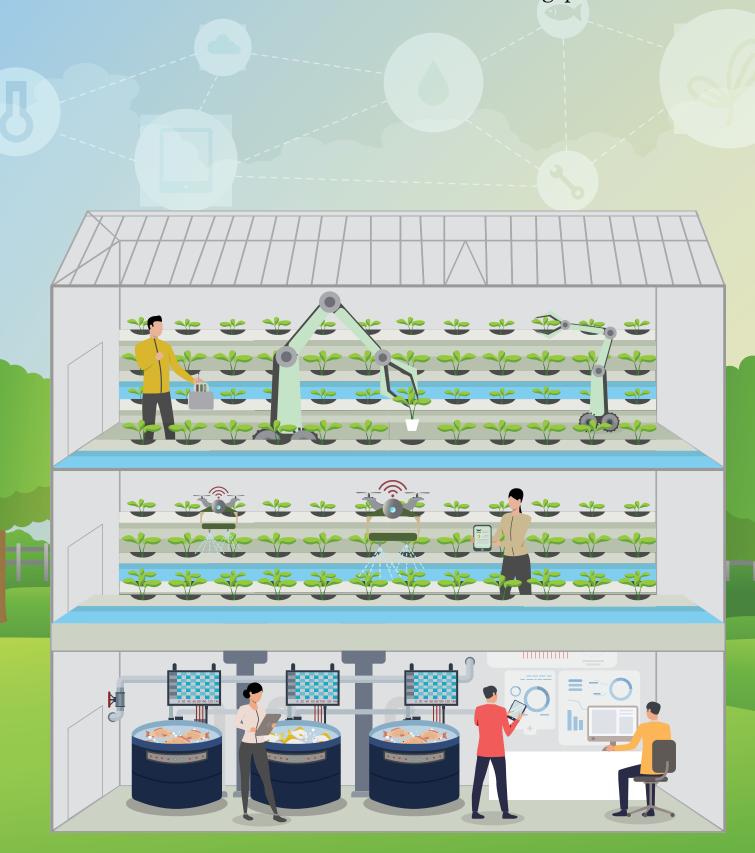
STARTING A FARM:

An Industry Guide

The guide will walk you through the key guidelines and procedures needed to start a land-based or indoor farm in Singapore.





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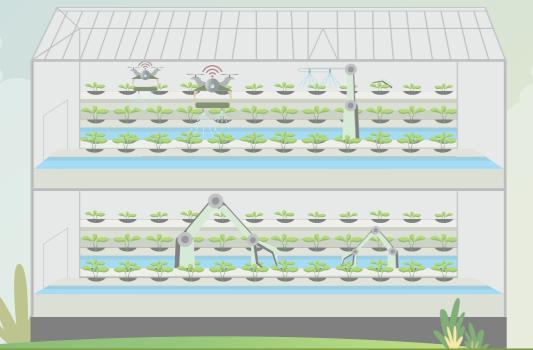
MSE's Foreword



In recent years, we have witnessed repeated food supply disruptions globally. Climate change, the COVID-19 pandemic and geopolitical developments have caused global supply disruptions that impacted Singapore's food supply. We can expect such disruptions to occur from time to time. We must therefore continue efforts to bolster our food resilience.

Singapore imports more than 90% of our food. We adopt a multi-strategy approach to sustain our food resilience. Local production is a key strategy that can provide us with a buffer during food supply disruptions. Our "30-by-30" goal is to have the capabilities and capacity to produce 30 per cent of Singapore's nutritional needs, sustainably, by 2030.

Our farms play a key role in achieving our "30-by-30" goal. The Government is committed to partnering the local farming industry to expand food production in a highly productive, climate-resilient, and resource-effective way.



We continue to avail and develop space for agriculture. Our latest plan is to re-develop the Lim Chu Kang region into a high-tech agri-food zone, currently at the master planning stage. This will increase food production while leveraging circular economy principles for greater resource efficiency.

We are actively supporting the adoption of productive farming methods through the \$60 million Agri-Food Cluster Transformation Fund, which cofunds the adoption, test-bedding and development of farming technologies. In parallel, Singapore Food Agency (SFA) works with Institutes of Higher Learning, SkillsFuture Singapore and Workforce Singapore to develop training programmes that sustain a strong pipeline of agri-food workers.

To help local farms better understand and navigate the regulatory requirements in setting up a land-based farm, the Regulations Workgroup (RWG), led by the SFA and ESG, developed the Industry Guide for Land-Based Farms in 2020. With the strong support of the Singapore Agro-Food Enterprises Federation Limited (SAFEF), this second version of the Industry Guide has been updated with the latest set of regulatory guidelines and requirements. SAFEF has been a key partner in the development of this guide for the sector's needs. I hope that our farmers will find this guide useful and informative.

It is a meaningful time to be in the agri-food industry. With the Government and the industry working closely together, we will co-create a sustainable and resilient food future for Singapore.

Grace Fu
Minister for Sustainability and the Environment

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SAFEF's Foreword

he agriculture scene in Singapore has changed drastically over the last decade and there is now a great emphasis on food security, with the government restarting efforts to tender out agriculture land for food farming. We, the Singapore Agro-Food Enterprises Federation Limited (SAFEF) was set up in 2017 as a not-for-profit organisation, to represent, advance and promote the agro-food sector for livestock, food fish and vegetable farms, and now has a wide network of local farmers as our Members.

In 2020, we received a lot of feedback from our Members who have won SFA land tenders, that they faced many regulatory challenges in setting up their farms in Singapore.

As a result of SAFEF's active engagement with the various government agencies to try to facilitate and expedite the farmers' journey in setting up their farms, the first edition of "Starting a Farm: An Industry Guide" was developed in 2020 as a live document, to be updated regularly.

I am very happy that the various government agencies, led by the Singapore Food Agency (SFA), have come together after 2 years to update this publication so that industry stakeholders are kept informed of current regulations. New sections have also been added to the Guide, such as that related to workers' living quarters at the farm and an archetype concept

design for fruited vegetables and/or mushroom farms. Also, greater clarity is given on when and how to obtain the relevant approvals from the various government authorities before a farm licence can be issued.

I urge you to take special note of the recommendation to garner your team of technical experts such as a Qualified Person (QP) and Mechanical & Electrical (M&E) Engineer early to help you navigate the Guide and the various regulations that you have to comply with, as their advice would help you to work out the capital investments required. This preparatory work is critical for the companies to be more prepared.

Mr George Huang Chairman, SAFEF











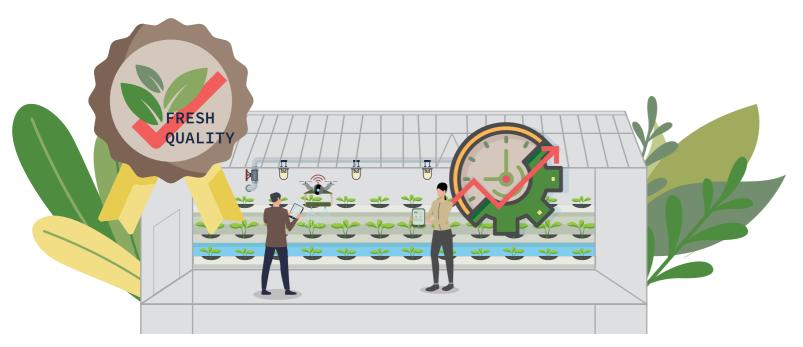
Introduction

What is the High-Tech Farming Sector About?



High-tech farming generally refers to intensive farming in buildings or controlled environments. High-tech farming systems now allow production to take place inside buildings (i.e. indoors). This enables more food and produce to be grown, at a consistently high quality.

Traditional methods of farming are heavily reliant on environmental factors that cannot be controlled, such as sun light, soil quality and water. In contrast, high-tech farming systems are typically enclosed to minimise contaminants, built up in a vertical racking structure to enhance productivity, and feature a range of environmental controls, such as LED lighting. The prospect of having fresh, quality produce available all year round is what makes high-tech farming so attractive.



Highlights of This Guide

If you are thinking of setting up a high-tech farm in Singapore, this guide will give you a better understanding of the procedures you will need to follow, including information on the various documents, fees and timelines involved. This guide also introduces each of the government agencies and departments overseeing the necessary permits, should you wish to contact them to make specific enquiries.



The following agencies have contributed to this guide:

























We would also like to thank Singapore Agro-Food Enterprises Federation (SAFEF), Panasonic Singapore, Singrow, MEOD and Kok Fah Technology Farm Pte Ltd for your feedback to the Industry Guide.

If you have suggestions on how we can improve this guide, or any questions about specific regulations and processes mentioned in the guide, please do get in touch with us at https://go.gov.sg/feedback-guide

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Singapore's Vision

"Our vision is for Singapore to be a leading urban agriculture and aquaculture technology hub with a food production model that can be exported to the region."

- Minister of State for Trade and Industry, Mr Alvin Tan

"Our local farms are essential to delivering our 30 by 30 goal. By leveraging technology and innovative solutions, we strive to develop a productive and sustainable local agriculture and aquaculture industry that will bolster Singapore's food resilience."

- Senior Minister of State for Sustainability and the Environment, Mr Koh Poh Koon



Food security is about survival, and is fundamental to national security. To ensure and secure a supply of safe food, Singapore takes a multi-prong approach, including diversifying our food import sources, producing some food locally, and growing produce abroad. Singapore imports over 90% of our food. These imports are vulnerable to global fluctuations in supply and price. Producing some of our own food locally is critical in helping us reduce our reliance on imports, and buffers the impact of supply disruptions abroad.

Producing food in land-scarce and resource-tight Singapore is no easy task. Our agri-food industry will have to pursue R&D and adopt new solutions to raise productivity and strengthen climate resilience. In doing so, Singapore can become a home to high-tech farms that not only produce fresh and nutritious food, but also pioneer technologies and systems that could transform farming in our region.

Singapore's international reputation for food safety and standards, as well as our strengths in adjacent industries, represent attractive value propositions for companies looking to innovate and further develop their businesses. Given our strong talent-base, strategic location and pro-innovation business environment, our ambition is to advance Singapore as an urban agriculture and aquaculture technology hub in the region.

A Unique Landscape To Operate In

Singapore is known regionally and globally for our high standards and rigorous regulations. However, these exacting standards may be challenging for agripreneurs (entrepreneurs in agriculture and farming) to navigate. This guide outlines the building & development phase in the setting up of farms. The section below offers:





An overview of the relevant regulatory considerations that could apply to your farm's design.



A time chart of the approval processes. You should factor these requirements into your business planning, before bidding for agricultural land or securing spaces to set up your new farm.

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An Overview

Safe & Productive Farming: A Collaborative Effort between Farmers & Public Agencies



Ensures your farm meets a high level of productivity. SFA leases out land and grants licences for food farming.



Helps your farm meet planning requirements on land use and intensity, while ensuring that your farm structures and activities remain compatible with surrounding uses.



Adopting proper waste, pollution management and vector control practices to ensure farming operations do not cause environmental pollution or public health issues.



Green spaces for tree and shrub planting are set aside to provide visual relief in the built environment. Trees are conserved wherever possible.



Stormwater and used water management helps minimise flood risk and ensure that your premises are served by modern sanitation.



Regulator for migrant workers' housing



Fire Safety Requirements ensure good fire safety is observed. They check that your building materials or appliances are not fire hazards, and that your farm has fire escape routes, with firefighting provisions in case of an emergency.



Property and Income Tax can be incorporated into your company's financial plans for business growth and development.



Differential/ Additional Land Premium can help you decide how best to enhance the use of land for your farm.

Building and Construction Auth

Checks that your construction site and built farm premises are safe for use, and accessible for people of different mobility. BCA also lists best practices for running an eco-friendly farm.

Together, we can create quality produce that meets international standards, while making farms enjoyable and conducive places to work in.

Starting a Farm: An Industry Guide

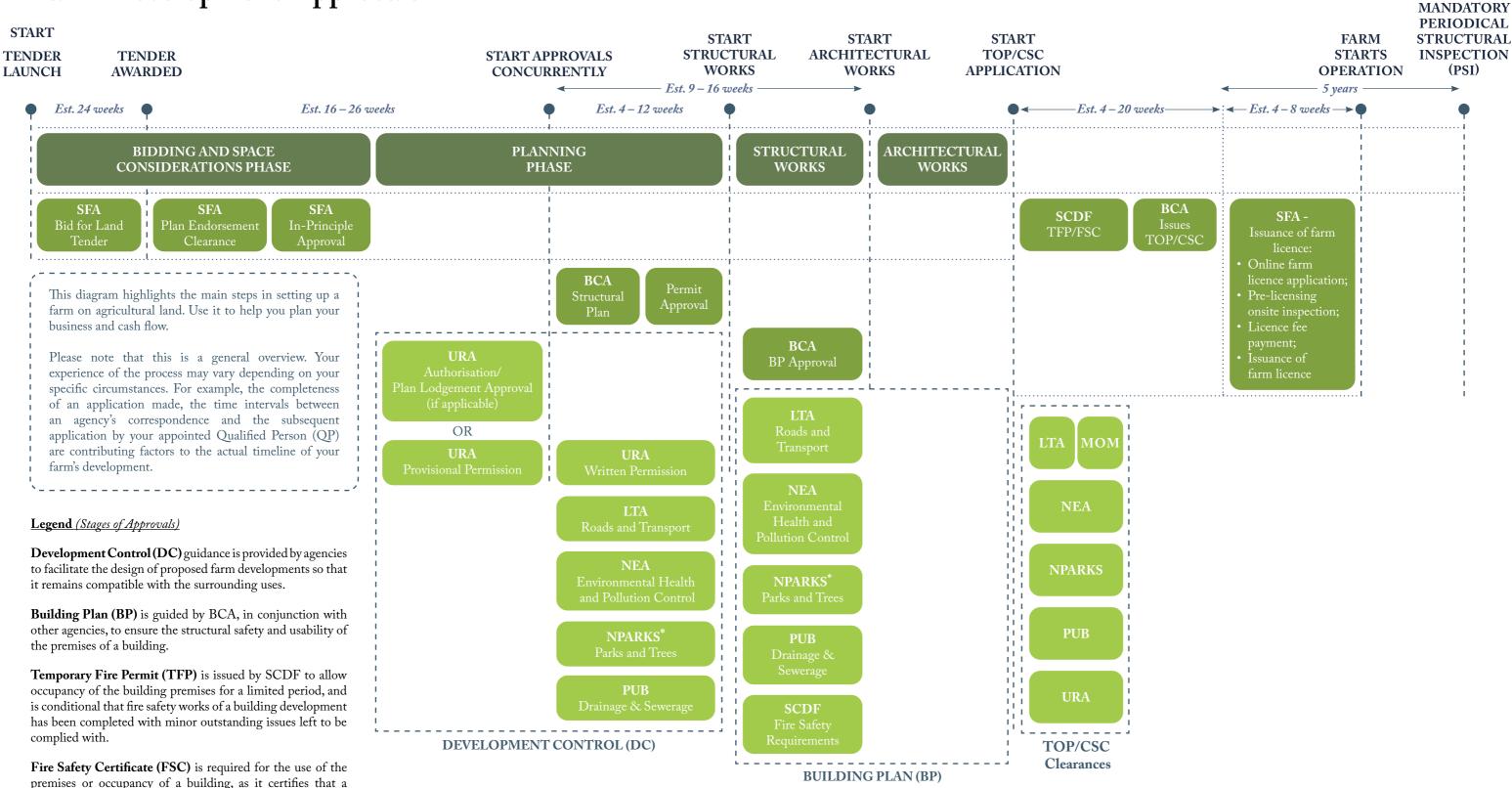
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Land Transport Authority

connected, with safe roads and enough parking space for employees and visitors.

Farm Development Approvals¹



building is safe for its occupants. It is issued by SCDF upon ensuring completion of all fire safety works for the building development.

Certificate of Statutory Completion (CSC) is issued by BCA, in conjunction with other agencies, upon ensuring that all building requirements have been fully complied with.

Temporary Occupation Permit (TOP) is issued by BCA in

conjunction with other agencies' approval, such as Temporary Fire Permit, to allow occupancy when building requirements

have been satisfactorily complied with.

Mandatory Periodical Structural Inspection (PSI) is required to be conducted by a qualified Professional Engineer once every 5 years. For details, please refer to https://www.bca.gov.sg/psi

*NParks' streamlined application process

From 1 September 2020 onwards, for all new development projects, BP submissions to NParks are not required. All greenery provision, tree felling request and reinstatement works within road reserve will be assessed and approved at the DC stage.

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¹ For applications, all documents are to be submitted through a one-stop online portal: Construction and Real Estate Network (CORENET) http://www.corenet.gov.sg Please include "Agricultural Building(s)" in project titles when making submissions to all agencies. Plans can be submitted to multiple approving authorities from anywhere, at any time. The submission status will be updated electronically.

Building a Successful Farm: Key Steps

This chapter explains the key government regulations that can affect the way you design your farm's layout or operations. The regulations are organised by category, according to the respective government agency overseeing them.

To help you understand how the regulations may impact your farm design, most of them are presented as a checklist of Performance Criteria and Acceptable Solutions. For each specific procedure, a flowchart and response times are included.

The details in this chapter can get technical. You are encouraged to appoint a Qualified Person (QP) - usually a Registered Architect or Professional Engineer to help you navigate the guide and to have a headstart in developing your farm.

If you need help engaging a suitable QP, you may approach SAFEF for more information.

We wish you all the best in designing a safe and conducive farm that will yield many years of fruitful production!



BIDFOR AGRICULTURE LAND





Singapore Food Agency (SFA): Formed as a statutory board on 1 April 2019, the SFA oversees food safety and food security from farm to fork.

The Land Sales and Management Department in SFA conducts agricultural land tenders, assesses tenders, and awards the land.

Since land is scarce in Singapore, land for agricultural use is usually let out via open tenders and the selection process in a tender assessment is competitive. This ensures that our limited agricultural land goes to the most productive farmers with the best concepts.

There are currently two types of tenders: (1) Fixed Price Tender and (2) Concept and Price Tender².

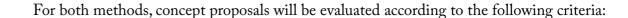
1) *Fixed Price Tender* (i.e. for vegetable, food fish, beansprouts)

The Fixed Price Tender is a single stage tender. Evaluation is conducted by a Tender Evaluation Committee and the tender is awarded based on proposals that can best optimise the land for production.



