60-70 Park Street, South Melbourne

Landscape Maintenance Plan

For Town Planning Approval
Arcadia Project Number: M24-110
NATSPEC Subscriber No: 21026302

Revision	Date	Approved by
TP1	10th April, 2026	[redacted]

ARCADIA

Arcadia Landscape Architecture VIC Pty Ltd
[redacted]
Address: Level 22, 459 Collins Street, Melbourne, VIC 3000
Phone: [redacted]
Email: [redacted]
NATSPEC Subscriber Number: 21026302

TABLE OF CONTENTS

INTRODUCTION

1 GENERAL

1.1 INTRODUCTION

Landscape Maintenance Plan

This Landscape Maintenance Plan has been prepared to detail the requirements for landscape maintenance the 110 Park Street Project along with details of the proposed irrigation system.

The plan responds to the requested additional information under the **Landscape Architecture** 'Irrigation' and 'Maintenance' sections of the *Internal Council Department Referral Responses* Letter by City of Port Phillip dated 27 March, 2026.

Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. The softworks including trees and vegetation are to be maintained to ensure their successful establishment and ongoing growth to maturity, and maintenance tasks shall include, but shall not be limited to, watering, mowing, fertilising, reseeding, returfing, weeding, pest and disease control, staking and tying, replanting, cultivation, pruning, aerating, renovating, top dressing. The site is to be maintained in a neat and tidy condition.

Maintenance Timeframe

The landscape contractor shall maintain the landscape works for the term of the 52 week Maintenance Period / Defects Liability Period and beyond in agreement with the Principal.

LANDSCAPE MAINTENANCE PLAN

1 GENERAL

1.1 RESPONSIBILITIES

General

Requirement: Provide landscape maintenance of the project area during and post the 52 week defects and liability / maintenance period.

Performance

Extent of maintenance:

- Weeding of lawn, garden bed areas, and pavement.
- Supply and spreading of fertiliser to lawn, garden bed areas and pots.
- Supply and installation of mulch to existing garden bed areas and pots.
- Pruning, trimming and tree surgery.
- Adjustment of tree stakes and ties.
- Insect and disease control of lawn, shrubs and trees.
- Mowing and edge trimming to all lawn areas including collection and removal of clippings.
- Diagnosis of cause of dead or failed plants and recommendations for corrective actions.
- Replacement of dead or failed plants and lawns.
- Maintenance of irrigation systems.
- Removal of rubbish and debris in garden areas.
- Removal of leaves, mulch and organic debris from pavement and drains.
- Maintenance of all fixtures including seating, pergolas and bin enclosures.
- Emptying of rubbish / recycling from bins.
- Keeping a log book of maintenance activities.
- Providing monthly reports.

Maintenance procedures: As documented.

1.2 THE SITE

Site restrictions

Entry permits: Make available, to persons entering designated secure areas, valid entry permits. Make sure these persons comply with conditions of entry.

Secure areas

Secure area visitors: At least 10 working days before entry is required, submit the full name, address, and date and place of birth of persons required to enter designated secure areas.

- Purpose of submission: Review.

Protection of persons and property

Temporary works: Provide and maintain required guards, fencing, footpaths, signs and lighting.

Accessways, services: Do not obstruct or damage footpaths, drains and watercourses or other existing services in use on or adjacent to the site.

Property: Do not interfere with or damage property which is to remain on or adjacent to the site, including adjoining property encroaching onto the site, and trees.

Rectification

Accessways, services: Rectify immediately any obstruction or damage to footpaths, drains and watercourses or other existing services in use on or adjacent to the site. Provide temporary services whilst repairs are carried out.

Property: Rectify immediately any interference or damage to property which is to remain on or adjacent to the site, including adjoining property encroaching onto the site, and trees.

1.3 GENERAL CONDITIONS

Contractor and staff

Representative: Nominate a senior partner/personal experienced in maintenance nursery practices and horticulture, to be responsible for taking and carrying out instruction, and reporting to the principal.

Affiliation: Financial member of the Landscape Contractors Association or Landscaping Victoria Master Landscapers or equivalent and / or hold a current Building Contractor's License.

Special instructions

Priority: If instructed by the principal, attend to certain areas and procedures as a priority. Obtain approval for additional costs before starting the works.

