

PART 10

PART 10 – ALAMANDA WETLANDS NORTH

Note: This is an example only and will differ according to each specific maintenance agreement.

SCHEDULE 1 (Part 10)

1. COMMENCEMENT DATE

- (a) Council's Commencement Date: The date as shown on Council's letter of "Final Completion", and included as part of Schedule 1, to be affixed at a date following Council's issue of the said letter.
- (b) Melbourne Water's Commencement Date: The date of Melbourne Water's "Certificate of Completion" for Civil and Planting works respectively, and included as part of Schedule 1, to be affixed at a date following Melbourne Water's issue of said letter.

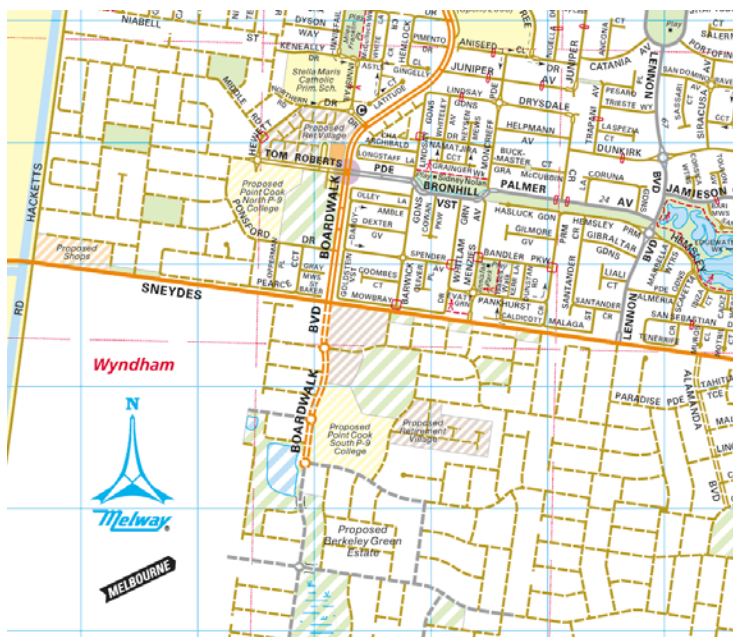
2. DEVELOPER

Enter Developer's company name

3. DESCRIPTION OF THE LAND

Preferably enter a GIS or Melway overlay showing the location of wetland and a written description include title description and Melway Reference:: See example below

The location of the site is shown in Figure 1 following. The site is 108 hectares in area and is on the corner of Sneydes Rd and Boardwalk BVD, Point Cook. Melways Reference 207 C7



4. OWNER OF THE LAND

Insert the reserve number and plan of subdivision reference under the appropriate owner. Please see example below. Note this is an example where Melbourne Water is the owner of the land only.

- (a) Council's Land: None
- (b) Melbourne Water's Land:

Reserve No. 1, Plan of Subdivision PS439514U

Reserve No. 1, Plan of Subdivision PS520335S.

5. SPECIAL CONDITIONS

Insert specific obligations under the relevant authority. For example timing, access constraints and notifications. See below example in blue.

- (a) Council's Special Conditions [insert specific obligations (if any) for the particular wetland / retarding basin which are not covered or adequately dealt with by the standard Document]:
- (b) Melbourne Water's Special Conditions [insert specific obligations (if any) for the particular wetland / retarding basin which are not covered or adequately dealt with by the standard Document]:

Melbourne Water to give notice to Council of at least seven (7) days when access through Council property is required for maintenance, except in an emergency. Contact Maroondah City Council's Asset Management Department on Ph: 9298 8000.