2) *Concept and Price Tender* (i.e. for General Agricultural farming)

The Concept and Price Tender is a two-stage tender. In the first stage, a Concept Evaluation Committee will evaluate the concept proposal based on assessment criteria. Only when the proposal passes the first stage will the Tender Evaluation Committee evaluate the Tendered Sale Price for award of the tender.



EVALUATION CRITERIA

Tender Proposals will be evaluated based on Production Capability, Track Record and Business Sustainability



DOCUMENTS NEEDED FOR TENDER SUBMISSION

- ✓ Tender Proposal Form
- ✓ Tender Deposit
- ✓ Declaration of Government Equity Participation
- ✓ Supporting Documents
- ✓ Form of Tender



² Information on the launch of new agriculture land tenders, along with the tender documents, can be found at SFA's website (www.sfa.gov.sg/landsales)

You are encouraged to engage a Qualified Person (QP), who can be a Registered Architect or Professional Engineer, to work on your farm's development and building plans during the tender submission stage. The list of QPs qualified to submit plans on your behalf can be found on the Board of Architects website (www.boa.gov.sg) and the Professional Engineers Board Singapore website (www.peb.gov.sg). You can also approach SAFEF for more information on QP if you need help.

Once you have successfully won the land tender,

- You must submit a Building Programme, stipulating the dates for key project milestones, stages of construction and the completion of the development.
- Your QP will submit the plans via the online portal, CORENET, for SFA's endorsement, before endorsement by other relevant agencies.
- Refer to Pages 14-15 on the Farm Development Approval Processes and Timelines.





KEY REQUIREMENTS

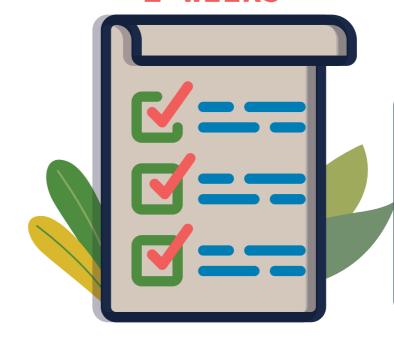
QPs should ensure that the submitted building plans

- are in line with the concept proposal that was submitted during tender, and
- comply with all requirements as stated in the Technical Conditions of Tender and Conditions of Tender (TCOT), including requirements for the green buffer and peripheral planting verge, building setback, building height, permitted farming type, areas for production and ancillary uses, and vehicular ingress/egress points.

For sites that are close to sensitive nature areas (e.g. Nature Reserves, Nature Areas, marina and coastal areas, and other areas of significant biodiversity or with potential trans-boundary impact), the TCOTs may include the requirement for QPs to consult and obtain the relevant technical agencies' clearances <u>prior to</u> commencing works. This is to ensure the necessary mitigating measures are in place to minimise any environmental impact arising from the proposal.



2 WEEKS



PLAN APPROVAL

SFA's Plan Endorsement Committee will require up to 2 weeks to assess and process submissions made via CORENET. Once a complete and detailed plan submission is made, the Committee may approve the plans, or if necessary, provide feedback and guidance to further improve the plans.

OTHER INFORMATION

Working with other technical agencies, SFA also processes applications for:

- Change of use and/ or intensification of use
- Commercial usage on farm
- Farm licence (Refer to section on Farm Licence Application, Pg 78)







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Helpful Tips!

4 Jay

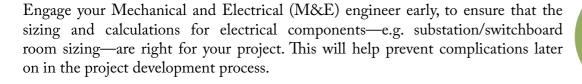


Engage a QP who is familiar with farm developments



Engage a QP who is familiar with and understands farm development or related projects. Your QP is a key resource person who will translate your farm plans into drawings for endorsement by SFA and other relevant agencies. Your QP will also advise you on regulatory requirements. A good understanding of the regulatory requirements that apply to your project will help minimise changes to your farm plans, and reduce the likelihood of delays.

Engage your Mechanical and Electrical (M&E) engineer early





Power at Low Voltage



Your farm will be able to tap on power at low voltage from the 22 kV electrical substations in the vicinity of the farm. If the farm operation requires power supply of more than 400 A at low voltage, you are required to construct your own 22 kV/LV Electrical Substation as part of your farm development within the Land Parcel. If you need more information, please consult Singapore Power Group Distribution Planning Section. You may refer to the guide on "How to Apply for Electricity Connection" at http://www.spgroup.com.sg for more information.





Farm developments can require significant capital outlay. Work through your financials carefully to ensure that all direct and indirect costs are included. If you intend to get investors or bank loans as a source of funding, engage your financial partners early, so you have some certainty during the process of setting up your farm.

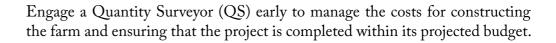


Process Flowchart

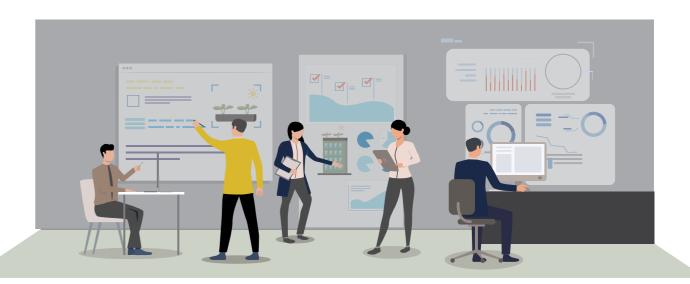


The process flowchart on the next page shows a typical timeline for seeking Plan Endorsement from SFA. This does not take into account any deviations to the plan, or resubmissions and other possible delays.

Engage a Quantity Surveyor (QS) early







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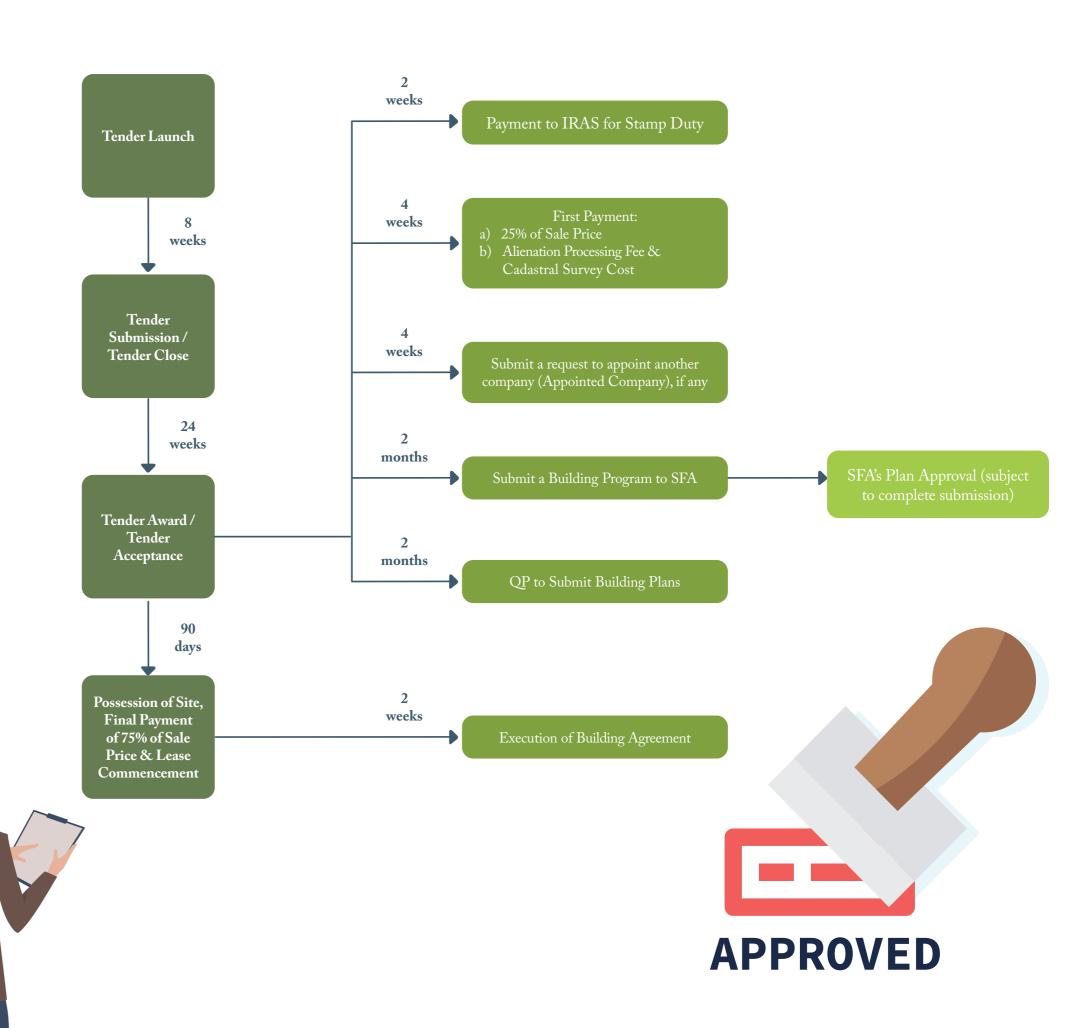
DOCUMENTS TO PREPARE FOR TENDER

- ✓ Tender Proposal Form
- ✓ Form of Tender (for Concept and Price Tender)
- ✓ Tender Deposit
- ✓ Declaration of Government Equity Participation
- ✓ Supporting Documents

DOCUMENTS TO PREPARE FOR PLAN SUBMISSION

The following documents are required when submitting plans via CORENET:

- ✓ Declaration Checklist for QP
- ✓ Certified Plans by QP (Site Plans, Section/ Elevation Plans, Floor Plan, Roof Plan, Setback Plan)
- ✓ Additional information for earthworks (if applicable)

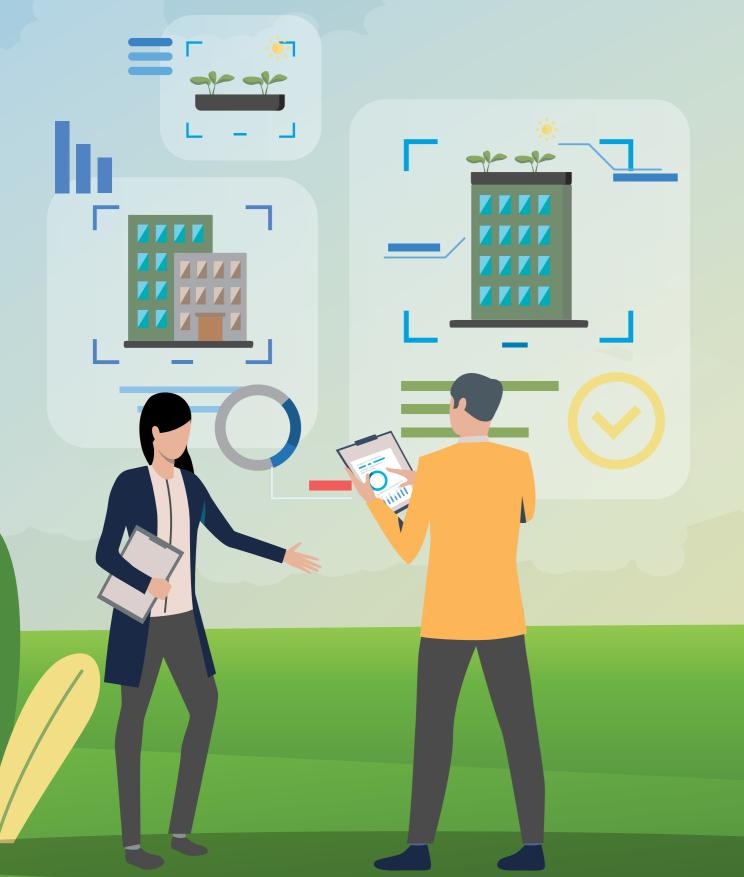


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OTHER SPACE OPTIONS



Besides purchasing agriculture land to set up your high-tech farm business, there are other space alternatives available in Singapore, such as converting existing building pockets for farm use.

After identifying a suitable space and getting the land/building owners' approval, you would need to obtain SFA's in-principle support for the farming proposal (*Refer to section on Farm Licence Application*, Pg 78).

Once SFA has given support for your business proposal, you may proceed to consult and obtain approval from URA and NEA.

PERFORMANCE CRITERIA

ACCEPTABLE SOLUTIONS

For land zoned for Agriculture purposes, agriculture uses can be allowed.

URA

Use for the land/building

More information on land use zoning on the URA Master Plan can be found here: https://www.ura.gov.sg/ Corporate/Planning/ Master-Plan For land not zoned for Agriculture purposes, an Outline Application proposal can be submitted for URA's consideration on whether the proposal can be supported.

For proposals to convert existing building premises into indoor farms or open-air farms (e.g. on the rooftop), a Change of Use proposal can be submitted through the LicenceOne portal at https://licence1.business.gov.sg/

More information on applying for a Change of Use proposal can be found at: https://www.ura.gov.sg/Corporate/Property/Business/ Change-Use-of-Property-for-Business

For farming proposals that involve additions and alteration works (e.g. erection of structures), a development application will need to be submitted if the proposal does not meet URA's Authorisation or Plan Lodgement conditions (see Page 31). More information on the submission requirements can be found at: https://www.ura.gov.sg/Corporate/Guidelines/Development-Control/Planning-Permission/using-CORENET-eSS

NEA

Siting requirements (industries and building pollution control requirement)

These are detailed in SS 593:2013 and regulated by NEA

For vegetable farming, Light Industrial requirements apply.

For all farming proposals, please consult NEA on the siting issue.

More information on Industrial Allocation System can be found at: https://e-services.nea.gov.sg/ias/PublicApplicant/
https://e-services.nea.gov.sg/ias/PublicApplicant/

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³There is no need to engage a Qualified Person (e.g. architect) for such proposals, although you are advised to

SCDF

More guidance on the application can be found here: https://www.scdf. gov.sg/home/firesafety/permitsand-certifications/ fire-safety-certificatetemporary-fire-permit

For proposals to convert existing building premises into indoor farms or open-air farms (e.g. on the rooftop) a Change of Use proposal/ Addition and Alteration (A&A) can be submitted to SCDF's Fire Safety Department through the CORENET e-Submission System.

BCA

Structural design standards to be used are indicated in the BCA's Approved Document, which can be found here: https://www.bca.gov.sg/Publications/BuildingControlAct/others/
Approveddocument.pdf

For farming systems with structures, Building Plan and Structural Plan submissions can be submitted through CORENET e-Submission System.

Farms or QPs who are unsure may enquire whether a submission is required (or not) by emailing to **bca enquiry@bca.gov.sg**.

PUB

For all farming systems, QPs are required to make Development Control and Detailed Plan Submissions through CORENET e-Submission System.

Development plans which are eligible for Simplified Submission Scheme do not need to obtain DP/TOP/CSC Clearance after carrying out a DC lodgement. Please refer to PUB's QP Portal for more info on this Scheme.

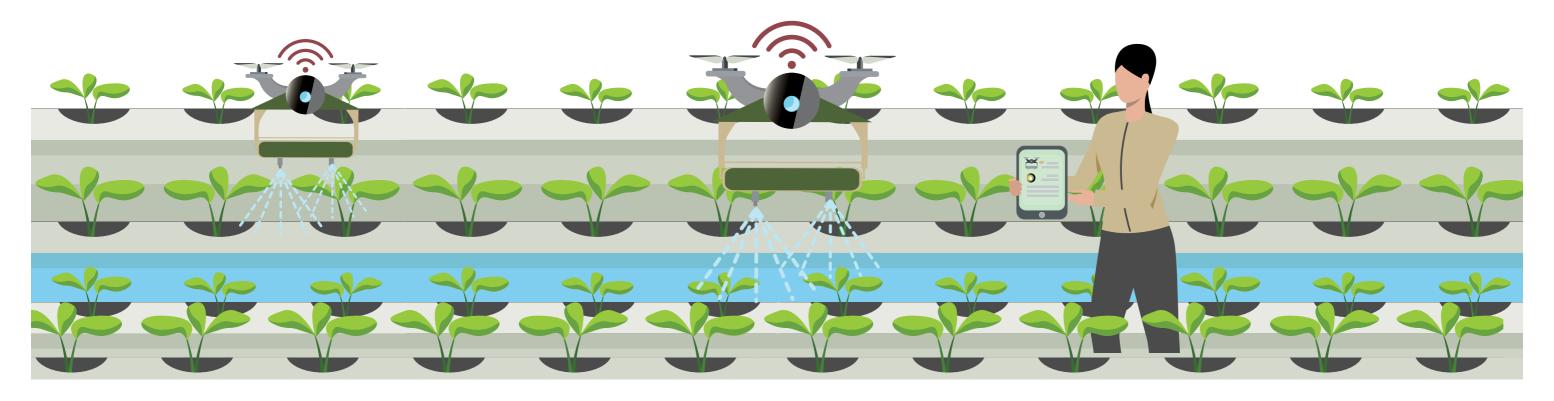
For water supply, a Water Supply – Notification of Water Service Installation (WSI) submission is required. For the installation of a PUB water submeter, QP shall include a letter from the building owner/management corporation indicating no objection for the installation of PUB submeter.

OTHER SUBMISSIONS REQUIRED:

For any trade effluent to be discharged to public sewer:

- Trade effluent discharged into a public sewer must comply with the Sewerage and Drainage Act and the discharged standards stipulated in Sewerage and Drainage (Trade Effluent) Regulations. Further information about this requirement can be found at: http://www.pub.gov.sg/compliance/industry/codeofpractice.
- Before operation, written approval from PUB is required for discharge of trade effluent into the public sewerage system. QPs can apply for approval via the LicenseOne Portal at: https://www.gobusiness.gov.sg/licences/.

Please obtain BCA's Temporary Occupation Permit or Certificate of Statutory Completion ("TOP/CSC") approval before commencement of operations at the indoor farm, and submit proof of TOP and CSC to SFA to obtain the farm's license to start production. URA, PUB and NEA's TOP/CSC Clearance as well as SCDF's Temporary Fire Permit (TFP)/ Fire Safety Certificate (FSC) are required for BCA's TOP/CSC Clearance.



LANDUSE ZONING AND PLANNING





Urban Redevelopment Authority (URA): As Singapore's land use planning authority, URA's role is to guide the development of Singapore in a sustainable manner through long-term planning, ensuring our limited land resources are put to optimal use. This includes facilitating development proposals while ensuring these are in line with the planning intention for the area and comply with the relevant planning guidelines.