Notice

Inspection: Provide two days' notice of the following operations:

- Application of herbicide.
- Application of fertiliser.
- Each site maintenance visit.
- Work affecting public access or amenity on the Thursday of the week before the work is planned.

Water restrictions: Provide immediate notification of any new restrictions that affect maintenance.

Reporting

Monthly report: Submit regular reports by the last Friday of each month to SELECTIONS, **MAINTENANCE REPORT**, **Monthly reports schedule** and as follows:

- General status of the works.
- Soil test results included as required for the fertilising programs.
- Any plant replacement requirements.
- Irrigation operation schedules and water consumption.

Incident reports: Report immediately, verbally and confirm in writing, any disturbance or incidence affecting or likely to affect the scheduling of the works.

Log book

Records: Log the following on a weekly basis:

- Description, time and method of application of toxic material.
- Maintenance work details.
- Inclement weather to verify inability to carry out work within the specified time frame.

Availability: Upon request.

Replacement plants

Species: Provide written certification that all plant material is true-to-species and type, and free of disease and fungal infection.

Coordination with others

Other contractors: Coordinate work with other contractors to minimise conflicting activities and delays. If disturbances to planned works are unavoidable, make arrangements to work around them.

2 EXECUTION

2.1 GENERAL

Weeding

Requirement: Remove unwanted broadleaf plants and grasses considered invasive to the locality.

Program:

- Lawns: Quarterly.
- Trees and shrubs: As required for planted, paved and mulched areas to be weed free when observed at fortnightly intervals.

Vigorous ground covers: Keep 200 mm clear from the base of any shrub or tree. Remove as follows:

- Small areas: By hand.
- Large areas: Proprietary herbicides.

Herbicide application: Apply as follows:

- To the manufacturer's recommendations and the material data and safety data sheets.
- When the weather is humid with moderate temperatures and maximum sunlight.
- When the ground has adequate soil moisture.
- Avoid windy days or if rain is likely to follow within 12 hours.

Insect and disease control

Requirement: Control any insects or diseases affecting the lawn and garden bed areas as follows:

- Identify the problem.
- Execute the correct treatment until the problem has been eliminated.
- Apply hazardous material out of normal working hours.
- Protect staff and public from exposure to hazardous materials.

2.2 GRASS SURFACES

Mowing and trimming

Preparation: Remove litter and fallen branches before mowing.

Grass height: Consistent with the growth habit of the grass variety and maintained at 25 mm to 40 mm throughout the year. Do not remove more than one third of the grass height at any one time.

Program: Weekly during the mowing season, November to March, and at fortnightly intervals during April to October. Do not mow during wet conditions.

Raking: Once every month before mowing during the mowing season, rake the grass with a flexible rake. On alternate mowings, adopt a north-south and east-west pattern.

Edges: At the same time as mowing, trim lawn edges to plant beds, pathways, base of trees and other obstacles. Do not damage trees or shrubs.

Clippings distribution: Remove from site as directed.

Non-selective herbicide: Make sure application does not exceed the area limits of normal manual trimming. Repair any damage from overuse or over spray.

Fertilising

Program:

- Regular application: Each September and April.
- Additional application: Each November and February at reduced rates.

Soil pH adjustment: Apply additional fertilisers and soil conditioners as indicated from soil testing or from the physical soil structure. Maintain a pH range of 5.5 to 6.5.

pH testing program: Two year schedule starting in the first year of the contract.

Application: Spread as follows:

- Dry: Crush lumps and broadcast dry material by hand or mechanically when the lawn is dry.
- Spray: Acceptable.
- Prevent fertiliser from leaching to adjoining planted beds, particularly those with sensitive native trees and shrubs.

Topdressing

Topdressing material for established lawns: Weed free imported sandy topsoil to a depth of 5 mm.

Topdressing material for remediation of depressions or irregularities: Apply coarse or medium texture soil, to AS 4419, suitable for application to turf or grass seeded areas.

Renovation

Established lawns of sandy soil profile: Renovate by dethatching or verticutting.

2.3 TREES AND SHRUBS

Pruning and trimming

General: Prune to reflect the natural growth, flowering and regrowth habit of the individual species.

Program generally: Spring and Summer and on a spot basis as required.

Shrubs: Prune after flowering.

Hedge trimming: Schedule trimming at times that maintains the character and design of hedges. Allow up to three times per season.

