

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Technical Education and Industrial Training

Vocational Training Council

20EM – Development of the Vocational Training Council International Culinary College

Members are invited to recommend to the Finance Committee the upgrading of **20EM** to Category A at an estimated cost of \$ 657.5 million in money-of-the-day prices for the development of the Vocational Training Council International Culinary College at Pokfulam.

PROBLEM

The Vocational Training Council (VTC) needs to construct a new campus for the development of the International Culinary College (ICC) at Pokfulam.

PROPOSAL

2. The Secretary for Education (SED), on the advice of the Director of Architectural Services (D Arch S), proposes to upgrade **20EM** to Category A at an estimated cost of \$657.5 million in money-of-the-day (MOD) prices for the development of the ICC.

/ **PROJECT**

PROJECT SCOPE AND NATURE

3. The proposed scope of works under **20EM** includes –
- (a) construction of a six-storey campus with two basement floors¹ for the ICC;
 - (b) construction of an interpretation area and a historic observation point to promote public understanding and appreciation of the history of the surrounding area;
 - (c) formation of a new access road along the west boundary of the site connecting the VTC Pokfulam Complex and the Old Dairy Farm Cowshed; and
 - (d) construction of an underground linkage connecting the lowest basement storey of the ICC and the existing VTC Pokfulam Complex.
4. The total net operational floor area² (NOFA) of the campus is about 5 680 m².³ Facilities to be provided in the campus include the following –
- (a) training kitchens and associated areas of 3 506 m² in NOFA;
 - (b) teaching and associated areas of 1 077 m² in NOFA;
 - /(c)

¹ The basement includes a mezzanine floor.

² NOFA is the floor area actually allocated to the users of a building for carrying out the intended activities. Unlike the construction floor area which takes into account all areas within the building structure envelope, NOFA does not include areas for toilets, lift lobbies, stair halls, public/shared corridors, stairwells, escalators and lift shafts, pipe/services ducts, refuse chutes and refuse rooms, balconies, verandas, open decks and flat roofs, parking spaces, loading/unloading areas, mechanical plant rooms, etc.

³ According to the proposal set out in the paper for the meeting of the Legislative Council Panel on Education on 14 January 2013, the NOFA of the ICC campus was about 6 600 m². After the meeting, the VTC finalised the detailed design of the ICC campus taking into account all relevant considerations. According to the latest detailed design, the NOFA has been reduced to about 5 680 m² due to increase in area for those rooms and space which could not be included in the NOFA. As ICC is a culinary training facility, due to hygiene standard and occupational safety, the campus needs to provide wider corridor and more space for movement of catering equipment and transfer of raw food materials and refuse. Also, the campus needs to have a relatively higher proportion of electrical and mechanical (E&M) rooms and exhaust air pipe ducts to serve the training kitchens.

- (c) office facilities of 547 m² in NOFA; and
- (d) support facilities of 550 m² in NOFA.

_____ A site plan is at Enclosure 1. The views of the campus (artist's impression) are at
_____ Enclosures 2. Layout plans, the sectional plan and the list of facilities are at
_____ Enclosures 3 to 5 respectively. Subject to the funding approval of the Finance
Committee, the VTC plans to commence the construction works in August 2013 for
completion in last quarter 2015.

JUSTIFICATION

5. In the 2011 Policy Address, the Chief Executive proposed to set up an ICC under the VTC. The ICC will provide training for students and in-service practitioners in Hong Kong aspiring to become professional chefs proficient in international cuisines. In addition, it will help attract renowned chefs and other talents of the culinary profession from around the world, and promote the development of related sectors, such as tourism, catering, retail and wine trading in Hong Kong. Apart from helping brand Hong Kong as a Gourmet's Paradise, the ICC will support Hong Kong's education services through the provision of valued progression pathways for youth and in-service personnel.

6. The ICC will offer a diversified array of programmes in the following three areas to promote the economic development of Hong Kong –

- (a) international cuisines programmes, including European, Mediterranean, American, Middle Eastern and Asian (Korean, Japanese, Southeast Asian and Indian);
- (b) programmes on food and wine pairing, sommelier and other wine-related courses; and
- (c) Meetings, Incentives, Conventions and Exhibitions (MICE)-related programmes.

To support the operation of these programmes, the construction of a purpose-built campus for the ICC is required.

7. The proposed project site is adjacent to the VTC's existing Pokfulam Complex where the Chinese Cuisine Training Institute (CCTI), Hospitality Industry Training and Development Centre (HITDC) and a training hotel are currently located, thereby enabling the VTC to achieve synergy through shared use of infrastructure, facilities and resources.

8. The VTC will build an underground linkage between the ICC and the existing VTC Pokfulam Complex to bring about synergy and enhance operational efficiency. The underground linkage is vital in particular when there is transportation of food items/ingredients between the two premises for organising events, master chef demonstrations and seminars. The linkage would also ensure food hygiene and safety when food items are being transported between the two premises. Furthermore, the linkage would ensure the safety and security for students travelling between the two premises. Although the VTC had considered building a footbridge to connect the two buildings, in view of the presence of graded historic buildings in the vicinity⁴ (as shown in Enclosure 1), the VTC proposes an underground linkage instead so as to match the campus with the surrounding environment.

9. As the proposed project site is adjacent to several graded historic buildings, the VTC will incorporate various features in the design of the campus so as to better match with the surrounding environment, such as reduced site coverage and building footprint and restricted building height. To better match with the surrounding environment, the proposed site coverage is only 47.3%, although the site is subject to maximum site coverage of 89%. The building height is also kept within 178m above the Hong Kong Principal Datum. Taking into account the planning parameters and operational needs, the VTC proposes to construct a two-level basement for the ICC. Furthermore, as the existing access road connecting the VTC Pokfulam Complex and the Old Dairy Farm Cowshed falls within the proposed project site, it needs to be realigned into the new access road as indicated in Enclosure 1.

10. The VTC also proposes to include an interpretation area and a historic observation point in the ICC campus (as indicated in Enclosure 1). The interpretation area is a heritage trail with display facilities so as to facilitate the public to appreciate the history and the past operation of the Dairy Farm in the Pokfulam area. The historic observation point would allow the public to appreciate all the major surrounding heritage buildings at the same time. The construction of

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⁴ Including the Old Dairy Farm Senior Staff Quarters, Old Dairy Farm Main Office Building, Old Dairy Farm Cowshed and the Bethanie.

the interpretation area and the historic observation point is suggested in the Heritage Impact Assessment (HIA) report (see paragraph 26 below). The interpretation area and the historic observation point will be opened to the public at any time free of charge.

11. The ICC will take in about 100 students as its first batch of students in the 2014/15 academic year initially on a smaller scale, using the facilities at the CCTI and HITDC prior to the completion of its campus in late 2015. Upon completion, the ICC will provide some 2 000 study places annually for secondary graduates and in-service personnel, leading to qualification awards at different levels, including certificate, diploma, higher diploma and beyond.

FINANCIAL IMPLICATIONS

12. We estimate the capital cost of the project to be \$ 657.5 million in MOD prices (see paragraph 15 below), broken down as follows –

	\$ million
(a) Piling, site formation and basement	80.1
(i) piling	3.0
(ii) site formation	20.3
(iii) construction of basement	56.8
(b) Building	166.6
(c) Building services	92.3
(d) Energy conservation, green and recycled features	4.8
(e) External works, drainage and utility services	20.4
(i) external works	14.9
(ii) drainage	3.7
(iii) utility services	1.8
(f) Interpretation area and historic observation point	6.2

/(g)

		\$ million	
(g)	Formation of access road and footpaths	9.7	
(h)	Underground linkage to the existing VTC Pokfulam Complex	25.2	
(i)	within ICC site boundary	3.3	
(ii)	outside ICC site boundary to Pokfulam Complex	21.9	
(i)	Consultants' fees for –	12.2	
	(i) tender assessment	0.1	
	(ii) contract administration	11.0	
	(iii) management of resident site staff	0.5	
	(iv) out-of-pocket expenses	0.6	
(j)	Remuneration of resident site staff	8.5	
(k)	Furniture and equipment ⁵	88.5	
(l)	Contingencies	51.4	
	Sub-total	565.9	(in September 2012 prices)
(m)	Provision for price adjustment	91.6	
	Total	657.5	(in MOD prices)

13. The VTC will engage consultants to undertake tender assessment, contract administration and site supervision of the project. A detailed breakdown of the estimated consultants' fees and residential site staff costs by man-month is at Enclosure 6.