For more information, see URA's website:

https://www.ura.gov.sg/Corporate/Guidelines/Development-Control/Non-Residential/Agriculture/Advisory-Notes

KEY GUIDELINES THAT APPLY TO YOUR FARM

URA's circular on guidelines pertaining to agriculture developments can be found here: https://www.ura.gov.sg/Corporate/Guidelines/Circulars/dc19-17



You may find information regarding the GFA treatment of farm structures at: https://www.ura.gov.sg/Corporate/Guidelines/Development-Control/gross-floor-area/GFA/Covered-greenhouses-farms

PLANNING PARAMETERS

Minimum Building Setback

PLANNING GUIDELINES

For the site boundary fronting a drainage reserve, backlane, or a non-agriculture development, the required minimum building setback is 4.5m inclusive of a 2m planting strip.

For the site boundary fronting an adjoining agriculture development, the required minimum building setback is 2m, with no planting strip required.

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Minimum Road Buffer						

ROAD CATEGORY	MINIMUM WIDTH OF BUFFER	SPECIFICATION OF BUFFER	
Category 1 – Expressway	15m	5m green, 10m physical	
Category 2 – Major Arterial A	7.5m	3m green, 4.5m physical	
Category 3 – Major Arterial B	5m	3m green, 2m physical	
Category 4 & 5 – Other major roads, minor roads, and slip roads	5m	3m green, 2m physical	

Ancillary Uses

• Restaurant, showroom, shop (maximum 200 m²)

• Visitor centre (maximum 200 m²).

- Allowable quantum for ancillary office, workers' quarters, production-related ancillary use (e.g. R&D, food processing), and other non-commercial ancillary uses supporting the operations of the agriculture use as supported by SFA, NParks, or SLA.
- Residential use for owner's dwelling purposes will not be allowed.

Earthworks

All earthworks will require endorsement and clearances from the lessor, SLA, and PUB.

Earthworks are generally not encouraged, except in the following circumstances:

- When the proposed earthworks are to match the existing platform levels of the neighbouring sites.
- When the sites are on undulating or sloping terrain, with large differences in platform levels within the site, or between the site and the road.

Earthfill involving the entire development site may only be considered if the proposed earthworks are needed to meet the Minimum Platform Level (MPL) stipulated by PUB.

Boundary And Retaining Walls Maximum allowable height for boundary walls is 1.8m.

Height of retaining walls is subject to evaluation. If retaining walls are allowed:

- the height should be less than 1.5m.
- retaining walls higher than 1.5m may be considered depending on site constraints and the need for extensive excavation.
- the total visible height of the solid boundary-cum-retaining wall should not exceed 2.8m, of which the solid boundary wall should not exceed 1.8m.

Planning Permission

Based on certain criteria, agriculture proposals can either be authorised, lodged, or subject to evaluation by URA.

Note that all works will require endorsement by the lessor (e.g. SLA, SFA, NParks) and must fully comply with technical agency requirements (including SCDF, NEA, PUB, NParks and LTA)

<u>Authorisation</u> - there is no need to seek approval from URA if the following conditions are met:

- The works complies with all planning guidelines for agriculture developments.
- For land that is tenanted (or granted Temporary Occupation Licence) by the State or statutory body for Agriculture development: Works comply with parameters in tenancy agreement.
- For land that is leased by the State / statutory body for Agriculture development: Works involving single storey structures not exceeding 12m high for Agriculture use only, including:
- o Ancillary uses e.g. office, workers' quarters, with endorsement from the lessor.
- o The works are for digging of ponds and wells.
- The development proposal does not involve a gazetted conservation building or monument, and are not located on sites that are subject to special planning controls (which will be made known in the tender and tenancy conditions).
- Landowner's consent is obtained prior to the proposed works.

<u>Plan Lodgement</u> – A Qualified Person (QP; e.g. architect) lodges plans and documentation with URA, pays plan lodgement fees, and can obtain an instant approval if the works comply with the criteria below:

- The land is leased by the State or a statutory body for Agriculture development.⁴
- The proposal is endorsed by lessor for the land (e.g. Singapore Land Authority, Singapore Food Agency or National Parks Board).
- Land for development abuts a public road allowing direct vehicular access.
- The proposed works do not encroach onto any other land.
- The works comply with all planning guidelines for agriculture developments.
- Prevailing building height controls are complied with.
- Earthfill works on the land, if any, will not cause the level of any point in the land to be more than 1.5 metres above the lower of the following:
- o the level of that point in the land at the time when the land was leased or agreed to be leased by the State or statutory body; or
- o the level of any point at the abutting edge of abutting land.
- There are no unauthorised works on the land.
- The proposal is submitted by a QP who is a registered Engineer, or surveyor, appointed by the lessee for proposed works.

<u>Development Application</u> - QP submits a development application to URA with plan submission fees to obtain a Written Permission (WP) for all other works for agriculture use that cannot qualify for plan lodgement or authorisation.

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PROCEDURE FOR PLAN LODGEMENT

DOCUMENTS NEEDED FOR SUBMISSION

- ✓ Written endorsement from lessor
- ✓ Authorisation letter from owner/ lessee of the land to authorise QP for the lodgement application
- ✓ CAD / BIM drawing for proposed development
- ✓ Payment of processing fee. The processing fee schedule can be found: https://www.ura.gov.sg/
 Corporate/Guidelines/
 Development-Control/Planning-Permission/-/media/E9B963142A
 224A9193714F881EF97B5F.ashx

QP lodges plans / documents with URA

Declares compliance with the lodgement criteria

Obtains lodgement authorisation instantly

LIST OF LODGEMENT CRITERIA

- 1. Land is leased by the State or statutory body for Agriculture development.
- 2. Proposal is endorsed by lessor for the land.
 (e.g. Singapore Land Authority, Singapore Food Agency or National Parks Board)
- 3. Land for development abuts a public road allowing direct vehicular access.
- 4. The proposed works does not encroach onto any other land.
- 5. Compliance with all planning guidelines.
- 6. Compliance with the prevailing building height controls.
- 7. Earthfill works on the land, if any, will not cause the level of any point in the land to be more than 1.5 metres above the lower of the following:
 - (i) the level of that point in the land at the time when the land was leased or agreed to be leased by the State or statutory body; or
 - (ii) the level of any point at the abutting edge of the abutting land.
- 8. There are no unauthorised works on the land.
- 9. The proposal is submitted by a Qualified Person (QP) who is a registered Architect, Engineer, or surveyor, appointed by the lessee for proposed works.
- 10. Clearances obtained from the relevant authorities (including LTA, NEA, PUB, SCDF, DSTA and BCA)

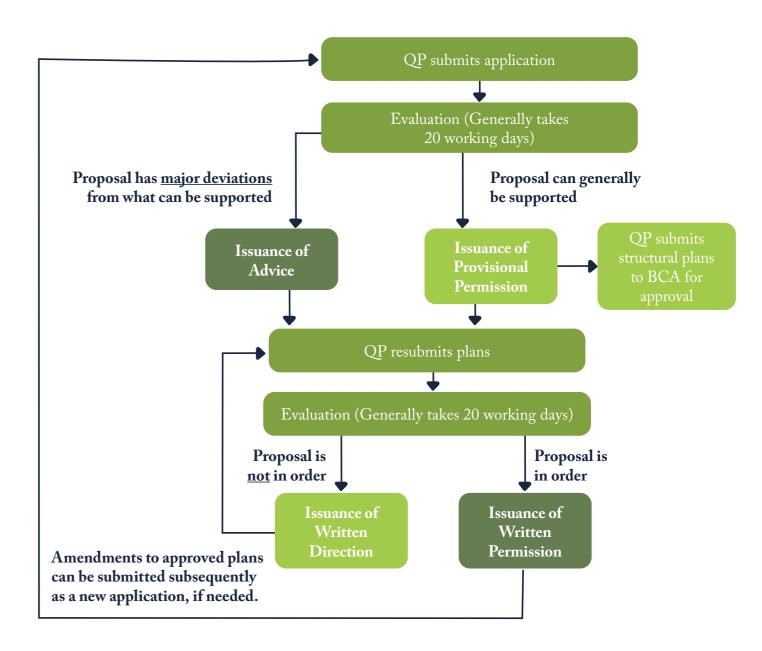
QP submits structural plans to BCA for approval

PROCEDURE FOR DEVELOPMENT APPLICATION



DOCUMENTS NEEDED FOR SUBMISSION

- ✓ Written endorsement from lessor
- ✓ Authorisation letter from owner/ lessee of the land to authorise QP for the lodgement application
- ✓ CAD / BIM drawing for proposed development
- Payment of processing fee. The processing fee schedule can be found: https://www.ura.gov.sg/Corporate/Guidelines/Development-Control/Planning-Permission/-/media/0788A17F5B1343069805B3BB9B28668B.ashx



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Helpful Tips!





Please engage a QP who is familiar with URA's development application process. QPs should take reference to this HYPERLINK "https://www.ura.gov.sg/-/media/User-Defined/URA-Online/Forms/EDA-form/subm_guidelines_CAD2008.pdf" in preparing their submission drawings to URA to avoid time wasted.

The appointed QP should also assess whether their proposal can qualify for either URA's authorisation (i.e. URA's approval not required) or plan lodgment (i.e. instant URA approval) as this will help farmers save time and costs (see details on Page 33). The appointed QP should only submit a formal development application to URA if their proposal does not meet the authorisation and plan lodgment criteria.

Regardless of whether the proposed agriculture development is submitted to URA via formal development application or Plan Lodgment, QPs are to ensure all the necessary information in the forms and submission drawings are indicated accordingly (e.g. GFA and use quantum details).

Please ensure that the proposed quantum of non-commercial uses (e.g. ancillary office, workers' quarters) is in accordance with the allowable quantum supported by the Lessor. Farms who wish to incorporate such commercial uses should ensure these are kept within the allowable quantum stated on Page 32.

Pre-Application Consultation Service (PACS):

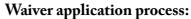
- o PACS is an optional channel for QPs to pre-consult with URA on development proposals. This saves time and avoids costly abortive work during the formal application process. URA will set up a meeting between the applicant and a Director-level URA representative to discuss any issues raised. This will lead to a formal Advice from URA.
- o More information on PACS, including fees payable, can be found at: https://www.ura.gov.sg/Corporate/Guidelines/Circulars/dc18-01



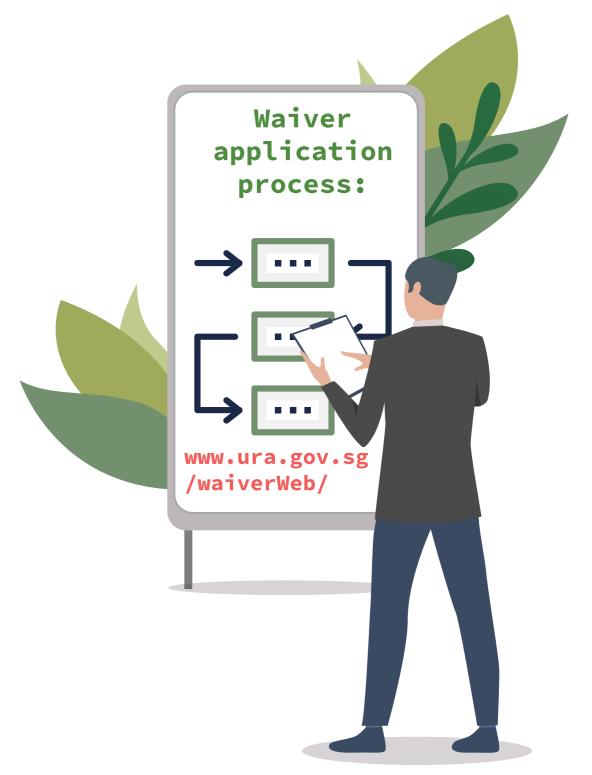
Pre-Application Consultation Service (PACS):

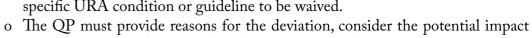
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- o QP submits a waiver request on the CORENET platform, indicating the specific URA condition or guideline to be waived.
- o The QP must provide reasons for the deviation, consider the potential impact on the amenity of surrounding developments and streetscape, and propose appropriate mitigation measures.
- o The request will be considered based on the merits of the proposal. A reply will typically be provided within 15 working days.
- o More information on the waiver application process and application form can be found at: https://www.ura.gov.sg/waiverWeb/







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STRUCTURAL AND BUILDING SAFETY





Building and Construction Authority (BCA): This government agency regulates and manages Singapore's buildings and construction industry to ensure a safe, high quality, sustainable and friendly built environment.

APPLICATION FOR BUILDING PLAN APPROVAL

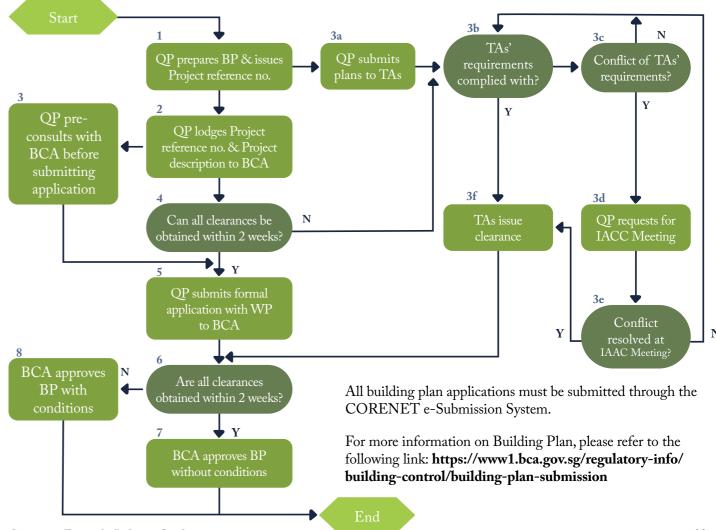
Before any building works can be carried out, the BCA must approve the building plans (for architectural works). These must be submitted by a Qualified Person (QP) appointed by the building owner or tenant.

- i. The QP will first obtain written permission from the URA where required.
- ii. Other technical agencies (TAs), such as the Singapore Civil Defence Force (SCDF), National Environment Agency (NEA), Public Utilities Board (PUB) and Land Transport Authority (LTA) and National Parks Board (NParks), can also be consulted at this time, and their requirements incorporated into the building plans.
- iii. After the technical agencies have given their clearance, the QP submits the building plans to the Commissioner of Building Control, BCA for approval, together with the prescribed plan fee.

BCA will approve the building plans within <u>7 working days</u> if the submission is in order.

The process of building plan submission is represented in the following work-flow:

WORK-FLOW FOR BUILDING PLAN SUBMISSION



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BUILDING WORKS THAT DO NOT **REQUIRE BUILDING PLAN APPROVAL**

You do not need plan approval from the Commissioner of Building Control for certain types of building works.

For such exemptions, please refer to the First Schedule of the Building Control Regulations – Insignificant Building Works.

APPLICATION FOR STRUCTURAL PLAN AND PERMIT **APPROVAL**

Before starting any building works that involve structural works, a professional engineer must submit structural plans to the BCA for approval. This can be done before or after the submission of building plans.

If the structural plans are submitted before the building plans, the prescribed plan fees will be paid during this submission. If full payment is made when the structural plan is submitted, the prescribed plan fees do not have to be paid again when the building plans are submitted later.

Some structural submissions to BCA require certification from an Accredited Checker (AC).

For exemptions, please refer to the Fourth Schedule of the Building Control Regulations.

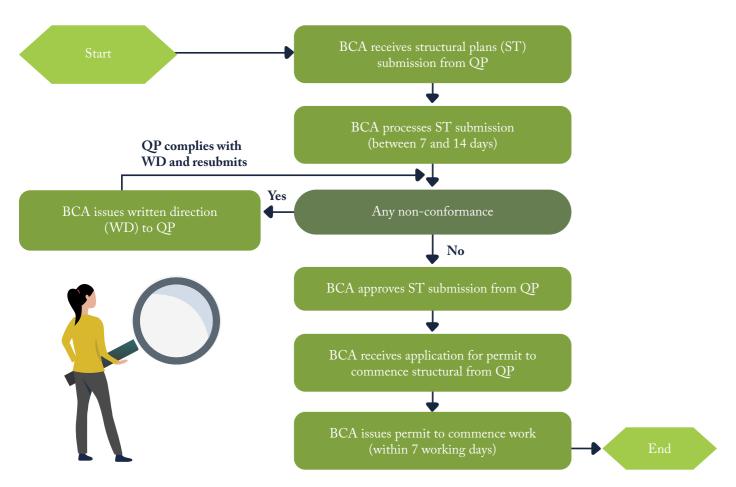
BCA will approve the structural plans between 7 and 14 days if the submission is in order.

Building works must commence within 24 months from the date of building or structural plan approval, failing which the approval will automatically lapse.

After having obtained structural plan approval and planning permission, the QP, builder and the applicant must jointly apply for a permit to commence works from the BCA, before starting any works. Please refer to:

Please refer to the work-flow below for structural plans and permit applications:

PROCEDURE FOR STRUCTURAL PLAN SUBMISSION



APPLICATION FOR TEMPORARY OCCUPATION PERMIT (TOP) / CERTIFICATE OF STATUTORY COMPLETION (CSC)

Once the building works are completed, the applicant and the QP should apply to the Commissioner of Building Control for a Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC). For this application, there are two forms to be filled: one by the owner, and one by the QP. The building can only be occupied when a TOP/ CSC is granted.

In order for a TOP/CSC to be granted, the following steps have to be completed:

A joint site inspection of the completed building works. The QP can arrange this with the BCA.

ii. TOP/CSC clearance from the technical agencies, namely: Singapore Civil Defence Force (SCDF), National Environment Agency (NEA), Public Utilities Board (PUB) and Land Transport Authority (LTA), Urban Redevelopment Authority (URA) and National Parks Board (NParks).

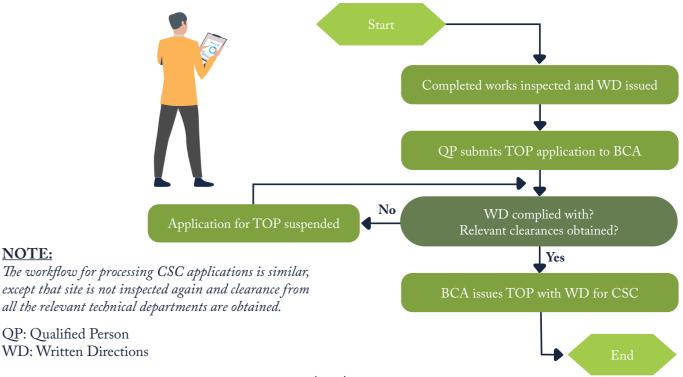
iii. Relevant certificates of supervision of works should be obtained. Details on the types of certificates to be submitted can be found on the BCA website, at: https://www1.bca.gov.sg/regulatory-info/building-control/ application-for-temporary-occupation-permit-top

Once these steps are completed, an application for TOP/CSC can be made to the BCA, to allow the building to be occupied and operations to commence.