Maroondah City Council access to and from, Melbourne Water "lands" [nominated access points and access road(s) – as described within Schedule 2 (Part1)] required for vehicular, plant and equipment access to maintain bio-retention system:

Regular general maintenance – utility vehicle and equipment for minor works [manual labour – litter removal, weed management (OH&S requirements)];

Periodic specific maintenance – Plant and equipment for major works [ie silt removal – backhoe and truck (EPA requirements for contaminated soil removal)]

AUTHORITY

Melbourne Water and Council agree that the responsibility for the maintenance of the asset described on the cover page to this Part is to be performed in accordance with the Document, and this Part is hereby incorporated into the Document in accordance with clause 2(b) as evidenced by the execution of this authority by Melbourne Water and Council and the parties agree that the Document is amended accordingly, with effect from the Commencement Date.

EXECUTED as an agreement.

**Signed for and on behalf of
MELBOURNE WATER CORPORATION,**
by its duly authorised officer, in the
presence of:

Signature of General Manager, Waterways

Signature of Witness

Name

Name

Signed for and on behalf of Wyndham City Council, by its duly authorised officer, in the presence of:

Signature of authorised officer

Signature of Witness

Name

Name

SCHEDULE 2 (Part 10) - COUNCIL'S MAINTENANCE WORKS

Please add or remove items in accordance with the specific agreement.

Note this is an example only please seek advice from the relevant council.

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
P1	Planting Area Type 1 – Terrestrial & Riparian Planting	Advanced tree & tubestock planting in mulched garden beds	Removal of litter & weeds, pruning, plant & mulch replacement, stake straightening, replacement & removal	Four (4) times per year or as required
P2	Planted Area Type 2 – Garden Beds	Advanced tree, tubestock & pot planting in mulched garden beds with edging	Removal of litter & weeds, pruning, fertilising, plant & mulch replacement, stake straightening, replacement & removal	Four (4) times per year or as required
OS1	Open Space Area Type 1 – Grass and Trees	Advanced tree planting in grass areas Established and developing trees General grassed/lawn areas	Removal of litter & weeds, pruning, fertilising, plant replacement, stake straightening, replacement & removal. Mowing.	Four (4) times per year or as required
OS2	Open Space Area Type 2 – Reinforced Grass (Sediment Pond Access)	Exotic grass in grass pave units	Fertilising & removal of litter & weeds Mowing Maintain even surface & replace broken/damaged pavers	Four (4) times per year or as required Monthly or as required Annually or as required

SCHEDULE 2 (Part 10) - COUNCIL'S MAINTENANCE WORKS - Cont

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
0S3	Open Space Area Type 3 – Granitic Sand	Granitic Sand Areas	Removal of litter & weeds. Maintain even surface and replace disturbed sands	Four (4) times per year or as required.
R1	Recreation Area Type 1 - Playground	Playground equipment, perimeter fence, softfall surface & rubber undersurfacing advanced trees.	Cleaning, graffiti removal, maintain minimum depth of softfall, safety assessment & repair	Monthly or as required
			Removal of litter & weeds, pruning, fertilising, plant replacement, stake straightening, replacement & removal	Four (4) times per year or as required
			Maintain even surface, top up & compact	Annually or as required
ST	Bridge & Viewing Structures	Timber, metal & concrete structures	Cleaning, graffiti removal, safety assessment, repair & replacement, tighten cables & fixings & maintain applied finishes	Twice yearly or as required
B1,B2 B3,B4	Board Walks one, two three and four.	Pedestrian bridges and boardwalks including footings, hand railing, timber deck, hand rails at water body edges. All Timber Jetties	Cleaning repairs and replacement Annual condition rating inspection. Litter pick-up	As required to council specification Repairs on as needs basis. Twice a year as minimum.