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⁵ The estimated cost of furniture and equipment is based on an indicative list of items.

14. The construction floor area (CFA) of this project is about 12 139 m². The estimated construction unit cost, represented by the building and building services costs, is \$ 21,328 per m² of CFA in September 2012 prices. D Arch S considers the estimated construction unit cost to be reasonable. A detailed account of the CFA vis-à-vis the construction unit cost is at Enclosure 7.

15. Subject to approval, the VTC will phase the expenditure as follows –

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 2014	143.9	1.06225	152.9
2014 – 2015	176.7	1.12599	199.0
2015 – 2016	121.8	1.19354	145.4
2016 – 2017	82.5	1.26516	104.4
2017 – 2018	29.8	1.34107	40.0
2018 – 2019	11.2	1.41147	15.8
	565.9		657.5

16. The VTC has derived the MOD estimates on the basis of the Government’s latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2013 to 2019. The contract will provide for price adjustments.

17. The project will have no impact on the tuition fees. The recurrent costs associated with this project will be met through annual allocations provided by Government to VTC to meet this new initiative, estimated to be around \$40.5 million a year, and tuition fee income.

PUBLIC CONSULTATION

18. The VTC consulted the District Development and Environment Committee of the Southern District Council on the proposal on 28 May and 26 November 2012 respectively and the Committee supported the proposal.

19. We also consulted the Legislative Council Panel on Education on 14 January 2013. Members generally supported the proposal.

20. The VTC also consulted the Antiquities Advisory Board on 20 February 2013. The Board generally supported the findings of the HIA in respect of the proposal (see paragraph 26 below).

ENVIRONMENTAL IMPLICATIONS

21. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The VTC completed a Preliminary Environmental Review for the project, which recommended a number of mitigation measures such as centralized air-conditioning and electrostatic precipitators in kitchen exhaust system to address noise and air quality impact. With such measures in place, the project would not have long term adverse environmental impact. The cost for the above mitigation measures has been included as part of the works in the project estimate. The VTC will implement these measures during operation of the project.

22. During construction, the VTC will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contracts. These include the use of quieter powered mechanical equipment (PME) and acoustic screen, avoidance of concurrent construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities etc.

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23. At the planning and design stages, the VTC has considered and will adopt modular design and off site fabrication to reduce the generation of construction waste where possible. In addition, the VTC will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities⁶. The VTC will encourage the contractor to maximise the use of recycled / recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

24. At the construction stage, the VTC will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. The VTC will ensure that the day-to-day operations on site comply with the approved plan. The VTC will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The VTC will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

25. The VTC estimates that the project will generate in total about 53 601 tonnes of construction waste. Of these, it will reuse about 5 360 tonnes (10%) of inert construction waste on site, deliver 46 097 tonnes (86%) of inert construction waste to public fill reception facilities for subsequent reuse. The VTC will dispose of the remaining 2 144 tonnes (4%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$1.51 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁷ at landfills).

/HERITAGE

⁶ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

⁷ The estimate has taken into account the costs for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90 per m³) and the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

HERITAGE IMPLICATIONS

26. The site of this project is located amidst several historic buildings (as shown in Enclosure 1) including the Old Dairy Farm Senior Staff Quarters, Old Dairy Farm Main Office Building, Old Dairy Farm Cowshed and the Bethanie. The VTC appointed a heritage consultant to conduct a HIA to devise mitigation measures to reduce any adverse impacts due to the development. The VTC will incorporate in the site planning an interpretation area with display facilities and a historic observation point within the site where all the major surrounding heritage buildings can be appreciated at the same time as suggested in the HIA report to promote public understanding and appreciation of the site's history (see Enclosure 1 for location). The mitigation measures recommended in the HIA Report have been accepted by the Antiquities and Monuments Office of the Leisure and Cultural Services Department and generally supported by Antiquities Advisory Board at its meeting on 20 February 2013. The VTC will implement the mitigation measures recommended in the HIA report as well as other mitigation measures as agreed with the Antiquities and Monuments Office.

LAND ACQUISITION

27. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

28. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular –

- (a) water cooled chiller with fresh-water cooling tower;
- (b) automatic demand control of chilled water circulation system;
- (c) automatic demand control of supply air; and
- (d) heat pump for hot water supply system.

29. For greening features, this project will provide vertical greening and rooftop greening for environmental and amenity benefits.

30. For recycled features, this project will adopt rainwater collection for irrigation.

31. The total estimated additional cost for adoption of the above features is around \$4.8 million (including \$3.0 million for energy efficient measures), which has been included in the cost estimate of the project. The energy efficient features will achieve 13% energy savings in the annual energy consumption with a payback period of about 8.2 years.

BACKGROUND INFORMATION

32. We upgraded **20EM** to Category B in September 2011. The VTC engaged consultants in February 2012 to carry out site investigation, detailed design and piling tender documentation at a total cost of \$17.3 million. We have charged this amount to block allocation **Subhead 8100QX** "Alterations, additions, repairs and improvements to education subvented buildings". The consultants have completed the site investigation, detailed design and tender document for the piling contract.

33. The proposed construction of the ICC and the underground linkage will involve removal of 22 trees and 13 trees (including three trees to be transplanted) respectively. All trees to be removed are not important trees.⁸ The VTC will incorporate planting proposals as part of the project, including estimated quantities of 42 trees and 14 trees for the construction of the complex and the underground linkage respectively.

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⁸ "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria—

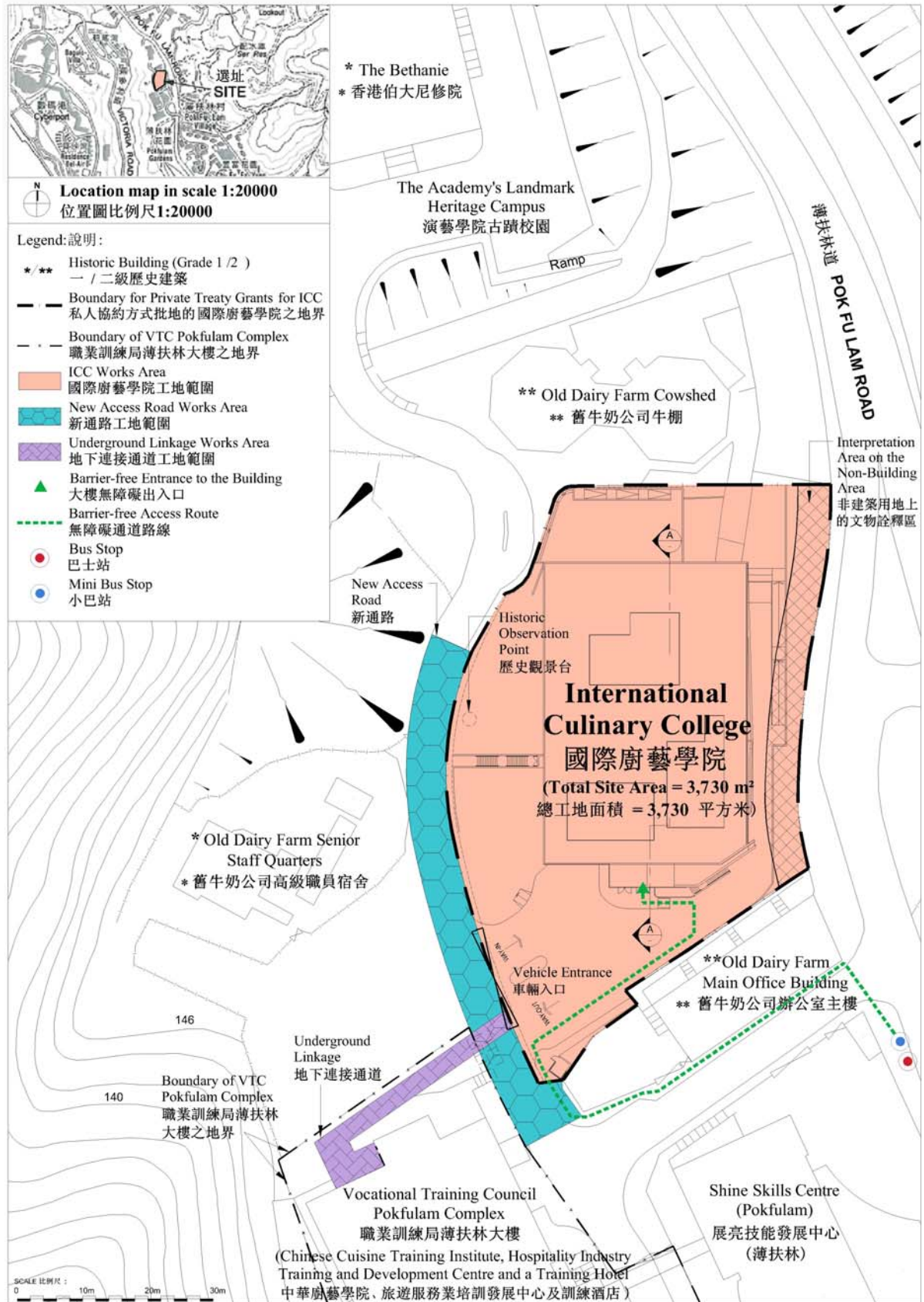
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 m (measured at 1.3 m above ground level) or with height/canopy spread equal or exceeding 25 m.