QPs have the option to request for Express TOP, a fast-tracked system, where TOP can be obtained within one working day provided all TOP requirements are met. The applicable fees are \$1000 for major projects or \$500 for minor projects.

Please refer to the work-flow for TOP/CSC applications below:

PROCEDURE FOR TOP/CSC APPLICATIONS



PERIODIC STRUCTURAL INSPECTION (PSI)

To ensure that building structures in the farm are properly maintained during its lifecycle, structural inspections are required. The frequency of inspections is once every 5 years for farm structures and buildings.

The PSI process involves the following:

- i. BCA informs building owner by serving a notice for PSI of buildingsii. Building owner appoints a Professional Engineer (PE)
- iii. PE conducts a structural inspection of the building
- iv. PE submits a report to BCA
- v. Where necessary, the building owner engages a contractor to repair defects as recommended by the PE.

More details of the process can be found on the BCA website at:

https://www1.bca.gov.sg/regulatory-info/building-control/periodic-structural-inspection

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Helpful Tips!



Appoint a competent licensed builder to ensure that building works are built in accordance to approved plans and are code compliant. This will minimise issues during post-construction inspections.

Please refer to SS 555: 2019 for design and technical compliance to Lightning Protection System.

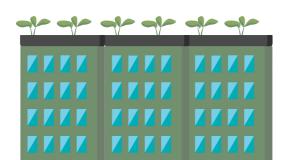
BCA pointers:

- o The design and construction of a building must comply with performance requirements prescribed in the Building Control Regulations. Please refer to the Approved Document for acceptable solutions: https://www1.bca.gov.sg/regulatory-info/building-control/building-control-act
- o The safety of occupants is paramount. For safety reasons, requests for partial TOP (i.e. splitting of the development plot to allow for TOP to be received earlier for part of the site) will not be accepted if there are on-going structural works and/or crane hoisting works within the land site.
- o QPs are advised to consult all technical agencies as soon as possible upon completion of works to obtain agencies' clearances or no objections for partial TOP application.
- o If the GFA of the development is 5000 m² or more, it is required to be designed and constructed to meet the minimum Environmental Sustainability and Buildability requirements as part of the building plan submission for approval; and minimum Constructability requirement as part of the submission for permit to commence structural works. However, these requirements do not apply to developments that are registered under the URA Plan Lodgement Scheme.

Please refer to the following links for more information.

go.gov.sg/bca-es-newbldg-min-std go.gov.sg/bca-es-faq

https://www1.bca.gov.sg/buildsg/productivity/buildability-buildable-design-and-constructability





Waiver application process:

- o To seek a waiver, the QP should submit a waiver application on the CORENET platform, indicating the specific clause of the code that the plans are deviating from. A reply will be given within <u>21 working days</u> if the application documents are in order.
- o If the waiver application is rejected, the applicant may make an appeal. Any appeal made despite the reasons provided by BCA, must be represented by the QP to the panel.

Waiver of accessibility requirements for a particular space or building can be granted if the applicant can provide justification(s) that the business processes/operations do not allow persons with disabilities to work at the applicable location(s).

Relevant approvals from technical agencies must be obtained, and site inspection completed with site demonstrating full compliance, before applying for TOP/CSC.

Frequently Asked Questions for Periodic Structural Inspection (PSI)

The frequently asked questions for building owner can be downloaded from the following link: https://www1.bca.gov.sg/regulatory-info/building-control/periodic-structural-inspection



PARKING PLACES AND STREET PLANS





Land Transport Authority (LTA): This national agency is responsible for planning, designing, building and maintaining Singapore's land transport infrastructure and systems.

The **Development and Building Control (DBC)** unit of LTA checks that appointed Qualified Persons create development and building plans that comply with LTA regulations. This includes making sure your farm has enough space to cater for your anticipated vehicular operations, and that there is safe connectivity to and from the public street.

Should your development fall within the railway protection zone,⁵ the DBC will further assess the building and engineering plans, as well as the engineering activities proposed to be carried out within the railway protection zone.



KEY REGULATIONS THAT APPLY TO YOUR FARM

At the Development Control (DC) stage, your proposed development will likely be required to meet the following criteria:

PERFORMANCE CRITERIA

Suitability Of Access Points

ACCEPTABLE SOLUTIONS

- Access points should be located along local access roads and at least 30m from road junctions, road bends, pedestrian crossings, bus-stops, existing access points.
- The access should be located along the lowest hierarchy of roads for sites fronting more than one road category.

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⁵To check if your development falls within the railway protection zone, purchase a road line plan from SLA's INLIS web service.

Frontage Improvements To Support Proposed Development

- Each development should be directly accessible from a public street.
- Should your proposed access be affected by existing streetlights and/or related facilities such as overground (OG) boxes, you will be required to relocate the facilities accordingly.
- Based on the scale of your proposed development, you may be required to carry out road improvement works to support anticipated traffic demand. This may include the widening of the road carriageway, or reconstruction of open drains to box drains to double as footpaths.
- Should your development site be affected by a road widening line, you will be required to set back your development boundary accordingly, make up the affected portion of land in accordance to LTA's requirements and hand over the land to the state.

Improvement Needed To Existing Traffic Schemes

> Provision Of Parking Lots

- The access arrangements, or necessary road improvement works to support your proposed development, may require modifications to existing traffic schemes.
- All modifications to the traffic scheme, including introduction of yellow boxes, relocation of arrow markings relocation of humps, are to comply with LTA's standards. The QP will be required to submit a traffic plan to LTA for approval.

Submission to LTA (Vehicle Parking) is exempted for development of land for the purpose of farming.

SUBMISSION OF STREET PLAN TO OBTAIN BP CLEARANCE.

The Street Plan should be prepared by the QP (Civil) based on the approved layout plan at DC stage, and prevailing specifications, standards, guidelines and codes of practice. If the proposal falls within the lodgement criteria, the QP (Civil) should lodge the street plans with LTA.

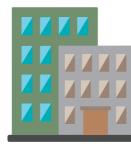
CERTIFICATE OF STATUTORY COMPLETION (CSC) CLEARANCE FOR COMPLETED STREET WORKS.

When the street works of any development proposal are completed, the QP must request a CSC inspection before the completed street works can be handed over to LTA. LTA officers will inspect the completed works to check if they have been carried out in accordance with the approved plans, and whether they meet LTA's material and workmanship specifications.

LTA will issue the CSC clearance to the QP, once the completed works and relevant documents submitted to LTA are deemed to be in order. The list of relevant documents can be found in section 1.9.3 of LTA's *Code of Practice for Street Work Proposals Relating to Development Works*.

Helpful Tips!

Do ensure that your proposed access design can cater for the operational needs of your development. For instance, heavy goods vehicles should be able to manoeuvre safely in and out of your development.



Should you or your appointed QP be unsure of the provisions to be made, or find difficulties complying with LTA requirements, do arrange a pre-consultation meeting with LTA to discuss your queries or the constraints you have encountered on site. You may email to: LTA-DBC_Registry@lta.gov.sg

Detailed submission requirements for Development Layouts and Street Plans can be found in LTA's *Code of Practice for Street Work Proposals Relating to Development Works*.

Relevant approvals from technical agencies should be obtained, and proper site inspection carried out, before applying for TOP/CSC—this will ensure a smoother application process. Ask your QP for help with these procedures.



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⁶ For development proposals that entail the construction of new streets, pedestrian underpass and overhead bridges, a <u>one-year maintenance</u> period (MEP), commencing from the date of CSC clearance, will be imposed. During this period, the developer will be responsible for the maintenance of the street. The developer should arrange for a taking over inspection meeting with LTA at the end of the MEP period. Upon ensuring that there are no outstanding defects, LTA will take over the street.

DOCUMENTS NEEDED ✓ Certified plans by QP for DC application ✓ Certified plans by PE for BP (External Works) application Certificate Taking Over Development Control Stage Building of Statutory **Pre-Consultation** Application* Completion Plan Stage Stage Road Transport and Vehicle Parking[^] $RT_Development$ RT_Street Plan RT_Taking Over RT_CSC Control Plan Lodgement Application $RT_Street &$ QP submits to Building Plan LTA RT_Street & Bid Plan (w/o new street) Road & Rail Structures Protection Certificate Building Development Control Stage Engineering Works **Pre-Consultation** of Statutory Plan Stage Stage Completion RL_Building RL_Engineering RT_Development RT_CSC Control Plan Proposals Works Application RSSZ_Engineering Works RSSZ_Engineering Activities

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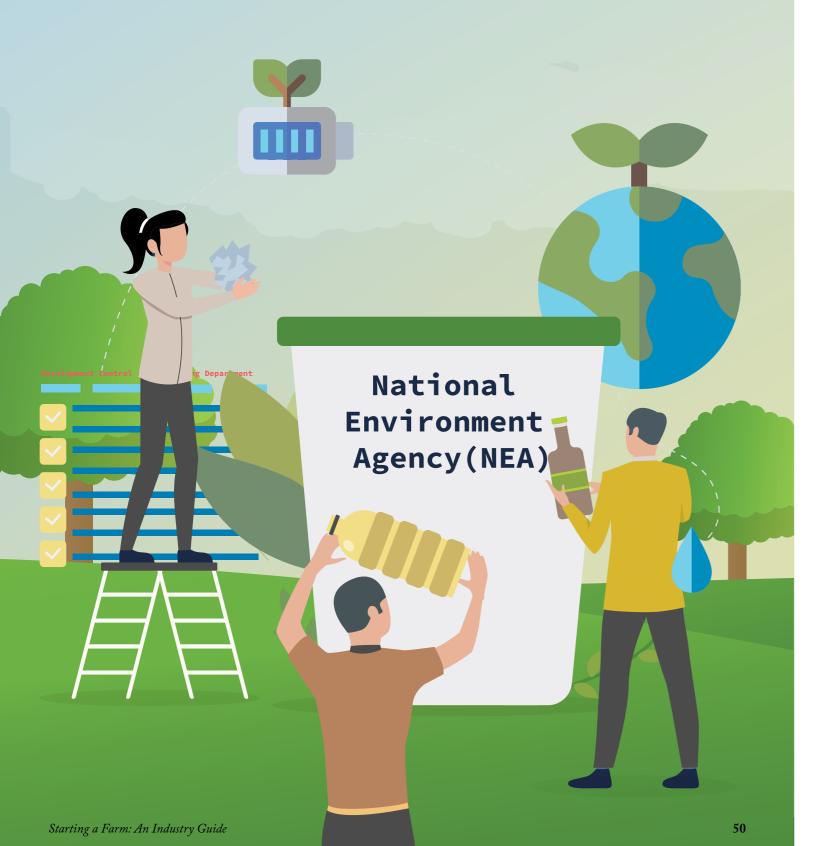




 $^{\ ^{\}wedge}$ You do not need to make a submission to LTA(Vehicle Parking) for farm developments.

^{*} For development proposals which entail the construction of new streets, pedestrian underpass and overhead bridges.

TRADE WASTE AND EFFLUENT





National Environment Agency (NEA): The NEA is the lead public agency responsible for ensuring a clean and green environment, as well as the sustainable development of Singapore.

The Development Control and Licensing Division is NEA's one-stop clearance centre. It checks that building plans submitted by QPs comply with relevant environmental health and pollution control requirements.⁷

KEY REGULATIONS THAT APPLY TO YOUR FARM

RELEVANT CODE

Code of Practice on

Environmental Health

(2021)

PERFORMANCE CRITERIA

outlets, downpipes and scupper drains without permanent and safe access shall be installed for any new development.

No roof gutters, rainwater

During the design of any building or structures, the QPs should take into consideration and avoid features that may result in water stagnation and become potential breeding habitat for mosquitoes. Any part of a building where water stagnation may occur should be provided with permanent and safe access for maintenance purpose.

ACCEPTABLE SOLUTIONS

- No waiver is required if the entire length of the roof gutters (including rainwater outlets, scupper drains and rainwater downpipes) are provided
- (i) permanent access via staircase/ fixed ladder etc; and
- (ii) safe access with safety railings/ parapet walls which are at least 1m in height.

Further information of this requirement can be found at: https://go.gov.sg/nea-roofgutternotification-2017

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⁷These apply to Development Control (DC), Building Plan (BP), Temporary Occupation Permit (TOP) and Certification of Statutory Completion

Best Management Practices Wastewater and trade effluent discharge from the farms should be prevented from flowing to the watercourse, potentially causing pollution.

This includes contaminated rainwater or farm discharge that has come into contact with fertilisers, pesticides, or compost, etc.

- Surface run-off should not be contaminated. The farm will have to annotate on the building plan that there will be no discharge of pollutive or waste water from the farm into any drain leading to the reservoir. This should be demonstrated during the site inspection.
- The farm design should incorporate an adequate number of shelters and kerbs. Hydro and/or aquaponic approaches could be used to prevent discharge of pollutive water into the drains.
- Alternatively, a cut-off drain surrounding the farm should be provided, with holding sump(s) at discharge locations. The contaminated water that is collected should be treated on site before discharge, or transferred to a collection pond/tank for reuse or disposal by licenced waste collectors.

Farm activities should not cause any odour nuisance to neighbouring premises.

- Activities which can cause potential odour nuisance should be carried out in an enclosed area.
- Alternatively, mitigation measures should be implemented to reduce the impact of odour nuisance.

(Note: Apart from this list of requirements, all farm developments must comply with all other requirements stipulated in the prevailing Code of Practice on Environment and Code of Practice for Pollution Control (i.e. SS593:2013) that is applicable to your farm development.)

Helpful Tips!

QPs may consult with the NEA during upstream planning, to clarify building plan requirements and discuss potential non-compliance or waiver applications.

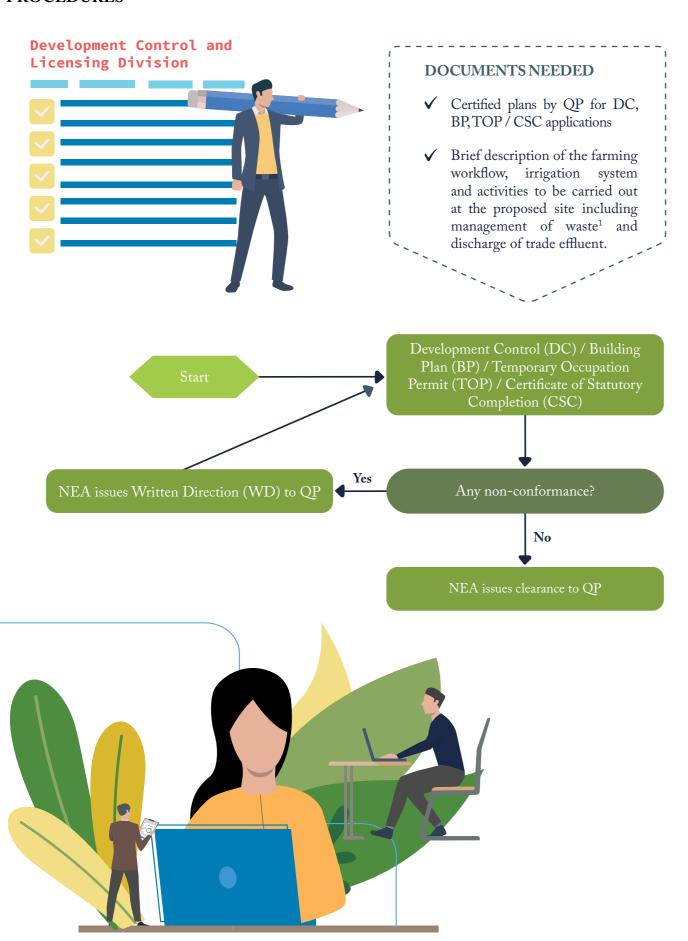


For consultation on waiver applications, your QP should specify the type of waivers and also prepare a list of possible mitigation measures and the relevant building plans. For plans that do not comply with NEA's requirements, QPs should obtain a waiver in writing prior to plan submissions.

Farm developments sited on Industrial space are also expected to comply with all requirements stipulated in the Code of Practice for Pollution Control (SS593:2013).

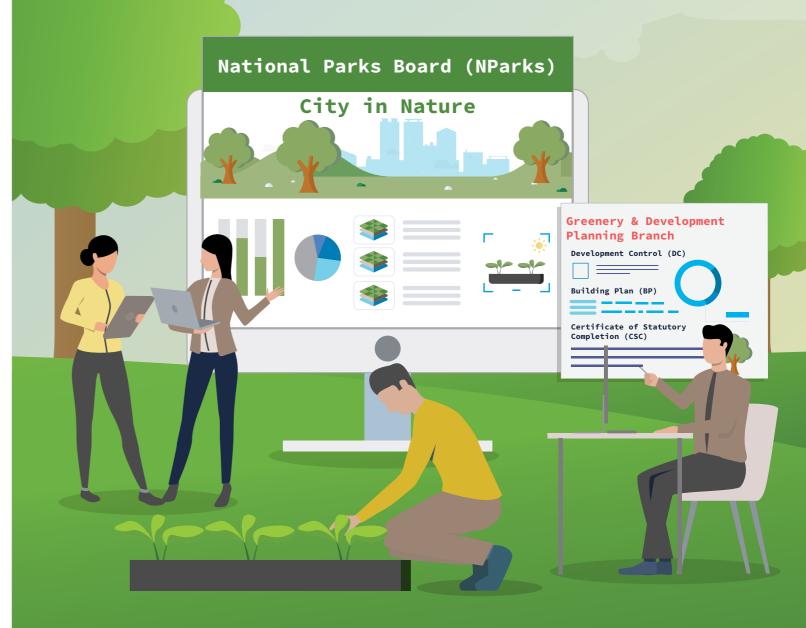
If you have any enquiries or specific questions related to your farm plans, please contact the NEA processing officer, or drop an email to **DCLD_DCLD_Consultation@nea.gov.sg**.

