# APPENDIX 3C Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List

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Managing Department: Architectural Services Department

Works Category: Air-conditioning Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$<u>5.7M</u>
Group II: Contracts/Subcontracts of unlimited value

# **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of air-conditioning installations comprising chillers, refrigeration systems, heat rejection plant, pipeworks, water handling equipment, air ducts, air handling equipment, thermal insulation, control and monitoring system, etc.

# Definition of Probationary Status<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Probation to Group I : Eligible for the award of a maximum of two Group I contracts/subcontracts

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II

contracts/subcontracts provided that the total value of Group II works does not exceed \$20 million

<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing Group I probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

Group I	Group II
A. Entry on Probation	A. Entry on Probation
Not Applicable	1. Job Experience
	<u>General</u>
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
	(c) The air-conditioning installation shall be of central type, which shall include chiller, chilled water pipeworks, pumps, air-handling equipment, etc., and the cooling capacity of the chillers is not less than 1000kW; and
	(d) The contract shall be of a completely new building construction project or a whole building refurbishment project.
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Group I			Group II
	(9)	Subo	contract will not be considered as valid job reference unless it can satisfy all of the awing requirements, in addition to all the above stated requirements:
		(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
		(d)	The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work; and
		(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
		(f)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
			ation with relevant authorities in Hong Kong (such as Quality Management Certification, Building Authority etc.)
	<u>S</u>	tatutor	y Registration
	ha	- a I On - a I an ave full	licant shall be Registered Specialist Contractor in the Ventilation Sub-register under Buildings rdinance, Cap. 123; and Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; d time technical staff (meeting the relevant statutory registration requirement) of lot less than that described in the Section "Technical Staff".
	Q	uality	Management System Certification
			Management System certificates issued under the rules of the Hong Kong ation Body Accreditation Scheme (HKCAS) operated by the Hong Kong

Group I	Group II
	Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
	The scope of certification shall be relevant to the contractor list being applied for, e.g. "supply, installation and maintenance of air-conditioning installation".
	If the scope of certification does not include "maintenance", the manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Qualified Engineer
	Employ at least 1 no. qualified engineer (Mechanical or Building Services discipline) with adequate and relevant project management experience.
	Technical Support Staff
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
	Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.
	<u>Craftsman</u>
	Employ adequate nos. of craftsman in the following trades
	(A)Plumber/ AC MechanicMinimum score required40 marksQualified Plumber/AC Mechanic20 marksIntermediate Plumber/AC Mechanic15 marksOrdinary Plumber/AC Mechanic8 marks
	(B) Electrician Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
	Statutory Registration
	The applicant shall have staff meeting the following statutory registration requirements:
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Group I	Group II		
•	<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 2 nos. (minimum)</li> <li>Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 – 1 no. (minimum)</li> </ul>		
	The LP and REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		
	Qualified Welder		
	Employ adequate nos. of Qualified Welder (QW)		
	QW 2 nos.		
	The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.		
	4. Plant and Equipment**(See Remarks on the end page of this Appendix)		
	Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 2</b> for list of typical equipment/tools and testing instruments required.		
	5. Office/Workshop Facilities		
	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 110 m² and the minimum workshop + storage area shall be 50 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		
B. Confirmation	B. Confirmation		
The following shall only be applicable to existing Group I probationary contractor:	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and		
(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		
(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(3) The scope of work for this contract must fulfill all the following requirements:		
(3) The scope of work for this contract must fulfill all the following requirements:	(a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and		
(a) Contract value of the work related to the category under application for confirmation exceeds 50% of Group I tender limit; and	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and		
(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	(c) The air-conditioning installation shall be of central type, which shall include		

		Group I			Group II
	(c)	Installation of window type air-conditioners will not be considered as valid job reference: and			chiller, chilled water pipeworks, pumps, air-handling equipment, etc., and the cooling capacity of the chillers is not less than 1000kW; and
	(d)	If the contract is a term contract, all of the above requirements 3 (a) to 3 (c) shall be fulfilled in one works order.		(d)	The contract shall be of a completely new building construction or a whole building refurbishment; and
(4)	Subc	ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:		(e)	If the contract is a term contract, all of the above requirements 3 (a) to 3 (d) shall be fulfilled in one works order.
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(4)	Sub follo	contract will not be considered as valid job reference unless it can satisfy all of the owing requirements, in addition to all the above stated requirements:
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the		(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(d)	concerned project; and  The aforementioned main contractor shall not be the air-conditioning installation		(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
	(u)	contractor for the project work.		(d)	The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work.
					• •
C. Direct Entry  1. Job Experience		Not	Applic	C. Direct Entry	
		NOL	Аррис	aut	
Gene	<u>ral</u>				
(1)	The a	applicant shall have adequate experience in the type and size of work of the gory, with satisfactory quality of work compatible with Government standard; and			
(2)	categ	applicant shall have adequate experience in contract management of work of the gory, solely and fully, including coordination with building contractor and other ling services / electrical and mechanical contractors; and			
(3)	CMĬ	ob experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the H must also be produced to the satisfaction of the Secretary for the Environment, sport and Works; otherwise, it will not be considered as a valid job reference.			
shall	Refere fulfill ence)	nce for Inspection (In addition to the above, every job submitted by the applicant all requirements set out below; otherwise, it will not be considered as a valid job			
(4)	The a	applicant shall submit at least 2 contracts, which were completed within the past 3 s for site inspection; and			

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		Group I	Group II
(5)		ast one of the above 2 contracts shall be completed within the past 12 months or at stage; and	
(6)	These the en	e 2 contracts shall be direct contract, which was signed between the applicant and employer of the concerned project; and	
(7)	exam	applicant shall be able to arrange joint site inspections for the government's ination of the quality and workmanship of the submitted job reference within al office hours; and	
(8)		scope of work for each of these 2 contracts must fulfill all of the following rements:	
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	
	(c)	Installation of window type air-conditioners will not be considered as valid job reference.	
(9)		ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d)	The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work; and	
	(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
	(f)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the	

Group I	
authenticity of the proof provided by the applicant from the concerned project.	ne relevant parties of the
	2 W 15
2. Registration with relevant authorities in Hong Kong (such as C System Certification, Building Authority etc.)	Quality Management
Statutory Registration	
The applicant shall be	
<ul> <li>a Registered Specialist Contractor in the Ventilation Sub-reg Buildings Ordinance, Cap. 123; and</li> </ul>	gister under
a Registered Electrical Contractor registered under Electricit	ty Ordinance, Cap.
406; and	
have full time technical staff (meeting the relevant statutory registrati number not less than that described in the Section "Technical Staff".	on requirement) of
3. Technical Staff (See Annex 1 for definition of Staff Qualification	1)
Technical Support Staff	
Employ adequate nos. of technicians, site supervisors and draftsm	en with adequate and
relevant academic qualification and working experience. Technician	2 nos.
Site supervisor	2 nos.
Draftsman	1 no.
<u>Craftsman</u>	
Employ adequate nos. of craftsman with adequate relevant experi	ence in the following
trades (A) Plumber/AC Mechanic	C
Minimum score required	20 marks
	20 marks 15 marks
Ordinary Plumber/AC Mechanic	8 marks
(B) Electrician	
Minimum score required	20 marks
	20 marks 15 marks
Ordinary Electrician	8 marks
Statutory Registration	
	ention requirements.
The applicant shall have staff meeting the following statutory registr	ation requirements:

Minimum Technical & Management Criteria for Admission	n, Confirmation and Promotion of Contractors for the Specialist List
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Group I	Group II
<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap.</li> </ul>	
406. Grade A2 – 1 no. (minimum)	
<ul> <li>Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 – 1 no. (minimum)</li> </ul>	
The LP and REW can be the Engineer, Technical Support Staff or Craftsman.	
The Dr and TD Weath of the Engineer, recommend support stain of Charastians	
Qualified Welder	
Employ adequate nos. of Qualified Welder (QW)	
QW 1 no.	
The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.	
4. Plant and Equipment**(See Remarks on the end page of this Appendix)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out	
installation, operation, maintenance and testing/commissioning services; valid calibration	
certificates where applicable for testing instruments shall be available. Refer to <b>Annex</b>	
2 for list of typical equipment /tools and testing instruments required.	
5 Office Weather Feetlities	
5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably	
furnished office and workshop/storage areas. In general, the minimum office area shall be	
50 m <sup>2</sup> and the minimum workshop + storage area shall be 30 m <sup>2</sup> . Documentary evidence	
(e.g. purchase/lease agreement) to prove right of use shall be produced.	

Works Category: Audio Electronics Installation Specialist Contractor

# **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of power amplifier, mixing amplifier, cassette tape deck, loudspeaker, microphone etc. commonly used for public address system, intercom system, language laboratory system, simultaneous interpretation system and audio system at different venues.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>\*</sup>See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
1. Job Experience  General	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	1. Job Experience  General
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	<ul> <li>(3) The scope of work for this contract must fulfill all the following requirements:</li> <li>(a) Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and</li> </ul>	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	<ul> <li>(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and</li> <li>(c) If the contract is a term contract, all of the above requirements (a) shall be fulfilled in one works</li> </ul>	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	order.  (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the audio electronics installation contractor for the project	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	work.	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) Contract value of the work related to the

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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation  (a) Contract value of the work related to the category under application for inclusion exceeds \$0.2M; and  (b) The contract shall cover the nature of works as described in the "Brief Scope of Category".  (9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	B. Confirmation	C. Direct Entry  category under application for inclusion exceeds \$0.5M; and  (b) The contract shall cover the nature of works as described in the "Brief Scope of Category".  (9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and  (c) The party by which the applicant is awarded
and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the audio electronics installation contractor for the project		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the audio electronics installation contractor for the project work; and
work; and  (d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and		<ul> <li>(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and</li> <li>(e) Notwithstanding the above, the Managing</li> </ul>
(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

A. Entry on Probation	B. Confirmation	C. Direct Entry
Technical Staff (See Annex 1 for definition of Staff Qualification)      Technical Support Staff		2. Technical Staff (See Annex 1 for definition of Staff Qualification)  Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
3. Plant and Equipment**(See Remarks on the end page of this Appendix)		3. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 3 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to <b>Annex 3</b> for list of typical equipment/tools and testing instruments required.
4. Office/Workshop Facilities		4. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
5. Others		5. Others
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A. Entry on Probation	B. Confirmation	C. Direct Entry
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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<b>Managing Department:</b>	Architectural Services Department	
Works Category:	Broadcast Reception Installation	Specialist Contractor
Brief Scope of Category	<b>:</b>	
1 *	category covers the supply, installation and maintenance of TV ombining units, tee-units, splitter units, signal cables and TV/FI	, <b>1</b> , , , , , , , , , , , , , , , , , , ,
Definition of Probationa	ary Status <sup>#</sup> (Para. 3.5.3 is not applicable for this category)	

<sup>®</sup> Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing probationary contractor)

<sup>\*</sup>See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	The following shall only be applicable to existing probationary contractor:	1. Job Experience  General
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building
	(3) The scope of work for this contract must fulfill all the following requirements:	contractor and other building services / electrical and mechanical contractors; and
	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.1M; and	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	not be considered as a valid job reference.
	(c) If the contract is a term contract, all of the above requirements 3(a) and 3(b) shall be fulfilled in one works order.	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	the direct contract by the employer of the concerned project, all shall not be the broadcast reception installation contractor for the project	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	work.	(a) Contract value of the work related to the

A. Entry on Probation	B. Confirmation	C. Direct Entry
		category under application for inclusion exceeds \$0.25M; and
		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the broadcast reception installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

A. Entry on Probation	B. Confirmation	C. Direct Entry
		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Electrician/BS Mechanic/Electronics Craftsman
		Minimum score required 20 marks Qualified Electrician/BS Mechanic/ Electronics Craftsman 20 marks Intermediate Electrician/BS Mechanic Craftsman 15 marks Ordinary Electrician/BS Mechanic/ Electronics Craftsman 8 marks
		3. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to <b>Annex 4</b> for list of typical equipment/tools and testing instruments required.
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m <sup>2</sup> and the minimum workshop + storage area shall be 10 m <sup>2</sup> . Documentary evidence
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Minimum Technical & Management Criteria for Admiss	on, Confirmation and Promotion of Contractors for the Specialist List
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(e.g. purchase/lease agreement) to prove right of use shall be produced.

Managing Department: Architectural Services Department	<b>Managing Department:</b>	Architectural Services Department
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<b>Works Category:</b>	<b>Burglar Alarm and Securit</b>	y Installation	Specialist (	Contractor

### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of central control station consisting of computer and peripherals, communication network, UPS system, equipment console and rack, deterrent system consisting of card access control, exit control lock, duress push button, tamper switch, detection system comprising of motion detector, magnetic door contact, glass break detector, surveillance system comprising of closed circuit television, digital video motion detector, watchman tour system, etc. where applicable for building and amenity projects.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>&</sup>lt;sup>®</sup>Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

<sup>@</sup> Not applicable for new application for admission. (Only applicable for existing probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry	
Not Applicable.	The following shall only be applicable to existing	1. Job Experience  General	
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
	<ul><li>(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and</li><li>(3) The scope of work for this contract must fulfill all the</li></ul>	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building	
	following requirements:	contractor and other building services / electrical and mechanical contractors; and	
	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will	
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	not be considered as a valid job reference.	
	(c) If the contract is a term contract, all of the above requirements 3(a) and 3(b) shall be fulfilled in	<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
	(4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
	the direct contract by the employer of the concerned project, all shall not be the burglar alarm and security installation contractor for the	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
	project work.	(a) Contract value of the work related to the	

A. Entry on Probation	B. Confirmation	C. Direct Entry
		category under application for inclusion exceeds \$1M; and
		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the burglar alarm and security installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

A. Entry on Probation	B. Confirmation	C. Direct Entry
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be a Licensed Security Company engaged in Type III Security Work under Security and Guarding Services Ordinance, Cap. 460 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Qualified Engineer
		Employ at least 1 no. qualified engineer (Electronics, Building Services or Electrical discipline) with adequate and relevant professional and project management experience. [This requirement may be waived with the applicant having adequate nos. of degree holder technicians stated below.]
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.  Degree holder Technician with minimum 5 years post-qualification experience.  y Nil for applicant with Qualified Engineer. y 2 for applicant without Qualified Engineer.
		Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Electrician/BS Mechanic/Electronics Craftsman
		Minimum score required 20 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Qualified Electrician/BS Mechanic/ Electronics Craftsman 20 marks Intermediate Electrician/BS Mechanic/ Electronics Craftsman 15 marks Ordinary Electrician/BS Mechanic/ Electronics Craftsman 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Security Personnel (SP) holding Security</li> <li>Personnel Permit (Cat. D) issued under Security</li> <li>and Guarding Services Ordinance, Cap 460 –</li> <li>2 nos. (minimum)</li> </ul>
		The SP can be the Qualified Engineer, Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 5 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		6. Others
		Authorized Agency Be an authorized agent/distributor in HKSAR for the

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Minimum Technical & Management Criteria for Admissic	n, Confirmation and Promotion of Contractors for the Specialist List
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		major equipment to be offered. Documentary evidence such as authorized agency/distributorship agreements shall be available.
		24-hour Emergency Service Centre Available for fault attendance. The service shall be effective, e.g. the fault call can be acknowledged immediately and maintenance personnel can arrive at the fault location within 1 hour.