Tip pruning:

- Purpose: To encourage development of new shoots during the active growing season.
- Method: Removal of the top 25 mm or growing tip of each branch.
- Restriction: Do not remove buds before the flowering season in those plants that have terminal flowers.

Radical pruning:

- Purpose: To maintain a hedge or formal shape or when a particular problem, growth habit, damage, or disease requires branch removal.

Tree pruning:

- Purpose: To eliminate diseased or damaged growth, avoid inter-branch contact and thin out crowns in a natural manner.
- Maintain sight lines to signs and lights.
- Maintain visibility for personal security.

Tree branch removal:

- To AS 4373.
- Give notice and engage a suitably qualified arborist.

Fertilising

Fertilising program: Base the program on soil testing results.

Soil testing: Test soil as follows:

- At the start of the contract.
- Take samples from a cross section of planting beds.

Soil pH adjustment: Apply additional fertilisers and soil conditioners as indicated from soil testing or from the physical soil structure. Maintain a pH range of 5.5 to 6.5.

Program:

- Regular application: Each September and March.

Sensitive native species: Apply fertiliser at an appropriate rate.

Micro nutrients: Apply 1 kg of urea in 20 litres of water per 100 m^2, through a hose proportioner every four weeks during Summer.

Stakes and ties

Generally: If plants are not self-supporting or if stakes are damaged, stake or re-stake the plants as follows:

- Drive three hardwood stakes placed diagonally with the first stake on the opposite side to the prevailing winds.

Removal: If plants are robust with well developed systems and no longer require support, remove stakes and ties.

Plant replacements

General: Before replacement, diagnose cause of plant failure and report findings. If failure is due to species incompatibility with site conditions, recommend alternative species. Replace all evergreen plants that have died or lost 50% of their normal foliage cover. Provide replacement plants as follows:

- Of the same species and variety (or approved alternative) and of the closest commercially available size.
- With a balanced root system in relation to the size of the plant and conducive to successful transpiration. Inspect the root conditions of plants by knocking plants from their containers.
- Without signs of having been stressed at any stage during their development due to inadequate watering, excessive shade/sunlight, suffered physical damage or have restricted habit due to growth in nursery rows.
- Grown in final containers for not less than twelve (12) weeks.

Plant replacements timing

General: Plants are to be replaced at the following timeframes:

- Trees: Monthly
- Other planting: Quarterly

2.4 WATERING

Grass and planted areas

Generally: Maintain a vigorous healthy appearance.

Application rates: Soak to a depth of 150 mm for grass areas and 300 mm for planting. Avoid frequent dampening of the surface. Allow the surface of the soil to partially dry out between waterings. Confirm soaked depth and record in the log book.

Timing: Water at times of day to minimise water evaporation loss. Do not water during the hottest period of Summer days.

Water restrictions: Coordinate the water supply and conform to legislation and restrictions applying at the time.

Hand watering

General: Manually water all lawn and planting areas in the absence of an irrigation system or until the proposed irrigation system is fully operational.

Irrigation

Irrigation system program: Adjust to suit the following:

- The precipitation requirements of the individual zones/stations with regard to types of plants.
- The infiltration rate of the soil/medium and associated physical factors, of seasons, evaporation, exposure, topography, local authority restrictions.
- Adjustment or shut down during and after periods of prolonged heavy rains.
- Water supply and watering regime of legislation and restrictions applying at the time.

Equipment maintenance: Conform to the following:

- Check all components for proper operation.
- Obtain approval to repair or replace damaged component with equivalent parts.
- Flush any dirt or foreign matter from the system and clear all blockages.

System maintenance: Conform to the **Irrigation system maintenance schedule**.

Programming

Automated systems: Program to coincide with optimum periods of water pressure and water absorption.

Public access: Do not inconvenience persons occupying the site by water spray or by blocking normal pedestrian or traffic flow.

2.5 MULCHING

General

Clean up: Remove all mulching materials from lawn or paved areas and maintain a clean and tidy appearance when viewed on a monthly basis.

Requirement: Maintain a minimum depth as follows:

- 75 mm for organic mulch.
- 50 mm for inorganic mulch.

Top up: Areas of excessive wear with mulch to match existing.