34. The VTC estimates that the proposed works will create about 420 jobs (375 for labourers and another 45 for professional/technical staff) providing a total employment of 6 300 man-months.

Education Bureau
June 2013

20EM – Development of the Vocational Training Council International
Culinary College

20EM – 發展職業訓練局國際廚藝學院



Site Plan and Location Plan 平面圖和位置圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



Artist's Impression of International Culinary College from Pok Fu Lam Road
從薄扶林道望向國際廚藝學院的構思圖

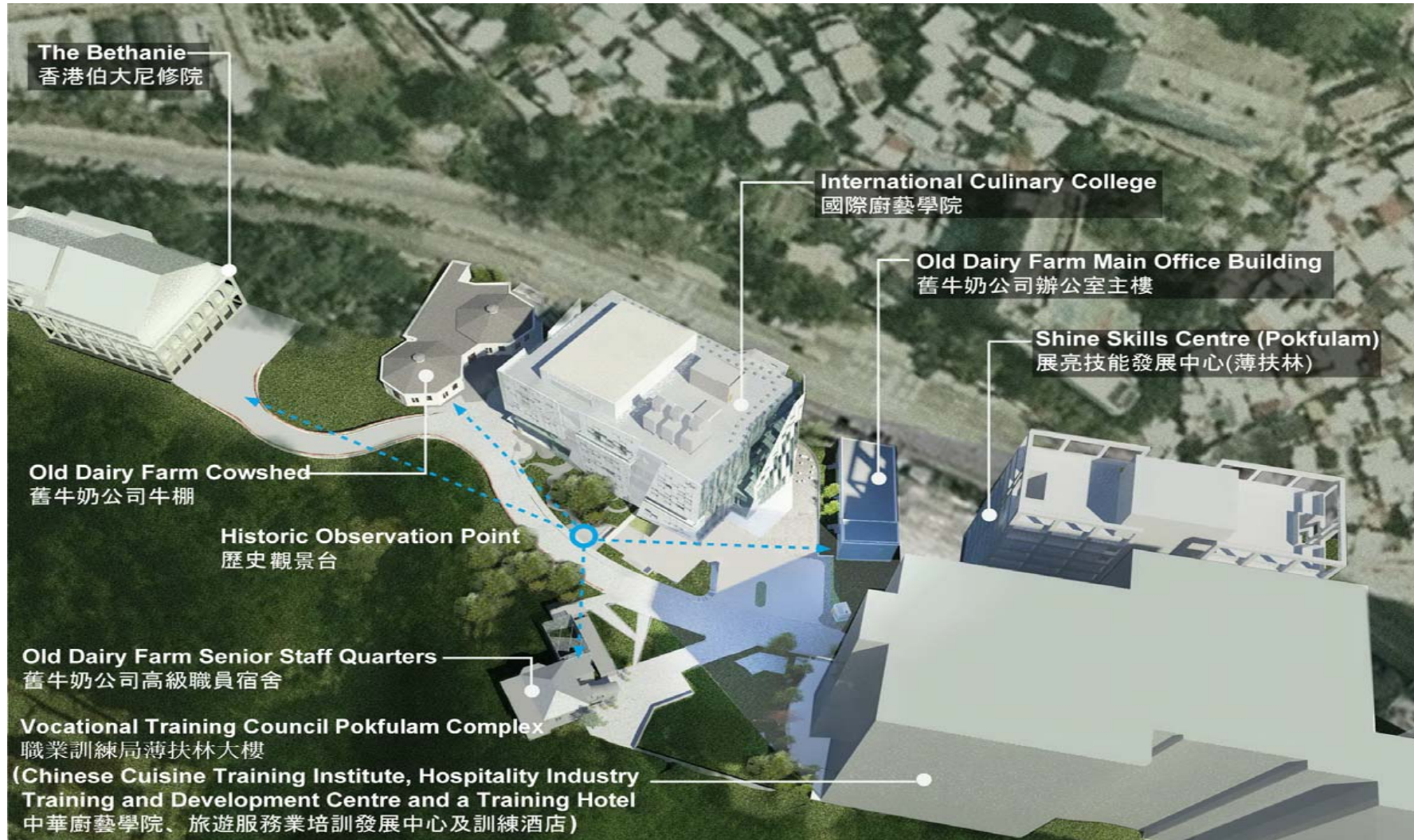
20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



Artist's Impression of Main Entrance of International Culinary College from VTC Pokfulam Complex
從職業訓練局薄扶林大樓望向國際廚藝學院正門入口的構思圖

20EM – Development of the Vocational Training Council International Culinary College

20EM – 發展職業訓練局國際廚藝學院



Aerial View of International Culinary College and Surrounding Buildings (1)

國際廚藝學院和鄰近建築物的鳥瞰構思圖 (一)

20EM – Development of the Vocational Training Council International Culinary College