Managing Department:	Architectural Services Department

Works Category: Catering Equipment Installation Specialist Contractor

# **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of full range of electrical and gas cooking equipment, sinks and fixtures, exhaust hood, steam and hot water equipment, refrigeration and food storage facilities, etc. for use in commercial kitchen, restaurant and canteen in buildings and associated serving area, including cooker, cooking range, food warmer, steamer, fryer, hot plate, oven, water heater, sink, hot cabinet, freezer, food rack, kitchen work-top, water wash hood, gas water heater connected to mechanical exhaust system etc.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	probationary contractor:	1. Job Experience
	<ol> <li>The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and</li> <li>This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and</li> <li>All statutory forms such as the Work Completion (Part</li> </ol>	<ul> <li>General</li> <li>The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and</li> <li>The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building</li> </ul>
	of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	contractor and other building services / electrical and mechanical contractors; and
	<ul><li>(4) The scope of work for this contract must fulfill all the following requirements:</li><li>(a) Contract value of the work related to the</li></ul>	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will
	category under application for confirmation exceeds \$0.5M; and	not be considered as a valid job reference.  Job Reference for Inspection (In addition to the above, every
	<ul><li>(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and</li><li>(c) The contract shall be for new building project or</li></ul>	job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	for a completely renovated commercial kitchen in restaurant, canteen, etc. Partial renovation or fitting-out works in an existing commercial kitchen are not acceptable; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(d) If the contract is a term contract, all of the above requirements 4 (a) and 4 (c) shall be fulfilled in one works order.	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(7) All statutory submissions to Gas Authority and statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job
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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the catering equipment installation contractor for the project work.	reference within normal office hours; and  (9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:  (a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and  (b) The contract shall cover major catering equipment installation related to the category; and
		(c) The contract shall be for new building project or for a completely renovated commercial kitchen in restaurant, canteen, etc. Partial renovation or fitting-out works in an existing commercial kitchen are not acceptable.
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the catering equipment installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from

A. Entry on Probation	B. Confirmation	C. Direct Entry
		them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and  (e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration The applicant shall be — a Registered Gas Contractor registered under Gas Safety Ordinance, Cap. 51; and — a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		Craftsman
		Employ adequate nos. of craftsman in the following trades  (A) BS Mechanic/Mechanical Fitter/Electrician

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A. Entry on Probation	B. Confirmation	C. Direct Entry
· ·		Minimum score required 20 marks Qualified BS Mechanic/Mechanical Fitter/Electrician 20 marks Intermediate BS Mechanic/Mechanical Fitter/Electrician 15 marks Ordinary BS Mechanic/Mechanical Fitter/Electrician 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Registered Gas Installer (RGI) registered under Gas Safety Ordinance, Cap. 51. Gas Installation Work – 1 no. (minimum) (The RGI(s) shall hold licences covering gas installation work Class 1 to 7 collectively)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)</li> </ul>
		The RGI and REW can be the Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to <b>Annex 6</b> for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Managing Department : <u>Highways Department</u>

Works Category : <u>Design, Manufacture and Installation of Glass (or Fibre) Reinforced Plastic Units</u> Specialist Contractor

# **Brief Scope of Category:**

The scope of work in this category covers the design, manufacture and installation of glass reinforced plastic units or plastic units reinforced with other fibre for highway structures works.

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#### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in the design, manufacture and installation of glass (or fibre) reinforced plastic products in highway structures in the past 3 years, each with a value of \$ 0.2 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

#### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Design staff with at least 3 years experience in the field of glass (or fibre) reinforced plastic.

Local workforce capable of installing the glass (or fibre) reinforced plastic units.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Mechanical fibre/resin mixer.
- b. Hoisting facility.
- c. Carpenter's equipment (saw, drill etc.).
- d. Heat curing chamber.
- e. Spray machine (chopped fabric, gelcoat etc.).
- f. Air compressor for spray gun.

### 6. Office/Workshop Facilities

Local office in Hong Kong is required. The applicant must possess a factory with equipment listed above and adequate testing and quality control facilities.

# 7. Training Facilities

Not Applicable

#### 8. Others

Acceptable design, manufacturing and installation procedures and fully documented quality assurance system. Raw materials used must comply with relevant British Standards or other equivalent national standards. A certificate from an approved laboratory to confirm that the materials used meet the requirements stipulated in BS 2782 & BS 4549.

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Managing Department:	Architectural Services Department	
Managing Department:	Architectural Services Department	

Works Category: Diesel Generator Installation Specialist Contractor

### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of diesel generator and associated installations such as fuel tank, switchboard, cable, earthing etc.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation C. Direct Entry		
Not Applicable.	The following shall only be applicable to existing probationary contractor:	1. Job Experience	
	(1) The applicant has satisfactorily completed, within the	<u>General</u>	
	past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard;	
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and (2) The applicant shall have adequate experience in	
	(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
	(4) The scope of work for this contract must fulfill all the following requirements:	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be	
	(a) The rating of the diesel generator of the job reference shall be 300kVA or higher; and	produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements	
	(c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in	set out below; otherwise, it will not be considered as a valid job reference)	
	one works order.  (5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
	requirements, in addition to all the above stated requirements:	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the diesel generator	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
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A. Entry on Probation	B. Confirmation	C. Direct Entry
	installation contractor for the project work.	(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) The contract shall cover the scope of works as described in the "Brief Scope of Category"; and
		(b) The rating of the diesel generator of the job reference shall be 300kVA or higher.
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the diesel generator installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof

A. Entry on Probation	B. Confirmation	C. Direct Entry
		provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Qualified Engineer
		Employ at least 1 no. qualified engineer (Mechanical, Electrical or Building Services discipline) with adequate and relevant project management experience.
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Mechanical Fitter
		Minimum score required 20 marks Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks

A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation		(B) Electrician  Minimum score required 20 marks Qualified Electrician 15 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks  Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:  — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)  The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.  4. Plant and Equipment**(See Remarks on the end page of this Appendix)  Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 7 for list of typical equipment/tools and testing instruments required.  5. Office/Workshop Facilities
		available. Refer to <b>Annex 7</b> for list of typical equipment/tools and testing instruments required.
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		6. Others  Authorized Agency Preferably being an authorized agent in HKSAR for
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		essential equipment. Documentary evidence such as authorized agency agreements shall be available.
		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

Managing Department:	Architectural Services Department
	THE CHILD COLUMN SET VICES Department

Works Category: <u>Electrical and Mechanical Installation for Sewage Treatment and Screening Plant</u> Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers design, supply, installation and maintenance of electrical and mechanical plant for sewage pumping stations, sewage screening & degritting plant and primary/secondary sewage treatment works.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$34 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

	A. Entry on Probation		B. Confirmation	C. Direct Entry		
	1. Job Experience  General		(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let		1. Job Experience  General	
(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2)	by a Works Department; and  This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(3)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and  The scope of work for this contract must fulfill all the following requirements:	(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.  Reference for Inspection (In addition to the above, every		<ul> <li>(a) Contract value of the work related to the category under application for confirmation exceeds \$5M; and</li> <li>(b) The contract shall cover major scope of works as described in the "Brief Scope of Category";</li> </ul>	(3) <u>Job 1</u>	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.  Reference for Inspection (In addition to the above, every	
set o	ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)		and  (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in	set o job r	submitted by the applicant shall fulfill all requirements out below; otherwise, it will not be considered as a valid reference)	
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5)	one works order.  Subcontract will not be considered as valid job reference unless it can satisfy all of the following	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and		requirements, in addition to all the above stated requirements:  (a) The subcontract shall include all the relevant	(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		work as described under the "Brief Scope of Category" covered in the main contract; and  (b) The applicant shall have undertaken the full	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and		scope of work covered in the subcontract, solely and fully, including contract management; and	(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project.	(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
(9)		cope of work for each of these 2 contracts must all of the following requirements:		(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$5M; and			(a) Contract value of the work related to the category under application for inclusion exceeds \$10M; and
	(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category".			(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
(10)	refere: requir	ontract will not be considered as valid job nee unless it can satisfy all of the following rements, in addition to all the above stated rements:		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and			(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contradtor including a letter, which			(d) The aforementioned main contractor shall not be the electrical and mechanical installation contractor for sewage treatment and screening plant of the project work; and
		must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and			(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the			must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
		concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.			(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the

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A. Entry on Probation	B. Confirmation	C. Direct Entry
·		concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer		Qualified Engineer
Employ at least 1 no. qualified engineer (Mechanical or Electrical discipline) with adequate and relevant project management experience.		Employ at least 1 no. qualified engineer (Mechanical or Electrical discipline) with adequate and relevant project management experience.
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.		Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades		Employ adequate nos. of craftsman in the following trades
(A) Mechanical Fitter Minimum score required 30 marks		(A) Mechanical Fitter Minimum score required 30 marks

A. Entry on Probation	B. Confirmation	C. Direct Entry
Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks	27 001111111101	Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks
(B) Electrician  Minimum score required 30 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks		(B) Electrician  Minimum score required 30 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
<ul> <li>Statutory Registration         The applicant shall have staff meeting the following statutory registration requirements:         — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 – 1 no. (minimum)         — A Competent Person (CP) appointed under the Factory &amp; Industrial Undertakings (Confined Spaces) Regulations, Cap. 59 as Personnel for working in confined spaces – 1 no. (minimum)         — Certified Worker (CW) appointed under the Factory &amp; Industrial Undertakings (Confined Spaces) Regulations, Cap. 59 as Personnel for working in confined spaces – 2 nos. (minimum)     </li> </ul>		<ul> <li>Statutory Registration         The applicant shall have staff meeting the following statutory registration requirements:         — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 – 1 no. (minimum)         — A Competent Person (CP) appointed under the Factory &amp; Industrial Undertakings (Confined Spaces) Regulations, Cap. 59 as Personnel for working in confined spaces – 1 no. (minimum)         — Certified Worker (CW) appointed under the Factory &amp; Industrial Undertakings (Confined Spaces) Regulations, Cap. 59 as Personnel for working in confined spaces – 2 nos. (minimum)     </li> </ul>
The CP, CW and REW can be the Qualified Engineer, Technical Support Staff or Craftsman.  Qualified Welder  Employ adequate nos. of Qualified Welder (QW)		The CP, CW and REW can be the Qualified Engineer, Technical Support Staff or Craftsman.  Qualified Welder Employ adequate nos. of Qualified Welder (QW)  QW 1 no.
QW 1 no.  The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.		QW 1 no.  The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.
4. Plant and Equipment**(See Remarks on the end page of this Appendix)		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be		Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be

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A. Entry on Probation	B. Confirmation	C. Direct Entry
available. Refer <b>Annex 8</b> for list of typical equipment/tools and testing instruments required.		available. Refer to <b>Annex 8</b> for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 70 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 70 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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**Managing Department:** Architectural Services Department

Works Category: Electrical Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$2.3M
Group II: Contracts/Subcontracts up to HK\$5.7M
Group III: Contracts/Subcontracts of unlimited value

### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of low voltage electrical installation comprising incoming electricity supply, main and sub-main distribution system, final circuits, power points, lighting points, lighting fittings, electrical appliances, lightning protection, earthing system, etc. for building and amenity projects.

# **Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Probation to Group I: Not probationary status

Probation to Group II: Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II contracts/subcontracts

Probation to Group III: Eligible for the award of any number of Group I and Group II contracts/subcontracts; and a maximum of two Group III

contracts/subcontracts provided that the total value of Group III work does not exceed \$20 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

Group I	Group II	Group III	
A. Entry on Probation	A. Entry on Probation	A. Entry on Probation	
Not Applicable	1. Job Experience	1. Job Experience	
	<u>General</u>	<u>General</u>	
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	job submitted by the applicant shall fulfill all requirements set	
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

Group I			Group II		Group III
	(9)		scope of work for each of these 2 contracts must l all of the following requirements:	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group II tender limit; and		(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group II tender limit; and
		(b)	The main incoming switchgear shall have rating of not less than 800A; and		(b) The main incoming switchgear shall have rating of not less than 2500A or 1500 kVA; and
		(c)	The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits.		(c) The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building
	(10)	unles	contract will not be considered as valid job reference as it can satisfy all of the following requirements, in tion to all the above stated requirements:		services / electrical and mechanical contractors; and
		(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and		(d) The contract shall be of a completely new building construction or a whole building refurbishment; and
		(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		(e) At least one of these 2 contracts shall not be work for residential development or engineering plant building.
		(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(d)	The aforementioned main contractor shall not be the electrical installation contractor for the project work; and		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and		(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
		(f)	Notwithstanding the above, the Managing Department may seek references on the		(d) The aforementioned main contractor shall not be the electrical installation contractor for the project work; and

Group I	Group II	Group III
	applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
		(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Same requirements as stipulated for "Direct Entry"	Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		Quality Management System Certification
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
		The scope of certification shall be relevant to the contractor list being applied for, e.g. "supply, installation and maintenance of electrical installation".

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Group I	Group II	Group III
		If the scope of certification does not include "maintenance", the manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Same requirements as stipulated for "Direct Entry"	Qualified Engineer
		Employ at least 1 no. qualified engineer (Electrical or Building Services discipline) with adequate and relevant project management experience
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.
		Craftsman Employ adequate nos. of draftsmen in the following trades:
		(A)Electrician80 marksMinimum score required80 marksQualified Electrician20 marksIntermediate Electrician15 marksOrdinary Electrician8 marks

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Group I	Group II	Group III
		Statutory Registration  The applicant shall have staff meeting the following statutory registration requirements:  — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C0 – 1 no. (minimum)  — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 – 2 nos. (minimum)  — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 5 nos. (minimum)  The REW can be the Qualified Engineer, Technical Support
	4. Plant and Equipment**(See Remarks on the end page of this Appendix)	Staff or Craftsman  4. Plant and Equipment**(See Remarks on the end page of this Appendix)
	Same requirements as stipulated for "Direct Entry"	Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals.
		Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 9</b> for list of typical equipment/tools and testing instruments required.
	5. Office/Workshop Facilities	5. Office/Workshop Facilities
	Same requirements as stipulated for "Direct Entry"	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 100 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
B. Confirmation	B. Confirmation	B. Confirmation
Not Applicable	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and
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Group I			Group II		Group III
	(2)	betwe	contract shall be direct contract, which was signed een the applicant and the employer of the erned project; and	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(3)	Certi	atutory forms such as the Work Completion ficate (i.e. Form WR1) shall be issued under the of the applicant; and	(3)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and
	(4)	The s	cope of work for this contract must fulfill all the wing requirements:	(4)	The scope of work for this contract must fulfill all the following requirements:
		(a)	Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and		(a) Contract value of the work related to the category under application for confirmation exceeds Group II tender limit; and
		(b)	The main incoming switchgear shall have rating of not less than 800A; and		(b) The main incoming switchgear shall have rating of not less than 2500A or 1500 kVA; and
		(c)	The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building services / electrical and mechanical contractors; and		(c) The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building services / electrical and mechanical contractors; and
		(d)	The contract shall be of a completely new building construction or a whole building refurbishment; and		(d) The contract shall be of a completely new building construction or a whole building refurbishment; and
		(e)	If the contract is a term contract, all of the above requirements 4 (a) to 4 (d) shall be fulfilled in one works order.		(e) The contract shall not be work for residential development or engineering plant building; and
	(5)	refere	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated		(f) If the contract is a term contract, all of the above requirements 4 (a) to 4 (e) shall be fulfilled in one works order.
			rements:  The subcontract shall include all the relevant	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			work as described under the "Brief Scope of Category" covered in the main contract; and		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of
		(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		Category" covered in the main contract; and  (b) The applicant shall have undertaken the full
		(c)	The subcontract shall be signed between the		scope of work covered in the subcontract, solely and fully, including contract management; and
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Group I	Group II	Group III
	applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and  (d) The aforementioned main contractor shall not be the electrical installation contractor for the project work.	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and  (d) The aforementioned main contractor shall not be the electrical installation contractor for the project work.
C. Direct Entry	C. Direct Entry	C. Direct Entry
1. Job Experience	1. Job Experience	Not Applicable
<u>General</u>	<u>General</u>	
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the	