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¹The general refuse output tabulation should be based on the latest Code of Practice on Environmental Health (COPEH). If horticulture waste are managed separately, QP is to clarify the type/amount of horticulture waste generated, storage details and provision such that they will not result in odour nuisance or nutrient leakage/spillage into the environment.

GREENERY PROVISION AND TREE CONSERVATION





National Parks Board (NParks): This agency works closely with developers, building owners, Qualified Persons (QPs), industry professionals and other public agencies, to achieve the vision of Singapore becoming a City in Nature. Within and around developments, green spaces are set aside for the planting of trees and shrubs to provide visual relief and contribute to the liveability and sustainability of Singapore, and the well-being of our people.

The Greenery & Development Planning Branch is a centralised team in NParks that processes Development Control (DC), Building Plan (BP) and Certificate of Statutory Completion (CSC) applications. They assess development plans to ensure that greenery provision and tree conservation are facilitated.

A 2.0m peripheral planting verge should be provided along other sides of boundary not fronting a public road.

- Where required in the Technical Condition of Tender (TCOT) of the sale site.
- Where the boundary is not adjoining another agriculture development.
- Planting of shade-providing trees is preferred.
- Peripheral planting verges may be considered for growing fruit crops and vegetables.

<u>Planting areas for open air</u> <u>parking areas</u> at street level should be provided.

- Alternative planting area configurations for open air parking area at street level may be considered.
- Planting areas may be considered for production areas.

Trees above 1.0m girth should be conserved, where possible.

- As far as possible, trees that are not directly affected by the building footprint or production areas should be retained.
- For trees to be properly and safely conserved, tree protection specifications must be complied with. (*Please refer to Chapter 2 of NParks' Guidelines for these specifications.*)

Other requirements may apply, such as proper mitigating and control measures for sites near environmentally-sensitive areas.

(Please refer to TCOT for specific requirements for the sale site.)

• For example, provide control points and holding tanks to ensure that there will be no pollutive discharge into nearby waterbodies, in accordance with PUB's and/or NEA's requirements.

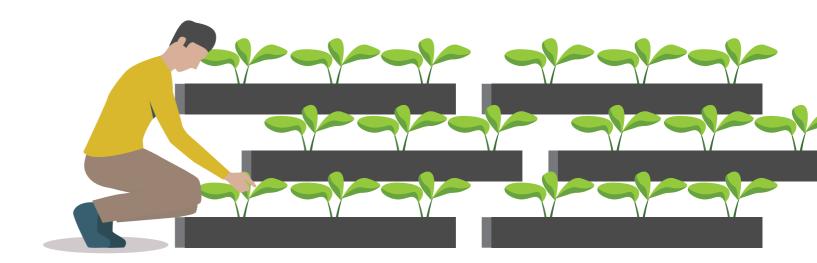
KEY REGULATIONS THAT APPLY TO YOUR FARM

PERFORMANCE CRITERIA

A 3.0m or 5.0m wide green buffer should be provided along the sides of boundary that front a public road, in accordance with the road category.

ACCEPTABLE SOLUTIONS

- Provide 3.0m or 5.0m wide planting area with shade-providing trees planted at regular spacing, e.g. a 6m centre-to-centre spacing between trees.
- Alternative configuration:
 - o A planting verge of minimum 2.0m width must be provided along the applicable side of the development boundary.
 - o The remaining green buffer area may be configured within the same side of the development boundary without any loss in the original green buffer area.



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Helpful Tips!



Check if the development is eligible for the Self-Declaration (SD) scheme, which will save time on the application process. Under this scheme, proposed works are checked and declared by the QP to be in full compliance with NParks' requirements.

For more information on this scheme, refer to Chapter 9 of the Guidelines on Greenery Provision and Tree Conservation for Developments in NParks' website:

https://www.nparks.gov.sg/partner-us/development-plan-submission/guidelines-on-greenery-provision-and-tree-conservation-for-developments

If your QP is unsure of the provisions to be made or would like to seek clarifications on NParks' guidelines, they can arrange for a pre-submission consultation with NParks through CORENET. Experienced processing officers will be able to advise QPs on amendments to be made to the development proposal and clarify whether proposed solutions to address non-compliant scenarios are feasible.



PROCEDURES

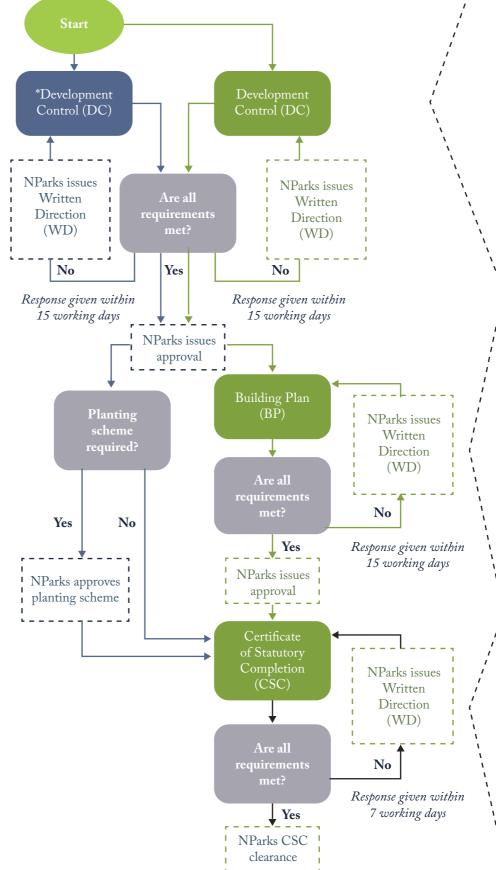
For all on-going DC/BP/CSC applications submitted to NParks before 1 September 2020

To continue with the existing application process.

*Streamlined application process

(w.e.f. 1 September 2020)

For new development projects, all greenery provision, tree felling request and reinstatement works within the road reserve will be assessed together at DC stage.



DOCUMENTS NEEDED

- ✓ Certified plans by QP for DC application
- NParks Electronic Submission Form
- ✓ Plan application fee depends on the submission type and stage:
 - a. Development Control (DC): \$1,605 to \$2,675; or
 - b. Self-Declaration Scheme for DC: \$107 per submission
 - c. For the new Application Process, please note that there is no change to the application fee as set out in the schedule under the Parks and Trees Regulations.

(For more information, please refer to Application Fee Schedule in NParks' website)

DOCUMENTS NEEDED

- Certified plans by QP for BP (Internal Works) application and/or (External Works) application
- ✓ NParks Electronic Submission
- ✓ Plan application fee depends on the submission type and stage: a. Building Plan (BP) – External: \$2,140
 - b. Self-Declaration Scheme for BP: \$107 per submission

Note: Not required for new development projects (submitted to NParks on or after 1 September 2020)

DOCUMENTS NEEDED

- ✓ NParks Electronic Submission Form
- ✓ Plan application fee depends on the submission type and stage:
 - a. For self-declaration scheme for CSC: \$107 per submission

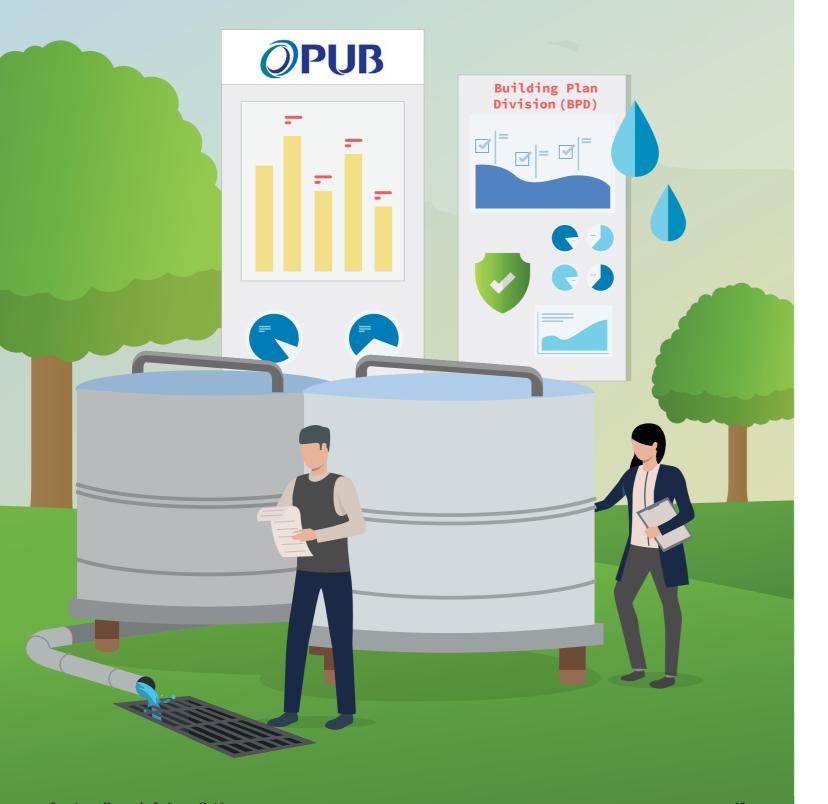
(For more information, please refer to Application Fee Schedule in NParks' website)

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USED WATER AND STORMWATER DISCHARGE





National Water Agency PUB: This agency manages Singapore's water supply, water catchment and used water in an integrated way, and is responsible for the collection, production, distribution and reclamation of water in Singapore. From April 2020, it also took on the role of protecting the country's coastline from sealevel rise as the national coastal protection agency.

PUB's Code of Practice specifies requirements that your building and development plans must fulfill. These requirements are intended to minimise flood risk to your farm, to ensure that the facility is served with proper sanitation to safeguard public health, and to avoid unintentional pollution of water sources. They also ensure that your farm's utilities are properly connected to public sewerage and land drainage systems.

KEY REGULATIONS THAT APPLY TO YOUR FARM

RELEVANT CODE PERFORMANCE CRITERIA ACCEPTABLE SOLUTIONS

Code Of Practice On Surface Water Drainage Minimum Platform Level

The minimum platform level shall not be lower than:

- 4.0m above Singapore Height Datum (SHD) for developments along the southern coast, and 4.5m above SHD for developments along the northern coast; or
- 600 mm above the adjacent road/ground level; or
- any other level specified by the Board whichever is the highest.

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Code Of Practice On Surface Water Drainage

Source Control and

Rainwater Harvesting

New developments and redevelopments of site area equal to or greater than 0.2 ha are required to implement source control measures to limit the peak runoff from the site by temporarily detaining 45% of the rain during the storm and discharging it into the public drainage system (or an alternative storage) after the storm. The maximum allowable peak runoff to be discharged from the development site will be calculated based on a 10-year return period design storm and a runoff coefficient of 0.55. Farms that are designed such that the resultant runoff coefficient of the development is 0.55 or below would not be required to implement detention systems.

- To meet the requirement, hybrid solutions such as minimising paved areas, using larger perimeter drains with controlled orifice discharge, integrating the detention features with rainwater harvesting concept for non-potable use can be explored, so long as source control requirements are met.
- Please note for systems with rainwater harvesting that the collected rainwater is only allowed for non-potable use within the owner's own premises. Any transaction or sale of the collected rainwater by the owner to other parties for use at other premises is not allowed. Further information on submission requirements for rainwater harvesting can be found online, at: https://www.pub.gov. sg/savewater/atwork/ alternatesources
- Farms may choose to combine the requirement for stormwater detention with rainwater harvesting as a combined system. However, this will need to be reflected

clearly in the submission and your QP must submit details (calculations and/or Source Control and hydraulic modelling results) Rainwater Harvesting showing how the proposed system is able to meet both stormwater detention and rainwater harvesting requirements. runoff development site shall be discharged into a roadside drain or an outlet drain and not into the adjacent premises. Drainage Affecting Other Premises A minimum 600mm high solid boundary wall shall be erected around your development site to Code Of Practice On prevent surface runoff from Surface Water Drainage overflowing into adjacent premises. • The capacity of internal drains shall be sufficient to intercept and discharge all runoff from the development The internal drains shall be designed for safety and ease of maintenance. Internal Drainage System Prior to discharging any storm water within the development site to public drain, vertical grating shall be installed at the outlet discharge point(s) of the internal drain located within the development site.

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Improvements to Existing Drain	No structure within Drain/Drainage Reserve No structure shall be constructed within a drain or Drainage Reserve without PUB's approval. Improvement to Existing Drains PUB may require the existing drains eg. entrance culvert or roadside drain, to be reconstructed, if the drains are affected by the development site. The size (width and depth) and the alignment of the proposed drain shall be determined and approved by PUB.
`/	`
Drainage Reserve	• Drainage Reserve All structures shall be set outside the Drainage Reserve.
Services to Undercross Drain/Drainage Reserve	Your QP shall obtain PUB's approval for any services crossing under the drain or Drainage Reserve.
/	`
Temporary Works Affecting Drain / Within Drainage Reserve	 An e-form submission shall be made if there are any temporary works affecting drain / within Drainage Reserve during the course of constructing the farm. Such works could include temporary crossings over drain to facilitate site access during construction works. The e-form for temporary works submission is under PUB's QP's Portal E-Services and can
Earth Control Measures (ECM) Submission	• Your QP shall submit detailed ECM proposal to PUB for approval and implement adequate ECM before the commencement of earthworks.

Code Of Practice On Surface Water Drainage sewerage system shall be connected to a public sewer at a PUB-approved connection point.

Sanitary facilities

• Any facilities or buildings (e.g. toilet, wastewater treatment facility) where used water will be generated must be sited on ground higher than the Top Level (TL of the public manhole it is connected to. Should such facilities/buildings be sited at ground lower than the TL of the connecting manhole, an ejector(s) would be required.

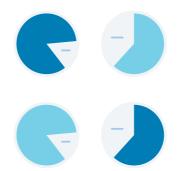
• As the cost of construction and maintenance of the ejector pumping system and vortex drop/multiple backdrops is significant, you are advised to take this into consideration when tendering for the farm plot.

• The finished floor level

Prevention of Used Water Backflow

Connection to Public Sewer

of the development and the levels of the sanitary appliances, floor traps and inspection chambers (usually on the compound) shall be constructed suitably higher than the top level of the manhole to which the sanitary drain line is connected. This is to prevent the overflow of used water from the inspection chamber, floor traps and other sanitary appliances into the development lot.



Code of Practice on

Sewerage and Sanitary

Works (COPSSW)



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Position of Sanitary Pipes Sewer Setback Code of Practice on Sewerage and Sanitary Works (COPSSW) Trade Effluent Discharge into Public Sewer		• Sanitary pipes shall not be placed above the potable water storage tank, electrical transformer/switchgear or above swimming pools and their balancing tanks. In all non-residential buildings, the sanitary pipes shall be located			Your QP will need to seek PUB's approval before carrying out any Specified Activities e.g. piling, excavation work, within the public sewer corridor, as specified in Section 2.1.2 of the latest COPSSW.
		such that: • no pipes from WC shall be located in the ceiling of a commercial unit. • no discharge stack or overhead pipe sited within areas of the food establishment/F&B unit where food is cooked, prepared, stored or served.	Code of Practice on Sewerage and Sanitary Works (COPSSW)	OPSSW) Fat, Oil & Grease (FOG) Control	• If your farm features a food establishment where cooking is carried out on the premises, a grease trap should be provided to prevent excessive FOG from being discharged into public sewers.
	ı Sewer Setback	• All developments should comply with the minimum setback distance between any buildings / structures and the sewers, as specified in Section 1.2.5 of the latest COPSSW.			• You should engage a NEA licensed General Waste Collector to maintain the grease trap periodically. The discharge of oil and grease (non-hydrocarbon) should not exceed 100mg/ litre, as specified in the Sewerage and Drainage (Trade Effluent) Regulations.
	 	• Trade effluent discharged into a public sewer must comply with the Sewerage and Drainage Act and the discharge standards stipulated in Sewerage and Drainage (Trade Effluent) Regulations. Pre-treatment might be necessary. Further information about this requirement can		Intensification	• If you plan to change the use of your farm or intensify your existing farm plot, you must consult the relevant authorities (e.g. SFA and NParks) for approval.
	Trade Effluent Discharge into Public Sewer	be found at Section 5 of the latest COPSSW. • After obtaining a Temporary Occupation Permit (TOP) for the development, Written Approval (WA) from PUB is required before the discharge of trade effluent into public sewers can be made. You can apply for WA via the	Other Requirements	Protection of Reservoir Water Quality	Different farm types have different specific requirements. Please refer to Technical Requirements for Agricultural Developments within Water Catchment Areas in the Technical Condition of Tender (TCOT) of the sale site for more details.
		GoBusiness Licensing Portal at: https:// www.gobusiness.gov.sg/ licences/			·

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Helpful Tips!

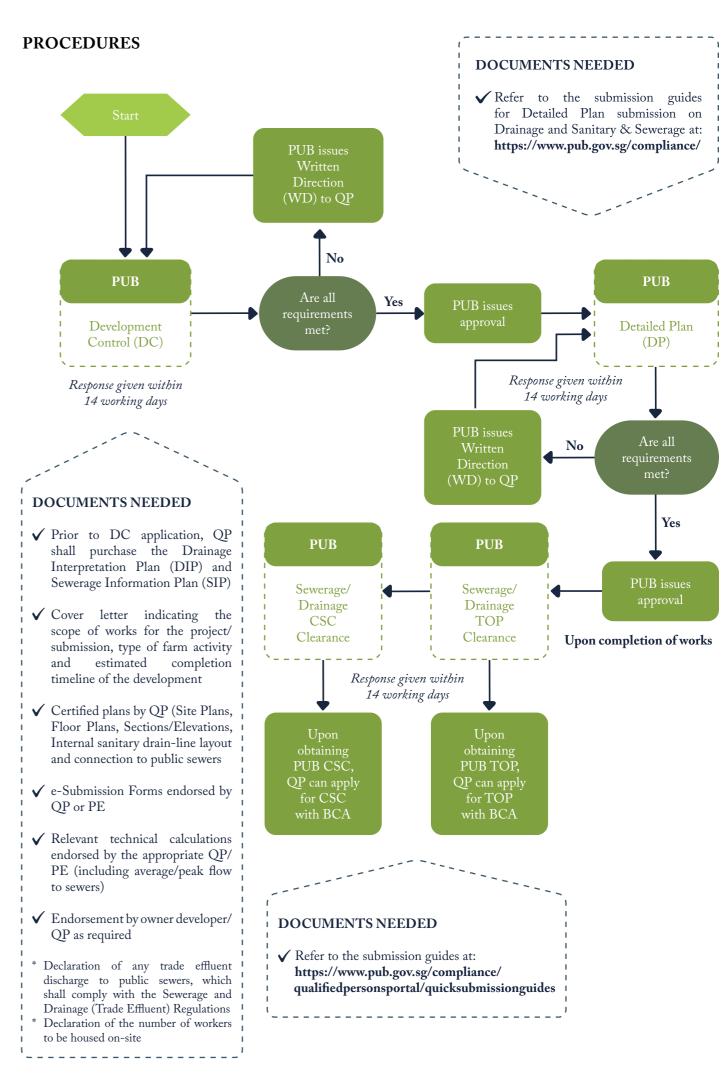
Check if your development plans are eligible for the Simplified Submission Scheme. This will reduce the processing time.