SCHEDULE 2 (Part 10) - COUNCIL'S MAINTENANCE WORKS - Cont

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
F	Footpaths	Concrete footpaths	Removal of litter, cleaning, maintain even surface, repair & replacement	Annually or as required
SH1	Shelter one	Advanced trees in gravel paving, structures, sculptures, lighting and public amenity items Shelters, BBQ area, light poles, bench seats and tables, bins, bollards, services infrastructure, signage, sculptures throughout park, Bluestone features. Concrete paths and paved areas.	Assessment and replacement; sanding, graffiti removal, oil / stain timber; painting of steel work. Cleaning and repair, globe replacement, straightening, painting.	Minimum of annually or as required. Repairs/replacement on as needs basis
PF	Park Furniture & Fencing	Seats, benches, bins, drinking fountains, bollards, fencing.	Assessment and replacement; oil timber; painting.	As required
DS	Drainage Structures	Drainage pits & pipes	Removal of litter, debris & sediment, structural assessment, repair & replacement	Annually or as required
CL	Culvert - Structural Maintenance	Concrete multi - celled culvert	Structural assessment, repair & replacement	Annually or as required
RW	Retaining Wall & Rock Structures	Masonry & gabion structures	Removal of litter, debris & weeds, cleaning, structural assessment, repair & replacement & maintain applied finishes	Annually or as required

SCHEDULE 2 (Part 10) - COUNCIL'S MAINTENANCE WORKS - Cont

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
LSR	Landscape Rockwork Above the NTWL	Rockwork bands, Feature rock walls, ornamental rock walls, rock escarpment, rock weirs and isolated rocks	Removal of litter, cleaning, graffiti removal, & structural assessment, reinstatement of rocks replacement & re-grouting.	Annually or as required
GPI	Gross pollutant trap 1	GPT on Council drain	GPT on 1050 dia main to be cleaned out when sediment, debris and litter accumulates such that the storage volume is halved or the effective flow area is reduced by half, whichever is first.	Annually or as required
BC	Bypass Channel	Tree planting, grassed areas & landscape rock areas.	Yearly tree pruning. Weeding every 6 months. Plant and mulch replacement as required. Mowing of grass as required.	As required.
DO1	Drainage Outlet	Pipe outlet into Channel	Tree pruning, weeding, Plant and mulch replacement & Mowing of grass.	Yearly, Every six month & as required respectively.
SW	Swale drains	Strip swale drains, gravel bio-retention trench and pits	Assessment; clear obstructions, inspect and clear pits.	As required.
I	Irrigation (Along Tenterfield Drive)	Roundabouts and local park, including booster pump and controller cabinet.	Assessment; replacement; clean; lubricate and adjust settings.	In accordance with council specifications.
S	Signs	Warning signs	Replacement of damaged signage and graffiti removal.	As required
AF	Aeration fountains	Fountains & pumps	Structural assessment, replacement and cleaning.	As required

SCHEDULE 3 (Part 10)- MELBOURNE WATER'S MAINTENANCE WORKS

Please add or remove items in accordance with the specific agreement.

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
W1	Wetland System	<p>Edge/ephemeral planting.</p> <p>Planting areas within and below the top water level (includes wetland, marsh zone planting and aquatic plants). Fringed macrophyte zones</p> <p>Edge treatment, macrophyte and aquatic plants.</p> <p>Pipeline, grilles, concrete structures, porous rock wall/ rock weirs. Rock Work around pit inlet/outlets.</p>	<p>Removal of litter & weeds, pruning. Nuisance management (including exotic fish, algae, etc)</p> <p>Plant replacement and thinning to keep good coverage of aquatic and marginal planting. Aquatic plant replacement to ensure 4 to 6 plants/m2</p> <p>Removal of settleable materials, including sediment, silt, litter and organic material.</p> <p>Stability / erosion protection</p>	<p>Four (4) times per year or as required.</p> <p>As required</p> <p>As required where risks are identified with no action.</p> <p>Once accumulation is within 500mm of the normal water level or is significantly compromising the operation of the asset.</p>
W2	Open Water body	Open water bodies generally 1.2m to 1.5m maximum depth.	<p>Erosion/sediment control and repair, weeding and plant maintenance, removal of litter and sediment. Plant replacement and thinning will be as required to keep a good coverage of aquatic and marginal planting.</p>	<p>Four (4) times per year or as required</p> <p>As required.</p>