Appearance: Keep mulched areas clean and tidy with no soil disturbance evident on the surface of the mulch.

2.6 INCIDENTAL WORKS

Supplementary works

General: Execute the following:

- Removal of waste from maintenance work.
- Removal of leaf litter fortnightly during leaf fall.
- Wash paving on completion of herbicide application.
- Emptying of rubbish and recycling bins.
- Maintenance of fixtures in accordance with manufacturer's recommendations.

Furniture, signage and barriers

Scope: All fixed and movable features noted in the record drawings.

Furniture and pots:

- Move and relocate as required for maintenance of the area.
- Repair or replace items damaged by the maintenance contract staff.

Signage: Maintain sight line visibility.

Drains

General: Inspect and clean all drainage structures and pit covers and make sure they are in proper working order. Remove all organic debris.

Frequency: As required so that all overflow drains are cleared when observed at fortnightly intervals.

3 SELECTIONS

3.1 MAINTENANCE REPORT

Monthly reports schedule

Item	Action
Plant material	Replace failed plants
	Additional planting
	Treat for disease or insect attack
	Tree surgery
	Fertilising generally
	Fertilising for specific nutrient deficiencies
	Thin out planting
	Pruning/trimming
Turf	Returfing
	Seeding
	Treat for disease
	Topdressing
	Weeding
	Mowing/trimming
Soil	Erosion/bank stabilisation
	Additional soil
	Soil conditioner
	Weeding
Mulch	Top up mulch
Rubbish removal	Generally remove bottles, paper, cigarette butts etc.
	Remove leaf, litter from path and paved areas
Irrigation	Replace parts
	Repair
	Clean out
	Adjust
	Clean out subsurface drains
Paving and pathways	Repair dips, hollows, irregularities
	Remove stains and graffiti
	Replace sections of uplift

Item	Action
	Clear main pathway drains of debris
	Weeding
Infant playground	Make sure that all play structures are secure and in working order
Fencing	Repair fencing
Bench/seat	Repair loose or damaged parts
Bollard	Reinstate in original position
Lighting	Replace blown lamps and damaged diffusers
Barriers	Replace broken or dislocated palings or rails

3.2 MAINTENANCE SCHEDULE

Maintenance schedule during and post the 52 week maintenance period

WEEK	SPRING (Sept, Oct, Nov)	SUMMER (Dec, Jan, Feb)	AUTUMN (Mar, Apr, May)	WINTER (Jun, Jul, Aug)
1	Mow and trim lawns	Mow lawns; weed	Mow lawns	Weed
2	Weed; trim and adjust trees and shrubs	Weed; mow lawns, trim and adjust trees and shrubs	Weed; mow lawns, trim and adjust trees and shrubs	Mow and trim lawns Trim and adjust trees and shrubs
3	Mow and fertilise lawns; treat plant material for insects and disease	Mow lawns; weed; treat plant material for insects and disease	Mow and trim lawn	Weed
4	Weed; topdress, condition lawns and over sow bare patches; issue maintenance report	Weed; mow and trim lawns; issue maintenance report	Weed; mow lawns; issue maintenance report	Mow lawns; issue maintenance report
5	Fertilise all trees and shrubs in garden beds; mow and trim lawns	Mow lawns; weed	Mow lawns	Mow lawns
6	Weed; inspect mulch for deficiencies in cover; check and adjust irrigation	Mow lawns; check and adjust irrigation	Weed; inspect mulch for deficiencies in cover; check and adjust irrigation	Mow and trim lawns; treat for insects and disease; check and adjust irrigation
7	Reinstate mulch as required; treat plant material for insects and disease; mow lawns	Mow lawns; weed	Reinstate mulch as required; mow, trim and fertilise lawns	Weed
8	Weed; inspect condition of paving and furniture; issue maintenance report	Mow and trim lawns; inspect condition of paving & furniture; issue maintenance report	Weed; inspect condition of paving and furniture; issue maintenance report	Mow lawns; Inspect condition of paving and furniture; issue maintenance report
9	Mow and trim lawns	Mow lawns; treat plant material for insects and disease	Mow lawns	Weed