Check your BIM model using our e-Plan Checker for compliance with PUB's requirements before making your submission to PUB via CORENET. This reduces your clearance time provided the modelling submitted has been reviewed and cleared of all non-compliances. For more info on PUB's BIM e-Checker, please refer to the following link at https://fornaxcloud.com

If you have questions about your submission, you can book a consultation or find out the status of submission through our QP Portal E-services, at https://www.pub.gov.sg/compliance/qualifiedpersonsportal/eservices
For further assistance, please call Building Plan Division (BPD) hotline at 67313512 during office hours between 9am to 5pm, or email to pub_bpu@pub.gov.sg.

If your enquiry pertains to trade effluent discharge, you may email to PUB_WA@pub.gov.sg





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PROCEDURES

CORENET FORM TO USE

Development Control (DC) and Detailed Plan (DP)

- Before the commencement of works, QP shall obtain Development Control (DC) and Detailed Plan (DP) clearances from PUB.
- The QP shall ensure that respective Detailed Plan (DP) clearances for surface water drainage and sewerage/sanitary systems are obtained prior to commencement of such works on site.
- For projects that do not involve drainage or sewerage works, a simplified submission can be made. For more information, please refer to the following link at https://www.pub.gov.sg/ compliance/qualifiedpersonsportal/processflow/ simplifiedsubmissionprocess

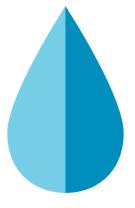
Detailed Plan submission for relevant work

scopes, including:

- Works affecting Sanitary System
- Used Water Pumping System (M&E)
- Works Affecting Sewerage System
- RC Trench
- Works Affecting Drainage

PUB-DCCLR form

• PUB-DPCLR form



Temporary Occupation Permit (TOP)

- Upon completion of works, you can ask for TOP clearance when only certain requisites are complied with.
- Your project may not have works involving Sanitary/Sewerage and/or Drainage Systems.
 Your QP must show confirmation from PUB (via email or CORENET correspondence) that this is the case.
- PUB-BPU-COMPOFWORK form for Sanitary and Sewerage TOP Clearance.
- PUB-DRATOP form for Drainage TOP Clearance.
- To apply for overall PUB TOP clearance, QP must make a CORENET e-submission using the PUB-TOP-CLR form. The submission should include attachments showing the clearances, where applicable, for PUB TOP clearance for Sanitary/Sewerage and/or Drainage Systems.

Certificate of Statutory Completion (CSC)

 You may seek CSC clearance upon completion of all works and have satisfied all the outstanding requirements.

- PUB-BPU-COMPOFWORK form for Sanitary and Sewerage CSC Clearance.
- PUB-DD-CSIDRA form for Drainage CSC Clearance.
- To apply for overall PUB CSC clearance, QP must make a CORENET e-submission using the PUB-CSC-CLR form. The submission should include attachments showing the clearances, where applicable, for PUB CSC clearance for Sanitary/Sewerage and/or Drainage.
- For projects which do not have works involving Sanitary/Sewerage and/or Drainage Systems, QP must provide email or CORENET correspondence showing PUB's confirmation that this is the case.

FIRE SAFETY REQUIREMENTS



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... for a safer Singapore

Singapore Civil Defence Force (SCDF): The SCDF provides emergency services in Singapore during peacetime and emergencies. Its main roles are to provide firefighting, rescue and emergency medical services, as well as to formulate, implement and enforce regulations on fire safety and civil defence shelter matters.

The SCDF's Fire Safety Department (FSD) oversees the approval of plans for fire safety works. The FSD administers the Fire Safety Act and regulates fire safety standards in Singapore. The Fire Code and the relevant Codes of Practice stipulate fire safety requirements for buildings in Singapore.



KEY REGULATIONS THAT APPLY TO YOUR FARM

This set of fire safety requirements shall be applicable to farm buildings that meet the following criteria:

- the habitable height of the building shall not be more than 10m;
- the building shall be used for the sole purpose of farming (e.g. growing of crops, fish breeding and egg production) and not involve activities such as packaging, storage and retail;
- other usages such as packaging, storage, retail, office, and non-farming related production can be co-located within the building, provided they are compartmented and comply fully with the respective requirements stipulated in this Code; and
- the total computed Fire Load Energy Density (FLED) within the compartment that is used solely for farming shall not exceed 200 MJ/m².

RELEVANT CODE

PERFORMANCE CRITERIA ACCEPTABLE SOLUTIONS

Fire Code

Occupant Load

 The occupant load shall be based on the accessible floor area, excluding designated farming areas, on the basis of 30m² per person. Fire Code

 Where the building is exempted from barrier-free accessibility compliance by the authority having jurisdiction, the clear width of corridor shall be at least 1m.

Travel distance

Width of corridor

• The one-way and two-way travel distances shall not exceed 25m and 60m respectively.

Fire engine accessibility

• A fire engine accessway is not required, however a fire engine access road for access by firefighting appliances shall be provided to within a travel distance of 60m of every point on the project plan area of the building.

Compartment size

limitations given in Table 3.2A is not applicable. The maximum Accessible Floor Area (AFA) per compartment shall not exceed 8000m² and the maximum cubical extent per compartment shall not exceed 30000m³. The full height of the compartment shall be used for computing the cubical extent.

Sprinkler system

• An automatic sprinkler system shall be provided where the AFA of any compartment that is used for farming purpose, exceeds the compartment size limit stated under Cl.9.6.4b.(5).

Smoke control system

 An engineered smoke control system as specified in Cl.7.4.5 shall be provided where the AFA of any compartment that is used for farming purpose, exceeds size limit of 8000m².

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Fire Code

Setback distance due to unprotected openings

• The requirements on setback of unprotected openings from building/notional boundary stipulated under Cl.3.5.3 shall be complied with and in accordance with Table 1 of Annex 3B. However, the height of the unprotected openings for greenhouses, used for the computation of the setback requirement, shall be in accordance with Table 9.6.4b.(8).

Emergency voice communication system and Fire Command Centre (FCC)

Emergency voice communication system and Fire Command Centre (FCC) are exempted.

External wall construction

• The requirements of Cl.3.5.1a. (1) for non-combustibility of external walls need not apply for greenhouse buildings. Where plastic glazing materials are used as screens or shades for a greenhouse, the material shall comply with Table 3.15G.

Please note that apart from the above list of key fire safety requirements, all other fire safety requirements in the Fire Code must be adhered to.



Helpful Tips!

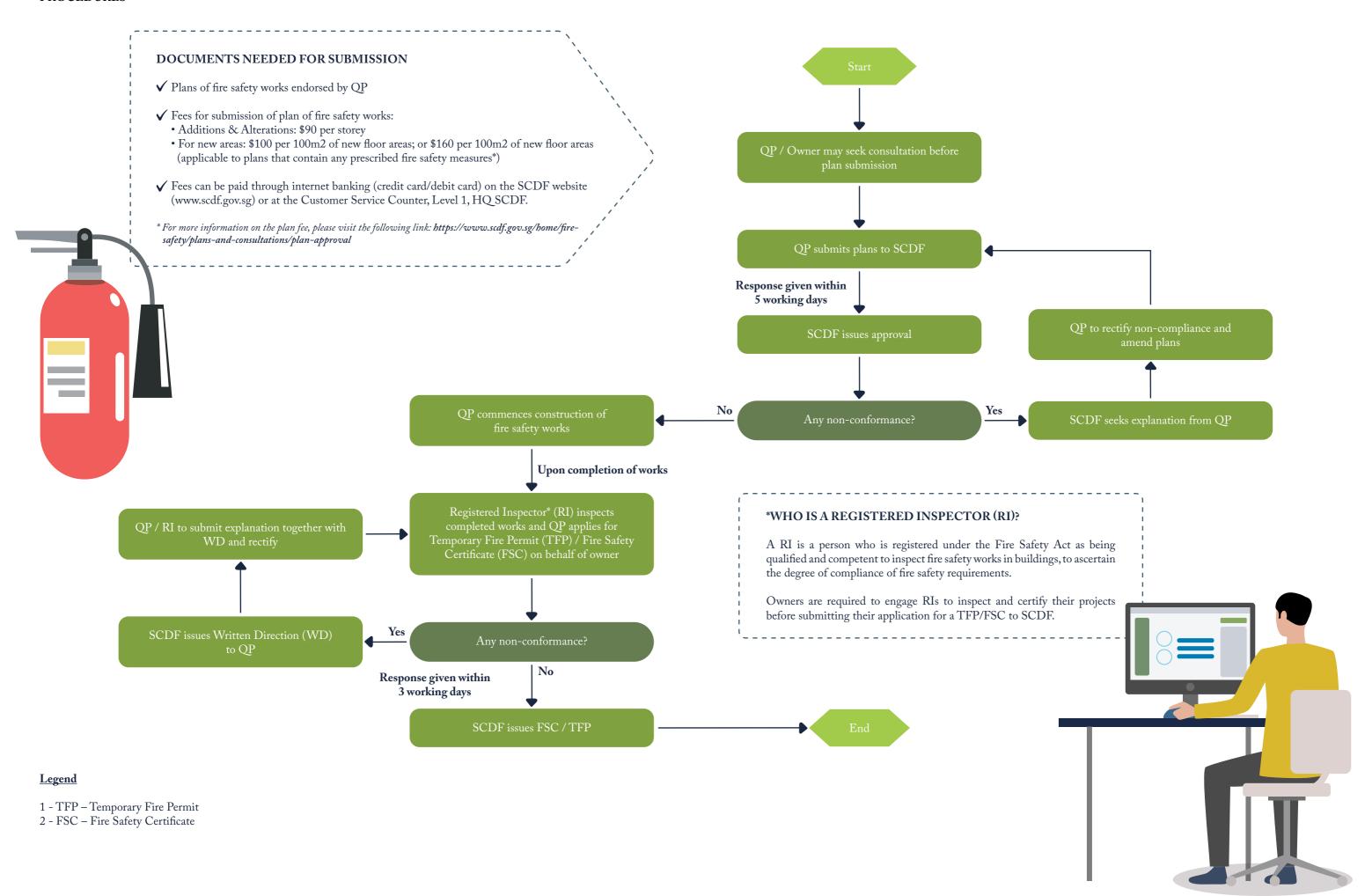
SCDF provides free fire safety consultations (via walk-in, phone and email) to QPs and farm owners. If you have any questions on fire safety requirements for your development, write to scdf_qp_consultant@scdf.gov.sg or call 1800-2865555.

QPs and farm owners are encourage to make appointment prior to their consultation sessions with SCDF, vis-à-vis the current walk-in consultations. We suggest that you make an appointment as this will minimise waiting time for consultations with SCDF at HQ SCDF (*Address: 91 Ubi Ave 4 Singapore 408827*).

- o Consultation appointments can be made via the SCDF General Enquiries Hotline at 1800-2865555 during office hours. The applicant is required to provide contact details and any Fire Code clause(s) related to his/her queries.
- o Consultation appointment time slots are available throughout the weekdays, on a first-come-first-serve basis:
 - o Monday, Tuesday and Thursday 0900 to 1730 hrs;
 - o Wednesday 1100 to 1730 hrs; and Friday 0900 to 1700 hrs.



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FARMLICENCE APPLICATION



The SFA's Food Production and Processing Department oversees the processing, issuance and renewal of licences for food farms. Under the Animals and Birds Act (Chapter 7) and Control of Plants Act (Chapter 57A), no person is allowed to keep or maintain a farm without a valid licence.

For more details on starting a farm, please visit: https://www.sfa.gov.sg/food-farming/food-farms/starting-a-farm

To find out more about setting up a food farm and applying for a farm licence, you may also contact SFA online at: https://csp.sfa.gov.sg/feedback

The Food Production and Processing Department will follow up with the enquirer directly.

A FARM LICENCE **COSTS \$100 PER ANNUM**

HOW TO APPLY FOR A FARM LICENCE

STEP 1:

Obtain In-Principle Approval For Farming

Proposal

THE ONLINE APPLICATION FORM HERE: https://form.gov.sg/#!/5d3fbfea3fe7210012f80953 For more information on submitting a farm business proposal, visit this *link*: https://www.sfa.gov.sg/docs/default-source/food-farming/lf_businessproposal-information.pdf

1. SUBMIT FARM BUSINESS PROPOSAL AND OTHER SUPPORTING DOCUMENTS FOR SFA EVALUATION,

Please approach BCA for any Addition & Alteration works done in your farm.

Documents Needed For Submission

- a. Company's ACRA business profile;
- b. Lease/Tenancy Agreement and land/building owner's approval letter for the proposed licenced premises;
- c. Certificate of Title as lodged with Land Registry, Singapore Land Authority (SLA) (if applicable);
- d. Description of the proposal including location plan, and overall farm layout plan in appropriate scale;
- e. Details of intended farming facilities, with clear dimensions (e.g. nursery area, preparation area, production area, packaging area, office, etc.);
- Brief description of the technology and farming system; g. Expertise involved in the farming operation;
- h. Construction period of the facilities;
- Types of animals / birds / plants to be bred or cultivated;
- Mitigation plans in the event of a pest or disease outbreak;
- Marketing plan (e.g. target market);
- Future business plans; and
- m. Any other relevant information.
- n. Additional items for cultivation of plants:
- i. Plans, if any, to process into ready-to-eat food at the proposed premise. Please indicate any processing activities in your plan. A separate application for these activities may be required;
- ii. Use of pesticide(s) at the proposed premises:
- iii. Product label (e.g. if produce is labelled as organic, organic certification is needed as stipulated under the Sale of Food Act). Packaging material can be submitted to SFA for assessment at a later stage.

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STEP 1:

Obtain In-Principle Approval For Farming Proposal

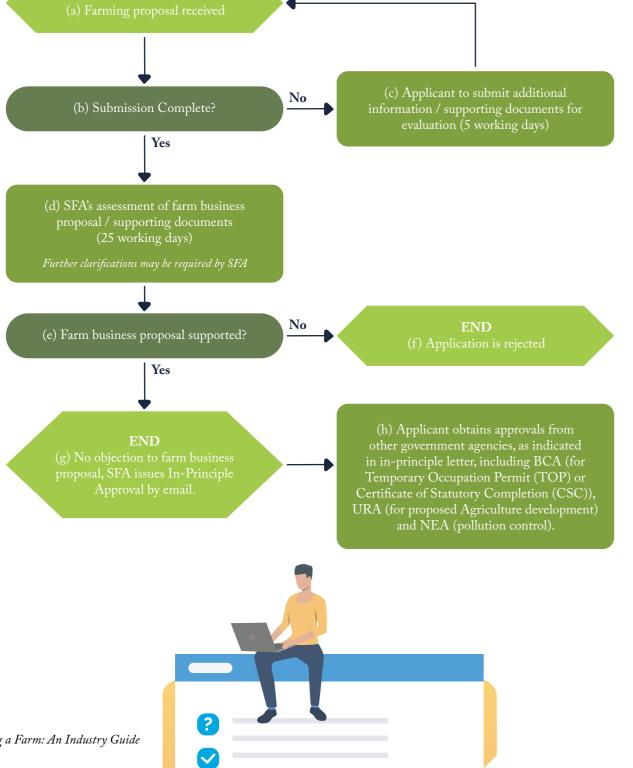
START

- 2. ONCE SFA HAS GIVEN SUPPORT FOR YOUR BUSINESS PROPOSAL, YOU MAY PROCEED TO CONSULT WITH AND OBTAIN APPROVAL FROM:
- a. URA (for proposed Agriculture development refer to application process on page 33)

and

b. NEA (for pollution control), at: https://e-services.nea.gov.sg/ias/PublicApplicant/Homepage.aspx

THE WORKFLOW FOR STEP 1 IS SUMMARISED BELOW:

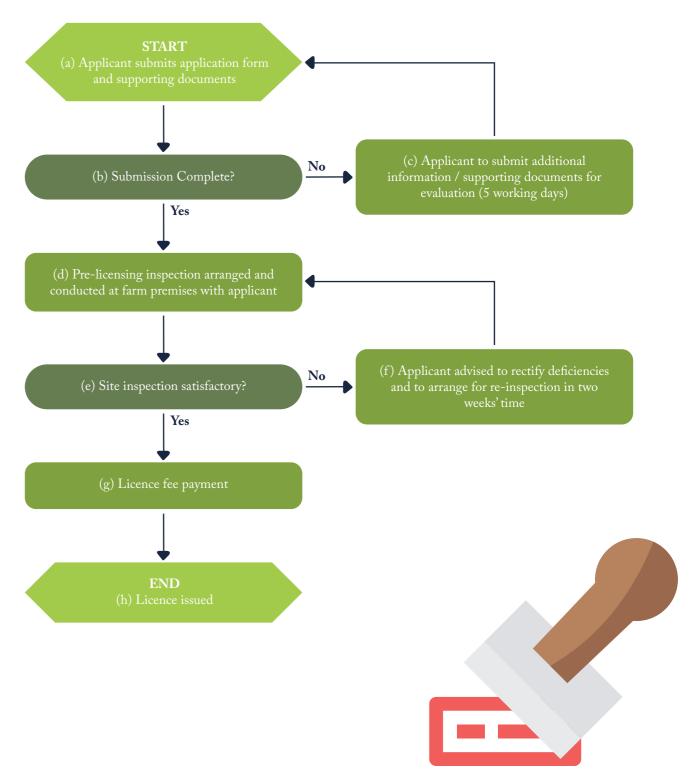


STEP 2: Apply For A Farm Licence

- 1. Obtain all clearances from government agencies, as indicated in inprinciple approval letter, including BCA (for Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC)), URA (for change of land use) and NEA (for pollution control).
- 2. SUBMIT COMPLETED FARM LICENCE APPLICATION TO SFA, AT: https://form.gov.sg/#!/5d2d49a3e431ff00114870eb

For more information on applying for a farm licence, see: https://www.sfa.gov.sg/docs/default-source/food-farming/lf_ application-information.pdf

THE WORKFLOW FOR STEP 2 IS SUMMARISED BELOW:



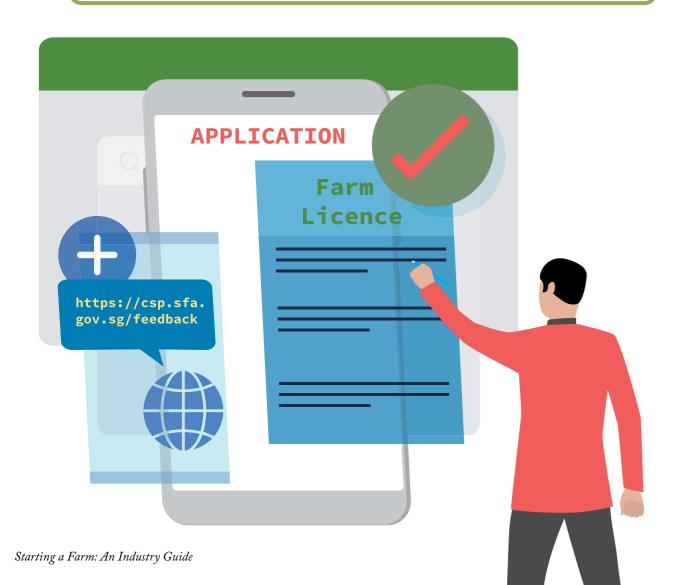
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Helpful Tips!