		Group I			Group II	Group III
	conce	erned project; and		conc	erned project; and	•
(7)	Certif	atutory forms such as the Work Completion ficate (i.e. Form WR1) shall be issued under the of the applicant; and	(7)	Certi	tatutory forms such as the Work Completion ficate (i.e. Form WR1) shall be issued under the e of the applicant; and	
(8)	inspec qualit	pplicant shall be able to arrange joint site ctions for the government's examination of the cy and workmanship of the submitted job reference in normal office hours; and	(8)	inspe quali	applicant shall be able to arrange joint site extions for the government's examination of the ty and workmanship of the submitted job reference in normal office hours; and	
(9)		cope of work for each of these 2 contracts must all the following requirements:	(9)		scope of work for each of these 2 contracts must 1 all the following requirements:	
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and		(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group II tender limit; and	
	(b)	The main incoming switchgear shall have rating of not less than 400A.		(b)	The main incoming switchgear shall have rating of not less than 800A; and	
(10)	unles	ontract will not be considered as valid job reference is it can satisfy all of the following requirements, in ion to all the above stated requirements:		(c)	The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			services / electrical and mechanical contractors; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		(d)	The contract shall be of a completely new building construction or a whole building refurbishment.	
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	(10)	refer requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:	
	(d)	The aforementioned main contractor shall not be the electrical installation contractor for the project work; and		(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main		(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
		contractor including a letter, which must be signed by the main contractor's authorized signatory to		(c)	The subcontract shall be signed between the applicant and the main contractor which is the	

Group I	Group II	Group III
confirm that the applicant has met the above requirements in the subcontract; and	company awarded with the direct contract by the employer of the concerned project; and	·
(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	<ul> <li>(d) The aforementioned main contractor shall not be the electrical installation contractor for the project work; and</li> <li>(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and</li> <li>(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.</li> </ul>	
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	
Statutory Registration	Statutory Registration	
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	
3. Technical Staff (See Annex 1 for definition of Staff Qualification)	3. Technical Staff (See Annex 1 for definition of Staff Qualification)	
Technical Support Staff	Technical Support Staff	
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	

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Group I	Group II	Group III
Technician 1 no.	Technician 2 nos.	•
Site supervisor 1 no.	Site supervisor 2 nos.	
Draftsman 1 no.	Draftsman 1 no.	
<u>Craftsman</u> Employ adequate nos. of craftsmen in the following trades:	<u>Craftsman</u> Employ adequate nos. of craftsmen in the following trades:	
(A) Electrician Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks  Statutory Registration	(A) Electrician Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks  Statutory Registration	
The applicant shall have staff meeting the following statutory registration requirements:	The applicant shall have staff meeting the following statutory registration requirements:	
Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 – 1 no. (minimum)  The REW can be the Technical Support Staff or Craftsman	<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 2 nos. (minimum)</li> <li>The REW can be the Technical Support Staff or Craftsman</li> </ul>	
4. Plant and Equipment **(See Remarks on the end page of this Appendix)	4. Plant and Equipment**(See Remarks on the end page of this Appendix)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.	Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.	
Adequate nos. of calibrated testing instruments and equipment/ tools for carrying out installation, operation, maintenance and testing/ commissioning services; valid calibration certificates for testing instruments shall be available. Refer to <b>Annex 9</b> for list of typical equipment/tools and testing instruments required.	Adequate nos. of calibrated testing instruments and equipment/ tools for carrying out installation, operation, maintenance and testing/ commissioning services; valid calibration certificates for testing instruments shall be available. Refer to <b>Annex 9</b> for list of typical equipment/tools and testing instruments required.	

Group I	Group II	Group III
5. Office/Workshop Facilities	5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/ storage areas. In general, the minimum office area shall be 60 m² and the minimum workshop + storage area shall be 15 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	

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Managing Department:	Architectural Services Department
ianaging Department.	Architectural Services Department

Works Category: <u>Electronic Timing and Display Installation</u> Specialist Contractor

### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of electronic scoreboard, electronic timing system, time and temperature display system, electronic message system etc. at different venues.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

1. Job Experience	A. Entry on Probation	B. Confirmation	C. Direct Entry		
contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and  (a) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.  (b) The contract is a term contract, all of the above requirements (a) and 3 (b) shall be fulfilled in one works order.  (c) If the contract is a term contract, all of the above requirements (a) and 3 (b) shall be fulfilled in one works order.  (d) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and  (d) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and  (f) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and  (g) The scope of work for each of these 2 contracts must fulfill all or the following requirements:  (a) Contract value of the work related to the category on few related to the category under application for confirmation exceeds \$0.2M; and  (b) The contract is a term contract, all of the above requirements (c) and all the above stated requirements.  (c) If the contract is a term contract, all of the above requirements (a) and 3 (b) shall be fulfilled in one works order.  (a) The subcontract shall include all the relevant work as described in the "Brief Scope of Category"; and  (b) The applicant shall be direct contract, which was signed between the applicant and the employer of the concerned project; and  (c) The applicant shall be direct contract, which was signed between the applicant and the employer of the concerned project; and  (d) The applicant shall be able to arrange joint site in	General  (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard;	past 12 months, at least one public works contract let by a Works Department; and  (2) This contract shall be direct contract, which was signed between the applicant and the employer of the	General  (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard;		
Subcontract will not be considered as a valid job reference on the low; otherwise, it will not be considered as a valid job reference on the low; otherwise, it will not be considered as a valid job reference on the low; otherwise, it will not be considered as a valid job reference on the low; otherwise, it will not be considered as a valid job reference on the past 3 years for site inspection; and   (4)    The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and   (5)   At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and   (6)   These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and   (7)   The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:    (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:    (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract, solely and fully, including contract management; and    (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and    (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contract with the subcontract, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic timing and display Installation contractor for the project work.    (a) The subcontract will not be considered as valid job reference of	<ul> <li>contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and</li> <li>(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will</li> </ul>	following requirements:  (a) Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and  (b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and  (c) If the contract is a term contract, all of the above	contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and  (3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will		
(a) Contract value of the work related to the	<ul> <li>job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)</li> <li>(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and</li> <li>(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and</li> <li>(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and</li> <li>(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and</li> <li>(8) The scope of work for each of these 2 contracts must</li> </ul>	one works order.  (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic timing and display Installation contractor for the	<ul> <li>job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)</li> <li>(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and</li> <li>(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage.</li> <li>(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and</li> <li>(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and</li> <li>(8) The scope of work for each of these 2 contracts must</li> </ul>		

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
		ategory under application for inclusion exceeds 0.2M; and			\$0.5M; and
		ne contract shall cover the nature of works as escribed in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(9)				(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a) Th	ne subcontract shall include all the relevant fork as described under the "Brief Scope of lategory" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b) Th	ne applicant shall have undertaken the full cope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	th pa w co pr di	ne party by which the applicant is awarded with the subcontract, and the upstream contracting arties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic timing and isplay installation contractor for the project pork; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic timing and display installation contractor for the project work; and
	(d) The even meal methods is	ne applicant must present documentary vidence to prove the above requirements are net and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from nem, which must be signed by their authorized gnatories to confirm that the applicant has met ne above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e) No Do ap from cooping properties of the	otwithstanding the above, the Managing repartment may seek references on the opplicant's technical and managerial capabilities rom the employer, the relevant parties of the concerned project and other sources or onfirmation on the authenticity of the proof rovided by the applicant from the relevant arties of the concerned project.			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

A. Entry on Probation	B. Confirmation	C. Direct Entry
2. Technical Staff (See Annex 1 for definition of Staff Qualification)	D. Communation	2. Technical Staff (See Annex 1 for definition of Staff Qualification)
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks  3. Plant and Equipment**(See Remarks on the end page of this Appendix)		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks  3. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 10 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 10</b> for list of typical equipment/tools and testing instruments required.
4. Office/Workshop Facilities		4. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
5. Others		5. Others
Authorized Agency		Authorized Agency
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A. Entry on Probation	B. Confirmation	C. Direct Entry
Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department :	Water Supplies Department	
	vater supplies bepartment	

Works Category : Fabrication of Steel Pipe Specials Specialist Contractor

### **Brief Scope of Category:**

The scope of work in this category covers fabrication of mild steel pipe specials of a size up to that shown below with protective coatings as specified in **Annex 11** for large waterworks projects:-

- a. 1200 mm dia. x 1200 mm dia. x 45<sup>o</sup> branch
- b. 1200 mm dia. x 2000 mm length
- c. 1200 mm dia. x 1000 mm taper
- d. 1200 mm dia. blank flange

#### **Direct Entry**

#### 1. Job Experience

The contractor should possess at least 5 years experience in the fabrication of steel pipe specials for large Waterworks projects including provision of their internal and external protections. The contractor must provide supporting documents to show that steel pipe specials meeting WSD's requirements have been manufactured in his previous projects.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

## 3. Top Management \*(See Remarks on the end page of this Appendix)

One of the managers should possess minimum qualification of a Higher Certificate in Mechanical/Production Engineering, or equivalent with at least 5 years relevant experience.

#### 4. Technical Staff

A minimum of 2 principal technical persons and 10 skilful workers for carrying out the fabrication work. At least one of the technical persons should possess minimum qualification of a Higher Certificate in Mechanical/Production Engineering or equivalent and with at least 5 years relevant experience.

## 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

Not Applicable

### 6. Office/Workshop Facilities

The contractor should have a workshop in Hong Kong equipped with sufficient and well maintained machinery, equipment, tools and lifting facilities for fabricating, testing and handling steel pipe specials up to 1200mm in diameter. The contractor should allow inspection of all workshop facilities by Government representatives.

## 7. Training Facilities

Not Applicable

#### 8. Others

The contractor should provide full details of his previous fabrication work to demonstrate his experience and capability.

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Managing Department:	Water Supplies Department	
Works Category :	Fabrication of Unfired Pressure Vessels	Specialist Contractor
Brief Scope of Categor  The scope of work in th	y: is category covers design, supply, manufacture, inspection & testing, pa	ainting and delivery to the site of steel unfired pressure
vessels and associated f		anning and derivery to the site of seed annived pressure

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### **Direct Entry**

#### 1. Job Experience

Possess at least 5 years experience in the fabrication of unfired pressure vessels for large Waterworks projects including provision of their internal and external protection. The contractor must provide supporting documents to show that unfired pressure vessels meeting WSD's requirements have been manufactured in his previous projects.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management\*(See Remarks on the end page of this Appendix)

One of the managers and principal technical staff should possess minimum qualification of Higher Certificate in Mechanical / Production Engineering or equivalent with at least 5 years relevant experience.

#### 4. Technical Staff

Minimum of 2 qualified technical persons as well as sufficient skilful workers for carrying out the fabrication work. At least one of the qualified technical persons should possess minimum qualification of Higher Certificate in Mechanical/Production Engineering or equivalent with at least 5 years relevant experience.

## 5. Plant and Equipment \*\*(See Remarks on the end page of this Appendix)

Not Applicable

### 6. Office/Workshop Facilities

A workshop in Hong Kong equipped with sufficient and well maintained machinery, equipment, tools and lifting facilities for fabricating, testing and handling unfired pressure vessels up to 3500mm in diameter as detailed in the **Annex 12**. The contractor should allow inspection of all workshop facilities by Government representatives.

### 7. Training Facilities

Not Applicable

#### 8. Others

The contractor should provide full details of his previous fabrication work to demonstrate his experience and capability.

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**Managing Department:** Architectural Services Department

Works Category: Fire Service Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$2.3M
Group II: Contracts/Subcontracts of unlimited value

### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of fire service installations comprising sprinkler system, FH/HR system, manual and automatic fire alarm system, etc. for building and amenity projects.

## **Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Probation to Group I : Eligible for the award of a maximum of two Group I contracts/subcontracts

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II

contracts/subcontracts provided that the total value of Group II works does not exceed \$8.2 million

<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing Group I probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

Group I	Group II	
A. Entry on Probation	A. Entry on Probation	
Not Applicable	1. Job Experience	
	<u>General</u>	
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
	(7) All statutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be issued under the name of the applicant; and	
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
	(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
	(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and	
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	
	(c) The contract shall be of a completely new building construction project or a whole building refurbishment project.	

Group I	Group II	
	(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d) The aforementioned main contractor shall not be the fire service installation contractor for the project work; and	
	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
	(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	
	Statutory Registration	
	The applicant shall be  — a Registered Fire Service Installation Contractor Class 1 & 2 registered under Fire Service Ordinance, Cap. 95; and  — a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	
	Quality Management System Certification	
	Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong	

Group I	Group II	
Accreditation Service (HKAS); i.e. bearing the HKCAS Accre Management System certificates bearing the accreditation man bodies which are considered as having an equivalent standard I Transport and Works Bureau.		y
	The scope of certification shall be relevant to the contractor list being applied for, e.g. "supply, installation and maintenance of fire service installation".	
	If the scope of certification does not include "maintenance", the manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.	
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)	
	Qualified Engineer	
	Employ at least 1 no. Qualified Engineer (Mechanical, Building Services or Electrical discipline) with adequate and relevant professional and project management experience.	
	Technical Support Staff	
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	i
	Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.	
	Craftsman	
	Employ adequate nos. of craftsman in the following trades	
	(A) Plumber/ FS Mechanic Minimum score required 40 marks Qualified Plumber/FS Mechanic 20 marks Intermediate Plumber/FS Mechanic 15 marks Ordinary Plumber/FS Mechanic 8 marks	
	(B)ElectricianMinimum score required40 marksQualified Electrician20 marksIntermediate Electrician15 marksOrdinary Electrician8 marks	
	Statutory Registration	
	The applicant shall have staff meeting the following statutory registration requirements:  — Class 3 Registered Fire Service Installation Contractor (RFSIC) registered under	
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Group I	Group II
	Fire Service Ordinance, Cap. 95 – 1 no. (minimum)  — Registered Electrical Worker (REW) registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)  — Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102. –1 no. (minimum)
	The LP, REW and RFSIC can be the Qualified Engineer, Technical Support Staff or Craftsman.
	4. Plant and Equipment**(See Remarks on the end page of this Appendix)
	Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 13</b> for list of typical equipment/tools and testing instruments required.
	5. Office/Workshop Facilities
	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
B. Confirmation  B. Confirmation	
The following shall only be applicable to existing probationary contractor:	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and
(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(3) All statutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be issued under the name of the applicant; and
(3) All statutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be issued under the name of the applicant; and	(4) The scope of work for this contract must fulfill all the following requirements:
(4) The scope of work for this contract must fulfill all the following requirements:	(a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and
(a) Contract value of the work related to the category under application for confirmation exceeds 50% of Group I tender limit; and	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	(c) The contract shall be of a completely new building construction or a whole building refurbishment; and
(c) The contract shall be of a completely new building construction or a whole building refurbishment; and	(d) If the contract is a term contract, all of the above requirements 4 (a) to 4 (c) shall

		C I		С И
		Group I		Group II be fulfilled in one works order.
(5)	(d) Subcefollor	If the contract is a term contract, all of the above requirements 4 (a) to 4 (c) shall be fulfilled in one works order.  ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	(5)	
	(a) (b) (c) (d)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and  The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and  The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and  The aforementioned main contractor shall not be the fire service installation contractor for the project work.		Scope of Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and  (c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and  (d) The aforementioned main contractor shall not be the fire service installation contractor for the project work.
		C. Direct Entry		C. Direct Entry
1. J	ob Exp		Not .	ot Applicable
Gene	<u>eral</u>			
(1)		applicant shall have adequate experience in the type and size of work of the cory, with satisfactory quality of work compatible with Government standard; and		
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and				
(3)	CMĬ	bb experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the H must also be produced to the satisfaction of the Secretary for the Environment, sport and Works; otherwise, it will not be considered as a valid job reference.		
shal	Refere l fulfill rence)	nce for Inspection (In addition to the above, every job submitted by the applicant all requirements set out below; otherwise, it will not be considered as a valid job		
(4)	The a	applicant shall submit at least 2 contracts, which were completed within the past 3 for site inspection; and		
(5)		ast one of the above 2 contracts shall be completed within the past 12 months or at stage; and		
(6)	Thes	e 2 contracts shall be direct contract, which was signed between the applicant and		
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		Group I	Group II
	the employer of the concerned project; and		-
(7)	All sta	atutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be d under the name of the applicant; and	
(8)	exami	pplicant shall be able to arrange joint site inspections for the government's ination of the quality and workmanship of the submitted job reference within al office hours; and	
(9)		cope of work for each of these 2 contracts must fulfill all of the following rements:	
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	
	(c)	The contract shall be of a completely new building construction project or a whole building refurbishment project.	
(10)	Subco	ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d)	The aforementioned main contractor shall not be the fire service installation contractor for the project work; and	
	(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
	(f)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	