WEEK	SPRING (Sept, Oct, Nov)	SUMMER (Dec, Jan, Feb)	AUTUMN (Mar, Apr, May)	WINTER (Jun, Jul, Aug)
10	Weed; mow lawns	Mow and topdress lawns	Weed; treat plant material for insects and disease	Mow and trim lawns
11	Mow and fertilise lawns; trim and adjust trees and shrubs	Mow lawns; trim and adjust lawns; weed	Mow and trim lawns; trim and adjust trees and shrubs	Prune back trees and shrubs after flowering
12	Weed; mow lawns; treat plant material for insects and disease	Mow, trim & fertilise lawns	Weed	Mow lawns; treat plant material for insects and disease
13	Check and adjust irrigation; mow lawns; issue maintenance report	Check and adjust irrigation; mow lawns; weed; issue maintenance report	Check and adjust irrigation; mow lawns; weed; issue maintenance report	Check and adjust irrigation; weed; issue maintenance report

3.3 IRRIGATION

Irrigation system maintenance schedule

Item	Frequency
Filters – mainline	Monthly
Electrical source output (auto system)	Monthly
Controller (automatic systems)	Monthly
Operation – progression - Station to Station	Weekly
Proper activation of valves	Monthly
Proper timing of stations	6 monthly
Proper time and day readings	Weekly
Exterior appearance	6 monthly
Valve operation	6 monthly
Open, close completely (weeping)	Weekly
Sprinkler operation	Weekly
Rotaries – clogged nozzles	2 monthly
Plant obstructed pattern	2 monthly
Arc coverage	2 monthly
Radius adjustment	2 monthly
Pop-up action	2 monthly
Riser seal leaks	2 monthly
Set to grade	2 monthly
Coverage pressure	2 monthly
Rotational speed	2 monthly
Clogged screens	2 monthly
Head damage	2 monthly
Piping	2 monthly
Leaks – broken or cracked pipe	As Needed
Bad solvent welds, bad threaded	As Needed
Connection	As Needed
Clogged pipe	As Needed

IRRIGATION PERFORMANCE SPECIFICATION

1 GENERAL

1.1 RESPONSIBILITIES

General

Requirement:

- Design, supply, install and commission multiple permanent irrigation systems.
- Prepare and submit irrigation design documents and plans for relevant authority and project approval that fully describe the system to be installed,
- Conform to Vic Water, Melbourne Water and other relevant authorities' approvals, rules and regulations,
- Supply and install all necessary pipes, fittings and pumps for providing a separate automatic system for irrigating separate identified garden and grass areas.

The final irrigation design and installed system shall take into account:

- Hydraulic Engineering and Electrical Engineering documentation for water supply points, electrical supply points for pumps and other infrastructure to supply the irrigation system.
- Water to be provided via a recycled water storage tank supplied and potable water supply.
- Subsurface drip irrigation system is to be used.
- Irrigation system is to comply with all relevant standards and codes for use.
- The requirements to comply with water use restrictions dictated by authorities.
- Water saving and conservation components.
- Use of soil moisture sensors.
- Using the on-site water storage tanks for irrigation reticulation.
- Controlling water flow to deliver only the necessary volume to sustain plant vigour, and
- Reducing water delivery rates, volumes and frequencies as plants mature and find their own water sources in the soil and lower strata.

Areas to be irrigated:

- All garden bed areas across all building floors

1.2 QUALITY

Give sufficient notice so that inspection may be made of the following:

- Work ready for specified testing,
- Underground or enclosed work ready to be covered up or concealed, and
- Final testing of the completed system.

Prepare and submit detailed shop drawings and a full performance programme for the required irrigation systems, including, but not limited to, irrigation pipes and fittings layout and irrigation controllers and valves locations. A transparency of all shop drawings is to be submitted to the Superintendent, Hydraulic Engineer and Landscape Architect for review and approval prior to the supply and installation of the works.

Prepare and furnish to the Superintendent before the date of practical completion, 'work as executed' drawings of the irrigation, to the same scale and on the same sized standard sheets as the contract drawings, showing the locations of all pipes and fittings, including depths of underground pipework, position of control valves, and the like. Provide written instructions for the operation and maintenance of the automatic irrigation system.

1.3 SYSTEM

The irrigation system shall be an automatic subsurface fixed drip system, with an irrigation controller self-operated via a soil moisture sensor. The system shall be compatible to the type of plant material and rates of water required. Where appropriate adjustable and fully serviceable. The layout of the

entire irrigation is to ensure that each individual plant receives the required amount of water to maintain healthy and vigorous growth.