As part of the licensing process, SFA will inspect and check that the farm is operationally ready for production. (i.e. Step 2e of the workflow).

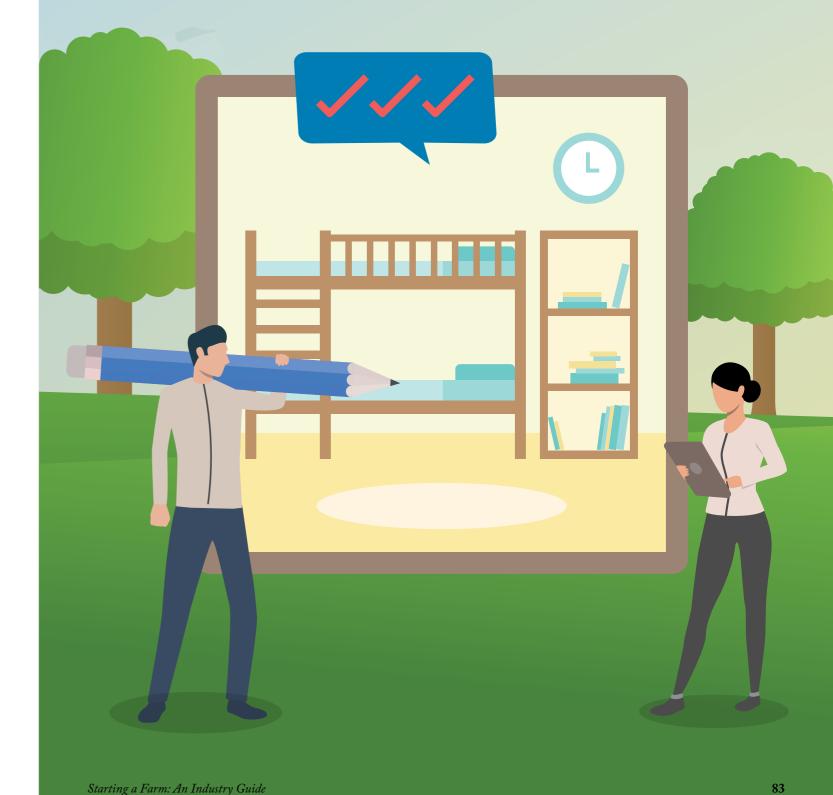
Onsite mercury vapor testing would be also carried out for indoor LED-light assisted farming.

Land and space that are not zoned Agriculture, may sometimes not be suitable for high-tech farming use. Hence, it is good practice to first obtain Agencies' approvals before renting a space and to tie in the tenure with the validity period of Agencies' approvals e.g. URA's land use approval.



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WORKERS' QUARTERS AT FARMS





Ministry of Manpower (MOM): MOM is the regulator for migrant workers' housing. Any farm operators intending to house migrant farm worker(s) on-site will require an approval from MOM, and register their migrant worker(s) in MOM's Online Foreign Workers Address Service (OFWAS, www.mom.gov.sg/ofwas) or EP Online (EPOL, www.mom.gov.sg/eservices/services/ep-online). You may refer to MOM's Housing website (www.mom.gov.sg/housing) for more information.

WHAT ARE WQFS

Living quarters for workers working and residing on farm premises.

ALLOWED TO HOUSE

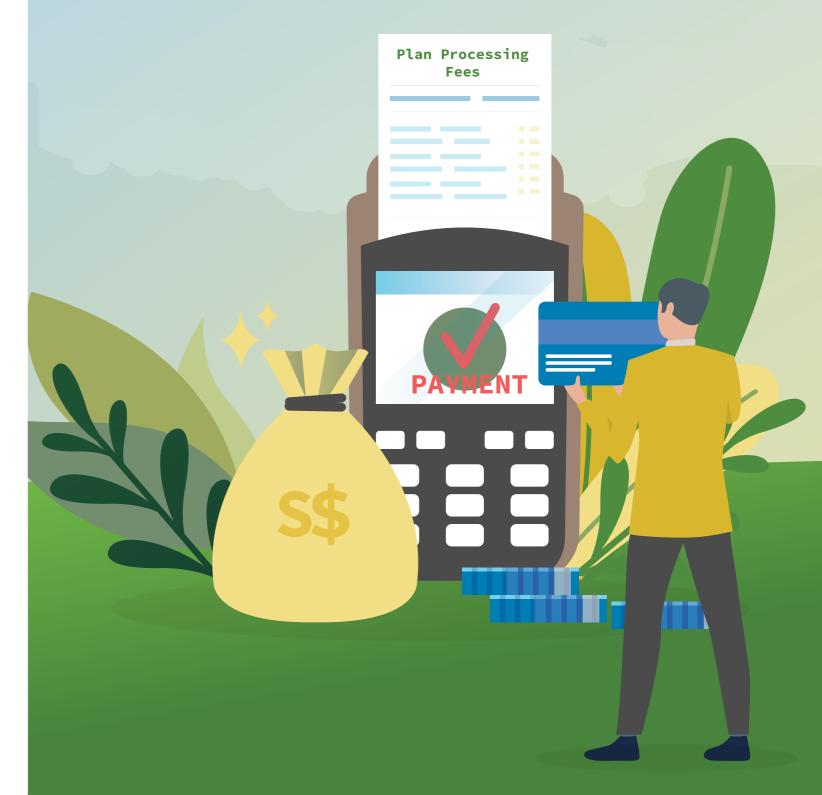
Workers employed by the farm owner

WHAT YOU NEED TO DO IF YOU ARE:

Food Farms (land) under SFA

- 1. **Apply** and obtain SFA's food farm licence.
 - Refer to section on Farm Licence Application, Pg 78.
- 2. **Submit** the completed <u>WQF declaration form</u> and attach SFA's food farm licence and main site plan to MOM for assessment.

OTHER DETAILS PLAN PROCESSING FEES



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URA'S PLAN PROCESSING FEES FOR **APPLICATION PROCESSES**

DEVELOPMENT **APPLICATION**

New Erection Application:

- a. First 1,000m² of development site area: \$3,745
- b. Subsequent 1,000m² of development site area or part thereof (\$ per additional 1,000m²): \$107

Additions & Alterations Application: \$5,136

For Additions & Alterations Application involving the erection / extension of a new building:

- a. First 1,000m² of building Gross Floor Area (GFA): \$3,745
- b. Rates per 100m² (beyond 1,000m² of building GFA): \$107

Change of Use: \$535

PLAN LODGEMENT

AUTHORISATION

New Erection Application: \$1,284

Additions & Alterations Application: \$909.50

Change of Use: \$160.50

NIL





SCDF'S FEES FOR APPROVAL **OF PLANS**

DESCRIPTION OF FEES

CURRENT FEE IN FIRE SAFETY ACT

Application for approval of plans for fire safety works

\$100 Per 100m2 of new floor areas or part thereof; or

\$160

Per 100m2 of new floor areas or part thereof (applicable to plans that contain any prescribed fire safety measures*)

Application for approval of plans with fire protection works

i Per storey



BCA'S FEES FOR BUILDING PERMIT PROCESSING

LOCATION OF BUILDING WORKS

FEE STRUCTURE (SGFA/ AREA OF PLAN VIEW)

BELOW SUBLEVEL

Refers to any storey that is more than 6 metres below the finished floor level of the 1st storey

ABOVE SUBLEVEL

- (1) Refers to the 1st storey and above
- (2) Refers to any storey that is 6 metres below or less than 6 metres below the finished floor level of the 1st storey

\$400 for every 100m² (or part thereof) in this location

\$150 for every 100m² (or part thereof) for the first 10,000m² of SGFA in this location.

\$220 for every subsequent 100m² or part thereof





NPARKS' FEES FOR **SUBMISSION PROCESSES**

SUBMISSION TYPE

TYPE OF DEVELOPMENT

APPLICATION FEE

Development Control (DC)*

(q) A project other than one referred to items (a) to (o) [in NParks Application Fee Schedule

\$2,140

Building Plan (BP)*

External Works

\$2,140

Self-Declaration Scheme for Development Control (DC) or Building Plan (BP) or Certificate of Statutory Completion (CSC)

For all Development Projects

\$107 per submission

(Extracted from the Application Fee Schedule available in NParks' website.)

*For application process (w.e.f. 1 September 2020)

For new project developments: Please note that there is no change to the application fee as set out in the schedule under the Parks and Trees Regulations. A single application fee at the DC stage is required, i.e. no application and payment required for BP (External Works).

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OTHER DETAILS PREMIUM FOR LAND ENHANCEMENT





Singapore Land Authority (SLA): The agency that optimises land resources for the economic and social development of Singapore. The Land Transfer and Land Sale Division in SLA oversees the collection of Land Betterment Charge.

KEY REGULATIONS THAT APPLY TO YOUR FARM

State lands are sold at prices that are based on use and intensity restrictions, as stipulated in the State Title. If there are subsequent development plans to put the site to a higher use or intensity, SLA will issue a Liability Order stating the Land Betterment Charge payable.

If your land is tendered for a specific use (such as vegetable farming or fish farming), the land will be valued according to that use and an allowable outdoor and indoor floor area for ancillary uses as stipulated in the Technical Condition of Tender (TCOT) for your land. The allowable ancillary uses include Workers' Quarters, Office and Carpark.

Any proposal for other ancillary uses such as visitor centre and retail outlets is subject to the approval of SFA, and the relevant authorities. A Land Betterment Charge may be levied for such amenities and for any increase in the allowable floor area for ancillary uses. SFA's endorsement and Planning approval by URA are required to proceed.

1. WHAT IS THE LAND BETTERMENT CHARGE?

To account for the land value arising from enhancement in land value, a payment known as Land Betterment Charge will be charged.



2. HOW IS LAND BETTERMENT CHARGE CALCULATED?

If at any time prior to or upon the grant of the Temporary Occupation Permit (TOP) for the whole of the development on your land, your site exceeds its tendered use or intensity, you are required to pay Land Betterment Charge (LBC) to be determined by the Chief Valuer.

After the grant of TOP, the LBC amount is generally computed based on the Land Betterment Charge (LBC) Table of Rates or by the Chief Valuer's valuation to be determined by SLA. The LBC amount will be determined based on the date of URA's plan lodgement/ Provisional Permission (PP) or the start date of any second or subsequent PP extensions. For leasehold lands. The LBC amount will be adjusted to reflect the remaining tenure of the land using the Leasehold Table. Where the approved use does not fit into any of the Use Groups in the LBC Table of Rates, the LBC amount payable will be determined by the Chief Valuer.

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3. WHAT IS THE PROCESSING TIME AND FEES FOR LAND BETTERMENT CHARGE?

The estimated processing time to issue a Liability Order is 4 weeks or 12 weeks (for cases requiring Chief Valuer's valuation) from SFA's endorsement and relevant agencies' approval for which full information has been provided. A non-refundable fee of \$1,100 is payable for updating the baseline database.

4. HOW TO PAY?

Please submit your proposal plans to the Singapore Food Agency (SFA) for plan endorsement. If LBC is payable, a Liability Order will be issued to the lessee specifying the amount of LBC payable.

Land Betterment Charge can be paid through Internet Bank Transfer or Paynow.

4 or 12 weeks

OTHER DETAILS PROPERTY TAX



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Inland Revenue Authority of Singapore (IRAS):

As the Government's main tax administrator, the taxes IRAS collects account for about 70% of the Government's Operating Revenue, which goes towards economic and social programmes to achieve quality growth and an inclusive society. IRAS also represents the Singapore Government in tax treaty negotiations, drafts tax legislations and provides advice on property valuation to the Government.

1. WHAT IS PROPERTY TAX?

Property tax is a tax on immoveable properties, comprising land, buildings and physical improvements. It is applicable whether the property is rented out, owner-occupied or left vacant.

2. HOW IS PROPERTY TAX COMPUTED?

Property tax is calculated by multiplying the Annual Value (AV) of your property with the prevailing tax rate for non-residential properties, currently set at 10% per annum (2023).

Property Tax = Annual Value (AV) x 10%

3. WHO PAYS FOR PROPERTY TAX?

Generally, the owner of the property is the person liable for property tax.

If you are a lessee or grantee of a property from a state lease, state land grant, or a lease of property by a public authority for a period exceeding three years, you are deemed as the owner for property tax purposes.

4. WHEN AND HOW TO PAY?

Property tax is payable yearly in advance. You will receive your annual property tax bill at the end of each year for the tax payable for the following year. You are required to pay by 31 January of each year.

During the year, you may receive a Valuation Notice from IRAS with the AV if you have new property, or when there is a revision to the AV of your existing property. If there is additional tax payable, payment should be made within one month from the date of the Notice.

You are encouraged to pay your tax by GIRO. You can enjoy up to 12 months' interest-free instalments or opt for a one-time GIRO deduction. Additional tax payable will be automatically reflected in your new payment plan and refunds will be credited into your account.

5. WHAT IS ANNUAL VALUE?

AV is the estimated gross annual rent of your property if it were to be rented out.

6. HOW IS THE ANNUAL VALUE OF MY FARM DETERMINED?8

a. Land and Development Sites

The AV of land and development sites is determined at 5% of the estimated freehold market value⁹. This applies to both vacant land and land under going construction.

Example:

Estimated Freehold Market Value of Farm Land is \$416,667. Annual Value = 5% x \$416,667 = \$20,833, say \$20,800.

b. Farm Property (upon completion of buildings, structures and/or physical installations)

Upon the completion of the buildings, structures or physical installations (including fixtures) on site, the AV of the completed farm property is typically determined at 5% of the estimated freehold capital value of the property, including buildings, structures and physical improvements (including fixtures).¹¹

Example:

The estimated freehold market value of farm land is \$416,667 and the costs of buildings, structures and physical installations (including fixtures) is \$1,000,000.

Annual Value = 5% x (\$416,667 + \$1,000,000) = \$70,833, say \$70,800.

Below are examples of structures and installations in farms that are taxable, for the purposes of calculating Property Tax:

EXAMPLES OF FARMS

EXAMPLES OF TAXABLE STRUCTURES AND INSTALLATIONS

Vegetable Farms

- Greenhouses
- Frames, gulley systems for the growing of vegetable crops.
- Irrigation system including tanks, pipes and pumps.
- Service machineries like lighting systems, mechanical and electrical systems, solar panels, fire protection system, air-conditioning, cooling or heating systems, security and alarm systems, sewerage installations, coldrooms, etc.

Fish Farms

- Fishponds or tanks, including supporting structures.
- Water circulation and filtration systems including tanks, ponds, pumps and pipes.
- Service machineries like lighting systems, mechanical and electrical systems, solar panels, fire protection system, air-conditioning, cooling or heating systems, security and alarm systems, sewerage installations, etc.

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⁸ For agricultural zoned farms only.

⁹ The market value of farm land is typically based on market transactions of land for agricultural/farm use. To determine the market value on a freehold basis, the Leasehold Table (as published by the Singapore Land Authority on their website) is used to convert from leasehold land values.

¹⁰ In the Leasehold Table, the value of a piece of land with 20-year tenure is about 48% of its freehold value. Assuming a land premium of \$200,000 is paid for a 20-year leasehold land, this translates to an equivalent freehold land value of \$416,667 (i.e. \$200,000 ÷ 48%).

¹¹ Under common law, a fixture is considered to be part of an immoveable property and is subject to property tax. Fixtures can include fixed installations and supporting structures that are annexed to the property and intended for permanent use within the premises.

Egg Farms

- Coops, including supporting structures
- Other supporting systems:
 - o Cooling and Ventilation system
 - o Feeding and Egg collection system
 - o Manure collection system
 - o Water treatment system
- Service machineries like lighting systems, mechanical and electrical systems, solar panels, fire protection system, air-conditioning, cooling or heating systems, security and alarm systems, sewerage installations, water supply and distribution systems, etc.

7. HOW OFTEN IS MY AV REVIEWED?

IRAS reviews the AV of properties annually to ensure that they are in line with prevailing market conditions. The AV will be amended if the market data shows that the existing AV of your property does not reflect current market values.

The AV of your property may also be revised if there are changes made to your property. These may include:

- Completion of new buildings, structures or physical installations (including fixtures);
- Addition, alteration or demolition of existing buildings, structures or physical installations (including fixtures); and
- Change of use within the farm (e.g. addition of food & beverage or retail facilities, visitor centres, farm-stay, etc.)

8. CAN I OBJECT TO THE ASSESSMENT OF MY PROPERTY?

You may object to the proposed AV and/or effective date of assessment within 30 days from the date of the Valuation Notice informing you of the AV of your property, if you think your property tax assessment is excessive.

You may also object to the AV of your property as shown in the Valuation List (VL) at any time in the year even if you do not receive a Valuation Notice. The VL contains the AVs of all properties. Objections to the AVs in the VL have to be made by 31 Dec of the year of the VL.

