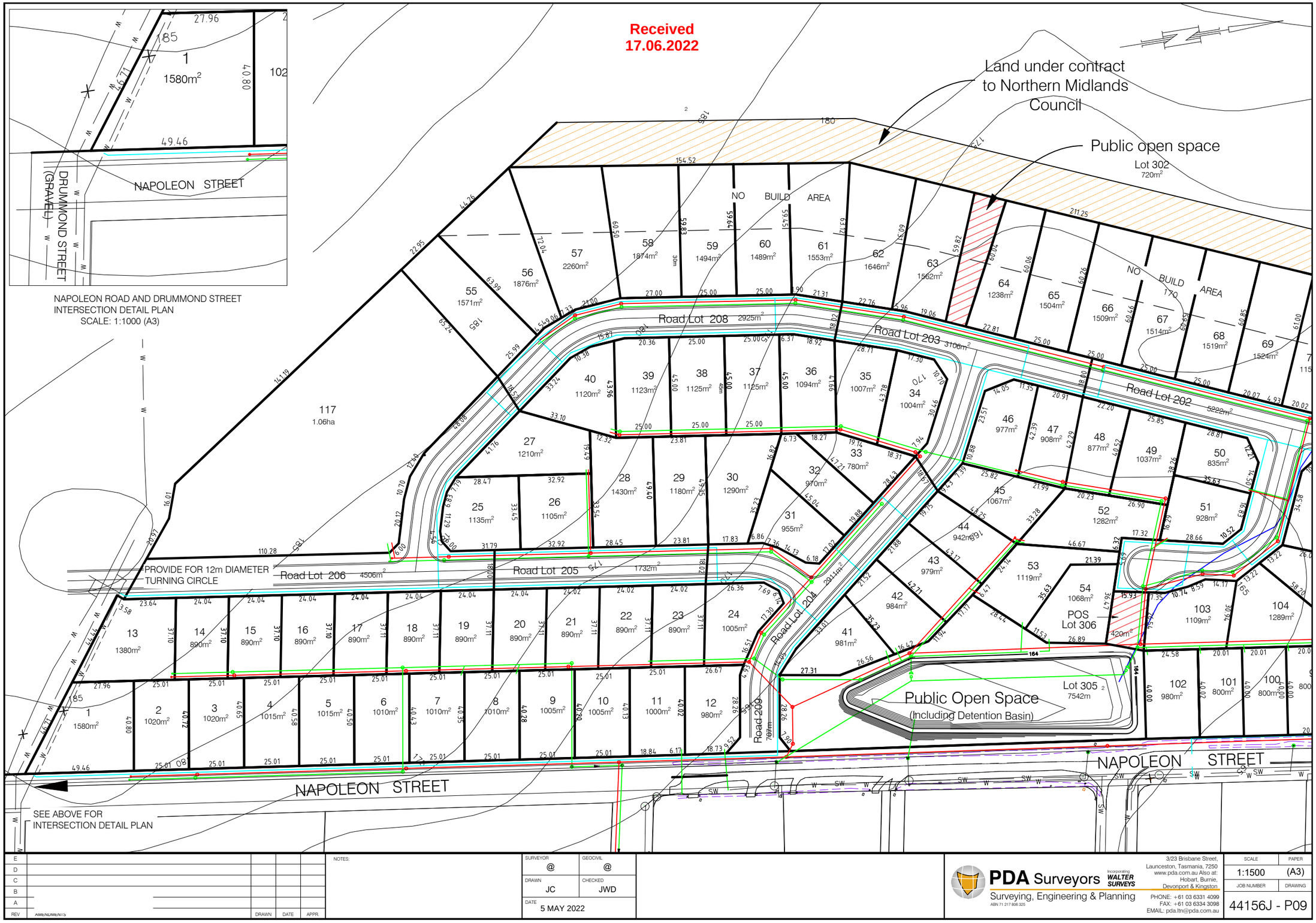
PRELIMINARY CATCHMENT PLAN
(SHEET 2)
174678/1
DRUMMOND STREET, PERTH

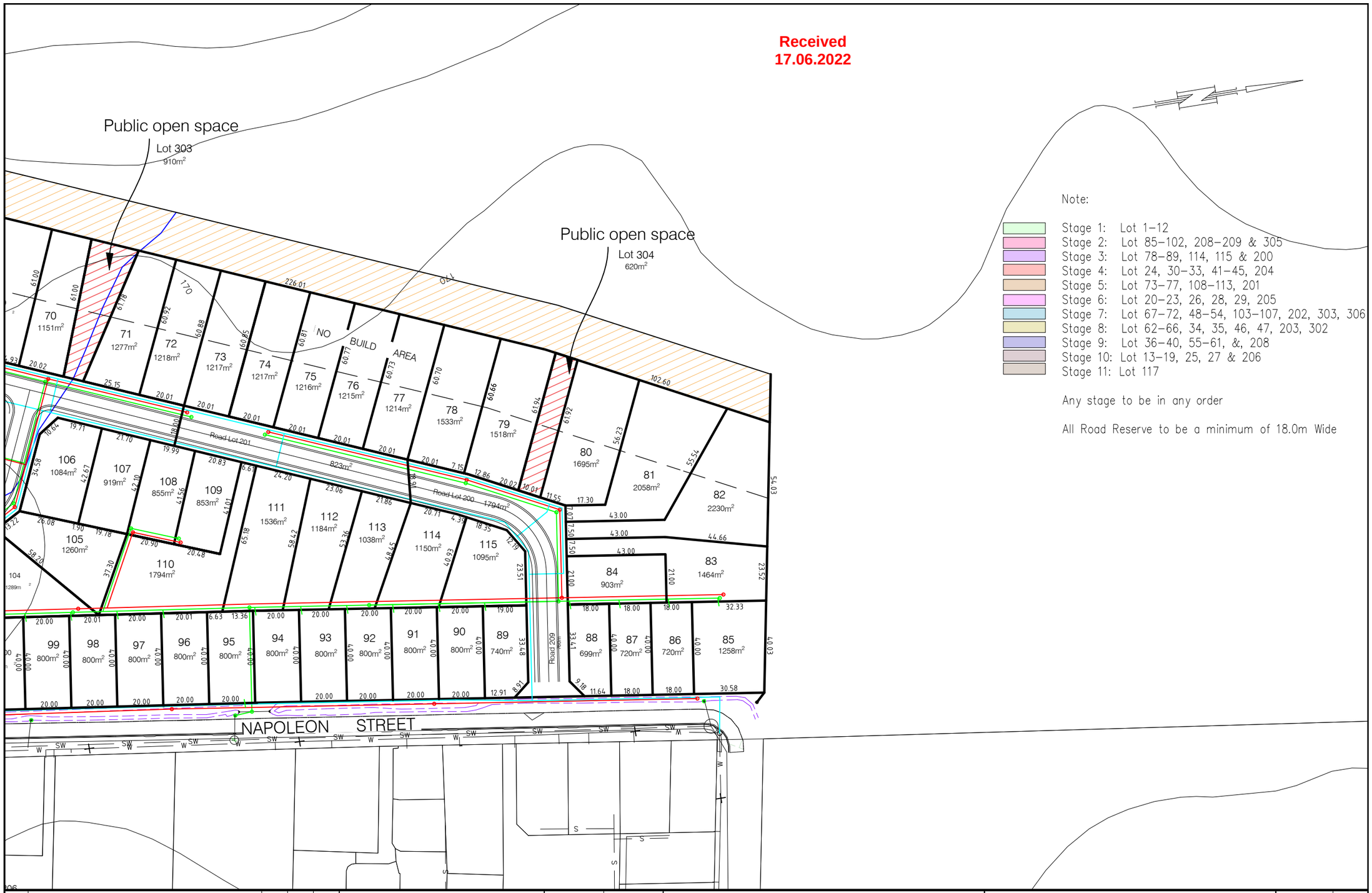
PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325

3/23 Brisbane Street, Launceston, Tasmania, 7250
www.pda.com.au Also at: Hobart, Burnie, Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:3000	(A3)
JOB NUMBER	DRAWING
44156J - CAT	