		Group II
2. Registration with relevant authorities in Hong Kong System Certification, Building Authority etc.)	(such as Quality Management	
Statutory Registration		
<ul> <li>The applicant shall be</li> <li>a Registered Fire Service Installation Contractor C Service Ordinance, Cap. 95; and</li> <li>a Registered Electrical Contractor registered under and</li> <li>have full time technical staff (meeting the relevant statu number not less than that described in the Section "Technical staff)</li> </ul>	Electricity Ordinance, Cap. 406; tory registration requirement) of	
3. Technical Staff (See Annex 1 for definition of Staff Qu	nalification)	
Technical Support Staff		
Employ adequate nos. of technicians, site supervisors are relevant academic qualification and working experience. Technician Site supervisor Draftsman	2 nos. 2 nos. 1 no.	
<u>Craftsman</u>		
Employ adequate nos. of craftsman with adequate relevent trades  (A) Plumber/FS Mechanic     Minimum score required     Qualified Plumber/FS Mechanic     Intermediate Plumber/FS Mechanic     Ordinary Plumber/FS Mechanic  (B) Electrician     Minimum score required     Qualified Electrician     Intermediate Electrician     Ordinary Electrician	20 marks 20 marks 15 marks 8 marks 20 marks 15 marks 8 marks 20 marks 15 marks 20 marks 15 marks 15 marks	
Statutory Registration		
The applicant shall have staff meeting the following statut	ory registration requirements:	

Minimum Technical & Management Criteria for Admiss	on, Confirmation and Promotion of Contractors for the Specialist List
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Group I	Group II
<ul> <li>Class 3 Registered Fire Service Installation Contractor (RFSIC) registered under Fire Service Ordinance, Cap. 95 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)</li> <li>Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102. – 1 no. (minimum)</li> </ul>	
The LP, REW and RFSIC can be the Qualified Engineer, Technical Support Staff or Craftsman.	
4. Plant and Equipment**(See Remarks on the end page of this Appendix)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates where applicable for testing instruments shall be available. Refer to <b>Annex 13</b> for list of typical equipment /tools and testing instruments required.	
5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 15 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	

Managing Department:	Architectural Services Department	
Works Category:	Fountain Installation	_ Specialist Contractor
<b>Brief Scope of Category</b>		
	category covers the supply, installation and maintain, pH control, chemical treatment, fountain light	ngs for water treatment of fountain pool such

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	Not Applicable	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
		(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

A. Entry on Probation	B. Confirmation		C. Direct Entry
		(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
			(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the fountain installation contractor for the project work; and
			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof

A. Entry on Probation	B. Confirmation	C. Direct Entry
		provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Plumber/ BS Mechanic Minimum score required 20 marks
		Minimum score required 20 marks Oualified Plumber/BS Mechanic 20 marks
		Intermediate Plumber/BS Mechanic 15 marks
		Ordinary Plumber/BS Mechanic 8 marks
		(B) Electrician Minimum score required 20 marks
		Qualified Electrician 20 marks
		Intermediate Electrician 15 marks
		Ordinary Electrician 8 marks
		Statutory Registration

A. Entry on Probation	B. Confirmation	C. Direct Entry
		The applicant shall have staff meeting the following statutory registered requirements:
		<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)</li> <li>Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 - 1 no. (minimum)</li> </ul>
		The LP and REW can be the Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminals.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 14</b> for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

<b>Managing Department:</b>	Civil Engineering and Development Department
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Works Category : Ground Investigation Field Work Specialist Contractor

Group I : Contracts/Subcontracts up to HK\$ 2.3M

Group II : Contracts/Subcontracts of unlimited value

## **Brief Scope of Categories:**

The scope of work in this category covers ground investigation field work for Government projects.

Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Sp	pecialist List Appendix 3C
Group I	Group II
A. Direct Entry	A. Direct Entry
1. Job Experience  Must be able to provide references to ground investigation works (each of value exceeding HK\$0.5M) carried out by the applicant for at least 5 projects in Hong Kong in the 3 years preceding the application and receive no adverse reports, on enquiry by CEDD. These performance reports must be prepared by at least 3 different engineering consultants who have supervised the works.	Must be able to provide references to ground investigation works (each value exceeding HK\$0.5M) carried out by the applicant for at least projects in Hong Kong in the 3 years preceding the application and rece no adverse reports, on enquiry by CEDD. These performance reports m be prepared by at least 3 different engineering consultants who has supervised the works.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)  Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.	Quality Management System certificates issued under the rules of the H Kong Certification Body Accreditation Scheme (HKCAS) operated by Hong Kong Accreditation Service (HKAS); i.e. bearing the HKC Accreditation Mark, and Quality Management System certificates beathe accreditation mark of other accreditation bodies which are considere having an equivalent standard by the Environment, Transport and We Bureau.

# 3. Top Management $^{*(See\ Remarks\ on\ the\ end\ page\ of\ this\ Appendix)}$

Not Applicable

#### 4. Technical Staff

Must employ sufficient full-time approved personnel who satisfy the minimum requirements as given in Annex 15.

# $\textbf{5. Plant and Equipment}^{**(See\ Remarks\ on\ the\ end\ page\ of\ this\ Appendix)}$

Must own at least four rigs in Hong Kong, and all of them shall be capable of drilling at least 40m through soil or rock.

Must own equipment capable of obtaining soil and rock samples, carrying out insitu tests (including SPT, GCO probing, impression packer, rising, falling and constant head permeability, packer (water adsorption), and vane shear) and installing standpipe piezometers (see the minimum requirements on equipment in Annex 16). All equipment should be calibrated and subject to periodic recalibration and maintenance.

Not Applicable

Must employ sufficient full-time approved personnel who satisfy the minimum requirements as given in **Annex 15**.

Must own at least ten rigs in Hong Kong capable of drilling at least 40m through soil or rock, and at least two of them shall be capable of drilling vertical or inclined holes up to 150m through soil or rock.

Must own equipment capable of obtaining soil and rock samples, carrying out insitu tests (including SPT, GCO probing, impression packer, rising, falling and constant head permeability, packer (water adsorption), and vane shear) and installing standpipe piezometers (see the minimum requirements on equipment in Annex 16). All equipment should be calibrated and subject to periodic recalibration and maintenance.

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Group I	Group II
6. Office/Workshop Facilities	
All applicants must possess or set up in Hong Kong a place of business.	All applicants must possess or set up in Hong Kong a place of business.
7. Training Facilities Not Applicable	Not Applicable
8. Others  Must have the managerial, professional, technical and other support staff resources to carry out	Must have the managerial, professional, technical and other support staff
Government contracts on ground investigation.  Must have adequate safety and health provisions and measures in accordance with the spirit of Chapter 3 of the Construction Site Safety Manual (CSSM) (Works Bureau). Proper documentation to illustrate this must be available. Must employ at least on a part-time basis one safety officer registered in accordance with the Factories and Industrial Undertakings (Safety Officers and Safety Supervisors) Regulation (FIU(SO&SS)R) with a minimum of 3 years of relevant experience.  Must demonstrate competence in carrying out drilling, excavation, sampling, testing, recording of information, description of soil and rock and reporting to CEDD standards.  Must maintain HOKLAS (Hong Kong Laboratory Accreditation Scheme) accreditation for selected tests and procedures of ground investigation when the accreditation for these is available from HOKLAS.	resources to carry out large Government contracts on ground investigation. Must have a proper safety management system and an adequate Safety Plan in accordance with the requirements of Chapter 3 of the CSSM. Must employ on a full-time basis at least one safety officer registered in accordance with the FIU(SO&SS)R and one safety supervisor, each with a minimum of 3 years of relevant experience.  Must demonstrate competence in carrying out drilling, excavation, sampling, testing, recording of information, description of soil and rock and reporting to CEDD standards.  Must maintain HOKLAS (Hong Kong Laboratory Accreditation Scheme) accreditation for selected tests and procedures of ground investigation when the accreditation for these is available from HOKLAS.
	B. Entry by Promotion
	Same as that required for "Direct Entry".

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Managing Department:	Architectural Services Department	
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Works Category: Industrial Type Electrical Installation Specialist Contractor

### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of electrical installations that are of high voltage or in specialized locations, typical installations include those in airport, highway, subway, tunnel, workshop, sewage treatment plant, pumping station, mechanical handling system etc., and in industrial environment.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation			B. Confirmation		C. Direct Entry	
1. Jo	• Experience			1. Job Experience		
Gene		(1)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	Gener		
(1)	The applicant shall have adequate experience in the type and size of work of the category, including high voltage installation, with satisfactory quality of work compatible with Government standard; and	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, including high voltage installation, with satisfactory quality of work compatible with Government standard; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and	(3)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and The scope of work for this contract must fulfill all the	(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and	
	mechanical contractors; and	(4)	following requirements:		mechanical contractors; and	
(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.		(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and	(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
	· ·		(b) The contract shall cover the nature of works as		·	
job s	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)		described in the "Brief Scope of Category"; and  (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in	job s	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)	
(4)	The applicant shall submit at least 2 contracts which		one works order.	(4)	The applicant shall submit at least 2 contracts which	
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5)	At least one of the above 2 contracts shall be		requirements:	(5)	At least one of the above 2 contracts shall be	
	completed within the past 12 months or at final stage; and		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of		completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		Category" covered in the main contract; and  (b) The applicant shall have undertaken the full	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
	concerned project; and		scope of work covered in the subcontract, solely		concerned project; and	
(7)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the		and fully, including contract management; and	(7)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the	
	name of the applicant; and		(c) The party by which the applicant is awarded with the subcontract, and the upstream		name of the applicant; and	
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the industrial type electrical installation contractor for the	(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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	A. Entry on Probation	B. Confirmation		C. Direct Entry
	he scope of work for each of these 2 contracts must alfill all of the following requirements:	project work.	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
(8	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
(10) \$	The contract shall cover the nature of works as described in the "Brief Scope of Category".  ubcontract will not be considered as valid job			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category" and at least one of the 2 contracts shall include high
re	eference unless it can satisfy all of the following equirements, in addition to all the above stated equirements:		(10)	voltage electrical installations.  Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
(t				(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
(0				(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the industrial type electrical installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the industrial type electrical installation contractor for the
(6	evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and  Notwithstanding the above, the Managing			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities

A. Entry on Probation	B. Confirmation	C. Direct Entry
confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer		Qualified Engineer
Employ at least 1 no. qualified engineer (Electrical discipline) with adequate and relevant professional and project management experience.		Employ at least 1 no. qualified engineer (Electrical discipline) with adequate and relevant professional and project management experience.
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades		Employ adequate nos. of craftsman in the following trades

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A. Entry on Probation	B. Confirmation	C. Direct Entry
(A) Electrician		(A) Electrician
Minimum score required40 marksQualified Electrician20 marksIntermediate Electrician15 marksOrdinary Electrician8 marks		Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
Statutory Registration		Statutory Registration
The applicant shall have staff meeting the following statutory registration requirements:		The applicant shall have staff meeting the following statutory registration requirements:
<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade H2 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 3 nos. (minimum)</li> </ul>		<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade H2 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 3 nos. (minimum)</li> </ul>
The REW can be the Qualified Engineer, Technical Support Staff or Craftsman		The REW can be the Qualified Engineer, Technical Support Staff or Craftsman
4. Plant and Equipment**(See Remarks on the end page of this Appendix)		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 17 for list of typical equipment/tools and testing instruments		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 17 for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use

A. Entry on Probation	B. Confirmation	C. Direct Entry
shall be produced.		shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

Managing Department :	Architectural Services Department	
Managing Debartment:	Architectural Services Department	

Works Category : Land Piling Specialist Contractor

Group I : Contracts/Subcontracts up to HK\$ 3.4 M Group II : Contracts/Subcontracts of unlimited value

## **Brief Scope of Category**

The scope of work in this category covers design, supply and installation of registered piling systems on land.

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	Group I	Group II
	A. Direct Entry	A. Direct Entry
1.	<ul> <li>Job Experience</li> <li>a) At least 3 small to medium size local projects (below \$3M each) for each system.</li> <li>b) The projects must be completed within the past 5 years.</li> <li>c) Experience as main contractor.</li> </ul>	<ul> <li>a) At least 3 medium/large size local projects (over \$3M each) for each system.</li> <li>b) The projects must be completed within the past 5 years.</li> <li>c) Experience as main contractor.</li> </ul>
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) The applicant shall be a Registered Specialist Contractor in the Foundation Sub-register under Buildings Ordinance, Cap. 123.	The applicant shall be a Registered Specialist Contractor in the Foundation Sub-register under Buildings Ordinance, Cap. 123.
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
		The scope of certification shall be relevant to the piling system under application.
3.	Top Management *(See Remarks on the end page of this Appendix) At least one member of the resident top management shall have a minimum of three years local experience in managing a construction firm obtained in the past five years.	At least one member of the resident top management shall have a minimum of five years local experience in managing a construction firm obtained in the past eight years.
4.	<ul> <li>At least one person with the following qualifications:</li> <li>a) Higher Certificate in Structural/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognized training institution or equivalent and two years local working experience in piling works; or</li> <li>b) Ordinary Certificate in Structural/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognized training institution or equivalent and three years local working experience in piling works.</li> </ul>	At least two persons with a relevant degree from a Hong Kong university or equivalent with at least five years post-graduate local experience in piling works.
5.	**(C., D.,, L.,, C.(L., A.,, L.)	Appropriate equipment for each system. (At least one set for each system).

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	Group I	Group II
6.	Office/Workshop Facilities Local office required. Yard facilities available.	Local office required. Yard facilities available.
7.	Training Facilities Not Applicable	Not Applicable
8.	Others  Piling system to be registered a) Method statement. b) Typical calculations. c) Acceptable references. d) Satisfactory demonstration on site.	Piling system to be registered  a) Method statement. b) Typical calculations. c) Acceptable references. d) Satisfactory demonstration on site.
		B. Entry by Promotion
		When the contractor has completed at least 3 numbers medium/large size local projects of value above \$3M each with good references.

	Criteria for Admission, Commitation and Promotion of Contractors for the Specialist List	Appendix 3C
naging Department :	Lands Department	
<b>g-gI</b>	Lands Department	
Works Category : _	Land, Engineering and Hydrographic Survey Services	_ Specialist Contractor
Works Category	Dana, Engineering and Trydrograpine but vey bet vices	_ Specialist Contractor
<b>Brief Scope of Category</b>	y •	
blici beope of Category	, •	
The scope of work in this	s category covers the provision of land, engineering and hydrographic survey services.	

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### **Direct Entry**

### 1. Job Experience

No requirement.

Past experience on government projects is used as reference in tender evaluation and selection, but not for entry requirement.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

No requirement.

However, endorsement such as ISO 9001 Certification, will be used as reference in tender evaluation and selection.