The irrigation system shall be such that, component theft, vandalism, over-spray and wetting of paths shall be reduced to a minimum or completely eliminated by the use of drip, pop-up sprinklers and judiciously placed fixed spray emitters. Do not use fine mist type emitters that provide a drifting mist that may wet paths and the buildings.

1.4 MATERIALS AND ITEMS

The system shall incorporate the following components:

- Valve boxes: All water supply points and timers shall be housed in lockable waterproof irrigation style valve boxes for easy access and location. The valve box should be manufactured from fibreglass or high density thermo plastic material. The valve lid is to incorporate a locking mechanism.
- Automatic control valves: 24V solenoid actuated hydraulic valves with flow control and a maximum operating pressure rating 1MPa. Provide stainless steel bonnet holding down bolts and internal metal parts of stainless steel, able to be serviced without removal from the line. Provide a gate valve of the same size immediately upstream of each automatic control valve. House both valves in a high impact plastic valve box with high impact plastic cover at finished ground level.
- Quick coupling valves: Provide DN 20 double lugged bronze quick coupling valves with neoprene seats mounted on DN 20 copper risers offset at least 150mm from the supply pipe. Provide valve boxes and covers set flush with the finished surface.
- Pressure regulating valves: Provide pressure regulating valves at offtake points, which are adjustable between 100-700 kPa. Provide an 800µm filter sized to suit the flow immediately upstream from the pressure regulating valve, and provide gate valves upstream from the filter and downstream from the pressure regulating valve. Mount the assembly in an accessible position in the valve box, access pit or adjacent building, and provide backflow prevention.
- Soil moisture sensors: Provide fixed ceramic moisture sensors. Connect to the irrigation controller via moisture control units.
- Control wires: Connect the automatic control valves and soil moisture sensors to the controller with double insulated underground cables laid alongside piping where possible. Lay intertwined for the full length without joints except at valves, sensors and branches of common wires. Provide waterproof connectors. Provide expansion loops at changes of direction and at joints.
- Irrigation controllers: Provide manual cycle and individual station operation, manual on/off operation of irrigation without loss of programme, 240V input and 24V output capable of operating 2 control valves simultaneously, 24 hour battery programme backup and power surge protection. Mount cabinet in a waterproof lockable cabinet. Provide a 240V electrical connection supply, with an isolating switch at the controller.

1.5 INSTALLATION

Work shall be done by or under the direct supervision of appropriately licensed personnel.

The final installation of the system shall include the following features:

- All components except the visible top of pop-up sprinklers shall be installed in a manner that is concealed below ground or below mulch,
- All tubing below mulch shall be pinned into place with galvanised steel spikes to prevent the tubing bending up through the mulch layer,
- All valve boxes shall be supported in the ground on brickwork,
- Valve box lids shall be set level with garden mulch levels and in concealed locations,
- All control fittings such as valves and the like shall be fully accessible within concealed valve boxes in the landscaping,
- All mainline and lateral pipework shall be concealed from view,
- No tube junctions shall be placed in conduits or under slabs where access is not possible,
- Use Class B copper piping on underside of slabs,
- All joints shall be fitted tightly, sealed and made leak proof, with no internal projections, burrs or obstructions,
- Each separate system shall be controlled by one control panel located in a secure area,

- Back flow and master valve assemblies shall be sized as follows:
    - Flow rate 10-17 lpm use 25mm backflow and master valve assembly,
    - Flow rate 71-150 lpm use 40mm backflow and master valve assembly, or
    - Flow rate 151-240 lpm use 50mm backflow and master valve assembly.
- Space dripline tubing at maximum 450mm centres and maximum 200mm from garden edges, and
- Pipework shall be in accordance with AS 1477 and AS 2032.

Flush piping system through with clear water at a velocity sufficient to remove foreign matter, and until only clean water is discharged at outlets. Leave the system free of foreign matter on completion.

1.6 COMMISSIONING

The entire system shall be tuned and tested to deliver an adequate amount of water to all plants and turf. Test the system in the presence of the Landscape Architect and/or irrigation designer to facilitate the issue of a Certificate of Practical Completion.

Maintain the system for the duration of the establishment maintenance period as detailed elsewhere in the specification.