APPENDIX E:Concept Servicing Plan





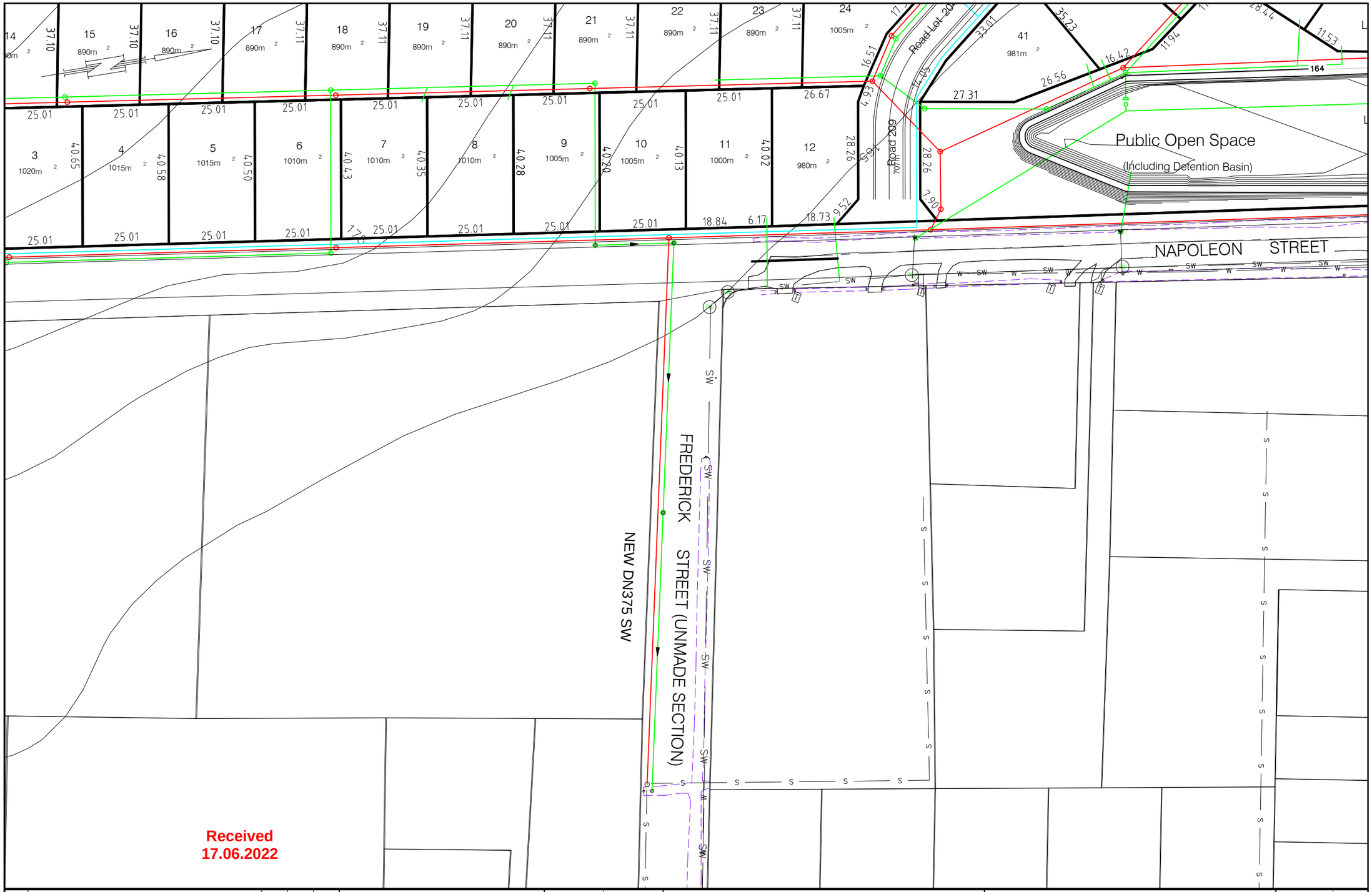
REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

NOTES:

SURVEYOR	GEOCIVIL
@	@
DRAWN: JC	CHECKED: JWD
DATE: 5 MAY 2022	

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325
3/23 Brisbane Street, Launceston, Tasmania, 7250
www.pda.com.au Also at: Hobart, Burnie, Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:1500	(A3)
JOB NUMBER	DRAWING
44156J - P09	



REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

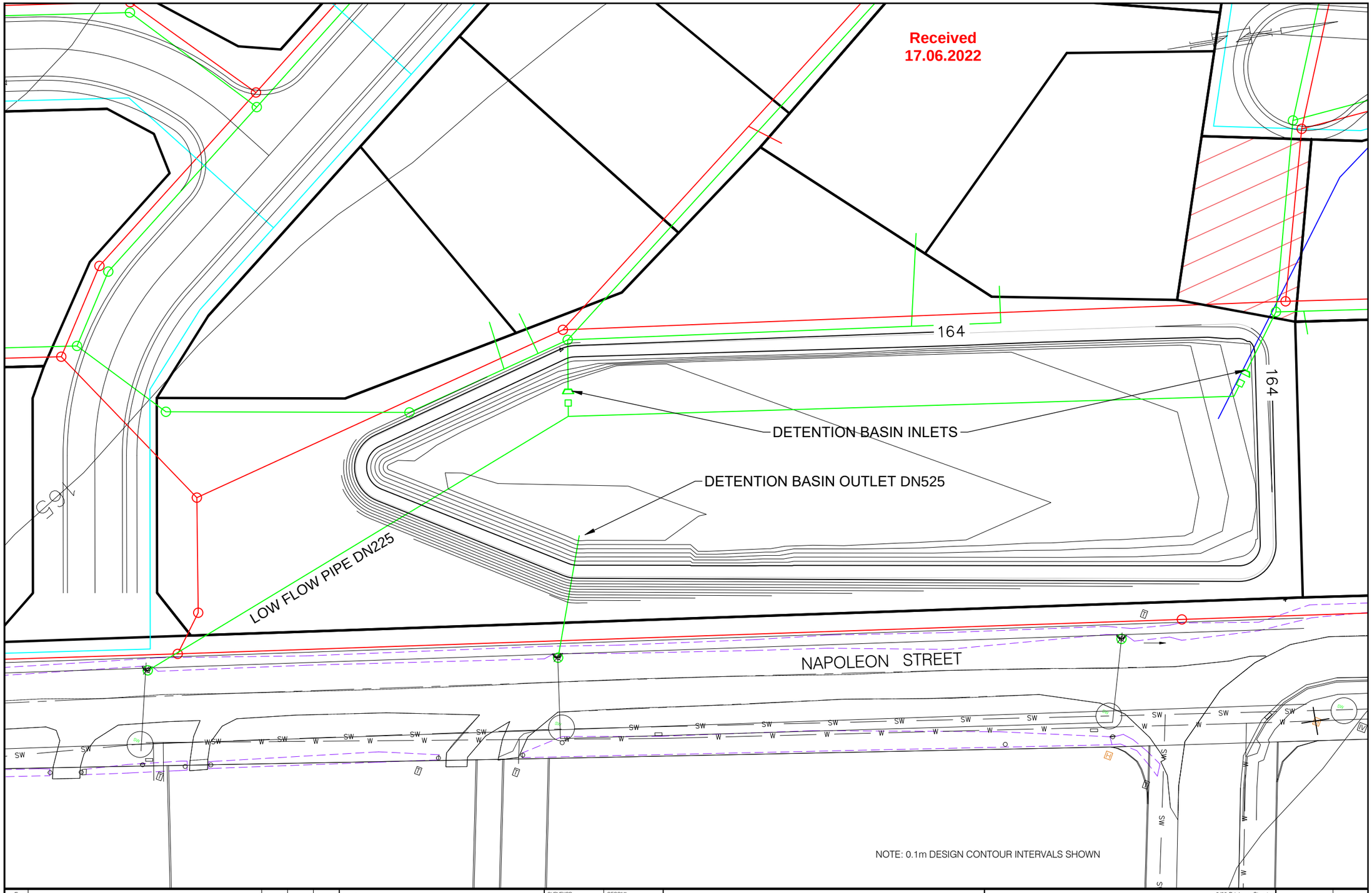
NOTES:

SURVEYOR	GEOCIVIL
@	@
DRAWN: JC	CHECKED: JWD
DATE: 5 MAY 2022	

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 806 325

3/23 Brisbane Street,
Launceston, Tasmania, 7250
www.pda.com.au Also at:
Hobart, Burnie,
Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:1000	(A3)
JOB NUMBER	DRAWING
44156J - P09	



REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

NOTES:

SURVEYOR	GEOCIVIL
@	@
DRAWN	CHECKED
JC	CW
DATE	
5 MAY 2022	

PDA Surveyors Incorporating WALTER SURVEYS
Surveying, Engineering & Planning
ABN 71 217 606 325
3/23 Brisbane Street, Launceston, Tasmania, 7250
www.pda.com.au Also at: Hobart, Burnie, Devonport & Kingston
PHONE: +61 03 6331 4099
FAX: +61 03 6334 3098
EMAIL: pda.ltn@pda.com.au

SCALE	PAPER
1:500	(A3)
JOB NUMBER	DRAWING
44156J - P09	

APPENDIX F MIDLANDS HIGHWAY DRAINAGE

Received
17.06.2022