## 3. Top Management\*(See Remarks on the end page of this Appendix)

At least one senior member of the firm's permanent full time staff should be a professional member of the HKIS (Land Survey Division) or approved equivalent, with minimum 2 years' post qualification local experience.

#### 4. Technical Staff

A minimum of two survey technicians should possess ordinary certificate or higher qualification in land or engineering surveying or approved equivalent with minimum one year's local land survey experience.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

The firm should possess some basic equipment such as theodolite, total station, level, EDM, computer system and transport facilities.

Special equipment such as echo sounder, laser level, GPS system etc. will be an asset in bidding tender for special survey services.

### 6. Office/Workshop Facilities

Not Applicable

### 7. Training Facilities

Not Applicable

#### 8. Others

Not Applicable

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**Managing Department:** Architectural Services Department

Works Category : Landscaping Specialist Contractor

Class I : General Landscape Work

**Group I** : Contracts/Subcontracts of value up to HK\$2.3M

Group II : Contracts/Subcontracts of unlimited value

### **Brief Scope of Category/Class:**

General Landscape Works includes all three types of:

- (a) landscape softworks (except hydroseeding) such as soiling, minor earthworks, turfing, sprigging, seeding and the supply, transplanting or planting of all types of plant material (including ground covers, tress, palms, shrubs, herbaceous, etc.) and subsequent establishment works;
- (b) horticultural and arboricultural maintenance works to vegetation, such as regular inspections of the vegetation and applications of routine maintenance operations to keep the vegetation in healthy growth; identification of plant disorders and application of appropriate treatments after diagnosis such as soil water and nutrient management, pest and disease control, thinning and pruning; installation and maintenance of tree support and protection systems such as cabling, bracing, propping and lightning protection; and tree risk assessment and management; and
- (c) landscape hardworks such as tree guards, tree grilles, tree rings, paving, planters, dwarf walls, steps, fencing, outdoor furniture, pergolas and pavilions.

## **Definition of Probationary Status**#

Probation to Group I : Eligible for the award of one contract/subcontract at any one time of value up to \$2.3 million

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts, plus one contract/subcontract of value exceeding \$2.3

million

See Remarks (1) on the end page of this Appendix.

	Group I	Group II
	A. Entry On Probation	A. Entry On Probation
1.	Job Experience Completed satisfactorily at least three relevant contracts/subcontracts of total value of the landscape softworks exceeding \$4M within the past 5 years. Job experience in all three types of the General Landscape Works within the past five years.	Completed satisfactorily at least three relevant government contracts/1 <sup>st</sup> tier Government subcontracts of total value of the General Landscape Works exceeding \$6M within the past 5 years, including at least two public works contracts/1 <sup>st</sup> tier Government subcontracts of total value of landscape softworks exceeding \$3M. Job experience in all three types of the General Landscape Works within the past five years.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable	Not Applicable
3.	Top Management*(See Remarks on the end page of this Appendix) Not Applicable	At least one top management staff with more than five years of relevant working experience gained in Hong Kong, who can be the same person as the horticulturist or the tree specialist.
4.	Technical Staff See Annex 35.	See Annex 35.
5.	Plant and Equipment**(See Remarks on the end page of this Appendix) See Annex 35.	See Annex 35.
6.	Office/Workshop Facilities Local office and a local holding nursery in Hong Kong of not less than 7,500m <sup>2</sup> required.	Local office and a local holding nursery in Hong Kong of not less than 7,500m <sup>2</sup> required
7.	Training Facilities Have training scheme to internal staff to improve arboricultural, horticultural and workplace health and safety practice.	Have training scheme to internal staff to improve arboricultural, horticultural and workplace health and safety practice.
8.	Others  Special arboricultural skills such as maintenance, protection and transplanting of mature trees, and other horticultural skills such as laying and maintenance of turfs for sports ground.	Special arboricultural skills such as maintenance, protection and transplanting of mature trees, and other horticultural skills such as laying and maintenance of turfs for sports ground.

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Group I	Group II
B. Confirmation	B. Confirmation
Completed satisfactorily at least two Government Group I contracts/ 1 <sup>st</sup> tier Government subcontracts of total value of the General Landscape Works exceeding \$2M within the past 5 years, including one Government contract / 1 <sup>st</sup> tier Government subcontract of value of landscape softworks exceeding \$0.5M. Job experience in all three types of the General Landscape Works within the past five years.	Completed satisfactorily at least two Government Group II contracts/ 1 <sup>st</sup> tier Government subcontracts of individual value of the General Landscape Works exceeding \$2M within the past 5 years, including one Government contract / 1 <sup>st</sup> tier Government subcontract of value of landscape softworks. Job experience in all three types of the General Landscape Works within the past five years.
C. Direct Entry	C. Direct Entry
Not Applicable	Not Applicable
	D. Entry by Promotion
	Same as that required for "Entry on Probation".

**Managing Department:** Architectural Services Department

Works Category : Landscaping Specialist Contractor

Class II : Hydroseeding

Group I : Contracts/Subcontracts up to HK\$2.3M
 Group II : Contracts/Subcontracts of unlimited value

### **Brief Scope of Category/Class:**

Hydroseeding is the application by high-pressure spraying of specified mixture of grass seeds, fertilizer, mulch and other additives in aqueous solution, including the supply of all materials and equipment necessary for the application and subsequent establishment of grass cover by the method described.

## **Definition of Probationary Status**#

Probation to Group I : Eligible for the award of one contract at any one time of value up to \$2.3 million

Probation to Group II : Eligible for the award of any number of Group I contracts, plus one contract of value exceeding \$2.3 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

	Group I	Group II
	A. Entry On Probation	A. Entry On Probation
1.	Job Experience Completed at least three relevant contracts/subcontracts of total value exceeding \$4M within the past 5 years.	Completed at least three relevant government contracts/subcontracts of total value exceeding \$6M within the past 5 years.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable	Not Applicable
3.	Top Management*(See Remarks on the end page of this Appendix) Not Applicable	Not Applicable
4.	<b>Technical Staff</b> Min. 1 No. trained operator with 3 years relevant HK working experience.	Min. 2 Nos. trained operator with 3 years relevant HK working experience.
5.	Plant and Equipment**(See Remarks on the end page of this Appendix) All necessary equipment to carry out the required work.	All necessary equipment to carry out the required work.
6.	Office/Workshop Facilities Local office in Hong Kong is required.	Local office in Hong Kong is required.
7.	<b>Training Facilities</b> Have training scheme to internal staff to improve hydroseeding and safety practice.	Have training scheme to internal staff to improve hydroseeding and safety practice.
8.	Others Financial resources	Financial resources

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Group I	Group II
B. Confirmation	B. Confirmation
Completed satisfactorily at least two government Group I contracts/subcontracts within the past 5 years, of total value exceeding \$2M.	Completed satisfactorily at least two government Group II contracts/subcontracts within the past 5 years, of individual value exceeding \$2M.
C. Direct Entry	C. Direct Entry
Not Applicable	Not Applicable
	D. Entry by Promotion
	Same as that required for "Entry on Probation"

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Managing Department : Civil Engineering and Development Department	
Works Category : <u>Landslip Preventive/Remedial Works to Slopes/Retaining Walls</u> Specialist Contractor	
Brief Scope of Category:  The scope of work in this category covers landslip preventive works, remedial works or formation works of slopes and/or retaining walls in areas immediately behind occupied structures, adjacent to railway lines or major trunk roads	
Definition of Probationary Status <sup>#</sup> :	
Contractors included in the Specialist List for "Landslip Preventive/Remedial works to Slopes/Retaining Walls (LPM)" but have not yet achieved confirmation status probationary contractor may take on not more than 2 government contracts tendered under the LPM category with total outstanding value of works of not greater tha \$114M.	

\* See Remarks (1) on the end page of this Appendix.

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	A. Entw. On Probation	P. Confirmation
<u> </u>	A. Entry On Probation	B. Confirmation
2.	Job Experience See sections 2.1, 2.2, 2.3 and 2.4 of Annex 18  Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Contractors who wish to apply for inclusion should have obtained:  i) The relevant Quality Management System Certification or if they do not have	Satisfactorily completed, as main contractor or 1 <sup>st</sup> tier sub-contractor (See Notes 1 under section 2.1 of Annex 18 to Appendix 3C), at least one Government Landslip Preventive Measures contract or its 1 <sup>st</sup> tier sub-contract respectively, containing multiple sites and of value not less than \$40M and subject to a minimum probationary period of 24 months
	suitable works contracts in hand for certification auditing, a confirmation from a certification body accredited by the HKAS to issue the Certification or considered to be equivalent by the Environment, Transport and Works Bureau that a full review of the Quality Manual of their Hong Kong office has been carried out in Hong Kong by the certification body and such Quality Manual has been confirmed by the certification body as being in conformity with the requirements of the relevant standard.  ii) Registration on the Buildings Department's list of Registered Specialist Contractor for Site Formation Works.	<ul> <li>i) Maintain the relevant Quality Management System Certification.</li> <li>ii) Maintain the Registration on the buildings Department's list of Registered Specialist Contractor for Site Formation Works.</li> </ul>
3.	Top Management*(See Remarks on the end page of this Appendix) See section 2.5.1 of Annex 18	Employ/retain appropriate management staff
4.	Professional Staff See section 2.5.3 of Annex 18	Employ/retain appropriate professional staff
5.	Technical Staff See section 2.3.3 of Annex 18	Employ/retain appropriate technical staff
6.	Safety Staff See section 2.5.4 of Annex 18	Employ/retain appropriate safety staff
7.	Plant and Equipment**(See Remarks on the end page of this Appendix) See section 2.6 of Annex 18	Possess appropriate plant and equipment
8.	Office/Workshop Facilities All applicants must possess or set up in Hong Kong a place of business.	Not Applicable

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Minimum Technical & Management Criteria for Admission, Confirmati	ion and Promotion of Contractors for the Specialist List
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## 9. Training Facilities

Not Applicable

Not Applicable

### 10. Others

(i) Performance on Government contracts/sub-contracts (See Notes 1 and 2 under section 2.1 gf Annex 18 to Appendix 3C) under the R&D and SF categories and in landslip preventive works in the past 3 years – see sections 2.1, 2.2, 2.3 and 2.4 of **Annex 18** 

In all other ways being considered suitable for confirmation

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<b>Managing Department:</b>	Architectural Services Department	_
Works Category:	Lift, Escalator and Passenger Conveyor Installation	Specialist Contractor
Brief Scope of Category	:	
	category covers the supply, installation and maintenance of passenge installations, lifting platform for barrier free access, and associated maside lifts, etc.	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		General
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) All statutory submissions to EMSD and Buildings Authority shall be issued under the name of the applicant; and
		(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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A. Entry on Probation	B. Confirmation		C. Direct Entry
		(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
			(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
			(c) The contract shall be of a completely new building construction project or a whole building refurbishment project.
		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
			(d) The aforementioned main contractor shall not be the lift, escalator and passenger conveyor installation contractor for the project work; and
			(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be
		<ul> <li>a Registered Lift and/or Escalator Contractor registered under Lifts &amp; Escalators (Safety) Ordinance, Cap. 327; and</li> </ul>
		<ul> <li>a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and</li> </ul>
		have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		Quality Management System Certification
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
		The scope of certification shall be relevant to the contractor list being applied for, e.g. "Supply, installation and maintenance of lift and escalator installation".

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Ţ.		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Registered Lift Engineer (RLE) At least 2 nos. registered under Lifts and Escalators (Safety) Ordinance, Cap. 327
		Registered Escalator Engineer (REE) At least 2 nos. registered under Lifts and Escalators (Safety) Ordinance, Cap. 327 The RLE and REE can be the same person
		Technical Support Staff Employ adequate nos. of site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Site supervisor 4 nos. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades Lift Electrician/Mechanic
		Minimum score required 100 marks
		Qualified Lift Electrician/Mechanic 20 marks Intermediate Lift Electrician/Mechanic 15 marks Ordinary Lift Electrician/Mechanic 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Registered Lift and/or Escalator Engineer         (RLEE) registered under Lifts &amp; Escalators         (Safety) Ordinance, Cap. 327 – 2 nos.         (minimum)</li> <li>Competent Lift/Escalator Worker (CLEW)         registered under Lifts and Escalators (Safety)</li> </ul>

A. Entry on Probation	B. Confirmation	C. Direct Entry
		Ordinance, Cap. 327 – 10 nos. (minimum)  — Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 – 1 no. (minimum)
		The RLEE, CLEW and REW can be the Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 19 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 100 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced
		<u>Depot</u> At least two, preferably more and distributed over Hong Kong SAR.
		6. Others
		Authorized Agency Be an authorized agent/distributor in HKSAR for the lifts, escalators, and passenger conveyors. Documentary evidence such as authorized agency/distributorship agreements shall be available for checking.
		Type test certificates for escalators Required for steps, pallets, belts and handrails
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(handrail breaking strength).
		Type test certificates for lifts Required for landing door locking devices, landing doors, overspeed governors, safety gears, energy dissipation and/or energy accumulation type buffers with/without buffered return movement, ascending car overspeed protection means, rupture valve/one way restrictor, and safety circuits containing electronic components.
		Permit to use and operate a new lift or escalator At least two installations for each model issued by Electrical & Mechanical Services Department. Applicant to submit a list of the models for use in Government projects. Only those models submitted and approved can be used in Government projects. New models to be offered after admission must be submitted for assessment and prior approval must be obtained before new models can be offered for use in Government projects.
		Harmonic distortion Comply with relevant standards; details of harmonic current distortion for each model to be submitted.
		Support from Manufacturer Sound technical support required, including provision of spare parts, training (record to be submitted), etc.
		Maintenance facilities 24-hour emergency service for fault attendance must be available. The 24-hour emergency service for fault attendance shall be effective, e.g. the fault call can be acknowledged immediately and maintenance personnel can arrive at the fault location within 1 hour for normal call (e.g. no trapping of passenger) and 30 minutes for urgent call (e.g. trapping of passenger). Applicant to provide evidence that such maintenance facilities are established in strategic locations in Hong Kong SAR with suitable communication network to meet the

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		above requirements.