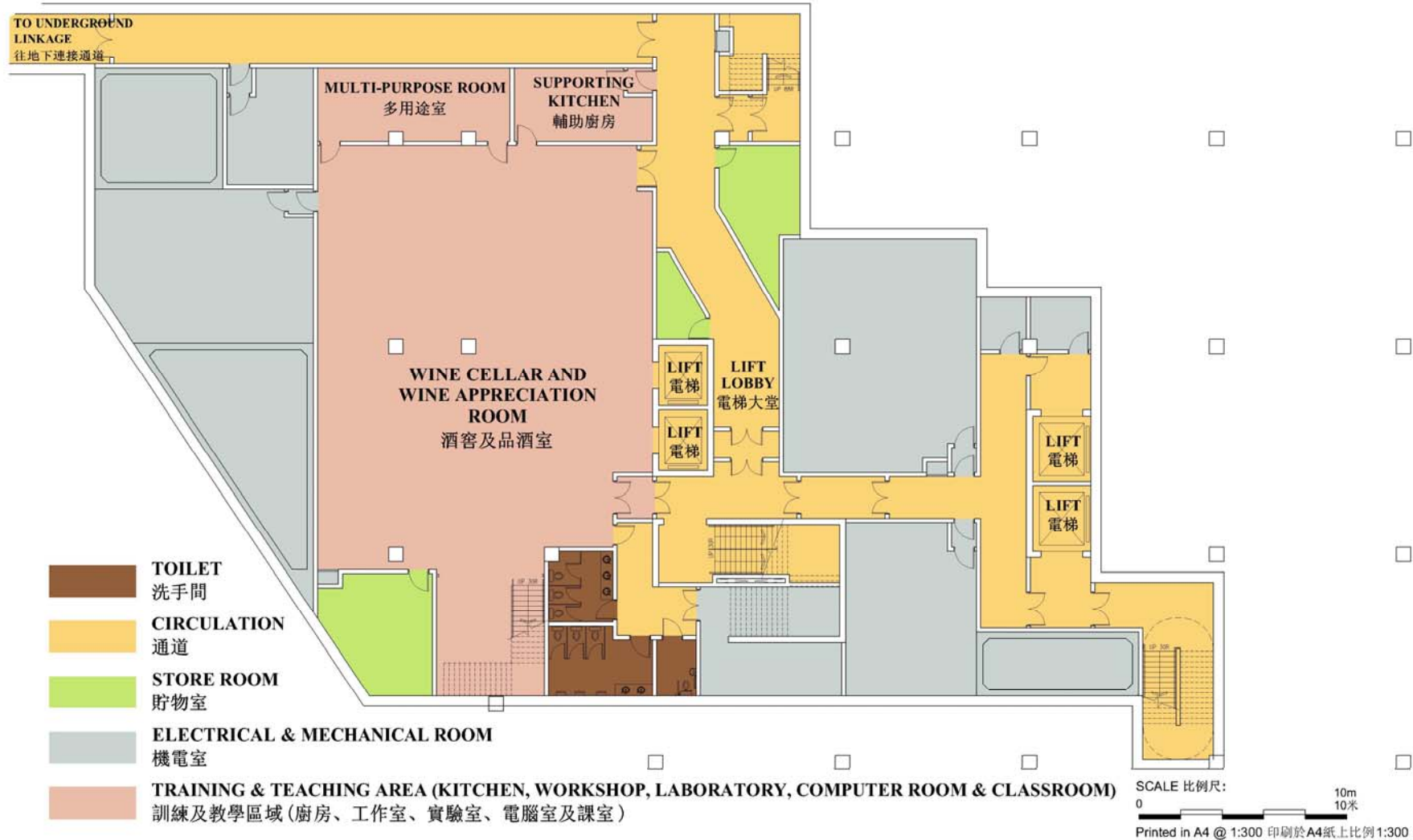
20EM – 發展職業訓練局國際廚藝學院



Aerial View of International Culinary College and Surrounding Buildings (2)

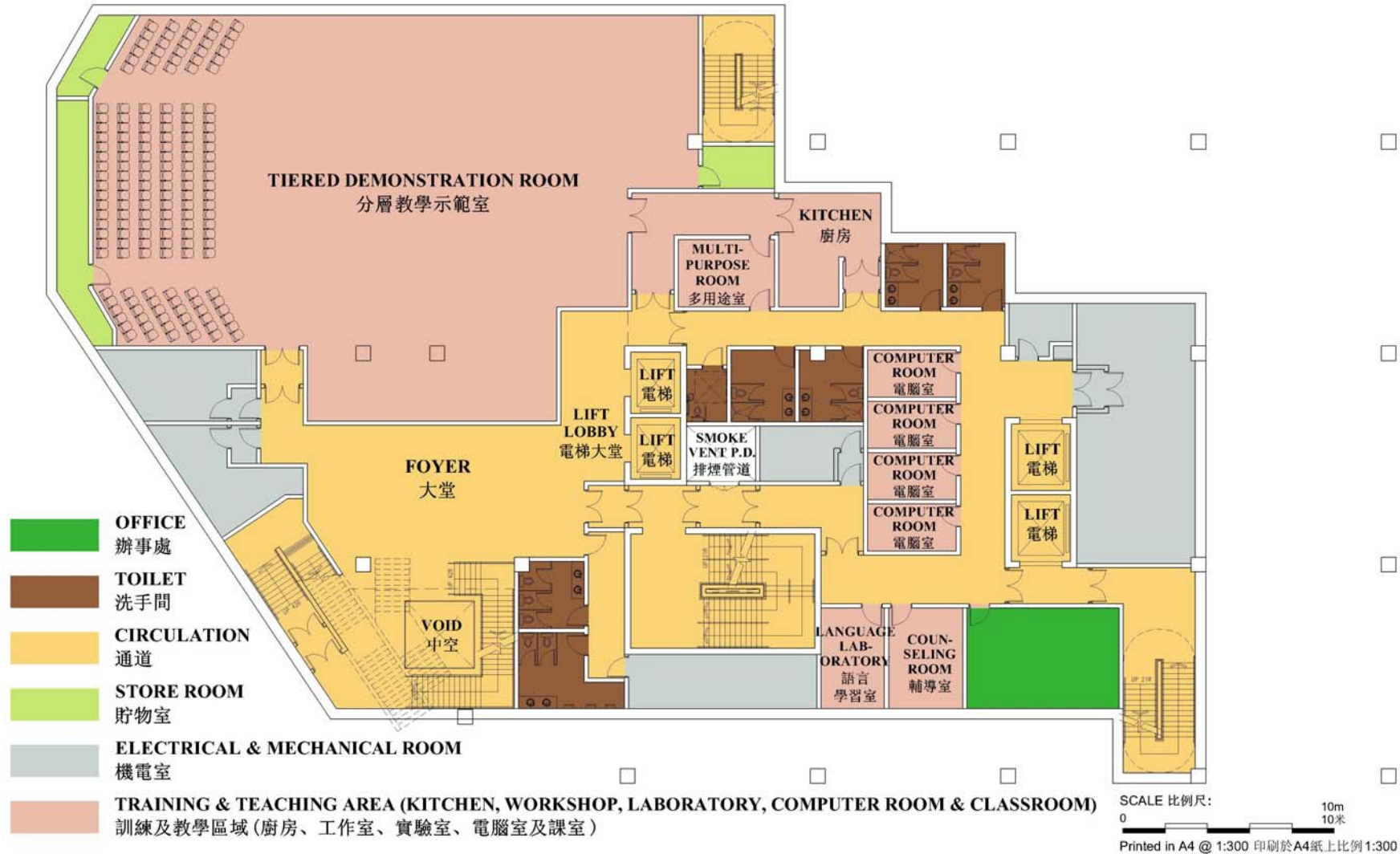
國際廚藝學院和鄰近建築物的鳥瞰構思圖 (二)

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



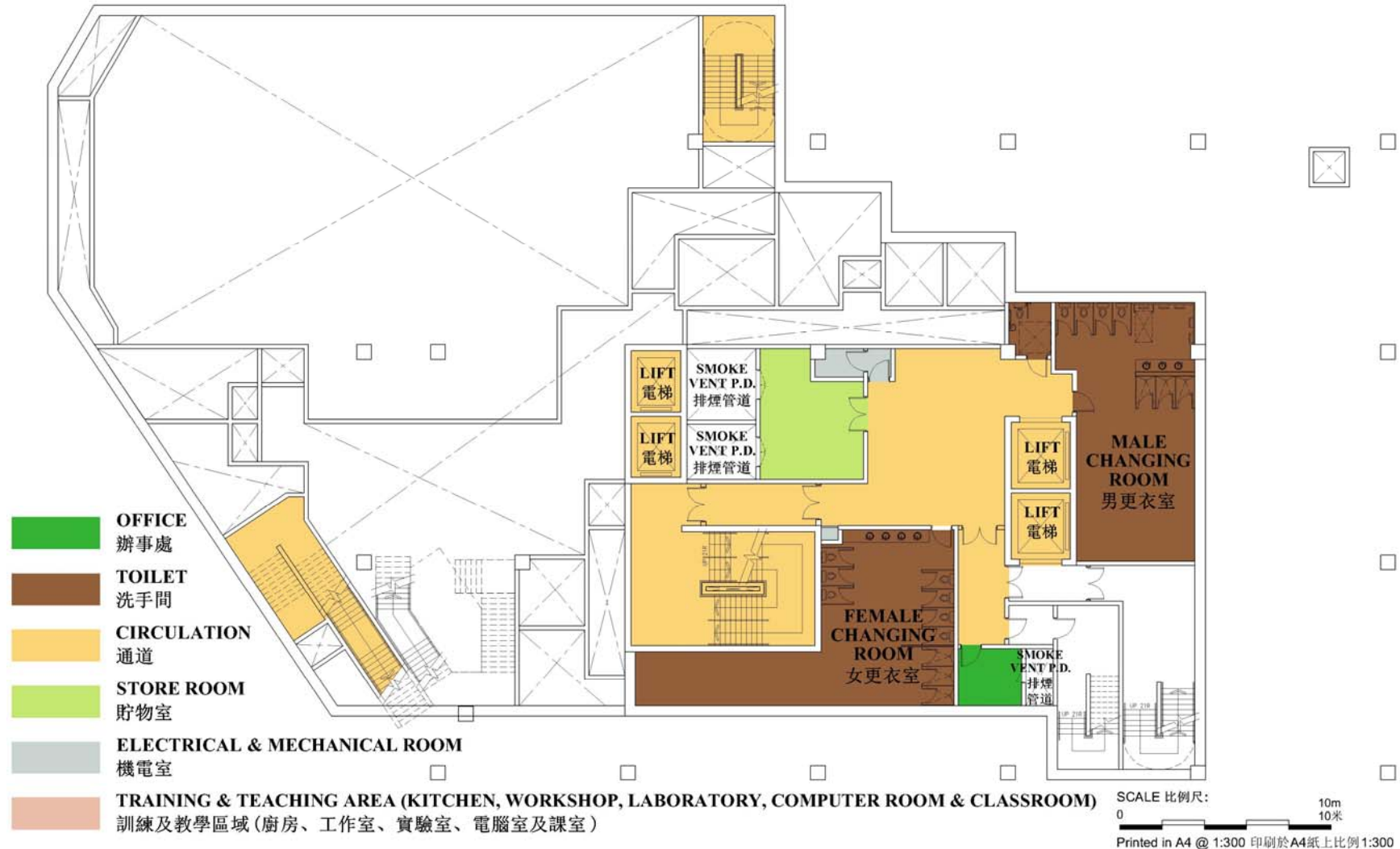
BASEMENT (SECOND FLOOR) PLAN 地庫(二樓)平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