SCHEDULE 3 (Part 10)- MELBOURNE WATER'S MAINTENANCE WORKS

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
S1	Sediment Pond 1	Sedimentation Pond Inlet and outlet ponds with associated Hydraulic system, piping and rock beaching	Removal of settleable materials, including sediment, silt, litter and organic material Erosion protection, vegetation maintenance and rockwork maintenance.	Once accumulation is within 500mm of the normal water level or is significantly compromising the operation of the asset. As required
WW	Waterway	Overland channel between Rock chute and 6 culverts 2.4m x 1.2m	Rock replacement and weed removal	As required, minimum two times per year respectively
CH	Ephemeral Waterway and Low flow/pilot channel	Low flow/pilot channel and ephemeral planting between inlet zone and pedestrian bridge.	Removal of litter, sediment, weed control and plant replacement (design plant density: 4-6/m ²), and rock replacement.	Litter removal typically a minimum of twice a year or as required. Sediment removal once accumulation compromises the capacity of the pilot channel / low-flow chase.
SW	Bypass spillway	Rock Spillway between sediment pond and bypass channel	Rock replacement and weed removal	As required, minimum two times per year respectively

SCHEDULE 3 (Part 10)- MELBOURNE WATER'S MAINTENANCE WORKS - Cont

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
	Porous Rock Walls	Porous rock structures	Removal of litter, debris & weeds, cleaning, structural assessment, repair & replacement	Annually or as required
	Drainage Structures	Drainage pits & pipes	Removal of litter, debris & sediment, structural assessment, repair & replacement	Twice yearly or as required
DS1	Drop structure number 1	Rock Drop Structure separating ephemeral waterway and wetland	Removal of litter, structural assessment and rock reinstatement, weed control, plant replacement to maintain specified planting.	Typically a minimum of twice a year or as required, four (4) times per year or as required and as required. respectively.
	Rock Beaching at pipe outfalls and Culvert inlet/outlet	Rock Beaching	Removal of litter, debris & sediment, replacement of missing rocks	Four (4) times per year or as required
RW	Rock Work Below Top of Water Level (NTWL)	Rock walls, rock escarpments, rock weirs and isolated rocks.	Structural assessment reinstatement of rocks and sealing as required. Removal of litter and cleaning.	Assessment to be carried out annually. Replacement of rock as required, to serve its waterway function.
CL	Culvert – Hydraulic Maintenance	Culvert multi – celled culvert	Removal of litter, debris & sediment	Twice yearly or as required

SCHEDULE 3 (Part 10)- MELBOURNE WATER'S MAINTENANCE WORKS - Cont

Code	Description	Assets	Maintenance Works	Frequency of Maintenance Works
M1	Maintenance access	Access track to sediment pond No.1	Repair and maintain access track following each desilting operation of the sedimentation pond and as required at other times. Monitor surface conditions, assess and remedy any risks to public health.	Four (4) times per year or as required.
DD1	Draw Down Facility 1 (pipe size)	Pits on main drain, flat backed penstock, concrete headwalls and associated pvc pipeworks	Structural assessment, repair & replacement. Removal of litter, debris and sediment	Annually or as required.
DC1	Discharge Control Pit	Steel plate baffle, pit on main drain, rock beaching and associated pipeworks.	Structural assessment, repair & replacement. Removal of litter, debris and sediment	As required.
FP	Frog Ponds	Habitat for growling grass frogs	Refer to conservation plan Annexure C (attach the relevant plan to annexure c)	Refer to conservation plan Annexure C (attach the relevant plan to annexure c)
CP	Control Pits	Combined extended detention control pits and drawdown structure	Remove litter and sediment and inspection of pit covers.	Annually or as required.

SCHEDULE 4 (Part 10)– INSURANCE

Item 1 Amount Insured under Public Liability Insurance Policy

\$20,000,000 per claim.

Item 2 Period of Public Liability Insurance Policy

6 years from the termination of this Document in accordance with clause 10.

Item 3 Amount insured under Industrial Special Risks Policy

\$20,000,000 per annum.