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Managing Department:	Architectural Services Department
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Works Category: Liquefied Petroleum Gas Installation Specialist Contractor

# **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of fixed and piped liquefied petroleum gas (LPG) installations including bulk LPG storage vessels, LPG cylinders, vaporizers, piping and fittings, valves and accessories, LPG appliances, etc.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	The following shall only be applicable to existing probationary contractor:	1. Job Experience  General
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building
	(3) All statutory submissions to Gas Authority shall be issued under the name of the applicant; and	contractor and other building services / electrical and mechanical contractors; and
	(4) The scope of work for this contract must fulfill all the following requirements:	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the
	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.25M; and	Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	(b) The contract shall cover a complete liquefied petroleum gas installation at least with cylinders supply; and	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(c) The contract shall be for new building project or new liquefied petroleum gas installation in an existing building. Partial renovation or fitting-out works for an existing installation are	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	not acceptable; and  (d) If the contract is a term contract, all of the above requirements 4 (a) and 4 (c) shall be fulfilled in	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	one works order.  (5) Subcontract will not be considered as valid job	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(7) All statutory submissions to Gas Authority shall be issued under the name of the applicant; and
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	(b) The applicant shall have undertaken the full	reference within normal office nours; and

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A. Entry on Probation	B. Confirmation	C. Direct Entry
	scope of work covered in the subcontract, solely and fully, including contract management; and	(9) The scope of work for each of these 2 contracts must
	(c) The party by which the applicant is awarded	fulfill all of the following requirements:
	with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the	(a) Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and
	concerned project, all shall not be the liquefied petroleum gas installation contractor for the project work.	(b) The contract shall cover a complete liquefied petroleum gas installation at least with cylinders supply; and
		(c) The contract shall be for new building project or new liquefied petroleum gas installation in an existing building. Partial renovation or fitting-out works for an existing installation are not acceptable.
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the liquefied petroleum gas installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration The applicant shall be a Registered Gas Contractor registered under Gas Safety Ordinance, Cap. 51 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		Craftsman
		Employ adequate nos. of craftsman in the following trades  (A) BS Mechanic/Mechanical Fitter
		Minimum score required 20 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Qualified BS Mechanic/Mechanical Fitter 20 marks Intermediate BS Mechanic/Mechanical Fitter 15 marks
		Ordinary BS Mechanic/Mechanical Fitter 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Registered Gas Installer (RGI) registered under Gas Safety Ordinance, Cap. 51 – 2 nos. (minimum) (These RGIs shall hold licences covering gas installation work Class 1 to 7 collectively)</li> <li>The RGI can be the Technical Support Staff or Craftsman.</li> </ul>
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 20</b> for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities  Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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<b>Managing Department:</b>	Architectural Services Department
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Works Category: Low Voltage Cubicle Switchboard Installation Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of low voltage cubicle switchboard comprising main incoming switchgear, busbars and droppers/risers, outgoing switchgears, instruments and protection devices, etc. all in a type tested assembly.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	The following shall only be applicable to existing probationary contractor:	1. Job Experience  General
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard;
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and  (2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building
	(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	contractor and other building services / electrical and mechanical contractors; and
	(4) The scope of work for this contract must fulfill all the following requirements:	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will
	<ul> <li>(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and</li> </ul>	not be considered as a valid job reference.  Job Reference for Inspection (In addition to the above, every
	(b) The rating of the main incoming switchgear is not less than 2500A or with power rating not less than 1500kVA; and	job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(c) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(d) If the contract is a term contract, all of the above requirements 4 (a) and 4 (c) shall be fulfilled in one works order.	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and
	Category" covered in the main contract; and  (b) The applicant shall have undertaken the full	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job
	scope of work covered in the subcontract, solely	reference within normal office hours; and

A. Entry on Probation	B. Confirmation		C. Direct Entry
	and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main	(9)	fulfill all of the following requirements:  (a) Contract value of the work related to the
	contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the low voltage cubicle switchboard installation contractor for the project work.		category under application for inclusion exceeds \$1M; and  (b) The rating of the main incoming switchgear is not less than 2500A or with power rating not
			less than 1500kVA; and  (c) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the low voltage cubicle switchboard installation contractor for the project work; and
			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)  Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of Electrician/Mechanical Fitter
		Minimum score required 40 marks Qualified Electrician/Mechanical Fitter 20 marks Intermediate Electrician/Mechanical Fitter 15 marks Ordinary Electrician/Mechanical Fitter 8 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 – 1 no. (minimum)</li> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 – 2 nos. (minimum)</li> </ul>
		The REW can be the Technical Support Staff or Craftsman
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 21</b> for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/ storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 180 m². Documentary evidence (e.g. purchase/ lease agreement) to prove right of use shall be produced.
		6. Others
		Design IEC 60439 Applicant to prove that switchboard is designed to the relevant IEC or equivalent standard; A motor control centre alone shall not be acceptable.
		Type test certificates for switchboard as required by

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		<ul> <li>IEC 60439-1</li> <li>temperature-rise limit test</li> <li>dielectric properties test</li> <li>short-circuit withstand strength test</li> <li>effectiveness of protective circuit test</li> <li>clearances &amp; creepage distance test</li> <li>mechanical operation test</li> <li>degree of protection test</li> </ul> Tests shall be on a whole switchboard and NOT simply on the busbar system; and the above type tests shall be certified by an internationally recognized testing organization, e.g. ASTA.
		Air circuit breakers Applicant to provide proof of compliance of relevant standards IEC 60947-2.  Switchfuse/fuseswitch Applicant to provide proof of compliance of relevant standards IEC 60947-3.
		H.R.C. fuses Applicant to provide proof of compliance of relevant standards IEC 60269 or BS 88.
		Busbars Applicant to provide proof of compliance of relevant standards BS 1433.
		Permit to use in Government projects Only those configurations with type tests certificates and materials with poof of compliance with the above standards can be offered for Government projects.
		Authorized Agency Agreement between principals and applicant, including agreements proving applicant's rights to manufacture, etc. shall be provided.

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<b>Managing Department:</b>	Architectural Services Department
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Works Category: Mechanical Handling and Lifting Installation Specialist Contractor

#### **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of mechanical handling and lifting installation including crane, hoist, conveyor system, mechanical storage system, movable boarding facility etc.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry	
1. Job Experience  General	(1) The applicant has satisfactorily completed, within the	1. Job Experience  General	
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	<ul> <li>(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and</li> <li>(4) The scope of work for this contract must fulfill all the following requirements:</li> </ul>	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and  (b) The contract shall cover the nature of works as	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	described in the "Brief Scope of Category"; and  (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in one works order.	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream	(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
(9)	The	cope of work for each of these 2 contracts must	mechanical handling and lifting installation	(9)	The scope of work for each of these 2 contracts must
(9)		all of the following requirements:	contractor for the project work.	(3)	fulfill all of the following requirements:
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(10)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical handling and lifting installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical handling and lifting installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the

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A. Entry on Probation	B. Confirmation	C. Direct Entry
concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer		Qualified Engineer
Employ at least 1 no. qualified engineer (Mechanical discipline) with adequate and relevant project management experience.		Employ at least 1 no. qualified engineer (Mechanical discipline) with adequate and relevant project management experience.
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades		Employ adequate nos. of craftsman in the following trades
(A) Mechanical Fitter		(A) Mechanical Fitter

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Minimum score required 20 marks Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks		Minimum score required 20 marks Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks
(B) Electrician  Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks		(B) Electrician  Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
Statutory Registration		Statutory Registration
The applicant shall have staff meeting the following statutory registration requirements:		The applicant shall have staff meeting the following statutory registration requirements:
<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A0 – 1 no. (minimum)</li> </ul>		<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A0 – 1 no. (minimum)</li> </ul>
The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.
Qualified Welder		Qualified Welder
Employ adequate nos. of Qualified Welder (QW)		Employ adequate nos. of Qualified Welder (QW)
QW 1 no.		QW 1 no.
The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.		The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.
4. Plant and Equipment**(See Remarks on the end page of this Appendix)		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 22 for list of typical equipment/tools and testing instruments		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 22</b> for list of typical equipment/tools and testing instruments

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A. Entry on Probation	B. Confirmation	C. Direct Entry
required.		required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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**Specialist Contractor** 

Appendix 3C

**Managing Department:** Architectural Services Department

Works Category: Mechanical Plant and Equipment Installation

Group I: Contracts/Subcontracts up to HK\$1.1M

Group II: Contracts/Subcontracts of unlimited value

#### **Brief Scope of Category:**

The scope of work in this category covers the general mechanical fabrication, supply, installation and maintenance of mechanical plants and equipment. Typical installations include laundry equipment, waste disposal equipment, vehicle examination facility, garage equipment, bulk fuel storage and dispensing system, pumping system etc.

### **Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

<sup>®</sup>Probation to Group I : Eligible for the award of a maximum of two Group I contracts/subcontracts

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II

contracts/subcontracts exceeding \$1 million provided that the total value of Group II works does not exceed \$3.4 million

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<sup>&</sup>lt;sup>®</sup> Not applicable for new application for admission. (Only applicable for existing Group I probationary contractor)

<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

Group I	Group II
A. Entry on Probation	A. Entry on Probation
Not Applicable	1. Job Experience
- von-FF	General
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
	(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the

Group I	Group II
•	following requirements, in addition to all the above stated requirements:
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical plant and equipment installation contractor for the project work; and
	(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Statutory Registration
	The applicant shall be a Registered Electrical Contactor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Qualified Engineer
	Employ at least 1 no. qualified engineer (Mechanical or Building Services) with adequate and relevant professional and project management experience.

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Group I	Group II	
•	Technical Support Staff	
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.  Technician 2 nos.	
	Site supervisor	2 nos. 4 nos.
	Draftsman	4 nos. 2 nos.
	Craftsman  Employ adequate nos. of craftsman in the following trades	2 1103.
	(A) Electrician Minimum score required Qualified Electrician Intermediate Electrician Ordinary Electrician	40 marks 20 marks 15 marks 8 marks
	(B) Mechanical Fitter Minimum score required Qualified Mechanical Fitter Intermediate Mechanical Fitter Ordinary Mechanical Fitter	40 marks 20 marks 15 marks 8 marks
	Statutory Registration/Qualified Welder  The applicant shall have staff meeting the following statutory registration	requirements:
	<ul> <li>Registered Electrical Worker (REW) registered under Electricity Or 406. Grade A2 – 1 no. (minimum)</li> </ul>	dinance, Cap.
	The REW can be the Qualified Engineer, Technical Support Staff or the C	Craftsman.
	Qualified Welder	
	Employ adequate nos. of Qualified Welder (QW)	
	QW	1 no.
	The QW can be the Qualified Engineer, Technical Support Staff or Crafts	man.

Group II Group II		
	4. Plant and Equipment ***(See Remarks on the end page of this Appendix)  Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 23 for list of typical equipment/tools and testing instruments required.	
	5. Office/Workshop Facilities	
	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 70 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	
	6. Others	
	Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreement shall be available.	
	Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.	
B. Confirmation	B. Confirmation	
The following shall only be applicable to existing probationary contractor:	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	
(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	<ul> <li>(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and</li> </ul>	
(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	(4) The scope of work for this contract must fulfill all the following requirements:	
(4) The scope of work for this contract must fulfill all the following requirements:	(a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and	
(a) Contract value of the work related to the category under application for confirmation exceeds 50 % of Group I tender limit; and	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	
(b) The contract shall cover the nature of works as described in the "Brief Scope of	Canagory , and	

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		T
	Group I	Group II
	Category"; and  (c) If the contract is a term contract, all of the above requirements 4 (a) to 4 (b) shall be fulfilled in one works order.	(c) If the contract is a term contract, all of the above requirements 4 (a) to 4 (b) shall be fulfilled in one works order.
(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical plant and equipment installation contractor for the project work.	<ul> <li>(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:</li> <li>(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and</li> <li>(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and</li> <li>(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical plant and equipment installation contractor for the project work.</li> </ul>
	C. Direct Entry	C. Direct Entry
1. Jo	ob Experience	Not Applicable
Gene	<u>ral</u>	
(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
shal	Reference for Inspection (In addition to the above, every job submitted by the applicant I fulfill all requirements set out below; otherwise, it will not be considered as a valid job rence)	
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and	

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		Group I	Group II
	the er	mployer of the concerned project; and	
(7)		atutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. WR1 (A)) shall be issued under the name of the applicant; and	
(8)	exam	applicant shall be able to arrange joint site inspections for the government's ination of the quality and workmanship of the submitted job reference within al office hours; and	
(9)		cope of work for each of these 2 contracts must fulfill all of the following rements:	
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	
(10)	Subco	ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the manufacture plant and equipment installation contractor for the project work; and	
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and	
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	

G *	a
Group I	Group II
2. Registration with relevant authorities in Hong Kong (such as Quality Managemen System Certification, Building Authority etc.)	
Statutory Registration	
The applicant shall be a Registered Electrical Contractor registered under Electrici Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutor registration requirement) of number not less than that described in the Section "Technic Staff".	y
3. Technical Staff (See Annex 1 for definition of Staff Qualification)	
Technical Support Staff	
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	
Technician 2 nos.	
Site supervisor 2 nos.	
Draftsman 1 no.	
<u>Craftsman</u>	
Employ adequate nos. of craftsman with adequate relevant experience in the following trades	
(A) Electrician	
Minimum score required 20 marks Qualified Electrician 20 marks	
Intermediate Electrician 20 marks 15 marks	
Ordinary Electrician 8 marks	
(B) Mechanical Fitter	
Minimum score required 20 marks Oualified Mechanical Fitter 20 marks	
Intermediate Mechanical Fitter 20 marks  15 marks	
Ordinary Mechanical Fitter 8 marks	
Ordinary Precinantear Fines	
Statutory Registration	
The applicant shall have staff meeting the following statutory registration requirements:	
<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap</li> <li>406. Grade A2 – 1 no. (minimum)</li> </ul>	
The REW can be the Technical Support Staff or Craftsman.	
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	Group I	Group II
4.	Plant and Equipment**(See Remarks on the end page of this Appendix)	
	Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates where applicable for testing instruments shall be available. Refer to <b>Annex</b> 23 for list of typical equipment /tools and testing instruments required.	
5.	Office/Workshop Facilities	
	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	
6.	Others	
	Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreement shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to	
	demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.	

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Managing Department:	Architectural Services Department		
Works Category:	Motor Vehicle Body-building and Painting	Specialist Contractor	
<b>Brief Scope of Category</b>	:		
The scope of work in this category covers design and building of general purpose/specialist vehicle body, supply and installation of specialist equipment on vehicle, minor or major vehicle modification, etc. and all vehicle related vehicle modification work.			

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category on motor vehicle fleet, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
		(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) The contract shall cover the major scope of works as described in the "Brief Scope of

A. Entry on Probation	B. Confirmation		C. Direct Entry
			Category".
		(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
			(d) The aforementioned main contractor shall not be the motor vehicle body-building and painting contractor for the project work; and
			(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
			(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. 7	Technical Staff (See Annex 1 for definition of Staff
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.  Craftsman
		Employ adequate nos. of Craftsman in the following trades  (A) Body Repairer/Builder  Minimum score required 30 marks  Qualified Body Repairer/Builder 20 marks  Ordinary Body Repairer/Builder 10 marks
		(B) Vehicle Mechanic Minimum score required 20 marks Qualified Vehicle Mechanic 20 marks Ordinary Vehicle Mechanic 10 marks
		(C) Vehicle Electrician Minimum score required 20 marks Qualified Vehicle Electrician 20 marks Ordinary Vehicle Electrician 10 marks
		(D) Vehicle Painter Minimum score required 20 marks Qualified Vehicle Painter 20 marks Ordinary Vehicle Painter 10 marks
		The craftsman can be the Technical Support Staff.
		3. Plant and Equipment**(See Remarks on the end page of this Appendix)
Appardix 2C		Adequate modern drafting facilities and minimum 1 computer, preferably with CAD. Adequate nos. of equipment, tools and testing

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		instruments for carrying out installation, testing/ commissioning and maintenance services. Refer to Annex 24 for list of typical equipment / tools required.
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 10 m², and the minimum workshop + storage area shall be 110 m² (minimum 50 m² of covered space). Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		5. Others
		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.

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**Managing Department:** Architectural Services Department

Works Category: Plumbing Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$2.3 million
Group II: Contracts/Subcontracts of unlimited value

## **Brief Scope of Category:**

The scope of work in this category covers the construction, repair and maintenance of plumbing installations. Typical installations include fresh and flush water pumps and pipework installations (including connection to sanitary fixtures and associated taps and water heaters installed by others); water supply for fire service installation including up-feed pipework and connection to the roof/transfer tank; cold and hot water supply systems; rain water recycling system water supply for feeding/make-up to air-conditioning installation, fountain installation and swimming pool installation; and water supply for irrigation system.

# **Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Probation to Group I : Not applicable

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II contracts/subcontracts

provided that the total value of Group II works does not exceed \$8.2 million

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<sup>\*\*</sup> See Remarks (1) on the end page of this Appendix.