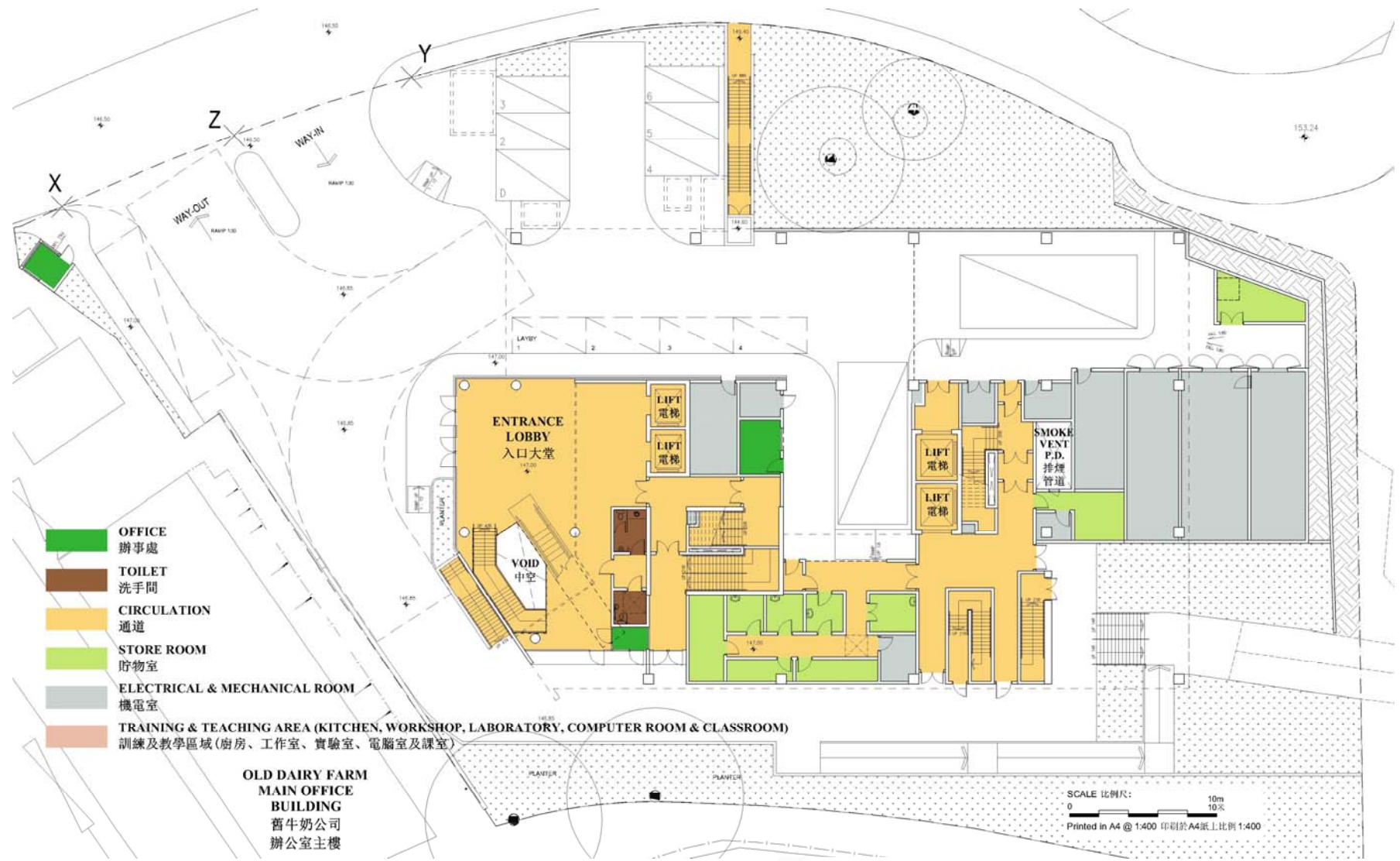
BASEMENT (FIRST FLOOR) PLAN 地庫(一樓)平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



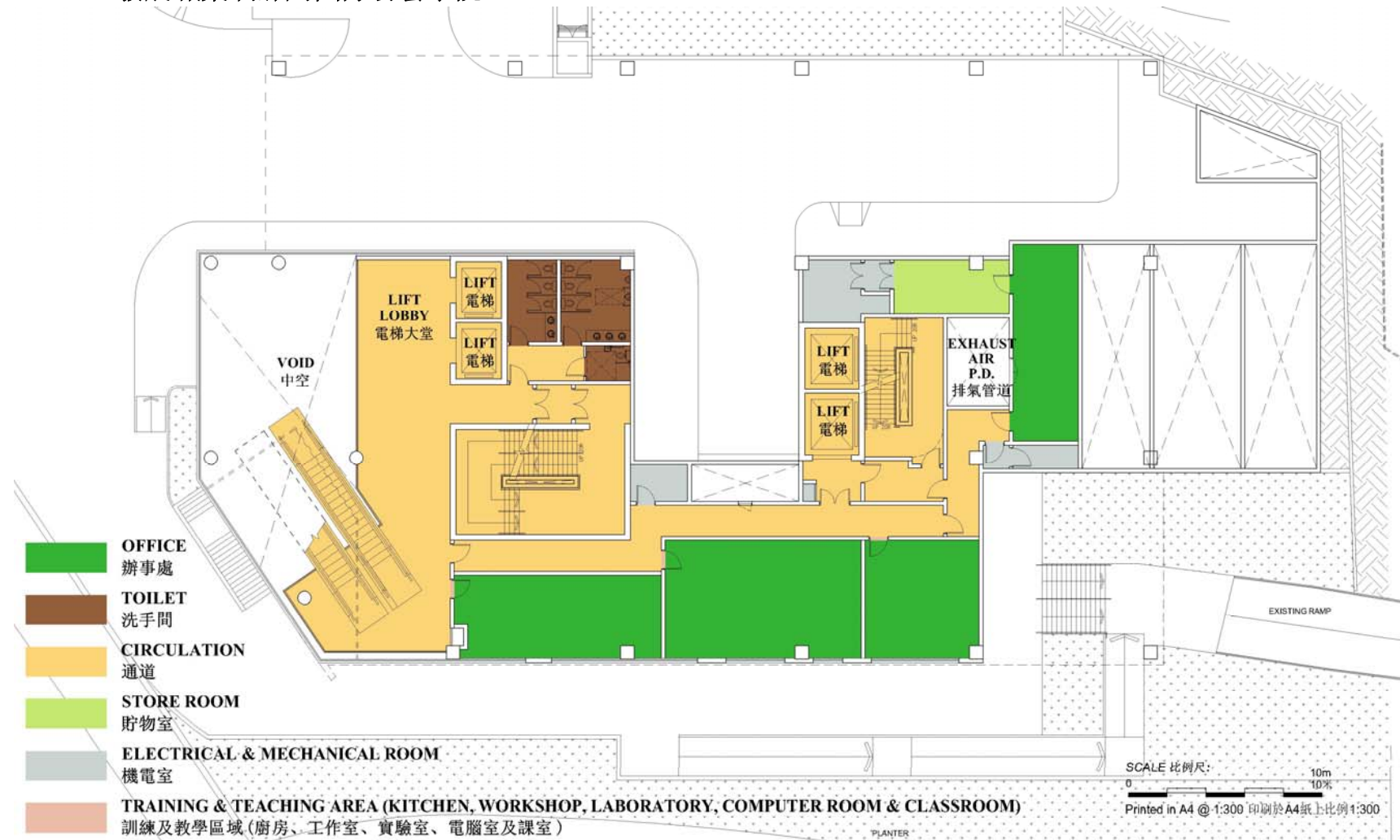
BASEMENT (MEZZANINE FLOOR) PLAN 地庫(閣樓)平面圖