Item 4 Period of Industrial Special Risks Policy

For the life of the Document

SCHEDULE 5 (Part 10)– AUTHORITY TO REMOVE

Melbourne Water and Council agree that with effect from [*Date*] the Document will cease to apply to the maintenance of the asset described on the cover page to this Part as evidenced by the execution of this authority by Melbourne Water and Council, and the parties agree that the Document is amended accordingly.

EXECUTED as an agreement.

Signed for and on behalf of
MELBOURNE WATER CORPORATION,
by its duly authorised officer, in the
presence of:

Signature of General Manager, Waterways

Signature of Witness

Name

Name

Signed for and on behalf of **Wyndham City Council**, by its duly authorised officer, in the presence of:

Signature of authorised officer

Signature of Witness

Name

Name

ANNEXURE A (Part 10)- PLAN

[Note the plan needs to be based on the original landscaping plan and be in a large enough scale so that the areas of responsibility can be clearly indentified and codes used in the schedules must be shown on the plan]

ANNEXURE B (Part 10) - PRIORITY WEED SPECIES LIST

Note: This list is currently under review and subject to change

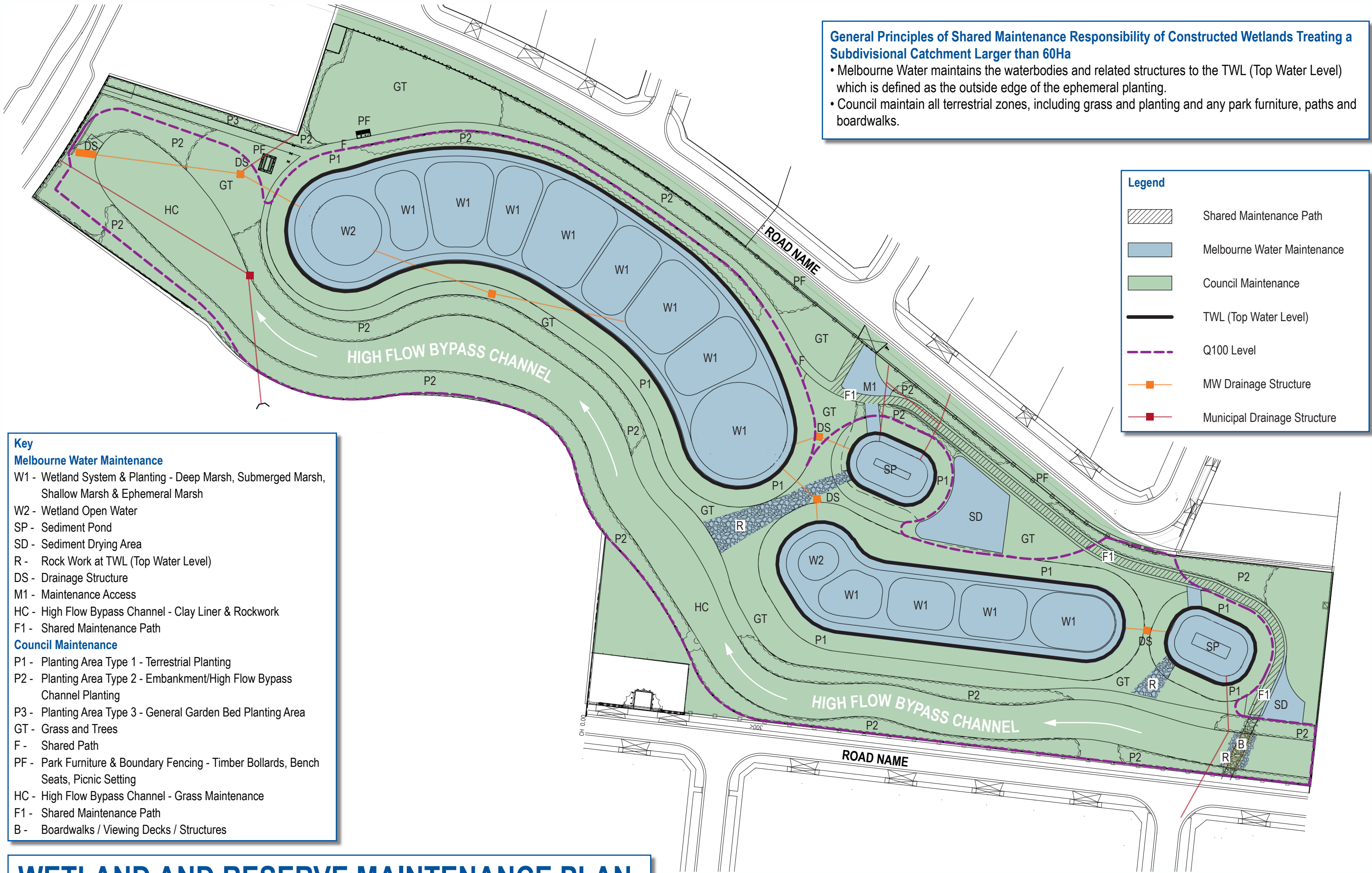
To include but not limited to the following.