To file an objection, you can use IRAS' e-Service "Object to Annual Value" by logging in with your SingPass/Corp Pass to: http://myTax.iras.gov.sg

Notwithstanding any filing of objection or appeal for your property, you will still need to make payment on the revised tax payable proposed by IRAS.



PROPERTY TAX CYCLE FOR YOUR AGRICULTURAL FARM

- 1. Agricultural Land purchase through:
- Tender
- State Allocation
- 2. Agricultural Land
- Vacan
- Undergoing Construction
- 3. Completed Property

Erection of new buildings, structures, physical installations (including fixtures).

L. Changes to
Existing Property

Due to addition & alteration works/ demolitions/change of use/ etc.

Property tax liability is effective from date of transfer or date of lease commencement, whichever earlier.

Determination of AV (Land)

Reviewed annually

• 5% of Estimated Freehold Market Land Value

Property Tax

• 10% of AV

Determination of AV (Property) Reviewed annually

• 5% of Freehold Value of Property (Comprising Land and Costs of buildings, structures, and physical installations (including fixtures)

Property Tax

• 10% of AV

- 1. Property Tax Bill will be sent at the end of each year to inform you of the Property Tax payable for the following year.
- 2. Valuation Notice may also be sent during the year, when the AV is amended to reflect the current market value of the property.





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OTHER DETAILS AGRITECH WORK PERMIT SCHEME



SFA Licenced Food Farms are eligible for the *Agritech Work Permit Scheme*. Foreign Workers under the Agritech Work Permit Scheme are strictly for food farming work only. Food farms on the Agritech Work Permit Scheme are to adhere to Ministry of Manpower (MOM) conditions for work permits:

https://www.mom.gov.sg/passes-and-permits/ work-permit-for-foreign-worker

TO APPLY TO MOM FOR FOREIGN WORKERS, A FOOD FARM NEEDS TO:

- 1. Register an entity with Accounting and Corporate Regulatory Authority (ACRA), such as soleproprietorship / partnership business firms or companies or as limited liability partnership,
- 2. Open a CPF account with Central Provident Fund Board and
- 3. Open a Work Pass account via Work Pass Account Registration (WPAR) at MOM.

EMPLOYMENT PERIOD

The maximum employment periods of foreign workers allowed in Singapore are as follows:

Type of Foreign Worker	Maxmimum Employment Period	
Unskilled (R2)	14 Years	
Skilled (R1)*	22 Years	

*MOM recognises Work Permit holders who have worked in Singapore for at least 4 years and have a fixed monthly salary of at least \$1,600, as R1 skilled workers under the Market-Based Skills Recognition Framework. An R1 skilled worker will enjoy a lower levy and can be employed for a maximum period of 22 years.

SOURCE COUNTRIES

Under MOM's Agritech Work Permit Scheme, farms can employ foreign workers from these countries or regions:

- Malaysia
- People's Republic of China (PRC)
- North Asian sources (NAS)
- o South Korea
- o Hong Kong
- o Macau
- o Taiwan
- Non-Traditional sources (NTS)
- o Bangladesh
- o India
- o Myanmar
- o Philippineso Sri Lanka
- o Thailand



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FARM ARCHETYPE FOR FRUITED VEGETABLES/ MUSHROOMS



An Overview

- To meet the 30 by 30 goal on food security, SFA will be launching more land tenders for farming. SFA has received feedback from industry stakeholders that the long time needed to obtain all the relevant approvals for design and construction has often derailed the original farming plans.
- This concept archetype aims to provide a generic design that is able to meet key regulatory
 requirements by Technical Agencies for a farm's adoption or adaptation to smoothen its clearance
 processes so that farm projects can attain approvals within the typical processing timeframe and
 potentially reduce development costs.
- The archetype also serves as a reference to provide farms with an overview of some of the key regulatory requirements and possible design solutions in developing a farm similar to this archetype.
- This archetype design demonstrates to industry stakeholders that effective design solutions, adhering to all the mandatory regulatory controls while achieving the targeted production outputs, are feasible within a reasonable timeframe.

DESIGN PARAMETERS

- A hypothetical 2-hectare land with a public road on the short side of the land was adopted for the archetype design.
- The design principle is based on SFA's agriculture development guideline which stipulates a minimum of 90% land area for production usage and maximum 10% ancillary usage (such as worker dormitory, office and carpark, etc.), excluding buffer and setback. The archetype design is targeted for fruited vegetables or mushroom using a simple hydroponic farming system. High intensity farming with "multi-tier" growing system is not included as a parameter for this archetype proposal.
- Proposed structures are kept to a maximum height of 12m to qualify for URA's Authorisation (i.e. URA's planning permission not required). Refer to Page 33 for the full list of URA's Authorisation conditions).
- Allowance is made for typical processing/production and other ancillary areas (e.g., cold/chiller room, office, workers' quarters, store, toilets, etc).
- All buildings in the archetype proposal, including greenhouses, are proper buildings under BCA's definition and will
 require full and complete compliance with Building Control requirements, including the Structural Plans. There is no
 adoption of "insignificant building" in this proposal.



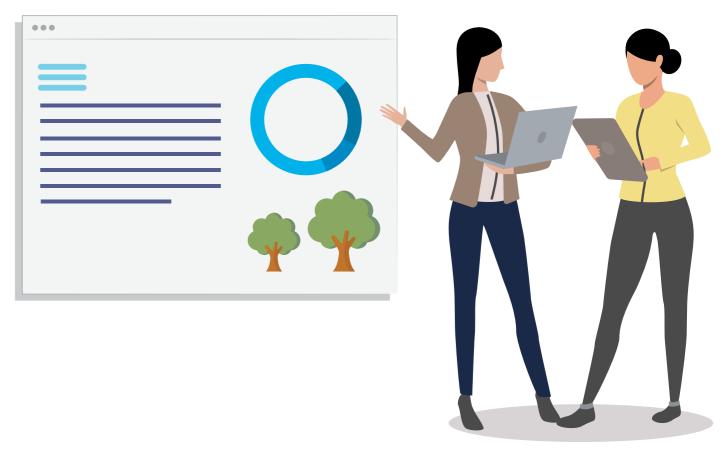
DESIGN APPROACHES AND STRATEGIES

- In any typical design process, the final deliverables are direct responses to the 3 key criteria, namely (i) Design brief of the client (e.g. type of agriculture system); (ii) Site configuration involving surrounding uses/users and characteristics; and (iii) Building Authority regulations (compliance parameters).
- Without a complete design brief in the context of a hypothetical site, the archetype design is targeted to address the relevant authority's regulations directly by providing relevant responses to address the issues on the compliances.
- The archetype proposal is designed for a hydroponic farming system with all growing systems under roof cover and within enclosure of a greenhouse.
- The following are some strategies adopted in the archetype design which can impact development costs and time taken for approvals:
- a) As the 2-hectare site is quite sizeable, grouping the same uses physically together, such as the ancillary uses, can help reduce infrastructure and services connection costs.
- b) By locating all servicing activities near to the access from public road, the extent of a 2-way service road can be minimised. Fire engine access roads to the deeper ends of development, which are extensive, can be kept to a minimum width of 4 metres.
- c) For the proposed archetype, the greenhouses are separated into 2 buildings to comply with SCDF's Fire Code on the limit of compartment size of 8,000 sqm. This is further compounded by the need for setbacks of the greenhouse building from boundaries and from one another to comply with unprotected opening requirements under the fire code.
- d) Height of greenhouses will have a direct impact on the setback due to fire code requirements and should be moderated. In this archetype proposal, a 6-metre height greenhouse (with 2.5-metre-high roof cover) is adopted such that the required setbacks are not disproportionate to the overall efficiency of the design layout.
- e) By locating ancillary buildings close to incoming service mains (e.g. electrical or water mains), usually close to public access road, services connection costs can also be kept to a minimum.
- f) To comply with setback requirements (e.g. to meet SCDF's unprotected openings, etc.), such setback zones could be planned to coincide with the fire engine road or for locating detention pond/tank, rainwater harvesting storage tanks or other permissible open outdoor activities for better utilisation of the land.
- g) Adopting a design approach to achieve full compliance with all regulatory requirements can help expedite approvals as deviations and non-compliances require time to seek the necessary waivers or exemptions.
- h) BCA, SCDF and PUB are the 3 main agencies whose requirements may impact land utilization efficiency, time, and costs significantly, if they are not well planned for. These 3 agencies' requirements pertaining to the farm layout planning and design should be addressed upfront at the land tender stage. Please refer to individual agency codes and requirements for more specific technical compliance relating to the agency concerned.



HOW THE ARCHETYPE CAN BE USED

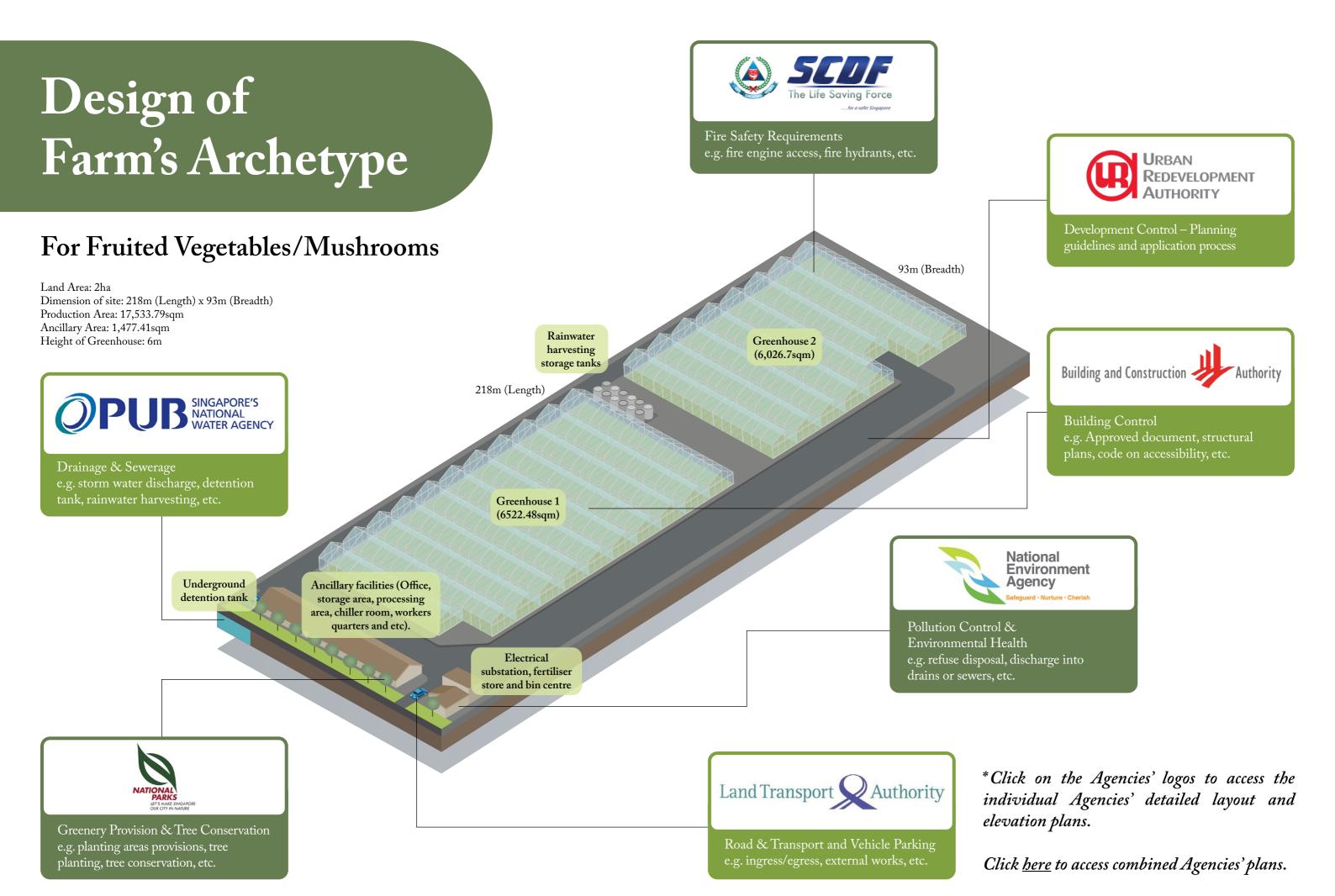
- The proposed archetype is not meant to be adopted completely as every farmer will have their unique agriculture solutions and each site will be different in terms of configuration/characteristics, technical constraints, opportunities that require modifications to achieve the individual site's desired response for optimisation and efficiency. Each farm may have its own preferred planting/growing system, which translates to varying greenhouse layout or configuration and back-of-house requirements. In addition, any innovative solutions must be able to comply with all prevailing authority bylaws and regulations to obtain the necessary approvals.
- The proposed archetype aims to address critical regulatory issues that impact the farm layout design but does not cover the technical requirements or those associated with growing systems as they are unique to different farm operators/crop types. The farm should also adopt a suitable farming system that can meet their targeted production outputs. Farm productivity based on traditional farming practices often resulted in the required production outputs not being attainable. Hence, it is critical for farms to utilise advanced farming systems, farming technology and/or superior seeds to achieve the required production output.
- The archetype serves only as a guide by demonstrating possible responses to the key technical requirements from the respective agencies. This is provided so that developers/farmers have a more realistic investment recovery projection.
- The Farm's QP is expected to undertake his/her own review for full regulatory compliances to enable commencement of construction and to obtain TOP/CSC upon completion. Some guiding notes relating to each regulatory agency, while not exhaustive, are provided to highlight key issues for QPs' special attention. QPs should consult the respective agencies when in doubt.
- The important points highlighted for each technical agency are surfaced during the development of the archetype. Undoubtedly, these are the critical issues that not only impact the efficiency of the design, but also the time and costs of development. The Farm's QPs will need to consider the unique constraints of each site and the specific technical requirements for the developer's farm.
- The Farms' QP must be capable of interpreting, adapting, and translating the archetype to their specific site and to the developer's requirements.



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Helpful Tips!

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QP to review the height of greenhouses, which is a critical factor of the unprotected opening calculations under SCDF's fire code.

Any activity in the outdoor open areas shall not result in any pollutive discharge from any process.

Look out for existing fire hydrants on public roads for savings in provision.

To qualify as 'insignificant building works' under the Building Control Act, farm buildings would require to be setback not less than 1.5 times its height away from any adjacent building or public route of access. In addition, no part of the building is to be used for dwelling, or for the purposes of packing, exhibiting, or retailing. Depending on the design, this may reduce the effective greenhouse areas. Though exempted from BCA submission, full compliance and submission to SCDF and other agencies are still required.

Other Relevant Government Agencies or Resources

SFA Agriculture Productivity Fund

https://www.sfa.gov.sg/ food-farming/funding-schemes/ agriculture-productivity-food • To support local farmers in their efforts to expand production capability, boost yield and raise productivity.

EnterpriseSG Schemes
- Grants, including the
Enterprise Development
Grant

https://www.enterprisesg.gov.sg/ financial-assistance/grants • To support the undertaking of deeper transformation in business upgrading, innovation and internationalisation.

Loans

https://enterprisesg.gov.sg/ financial-assistance/ loans-and-insurance • To help companies access financing as working capital or for set-up.



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Codes and Regulations Referenced in Guide

URA

Guidelines for Agriculture Developments, & Streamlined Planning Application Process for Agriculture Developments.

https://www.ura.gov.sg/Corporate/Guidelines/Circulars/dc19-17

BCA

First Schedule of the Building Control Regulations – Insignificant Building Works. https://sso.agc.gov.sg/SL/BCA1989-S666-2003?DocDate=20181212&ProvIds=Sc1-#Sc1-

Fourth Schedule of the Building Control Regulations.

https://sso.agc.gov.sg/SL/BCA1989-S666-2003?DocDate=20181212&ProvIds=Sc4-#Sc4-

Approved Document.

https://www.bca.gov.sg/Publications/BuildingControlAct/others/Approveddocument.pdf

PUB

Code of Practice on Sewerage and Sanitary Works (2nd Edition - Jan 2019 with Amendments under Addendum No. 1 - Mar 2021)

https://www.pub.gov.sg/Documents/COPSSW2nded2019AddendumNo1_final.pdf

Code of Practice on Surface Water Drainage (7th Edition - Dec 2018 with Amendments under Addendum No. 1 - Apr 2021)

https://www.pub.gov.sg/Documents/COP_Surface%20Water%20Drainage_7th%20Ed%20Add.%201.pdf

SCDF

Fire Code 2018

https://www.scdf.gov.sg/firecode2018/firecode2018

NPARKS

Guidelines on Greenery Provision and Tree Conservation for Developments. https://www.nparks.gov.sg/partner-us/development-plan-submission/guidelines-on-greenery-provision-and-tree-conservation-for-developments

MOM

Employment of Foreign Manpower Act (EFMA) https://www.mom.gov.sg/legislation/employment-of-foreign-manpower-act

Helpful Contacts

Agency	Email Address	Hotline (applicable during office hours)
SFA	For questions relating to farm land: Landsales@sfa.gov.sg For other questions: https://csp.sfa.gov.sg/feedback	6805 2987 6805 2871
Enterprise SG	Please reach out to us at go.gov.sg/askenterprisesg	6898 1800
URA	https://www.ura.gov.sg/feedbackWeb/contactus_feed	dback.jsp 6223 4811
NEA	DCLD_Consultation@nea.gov.sg	6225 5632
BCA	https://www.bca.gov.sg/feedbackform/	1800-3425222 (1800-DIAL BCA) +65 6534 0219 (for overseas call)
PUB	PUB_One@pub.gov.sg	1800-2255-782
SCDF	scdf_qp_consultant@scdf.gov.sg	1800-2865555
LTA	LTA-DBC_Registry@lta.gov.sg	1800-2255582

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NParks	For development-related enquiries: NPARKS_GDP@nparks.gov.sg For other enquiries: www.nparks.gov.sg/feedback	6471 7842 1800-4717300
IRAS	https://www.iras.gov.sg/contact-us/property-tax	1800-3568300
SLA	Feedback form for SLA	https://forms. cwp.gov.sg/SLA/ FormJVNB4
MOM	For information on Workers' Quarters at Farms (WQFs): https://mom.gov.sg/housing For enquiries and submission of documents for WQFs: https://service2.mom.gov.sg/efeedback/?option=38	64385122 (64385122)
SAFEF	secretariat@safef.org.sg	68260960