20EM – Development of the Vocational Training Council International Culinary College
 20EM – 發展職業訓練局國際廚藝學院



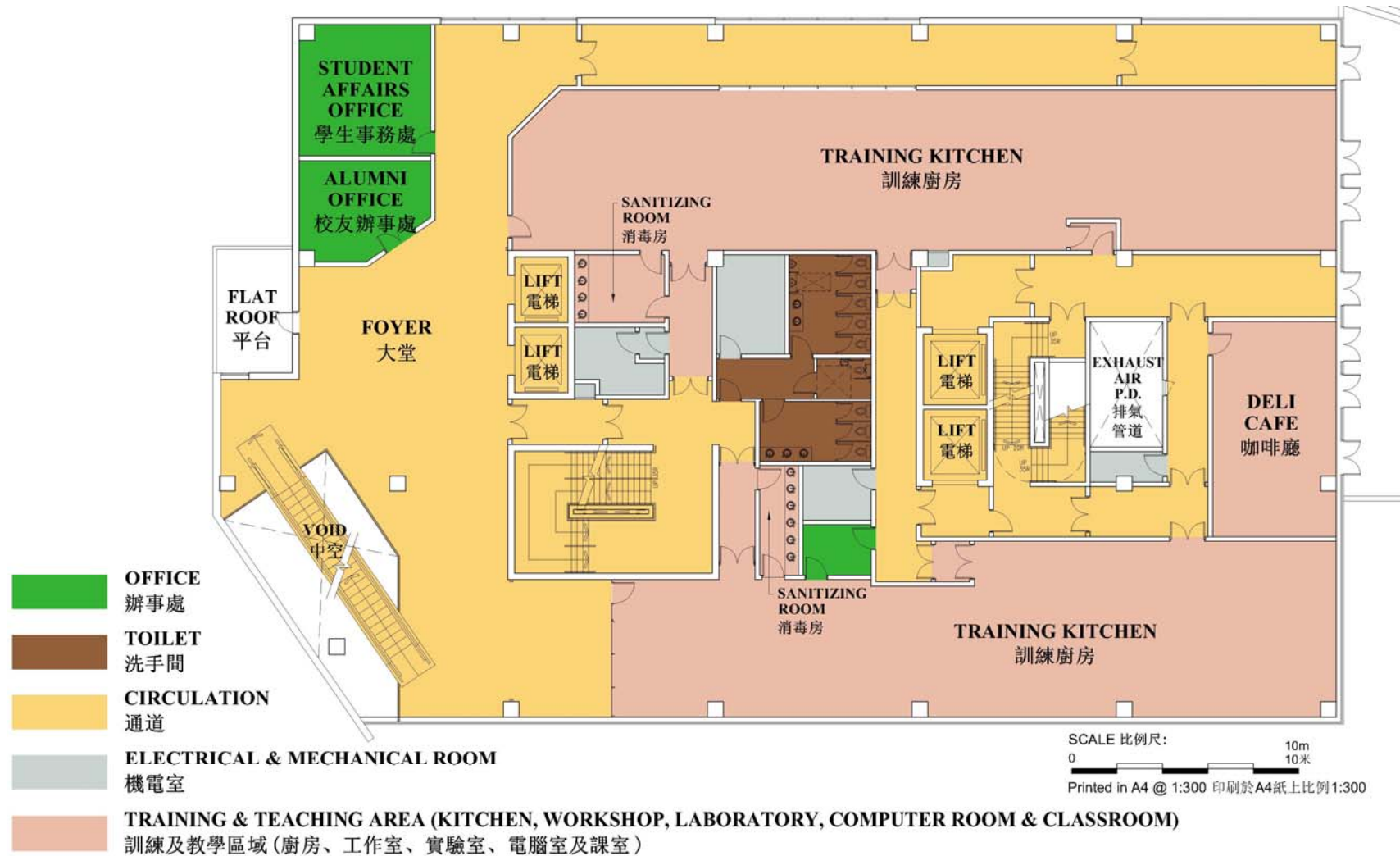
GROUND FLOOR PLAN 地面平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



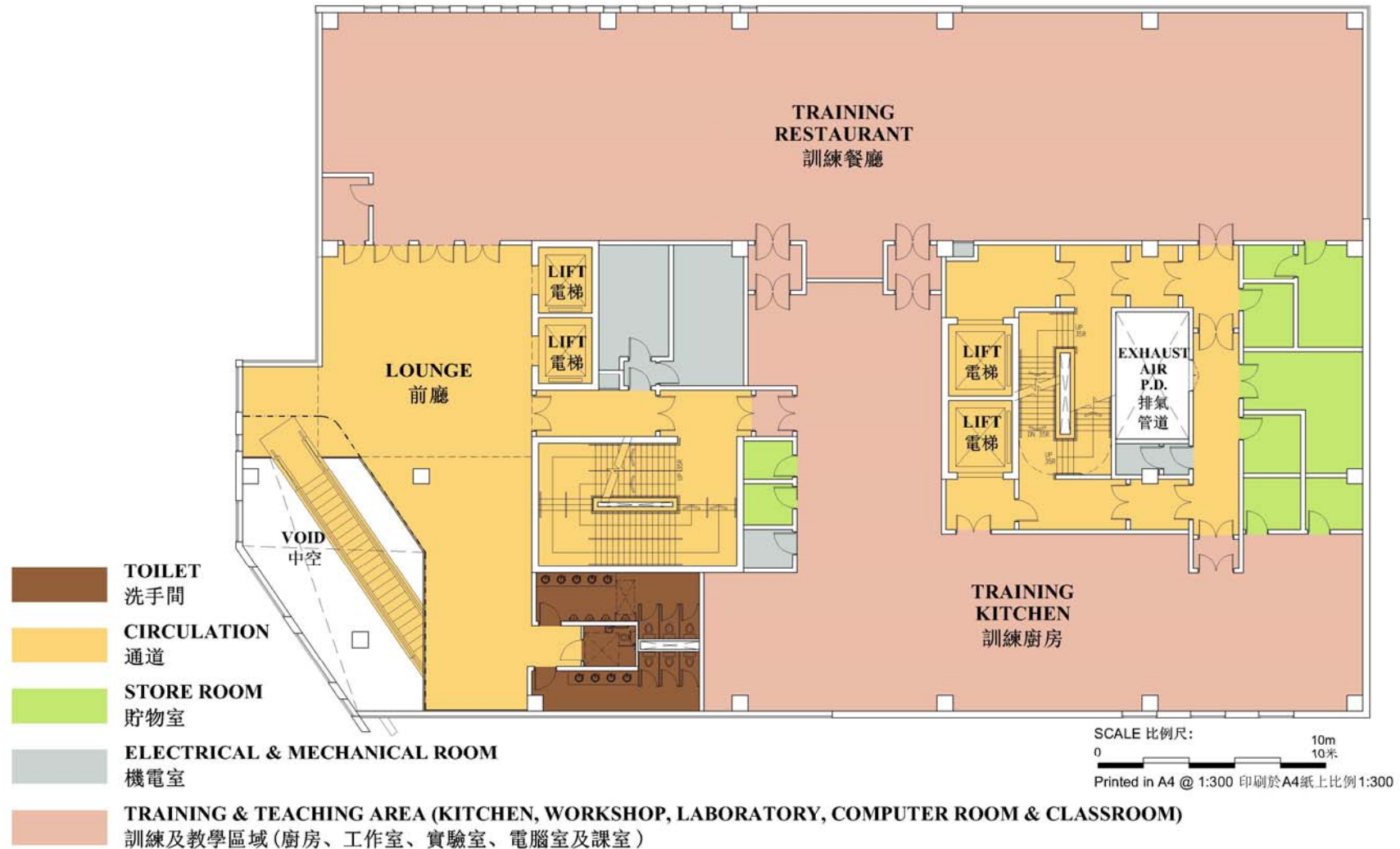
MEZZANINE FLOOR PLAN 閣樓平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