Primary Weeds to be Controlled	
Common Name	Botanical Name
Alligator Weed	<i>Alternanthera philoxeroides</i>
Common Reed	<i>Phragmites australis</i>
Drain Flat Sedge	<i>Cyperus eragrostis</i>
Invasive broadleaf species	
Invasive pasture grass species	
Parrots Feather	<i>Myriophyllum aquaticum</i>
Phalaris	<i>Phalaris aquatica</i>
Typha spp. (Cumbungi)	<i>Typha orientalis, Typha latifolia and Typha domingensis</i>
Water Couch	<i>Paspalum distichum</i>

Secondary Weeds to be Controlled when Directed by the Supervisor	
Common Name	Botanical Name
Annual Beardgrass	<i>Polypogon monspeliensis</i>
Barnyard Grass	<i>Echinochloa crus-galli</i>
Birdsfoot Trefoil	<i>Lotus corniculatus</i>
Celery Buttercup	<i>Ranunculus sceleratus</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Curled Dock	<i>Rumex crispus</i>
Jointed Rush	<i>Juncus articulatus</i>
Waterbuttons	<i>Cotula coronopifolia</i>
Watercress	<i>Rorippa nasturtium – aquaticum</i>

General Principles of Shared Maintenance Responsibility of Constructed Wetlands Treating a Subdivisional Catchment Larger than 60Ha

- Melbourne Water maintains the waterbodies and related structures to the TWL (Top Water Level) which is defined as the outside edge of the ephemeral planting.
- Council maintain all terrestrial zones, including grass and planting and any park furniture, paths and boardwalks.



Key

Melbourne Water Maintenance

- W1 - Wetland System & Planting - Deep Marsh, Submerged Marsh, Shallow Marsh & Ephemeral Marsh
- W2 - Wetland Open Water
- SP - Sediment Pond
- SD - Sediment Drying Area
- R - Rock Work at TWL (Top Water Level)
- DS - Drainage Structure
- M1 - Maintenance Access
- HC - High Flow Bypass Channel - Clay Liner & Rockwork
- F1 - Shared Maintenance Path

Council Maintenance

- P1 - Planting Area Type 1 - Terrestrial Planting
- P2 - Planting Area Type 2 - Embankment/High Flow Bypass Channel Planting
- P3 - Planting Area Type 3 - General Garden Bed Planting Area
- GT - Grass and Trees
- F - Shared Path
- PF - Park Furniture & Boundary Fencing - Timber Bollards, Bench Seats, Picnic Setting
- HC - High Flow Bypass Channel - Grass Maintenance
- F1 - Shared Maintenance Path
- B - Boardwalks / Viewing Decks / Structures

Legend

- Shared Maintenance Path
- Melbourne Water Maintenance
- Council Maintenance
- TWL (Top Water Level)
- Q100 Level
- MW Drainage Structure
- Municipal Drainage Structure

WETLAND AND RESERVE MAINTENANCE PLAN



NOT TO SCALE

WETLAND NAME:

ESTATE & STAGE NO.:

ADDRESS:

MEL REF / VICMAP REF: