

*Based on SILA Member's Handbook Section V
– Professional Practice, revised in December 1998*

The scope and nature of the services to be provided by the accredited landscape architect either directly or in conjunction with other consultants will vary according to the particular planning and design requirements of the client.

Edits done in Sep 2019 highlighted in yellow

Nature of Services

The landscape architectural services cover five distinct areas as follows:

1 Master Planning and Site Planning

This involves identifying and resolving fundamental site layout issues relating to the selection and location of land uses, activities, structures and pattern of circulation, landforms, water bodies and planting.

2 Design Documentation and Contract Administration

This involves preliminary design drawings which then leads to design development. The developed design will illustrate the size and character of the entire project with sufficient details which may include design reports, and the co-ordination of schematic design of other specialist services. Documentation involves all necessary preparation of tendering document as required for the calling of tenders, the co-ordination of documents. Contract administration is the evaluation and recommendation of tenders; general administration of the contract involving site inspections on

quality and progress of work, attending meetings with the contract and to clarification of matters arising from interpretation of the documents and overseeing that works carried out are in accordance with the contract documents.

3 Landscape Planning and Related Activities

This involves the process of setting landscape goals, objectives and policies for action at local, national and regional scales. Landscape planning may involve landscape inventories, landscape valuation, evaluation of landscape and development options, recommendation of strategies for implementation of landscape policies and the management of disciplinary projects for Site Selection Studies, Environmental Impact Assessments, and Feasibility Studies.

4 Landscape Management

This is the management of a particular landscape to meet specific objectives in relation to the needs of the landscape and the user. It includes the preparation of Landscape Management Plans covering analysis, recommendations, master plans and research. It may

include preservation, restoration, rehabilitation and enhancement of the landscape.

5 Research

This is undertaken to bring about improvements in approaches, techniques and the cost and effectiveness of landscape planning, design and management. It may include valuation, behavioural, environmental, maintenance and tourism studies in relations to the planning, design, and management of landscapes.

Other Services

This may include the preparation of a project landscape brief production of specific drawings and models, etc.

Preamble

All accredited landscape architects in Singapore should be able to provide basic landscape architectural services listed in the following table. The service contents offered by the landscape architect should reflect as closely as possible the services required by the client. This means that before any work is undertaken, full understanding of the scope of the landscape architect's involvement in a project, together with a payment schedule reflecting the different service stages, should be agreed upon in writing.

Use of Terms

The term *hardscape* refers to hard landscape - this being all aspects of the construction works that are involved in landscape schemes. This includes the physical design of water features, but not the mechanical and electrical systems.

The term *softscape* refers to soft landscape - this being all aspects of the planting works for landscape schemes. This includes all aspects of soil bodies, but does not include landscape irrigation.

Basic Scope of Services

1	Preliminary Design Stage
1.1	Strategic Definition
1.1.1	Review the brief provided by the Client and establish a set of requirements and design objectives based on information that influences the development or management of the project.
1.2	Site Analysis - Identify opportunities and constraints
1.2.1	Analyse existing site conditions that will affect and influence the design and arrangement of landscape features in the context of proposed buildings and site infrastructure shown in planning documents and work by other professions. Study site characteristics and conditions to evaluate the strengths, weaknesses, constraints and opportunities related to subject development site.
1.2.2	Develop sketch design proposals, zoning plans, and initial concepts, and coordinate information with the architect and/or other project team members.

2	Design Stage
2.1	Concept Proposal
2.1.1	Develop the landscape concept proposal including overall layout plan(s) showing the location of landscape spaces and relationships to other built elements within the site. Designs and supporting graphics may include landform, circulation and facilities with more elaborated concept for the proposed main landscape spaces; overall planting strategy, and materials with information and images on unique features and visual appearance, if necessary.
2.1.2	Coordinate with the architect and any other relevant consultants on the site planning issues that might affect the resultant landscape design. Prepare illustrative drawings to demonstrate the design concepts for the hardscape, softscape and special features such as play areas, water features, (and where applicable) furniture, rockworks, art works and landscape accessories. These are illustrative concepts which do not contain details at this stage.
2.1.3	Evaluate and incorporate the formal comments on the concept proposal from the client and other project team members, and obtain the client's approval for the concept, then proceed to the next design stage.

2.2	Schematic Design
2.2.1	This stage provides the necessary information required to illustrate the design intent of the landscape elements for coordination amongst the consultants and for the client’s approval.
2.2.2	Comments from the Concept Proposal Stage will be incorporated, and in progress coordination drawings will be issued to the client and all relevant consultants for their final input and coordination. These drawings are intended to convey the character and relationships between various site elements for detailed coordination. The drawings will also help to prepare for more detailed designs (draft plans, sections, elevations and/or preliminary details) of the critical areas, including plans for overall grading intent, planting intent, material selection and soil depth.
2.2.2	The landscape architect will provide the costing for the softscape works only. All other cost information for preparation of overall project cost plans shall be provided by the project quantity surveyor, with assistance by the landscape architect for hardscape works where applicable.
2.1.3	<p>Review with and assist the Qualified Person (QP) in the landscape related matters that are required for the respective authorities, such as inputs to planning submissions.</p> <p>Note: BCA-Greenmark Assessment - Green Provisional Section, ABC Waters, LEED, LEAF and other environmental certification schemes are not part of the main authority submissions and are additional scope of work items if they are required by the developers. These works are not included in the landscape architect’s fee. Separate quotes can be provided if these are required.</p>

2.3	Design Development
2.3.1	<p>Develop landscape detailed proposals including technical details; planting specification; detailed design drawings of landscape structures, furniture, finishes; pavement and material plans; and lighting plan and details. Small architectural elements such as a clubhouse, guard house, gym, lounge, roofed pavilions and site boundary walls are considered architectural items and are not part of the landscape architect's scope of works. Coordination with the project engineers for their inputs are expected, but any structural, mechanical and electrical engineering design and details including those required for automatic irrigation and water features are not part of landscape architect's expertise or scope.</p> <p>Note: Landscape external lighting, except to guide the intent, and integration on location of fittings, should not be included where a Lighting Consultant has been appointed to the project.</p>
2.3.2	<p>Provide the outline specifications and schedules of both hardscape and softscape materials and services for the preparation of the estimates of the construction cost by the quantity surveyor.</p>

3	Tender Stage
3.1	Landscape Submission and Tender Preparation
3.1.1	Study the impact of statutory requirements, and work with the architect to seek clearances and refer to the submission guidelines for landscape elements by the relevant authorities, if provided by the authorities.
3.1.2	<p>Prepare softscape and hardscape technical drawings, schedules and specifications of materials, and landscape grading indicating layout, dimensions, and profiles. Accompanying notes for workmanship should be added where required for the tender and construction.</p> <ol style="list-style-type: none"> a. The water feature details will be for the physical design of the water feature, and the intent of ‘water play’, and will include only the design intent profiles, layouts and performance specifications. b. The landscape lighting plans, if there is no lighting consultant, will include only plans for locations and types of fittings inclusive of cut sheet specifications. c. The surface drainage design includes up to the design intent schematic and visual treatment only.

cont. Landscape Related Works and Design by Others:

The following works fall under the scope of engineers and architects. The landscape architect's role in these is collaborative to ensure integration. But, these items are not designed by the landscape architect.

- a. All parts of the waterproofing system;
- b. The surface drainage network and hydraulic calculations for collection and discharge calculations and external connections;
- c. Electrical wiring diagrams and photometric calculations;
- d. and any other structure and mechanical & electrical engineering designs and specifications including those required for the automatic irrigation and the water features.

The water features mechanical and electrical systems are not designed by landscape architects but by the qualified specialist water features designers or the contractors. This work is not included in the landscape architect's fee.

The irrigation system layouts and the design/specification for mechanical and electrical systems are not carried out by the landscape architects but are done by the qualified specialist Irrigation designers or contractors. This work is not included in the landscape architect's fee.

The signage design is not carried out by landscape architects, though the landscape architect will coordinate with the signage designer. The design of landscape lighting will only be done by the landscape architect if it is clearly stated in their brief that there is no lighting consultant, and the landscape architect has agreed to include landscape lighting in their scope and fee.

3.1.3	Landscape Architect will provide relevant information to the Quantity Surveyor for the purpose of preparation for tender documentation. It is the responsibility of the Quantity Surveyor to prepare proper tender documents, letter of award and proper contract documents for the softscape tender, including any necessary front-end and back-end documents for a complete and legal tender process. Arithmetic checks, liquidated damages, performance bond(s) necessary insurance, issuance of progress claims and final accounts will be under the purview of the Quantity Surveyor. Landscape Architect will assist by assessing the landscape work done on site.
3.1.4	Evaluate the landscape related tenders, issue the tender questionnaires for hardscape, softscape, and if applicable for the ancillary sub-contract tenders such as irrigation, play areas and water feature works, providing these requirements have been covered in the initial brief.
3.1.5	Advise the client and make recommendations on the appointment of the landscape contractor. Arithmetic checks for the returned tenders shall be done by the project quantity surveyor.
4	Construction Stage
4.1	Construction
4.1.1	Administer the contract during construction including reviewing the contractor's programme and shop drawings for the landscape portion of the works. This may include issuing information and instructions; checking and certifying progress; inspecting and checking hard and soft landscape works done on site; recommending payments due for works done on site and identifying any variation works.

4.1.2 Attend site meetings for items relevant to the landscape works and visit the site at intervals appropriate to the contractor's programmed activities and/or to an inspection schedule agreed with the client. This should be to inspect the progress and quality of the works, and the compliance with the design and construction information shown in the landscape architect's drawings.

Full time or continuous weekly supervision of the landscape works will be not provided in the landscape architect's scope. If site staffs are requested by the client, this will be an additional service not covered by the consultant's fee and paid for by the client separately.

Provide inspection reports to the client specific to the landscape work items reviewed at site.

Inspections of the contract works will continue until completion of the main contract, temporary occupation permit, or acceptance by the client that works are complete and a date of completion is agreed.

Note: Monthly financial reports or weekly site progress reports, which are to be done by others are not part of the landscape architect's scope.

4.1.3 Liaise with other appointed consultants to enable decisions to be made regarding the contract.

4.1.4 Provide information for change control procedures where necessary, or to assist in the decision making on the cost and time control during the construction period.

4.2	Handover and Close out
4.2.1	Prepare the schedule of defects and certify completion of defects made good prior to and immediately after the certification of completion of contract works. Set a programme for contractors making good of the defects.
4.2.2	During defect liability period, visit the site at intervals appropriate to an inspection schedule agreed with the client to inspect the quality of the landscape maintenance works.
4.2.3	<p>Administer the terms of the contract relating to the completion of works dictated by the schedule of services in softscape specification.</p> <p>Attend the final inspection of all other landscape related works for the job certification. Assist in the preparation of the project Final Accounts for softscape works by certifying the work done and defects completed at site. This excludes the recommendation of the final sum to be paid which is subject to project quantity surveyors' arithmetic checks and the assessment for the applicable discounts, retention, performance bond and applicable taxes for their recommendation of the final monies to be paid.</p>