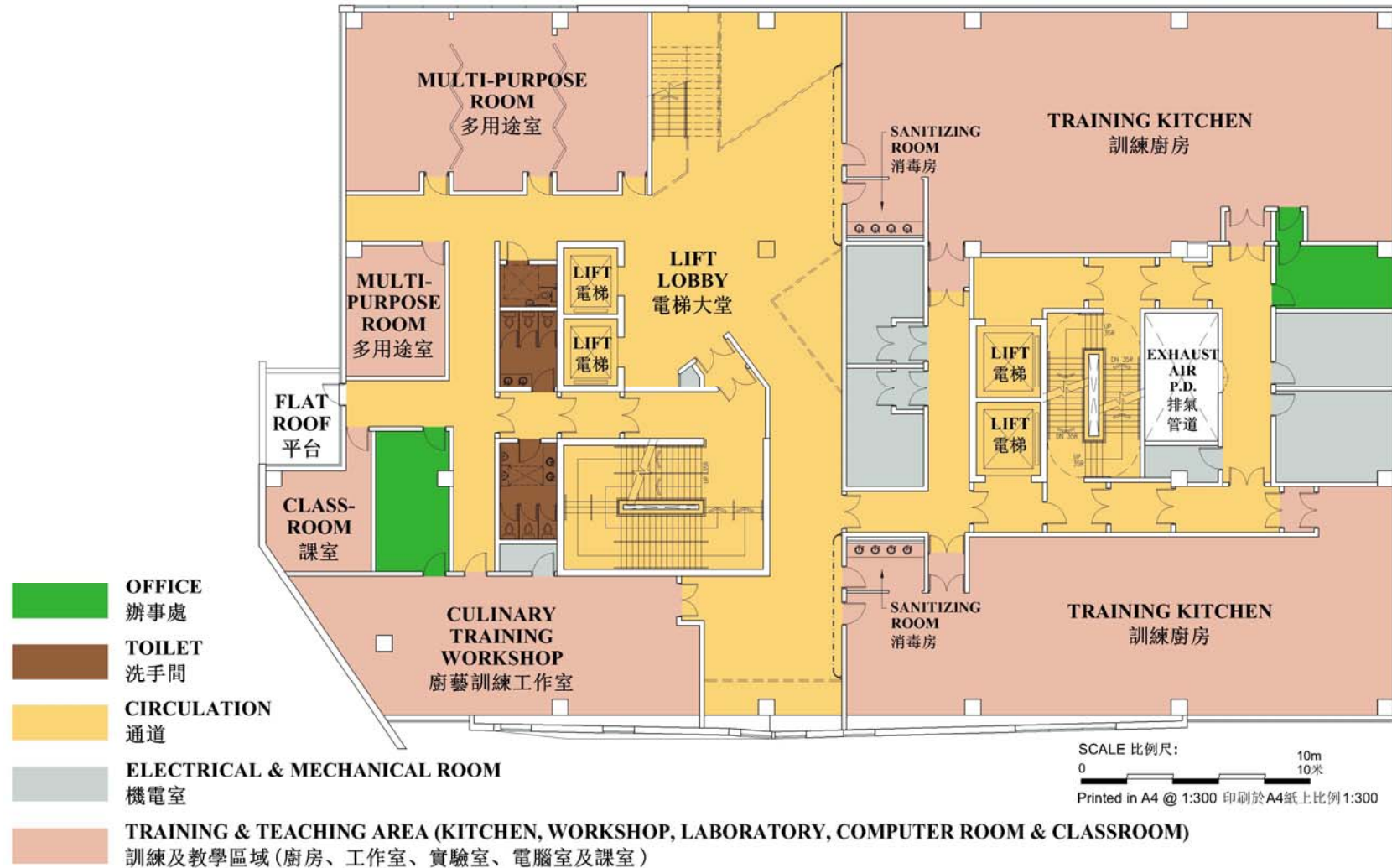
FIRST FLOOR PLAN 一樓平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



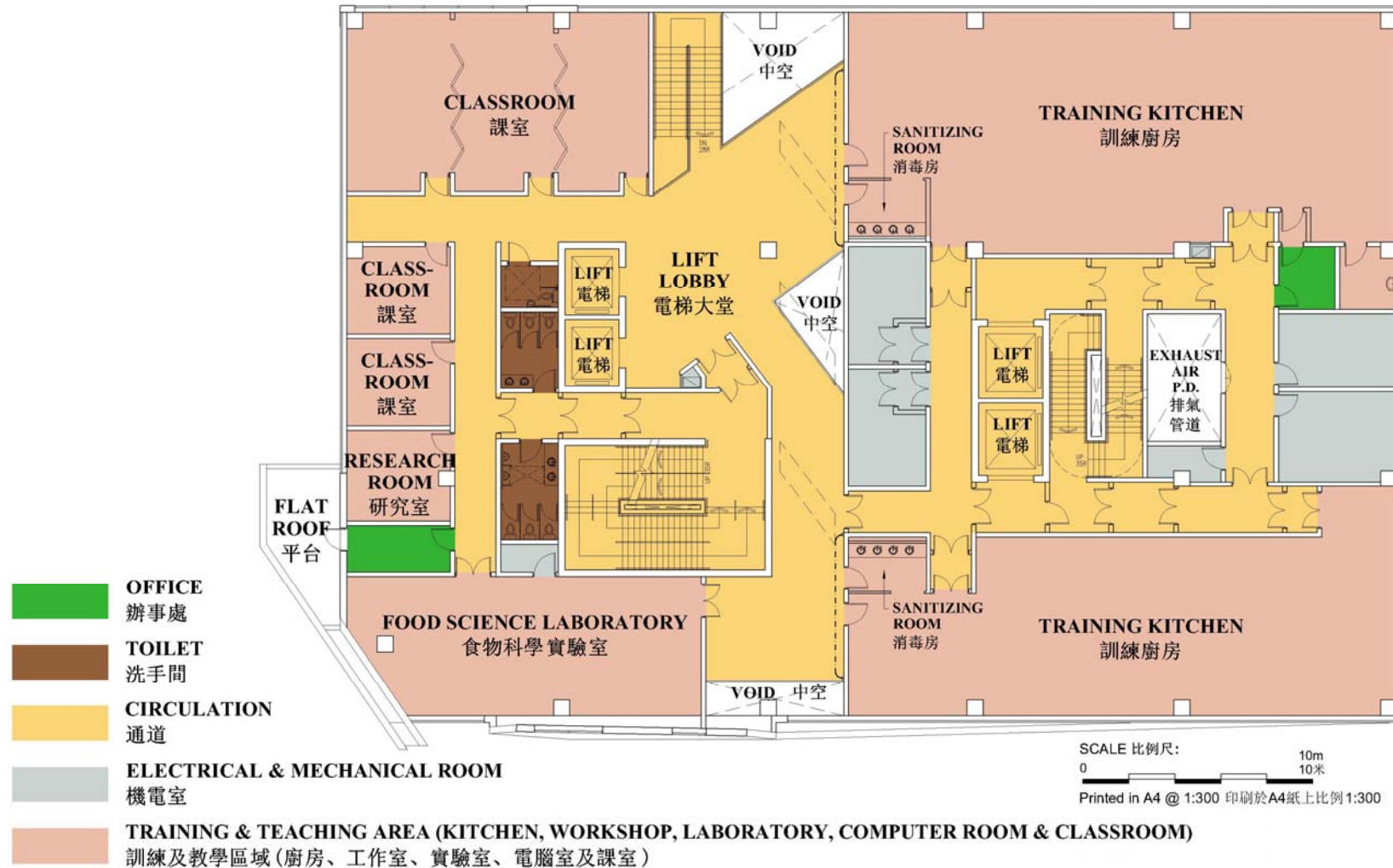
SECOND FLOOR PLAN 二樓平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



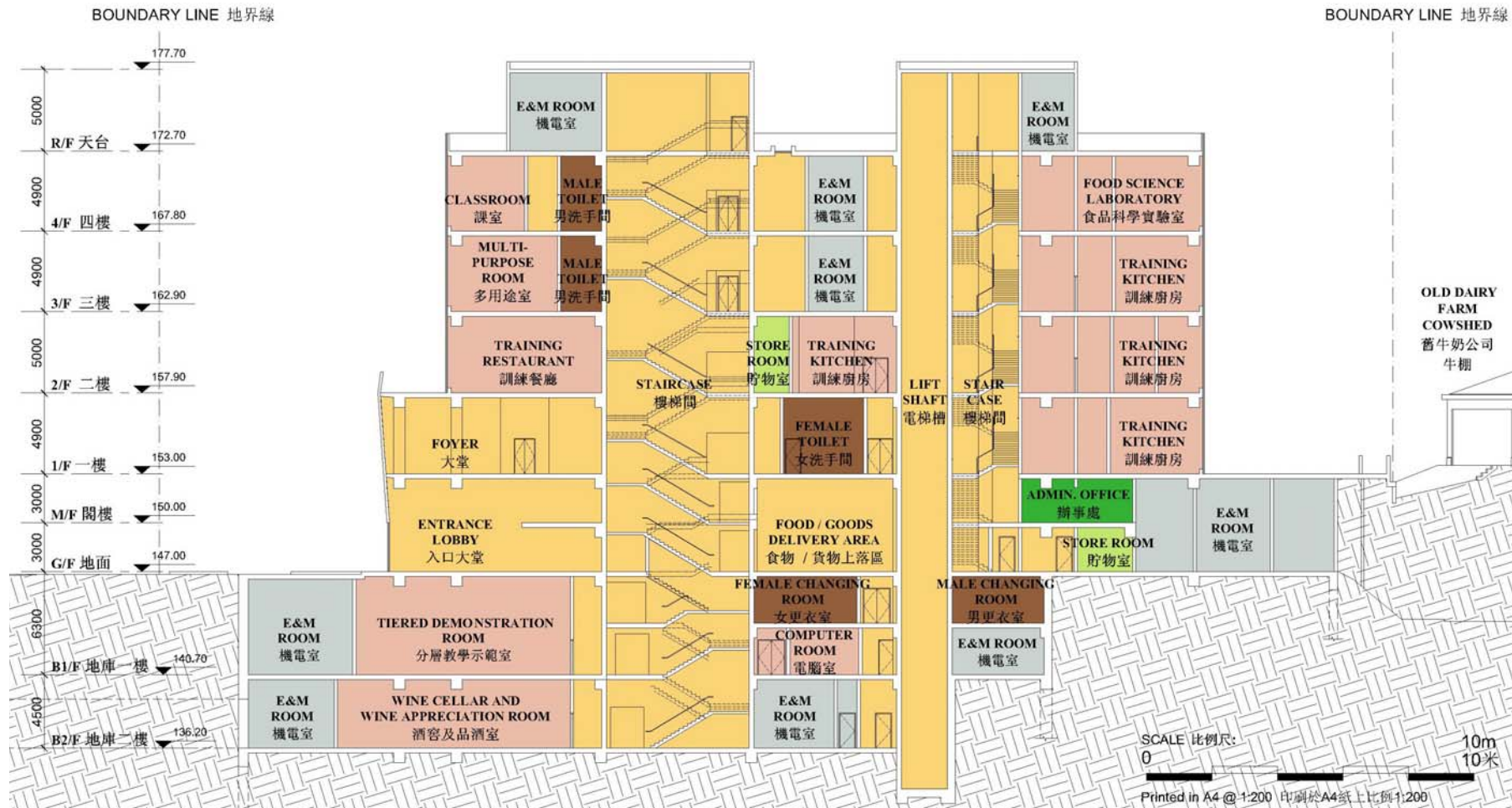
THIRD FLOOR PLAN 三樓平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



FOURTH FLOOR PLAN 四樓平面圖

20EM – Development of the Vocational Training Council International Culinary College
20EM – 發展職業訓練局國際廚藝學院



Sectional Plan 截面圖

20EM – Development of the Vocational Training Council International Culinary College**List of facilities**

Facilities	Estimated floor area in net operational floor area (NOFA) (m ²)
(a) Training kitchens and associated areas (Including 6 training kitchens for various international cuisines, a tiered demonstration room & kitchen, a wine cellar and wine appreciation room and supporting kitchen, a training restaurant with training kitchen and other relevant areas)	3 506
(b) Teaching and associated areas (Including 6 classrooms, 4 computer rooms, a food science laboratory, a language laboratory, 4 multi-purpose rooms, a culinary training workshop and other relevant areas)	1 077
(c) Office facilities (Including a counseling room, a confidential registry office, 5 instructor's office, a recruitment office, an administrative office, a student affair office, receiving & issuing area and other relevant areas)	547
(d) Support facilities (Including furniture store, maintenance workshop, refuse storage and material recovery chamber, store rooms, a deli café and other relevant areas)	550
Total	5 680

20EM – Development of the Vocational Training Council International Culinary College**Breakdown of the estimate for consultants' fees (in September 2012 prices)**

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fees (\$ million)
(a)	Consultants fees ^(Note 2)					
(i)	Tender assessment	Professional	–	–	–	0.1
(ii)	Contract administration	Professional	–	–	–	7.3
		Technical	–	–	–	3.7
(b)	Resident site staff ^(Note 3)	Technical	251	14	1.6	9.0
	Comprising –					
(i)	Consultants' fee for management of resident site staff					0.5
(ii)	Remuneration of resident site staff					8.5
					Sub-total	20.1
(c)	Out-of-pocket expenses ^(Note 4)					
	Lithography and other direct expenses					0.6
					Total	20.7

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the costs of resident site staff supplied by the consultants. (As at now, MPS salary point 14 = \$22,405 per month.)
2. The consultants' fees for tender assessment and contract administration are devised in accordance with the existing consultancy agreements for the design and construction of **20EM**. The assignment will only be executed subject to the Finance Committee's approval to upgrade **20EM** to Category A.
3. The actual man-months and actual costs for site supervision shall only be known after completion of the construction works.
4. Examples of out-of-pocket expenses include the purchase of documents, drawings, maps, photographs and records, printing, lithography, presentational materials, etc. The consultants are not entitled to any additional payment for overheads or profit in respect of these items.

20EM – Development of the Vocational Training Council International Culinary College

Breakdown of the construction floor area (CFA) vis-à-vis the construction unit cost

(a) Breakdown of CFA

	Estimated floor area (m²)
(i) Net operational floor area (NOFA)	5 680
(ii) Circulation areas and toilets	5 105
(iii) Electrical and mechanical plants	1 354
CFA (i.e. (i) + (ii) + (iii))	12 139

(b) NOFA/CFA ratio 47% ^{Note}

(c) Estimated construction unit cost \$21,328 per m² of CFA
 (represented by the building and building (in September 2012 prices)
 services costs)

^{Note} As ICC is a culinary training facility, due to hygiene standard and occupational safety, the campus needs to provide wider corridor and more space for movement of catering equipment and transfer of raw food materials and refuse. Also, the campus needs to have a relatively higher proportion of electrical and mechanical (E&M) rooms and exhaust air pipe ducts to serve the training kitchens. These rooms or space could not be included in the NOFA. Therefore, the NOFA/CFA ratio is relatively lower.