Group I	Group II
A. Entry on Probation	A. Entry on Probation
Not Applicable	1. Job Experience
	<u>General</u>
	(1) The applicant shall have adequate experience in the type and size of work of the category, as stipulated under "Job Reference for Inspection" below, with satisfactory quality of work compatible with Government standard on and in relation to plumbing installations; and
	(2) The applicant shall have adequate experience in contract management of work of the category, as stipulated under "Job Reference for Inspection" below, including solely and fully responsible for carrying out contract management and coordination with building contractor and other building services / electrical and mechanical contractors; and
	(3) For job experience outside the HKSAR, evidences must also be produced to the satisfaction of the Secretary for Development; otherwise, it will not be considered as a valid job reference.
	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(7) All statutory forms such as Form WR1(A) "Electricity Ordinance (Cap. 406) Electricity (Wiring) Regulations Work Completion Certificate", Form WWO 46 "Waterworks Ordinance (Cap. 102) Notification/Application for Constructing, Installing, Altering or Removing an Inside Service or Fire Service", etc. shall be issued under the name of the applicant and/or the Registered Electrical Worker (REW)/ Licensed Plumber (LP) engaged by the applicant as applicable; and
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

Group I		Group II
	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and
		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
		(c) The contract shall be of a completely new building construction project or a whole building refurbishment project.
	(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
		(d) The aforementioned main contractor shall not be the plumbing installation contractor for the project work; and
		(e) The applicant must present documentary evidence to prove that the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
		(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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Group I		Group II
•	2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff" below.
		Quality Management System Certification
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, or Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Development Bureau.
		The scope of certification shall be relevant to the "Brief Scope of the Category" being applied for, e.g. "supply, installation, repair and maintenance of plumbing work".
		If the scope of certification does not include "maintenance", the relevant quality management manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.
	3.	Technical Staff (See Annex 1 for definition of Staff Qualification)
		Qualified Engineer
		Employ at least 1 no. Qualified Engineer (Mechanical, Building Services or Electrical discipline) with adequate and relevant professional and project management experience.
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician2 nos.Site supervisor4 nos.Draftsman2 nos.

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Group I	Group II	
•	<u>raftsman</u>	
	mploy adequate nos. of craftsman to meet the minimum solow in the following trades	cores of both (A) and (B)
	A) Licensed Plumber/ BS Mechanic Minimum score required Qualified Plumber/BS Mechanic Intermediate Plumber/BS Mechanic Ordinary Plumber/BS Mechanic	40 marks 1 no. for 20 marks 1 no. for 15 marks 1 no. for 8 marks
	B) Electrician Minimum score required Qualified Electrician Intermediate Electrician Ordinary Electrician	40 marks 1 no. for 20 marks 1 no. for 15 marks 1 no. for 8 marks
	atutory Registration	
	ne applicant shall have staff meeting the following statutory re- Licensed Plumber, Grade I, registered under Waterworks C 1 no. (minimum) REW registered under Electricity Ordinance, Cap. 406. Gr 1 no. (minimum)	Ordinance, Cap. 102. –
	ne LP and REW can be the Qualified Engineer, Technical Sup	port Staff or Craftsman
	lant and Equipment**( See Remarks on the end page of this Appendix)	Pose Sum of Crustoman.
	dequate modern drafting and computing facilities; minimudequate nos. of calibrated testing instruments and equipment stallation, operation, maintenance and testing / complibration certificates where applicable for testing instruments.  Annex 36 for a list of typical equipment / tools and testing in	ent / tools for carrying out nissioning services; valid s shall be available. Refer
	ffice/Workshop Facilities	
	ocal office/workshop in Hong Kong SAR is required. rnished office and workshop/storage areas. In general, the 80 m <sup>2</sup> and the minimum workshop + storage area shall ridence (e.g. purchase/lease agreement) to prove right of use storage.	e minimum office area shall be 25 m <sup>2</sup> . Documentary
B. Confirmation	B. Confirmation	

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Group I		Group II
Not Applicable	(1)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and
	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(3)	All statutory forms such as Form WR1(A) "Electricity Ordinance (Cap. 406) Electricity (Wiring) Regulations Work Completion Certificate", Form WWO 46 "Waterworks Ordinance (Cap. 102) Notification/Application for Constructing, Installing, Altering or Removing an Inside Service or Fire Service" etc. shall be issued under the name of the applicant and/or the REW/LP engaged by the applicant as applicable; and
	(4)	The scope of work for this contract must fulfill all the following requirements:
		(a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and
		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
		(c) The contract shall be of a completely new building construction or a whole building refurbishment; and
		(d) If the contract is a term contract, all of the above requirements 4(a) to 4(c) shall be fulfilled in one works order.
	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
		(d) The aforementioned main contractor shall not be the plumbing installation contractor for the project work.
C. Direct Entry  1. Job Experience	NT :	C. Direct Entry
1. Jun Experience	Not	Applicable

Appendix 3C

	Group I	Group II
Gene	<u>ral</u>	•
(1)	The applicant shall have adequate experience in the type and size of work of the category, as stipulated under "Job Reference for Inspection" below, with satisfactory quality of work compatible with Government standard on and in relation to plumbing installations; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, as stipulated under "Job Reference for Inspection" below, including solely and fully responsible for carrying out contract management and coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3)	For job experience outside the HKSAR, evidences must also be produced to the satisfaction of the Secretary for Development; otherwise, it will not be considered as a valid job reference.	
shal	Reference for Inspection (In addition to the above, every job submitted by the applicant fulfill all requirements set out below; otherwise, it will not be considered as a valid job rence)	
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7)	All statutory forms such as Form WR1(A) "Electricity Ordinance (Cap. 406) Electricity (Wiring) Regulations Work Completion Certificate", Form WWO 46 "Waterworks Ordinance (Cap. 102) Notification/Application for Constructing, Installing, Altering or Removing an Inside Service or Fire Service" etc. shall be issued under the name of the applicant and/or the Registered Electrical Worker (REW)/ Licensed Plumber (LP) engaged by the applicant as applicable; and	
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:	

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	Group I		Group II
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	
	(c)	The contract shall be of a completely new building construction project or a whole building refurbishment project.	
(10)	Subc	ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d)	The aforementioned main contractor shall not be the plumbing installation contractor for the project work; and	
	(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
	(f)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		
St	Statutory Registration		
O	The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical"		

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Group I		Grou	p II
Staff" below.			
Technical Staff (See Annex 1 for definition of Staff C	Qualification)		
Technical Support Staff			
Employ adequate nos. of technicians, site supervisors relevant academic qualification and working experience Technician Site supervisor	and draftsmen with adequate and: 2 nos. 2 nos.		
Draftsman	1 no.		
<u>Craftsman</u>			
Employ adequate nos. of craftsman with adequate minimum scores of both (A) and (B) below in the follow			
(A) Licensed Plumber/FS Mechanic Minimum score required Qualified Plumber/BS Mechanic Intermediate Plumber/BS Mechanic Ordinary Plumber/BS Mechanic	20 marks 1 no. for 20 marks 1 no. for 15 marks 1 no. for 8 marks		
(B) Electrician Minimum score required Qualified Electrician Intermediate Electrician Ordinary Electrician	20 marks 1 no. for 20 marks 1 no. for 15 marks 1 no. for 8 marks		
Statutory Registration			
The applicant shall have staff meeting the following state	utory registration requirements:		
<ul> <li>Licensed Plumber, Grade I, registered under Water 1 no. (minimum)</li> <li>REW registered under Electricity Ordinance, Cap. 1 no. (minimum)</li> </ul>	•		
The LP and REW can be the Qualified Engineer, Technic	al Support Staff or Craftsman.		
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Group I	Group II
4. Plant and Equipment **( See Remarks on the end page of this Appendix)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment / tools for carrying out installation, operation, maintenance and testing / commissioning services; valid calibration certificates where applicable for testing instruments shall be available. Refer to <b>Annex 36</b> for a list of typical equipment /tools and testing instruments required.	
5. Office/Workshop Facilities	
Local office/workshop in the Hong Kong Special Administrative Region (HKSAR) is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 15 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be provided.	

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Managing Department : <u>High</u> v	ways Department	•
	essed Concrete Works for Highway Structures y and Installation of Prestressing Systems	Supplier / Specialist Contractor
Brief Scope of Category/Class	s:	
	n this category and class for the supply and installation of a par-	ng systems for prestressed concrete works for highway structures ticular prestressing system proposed in the application. The

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#### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in supply and installation of the prestressing system in the past 3 years, each with a value of \$1.0 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

## 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the prestressing systems shall be operating a quality management system certified by an internationally recognized certifying body.

# 3. Top Management \*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional (HKIE Corporate Member or equivalent) and technical staff experienced in the design of prestressed concrete bridges and the installation of prestressing systems. Local workforce capable of installing prestressing systems.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Prestressing jack.
- b. Mechanical grout pump.
- c. Mechanical grout mixer.
- d. Strand feeder.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information and method statements. Works must comply with Section 17 of the General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the prestressing systems and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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Managing Department:	Highways Department

Works Category : Prestressed Concrete Works for Highway Structures Supplier / Specialist Contractor

Class <u>II</u> : <u>Supply of Prestressed Concrete Units</u>

## **Brief Scope of Category/Class:**

The scope of work in this category and class covers the supply of prestressed concrete units for highway structures. The applicant will be included in this category and class for a particular prestressing system proposed in the application. The prestressing system must be a proprietary product.

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## **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in the fabrication of prestressed concrete units in the past 3 years, each with a value of \$2.0 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

#### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the prestressing systems shall be operating a quality management system certified by an internationally recognized certifying body.

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional (HKIE Corporate Member or equivalent) and technical staff experienced in the design of prestressed concrete bridges and the installation of prestressing systems. Workforce experienced in precast and prestressed concrete works.

# 5. Plant and Equipment \*\*(See Remarks on the end page of this Appendix)

- a. Lifting crane.
- b. Prestressing jacks.
- c. Mechanical grout pumps.
- d. Mechanical grout mixer. e.
  - Concrete mixer.
- f. Concrete vibrator.
- g. Necessary equipment to fabricate casting moulds complete with tendon/strand anchor fittings.
- h. Concrete batching plant.
- i. Equipment for testing concrete.
- j. Curing facilities.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required. The applicant must possess a permanent casting yard with the equipment listed above and adequate storage space.

## 7. Training Facilities

Not Applicable

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## **Direct Entry**

#### 8. Others

Satisfactory technical information and method statements. Works must comply with Sections 14, 15, 16 & 17 of the General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the prestressing systems and the applicant must have established acceptable manufacturing procedures and fully documented quality assurance systems. Visit to the permanent casting yard may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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<b>Managing Department:</b>	Architectural Services Department
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Works Category: Radio Electronics Installation Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of VHF/UHF radio transceiver, basestation, repeater, microwave radio system and related ancillary equipment at hilltop site and different venues.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
1. Job Experience  General  (1) The applicant shall have adequate experience in the	(1) The applicant has satisfactorily completed, within the	Job Experience     General     The applicant shall have adequate experience in the
type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	<ul> <li>(3) The scope of work for this contract must fulfill all the following requirements:</li> <li>(a) Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and</li> </ul>	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	<ul> <li>(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and</li> <li>(c) If the contract is a term contract, all of the above requirements 3 (a) and 3 (b) shall be fulfilled in</li> </ul>	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	one works order.  (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the radio electronics installation contractor for the project	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	work.	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:

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		A. Entry on Probation	B. Confirmation			C. Direct Entry
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.2M; and			(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".			(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".
(9)	refer requi	contract will not be considered as valid job vence unless it can satisfy all of the following irements, in addition to all the above stated irements:		(9)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the radio electronics installation contractor for the project work; and			(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the radio electronics installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant			(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant

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A. Entry on Probation	B. Confirmation	C. Direct Entry
parties of the concerned project.		parties of the concerned project.
2. Technical Staff (See Annex 1 for definition of Staff Qualification)		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
Craftsman		<u>Craftsman</u>
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
3. Plant and Equipment**(See Remarks on the end page of this Appendix)		3. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 25</b> for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 25</b> for list of typical equipment/tools and testing instruments required.
4. Office/Workshop Facilities		4. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
5. Others		5. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department : Architectural Services Department	
Works Category : Repair and Restoration of Historic Buildings	Specialist Contractor
Brief Scope of Category :	
The scope of work in this category covers the repair and restoration of historic buildings and structures.	

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### **Direct Entry**

### 1. Job Experience

At least 3 examples of relevant works carried out in Hong Kong within the past 5 years

# 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable

3. Top Management\*(See Remarks on the end page of this Appendix)

Adequate standard of administration and 1 no. of site foreman with more than 3 years of relevant conservation working experience

#### 4. Technical Staff

Specialist craftsmen/tradesmen with adequate qualification and skill in timber carvings, decorative plasterworks, decorative painting and artworks

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

Adequate source of traditional material including fair face green bricks, Chinese roof-tile and ceramics etc

## 6. Office/Workshop Facilities

Adequate office, workshop and store. Local office and local workshop in Hong Kong are required.

## 7. Training Facilities

Not Applicable

## 8. Others

Not Applicable

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Managing Department:	Water Supplies Department	

Works Category : Repair of Motors, Transformers and Switchgear

**Specialist Contractor** 

## **Brief Scope of Category:**

The scope of work in this category covers the repair of high and low voltage (up to and including 11,000 Volt) motors, transformers and switchgear and ancillary equipment installed in Government installations.

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#### **Direct Entry**

#### 1. Job Experience

The contractor should possess at least 5 years experience in repair of motors, transformers and switchgear. The electrical equipment required to be repaired in Water Supplies Department is listed in **Annex 26**.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management \*(See Remarks on the end page of this Appendix)

One of the managers should possess minimum qualification of a Higher Certificate in Electrical Engineering or equivalent with at least 5 years relevant experience.

#### 4. Technical Staff

The Contractor shall have in their employment at least four supervising engineering staff and twenty competent tradesmen. The supervising staff shall possess a Higher Certificate in Electrical Engineering and be registered as a Class H Electrical Worker under the Electricity Ordinance.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

As stated in item 6 (Office/Workshop Facilities) below

## 6. Office/Workshop Facilities

The contractor should have a well-maintained workshop in Hong Kong with equipment as listed in **Annex 27**. The Engineer may visit the Contractor's workshop to inspect the equipment and facilities before approval is granted.

## 7. Training Facilities

Not Applicable

#### 8. Others

Contractor shall be in frequent trading with one or more reputable manufacturers who are able to supply specialized materials and provide technical support for repair work when required.

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Managing Department :	<b>Highways Department</b>

Works Category : Road Marking Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers the laying of the various road markings.

## **Definition of Probationary Status**#

The probation period is 3 years, during which the probationary contractor shall only be allowed to work as a subcontractor in government contracts and shall be working on not more than 2 government contracts at any one time. At the end of the probationary period or when the probationary contractor has satisfactorily completed road marking works up to a total value of HK\$ 3.0 million, the performance of the probationary contractor will be assessed to determine whether the contractor is eligible to be confirmed, or remains as a probationary contractor, or is required to be removed from the List.

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

	A. Entry On Probation	B. Confirmation	C. Direct Entry
1.	Job Experience Satisfactory completion of less than 3 projects in road marking works in the past 3 years, each with a value of HK\$ 1 million or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.	The performance of the probationary contractor will be assessed at the end of the probationary period or when he has satisfactorily completed road marking works up to a total value of HK\$ 3.0 million. The requirements are the same as those required for "Direct Entry".	Satisfactory completion of at least 3 projects in road marking works in the past 3 years, each with a value of HK\$ 1 million or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable		Not Applicable
3.	<b>Top Management</b> *(See Remarks on the end page of this Appendix) Not Applicable		Not Applicable
4.	<b>Technical Staff</b> Technical staff and work force experienced in road marking works.		Technical staff and work force experienced in road marking works.
5.	Plant and Equipment **(See Remarks on the end page of this Appendix)  Adequate equipment required for thermoplastic road markings:  a. Spraying machine. b. Screeding machine. c. Grinding machine. d. Twin preheater.		Adequate equipment required for thermoplastic road markings:  a. Spraying machine. b. Screeding machine. c. Grinding machine. d. Twin preheater.
6.	Office/Workshop Facilities Not Applicable		Not Applicable
7.	Training Facilities Not Applicable		Not Applicable

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A. Entry On Probation	B. Confirmation	C. Direct Entry
8. Others  a. Satisfactory technical information and method statements.  Works must comply with Section 12 of General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification.		a. Satisfactory technical information and method statements. Works must comply with Section 12 of General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification.
b. Satisfactory site demonstration on laying various types of road marking materials to demonstrate that the laying techniques and workmanship comply with the specified requirements.		b. Satisfactory site demonstration on laying various types of road marking materials to demonstrate that the laying techniques and workmanship comply with the specified requirements.

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Managing Department :	Civil Engineering and Development Department	
Works Category :	Soil and Rock Testing	Specialist Contractor
Brief Scope of Category Contractors (or Laborate carried out in Hong Kon	ories) under this category shall provide services for testing	of soil and rock samples which originate from ground investigation

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#### **Direct Entry**

#### 1. Job Experience

The Laboratory shall be able to provide at least the following services:

- (a) All soil tests included in Geospec 3 except the determination of particle size distribution by the pipette method (Test Methods 8.3 and 8.4), the determination of in-situ bulk density and in-situ dry density of soils by nuclear densometer method (Test Method 11.3), the determination of relative compaction of fill material (Test Method 11.4) and the direct shear test using large shear box apparatus (Test Method 16.2).
- (b) Preparation of soils from tube and block samples for examination, description and determination of bulk and dry densities, void ratio and degree of saturation.
- (c) Point load test on rock and the determination of water content, porosity and dry density of rock.
- (d) Determination of the direct shear strength of rock discontinuities.
- (e) Description of soil and rock to Geoguide 3.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The Laboratory must have a quality system which meets the requirements of the Hong Kong Laboratory Accreditation Scheme (HOKLAS) appropriate to the testing services being provided, and be accredited by Hong Kong Accreditation Service (HKAS) under the HOKLAS for the prescribed soil tests. The full scope of accreditation shall be maintained at all times. If any amendments to Geospec 3 are promulgated in whatsoever form, the Laboratory shall seek and obtain accreditation for the relevant tests incorporating the amendments.

# $\textbf{3.} \quad \textbf{Top Management}^{*(See\ Remarks\ on\ the\ end\ page\ of\ this\ Appendix)}$

All management staff below shall satisfy the minimum qualifications and training requirements prescribed below. Staff competence will be assessed.

- (a) Quality Manager (1 no.) responsible for the quality system
- (b) Laboratory Manager (1 no.) responsible for the technical and administrative matters
- (c) Signatories (minimum 2 nos.) responsible for signing all test certificates and reports

## **Qualifications, Training and Experience Requirements:**

## (a) Quality Manager

The Quality Manager shall satisfy the minimum qualification requirements for Signatory Option A or B as set out below. In addition, he/she shall be fully conversant with the quality system of the Laboratory and shall have adequate knowledge and experience on laboratory quality management and internal quality audits.

## (b) <u>Laboratory Manager</u>

The Laboratory Manager shall satisfy the minimum qualification and experience requirements for Signatory Option A, B or C as set out below. In addition, he/she shall have at least one year of experience in the management of a Laboratory, including the technical and administrative matters associated with the Laboratory's operation.

## (c) Signatories of Test Certificates and Reports

The main and reserve Signatories shall possess a sufficient standard of English to understand the requirements of soil and rock testing standards and HOKLAS documents.

They shall satisfy the minimum qualification and experience requirements given in either Option A, B or C below and shall also be a HOKLAS Approved Signatory for the prescribed soil tests included in Geospec 3:

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#### **Direct Entry**

#### Option A

Be in possession of an educational qualification acceptable to HKIE for Corporate Membership (Civil or Geotechnical Discipline) (Non-mature candidates), and have a minimum of five years of post-qualification civil or geotechnical engineering experience, with at least one year of experience in supervising the relevant types of soil and rock tests.

#### Option B

Be in possession of a Hong Kong polytechnic or technical institute Ordinary Certificate in Civil Engineering, or equivalent approved by Government, and have a minimum of seven years of post-qualification experience in construction materials testing, with at least two years in the relevant types of soil and rock tests, one year of which shall be in a supervisory role.

#### Option C

Be in possession of Grade E or above in five subjects including Physics, Mathematics and English (Syllabus B) in the Hong Kong Certificate of Education Examination (HKCEE), or equivalent approved by Government, and have a minimum of ten years of post-qualification experience in construction materials testing, with at least two years in the relevant types of soil and rock tests, one year of which shall be in a supervisory role.

#### 4. Technical Staff

All technical staff below shall satisfy the minimum qualifications and training requirements prescribed below. Staff competence will be assessed.

- (a) Senior Laboratory Technician (minimum 1 no.) responsible for organizing the testing operations
- (b) Laboratory Technicians (minimum 2 nos.) responsible for carrying out testing and reporting
- (c) Laboratory Assistants (minimum 2 nos.) responsible for simple tests under supervision
- (d) Semi-skilled Staff (adequate no.) responsible for assisting in all tests under supervision

## **Qualifications, Training and Experience Requirements:**

## (a) Senior Laboratory Technician

The person shall satisfy the minimum qualification and experience requirements given in either Option 1, 2 or 3 below:

## Option 1

Be a qualified Laboratory Technician (Option 1) as defined in 4(b) below, and have a minimum of three years of experience in construction materials testing, with at least two years in the relevant types of soil and rock tests. Records of such experience shall be certified as accurate by the Signatory.

## Option 2

Be a qualified Laboratory Technician (Option 2) as defined in 4(b) below, and have a minimum of six years of experience in construction materials testing, with at least two years in the relevant types of soil and rock tests. Records of such experience shall be certified as accurate by the Signatory.

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#### **Direct Entry**

#### Option 3

Be a qualified Laboratory Technician (Option 3) as defined in 4(b) below, and have a minimum of eight years of experience in construction materials testing, with at least two years in the relevant types of soil and rock tests. Records of such experience shall be certified as accurate by the Signatory.

#### (b) Laboratory Technicians

The persons shall satisfy the minimum qualification and experience requirements given under Option 1, 2 or 3 below:

#### Option 1

Be in possession of a Hong Kong polytechnic or technical institute Ordinary Certificate in Civil Engineering, or equivalent approved by Government, and have adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out.

#### Option 2

Be in possession of Grade E or above in five subjects including Physics, Mathematics and English (Syllabus B) in the Hong Kong Certificate of Education Examination (HKCEE), or equivalent approved by Government, and have adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out.

#### Option 3

Be a qualified Laboratory Assistant as defined in 4(c) below, in possession of Grade E or above in English (Syllabus B) in the Hong Kong Certificate of Education Examination, or equivalent approved by Government, and have a minimum of two years of post-qualification experience in the relevant types of tests and adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out. Records of such experience shall be certified as accurate by the supervising Senior Laboratory Technician or Signatory.

#### (c) Laboratory Assistants

The persons shall be able to read and understand the work instructions of the Laboratory and have adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out.

### (d) Semi-skilled Staff

The persons shall have adequate training in the operations required to be performed in the Laboratory.

## 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

The laboratory shall possess the following minimum numbers of major items of equipment:

Triaxial compression machines (6 nos.), triaxial cells and all accessories (12 nos.), oedometer cells (6 nos.), and direct shear machine (1 no.)

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### **Direct Entry**

#### 6. Office/Workshop Facilities

All applicants must possess or set up a place of business in Hong Kong. Laboratory set-up, equipment and accommodation will be audited and assessed.

#### 7. Training Facilities

Training records/competence log on technical staff are required.

#### 8. Others

The prescribed minimum numbers of management and technical staff shall be working full-time for the Laboratory. The Laboratory must have satisfactory accommodation and equipment to carry out the prescribed soil and rock tests to relevant testing standards. It must demonstrate that it continues to satisfy all the criteria through submission of documentary evidence and records, and during audit visits by Government representatives. It must also demonstrate satisfactory performance in proficiency testing arranged from time to time.

When applying to enter the List, the Laboratory shall provide copies of the following to the Government for assessment:

- (a) quality manuals (including test method manuals);
- (b) a test directory listing all soil and rock tests which the Laboratory can perform and the test methods (including the version of amendments to relevant test standards) adopted;
- (c) organization chart of the Laboratory;
- (d) a list of the names of the proposed main and reserve Signatories, Quality Manager and Laboratory Manager, and of the Laboratory's Technical Personnel, as well as curriculum vitae giving their qualifications and experience, together with self-declaration letters on their full-time employment status with the Laboratory;
- (e) a competence log sheet giving the tests/operations which each of the Technical Personnel is competent to perform/supervise;
- (f) a plan showing the layout and dimensions of the testing areas and sample storage and preparation areas of the Laboratory, with environment controls stated on it; and
- (g) a schedule giving the name of the manufacturer, model, identification marking, specification details of major equipment (including triaxial, direct shear, oedometer, CBR and point load tests equipment) and their calibration records required for carrying out the tests.

On acceptance on the List, whenever changes to any of the above items (including changes of staff) have taken place, the Laboratory shall provide updated copies of the item to the Government within one week of the change taking place. Also, in January and July each year, the Laboratory shall submit to the Government the latest organization chart of the Laboratory and a summary of the total number of tests carried out for each type of standard and non-standard tests in the preceding six months for both Government and other clients.

Government representatives may carry out quality or technical audits of the Laboratory at any time. The Laboratory shall provide every assistance to enable the audits to be carried out. During the audits, the Laboratory's records related to the tests carried out (including records of calibration and checking of equipment), as well as training records, internal audit records and proof of qualifications and experience of personnel may be examined. Laboratory Personnel may be interviewed and required to perform specific tests and calibrations in part or in full.

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Managing Department :	Architectural Services Department		
Works Category :	Space Frame Systems		Supplier / Specialist Contractor
<b>Brief Scope of Categor</b>	y:		
The scope of work in the the specified roof system		of the erection of the space frames, a	and the design in the case of modification to suit

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### **Direct Entry**

## 1. Job Experience

The system has been satisfactorily used in the past 5 years with good references.

# 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable.

# 3. Top Management\*(See Remarks on the end page of this Appendix)

The top management includes the agent's director.

#### 4. Technical Staff

Manufacturer's designer and site/erection supervisor.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

As required by the system.

### 6. Office/Workshop Facilities

The agent of the system must have a local office in Hong Kong and local representative is needed.

## 7. Training Facilities

Not Applicable.

#### 8. Others

Certified strength of nodal joints.

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Vorks Category : Class <u>I</u> :		Specialist Contractor
Brief Scope of Categ	gory/Class :	
The scope of work in	this category and class covers the guniting works for construction and/o	or repair of concrete highway structures.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in guniting works for the construction and/or repair of concrete highway structures in the past 3 years, each with a value of \$ 0.1 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

## 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Local skilled workforce in guniting.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Air compressor.
- b. Gunite machine with necessary accessories.
- c. Concrete breaking hammer (pneumatic/electric).
- d. Scabbling hammer.
- e. Spray machine with spray gun.
- f. Water jet pump.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information and method statements.

Satisfactory site demonstrations. The applicant is also required to demonstrate procedures for the treatment of corroded reinforcement prior to guniting.

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Vorks Category : lass <u>II</u> :	Specialized Operations for Highway Structures Waterproofing of Concrete Surfaces	Specialist Contractor
rief Scope of Catego	gory/Class:	
he scope of work in	this category and class covers the waterproofing of surfaces of concrete hi	ghway structures, e.g. footbridge roofs or the like.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in waterproofing of surfaces of concrete highway structures in the past 3 years, each with a value of \$ 0.2 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

## 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Local skilled workforce in waterproofing works.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

Equipment specified by the manufacturer of the proprietary waterproofing material.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information and method statements.

Satisfactory site demonstrations.

Works must comply with Section 20: Part 1 of the General Specification for Civil Engineering Works.

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Managing Department :	Highways Department	
Works Category : Class <u>III</u> :	Specialized Operations for Highway Structures Repair of Cracked Concrete by Resin Injection	Specialist Contractor
Brief Scope of Categor  The scope of work in th	y/Class: is category and class covers the resin injection for repair of cracks in structural concrete fo	or highway structures.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects involving resin injection for repair of cracks in structural concrete in the past 3 years, each with a value of \$15,000 or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

## 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management \*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Local workforce skilled in repair of concrete structures by resin injection.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Resin injection pump with pressure control.
- b. Mechanical mixer for resin.
- c. Air compressor.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information and method statements.

Satisfactory site demonstrations.

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Scope of Category	/Class:	
scope of work in thi	s category and class covers the non-destructive weld-testing of structura	l steelworks for highway structures.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in non-destructive weld-testing on structural steel works in the past 3 years, each with a value of \$ 0.1 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

# 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management \*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional and technical staff with relevant qualifications and experience in non-destructive testing of welds.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Penetrant (dye and fluorescent) flaw detection.
- b. Magnetic particle flaw detection.
- c. Radiological flaw detection, including dark room facilities.
- d. Ultrasonic flaw detection.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

 $Satisfactory\ technical\ information,\ method\ statements\ and\ fully\ documented\ quality\ assurance\ system.$ 

Satisfactory site demonstrations.

Works must comply with Clause 18.96(4) of the General Specification for Civil Engineering Works.

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<b>Managing Department:</b>	Highways Department	

Works Category : Specialized Operations for Highway Structures Specialist Contractor
Class V : Hot Dip Galvanising

# **Brief Scope of Category/Class:**

The scope of work in this category and class covers the hot dip galvanising of structural steelworks for highway structures.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in hot dip galvanising of structural steelworks in the past 3 years, each with a value of \$ 0.2 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

# 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Technical staff with relevant qualifications and experience.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Alkaline degreasing tank.
- b. Acid pickling tank.
- c. Rinsing tank.
- d. Fluxing tank.
- e. Drying tank.
- f. Zinc bath with temperature control.
- g. Water quenching/air cooling tank.
- h. Coating thickness gauge.
- i. Lifting cranes.
- j. Laboratory facilities for testing chemicals used in galvanising.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required. The applicant must possess a galvanising facility with the equipment listed above.

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## 7. Training Facilities

Not Applicable

### 8. Others

Satisfactory technical information, method statements and fully documented quality assurance system. Satisfactory demonstrations.

Works must comply with Clause 18.53 to 18.60 and 18.61(2) of the General Specification for Civil Engineering Works.

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<b>Managing Department:</b>	Architectural Services Department

Works Category: Steam and Compressed Air Installation Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of steam and compressed air installation including laundry equipment, boiler, steam distribution system, compressed air plant etc.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation		B. Confirmation	C. Direct Entry
I. Job Experience     General     (1) The applicant shall have adequate experience in type and size of work of the category, with satisfication quality of work compatible with Government states and	ctory (2)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and  This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	I. Job Experience     General     (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
(2) The applicant shall have adequate experience in contract management of work of the category, so and fully, including coordination with building contractor and other building services / electrical mechanical contractors; and		All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and  The scope of work for this contract must fulfill all the	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
(3) For job experience outside the HKSAR, evidence stipulated under para. 2.4.5 of the CMH must also produced to the satisfaction of the Secretary for t Environment, Transport and Works; otherwise, it not be considered as a valid job reference.	be e	following requirements:  (a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and  (b) The contract shall cover the nature of works as	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
Job Reference for Inspection (In addition to the above, job submitted by the applicant shall fulfill all requirem set out below; otherwise, it will not be considered as a job reference)	nts	described in the "Brief Scope of Category"; and  (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in one works order.	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
(4) The applicant shall submit at least 2 contracts, where completed within the past 3 years for site inspection; and	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stand	ige;	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
(6) These 2 contracts shall be direct contract, which signed between the applicant and the employer concerned project; and		Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(7) All statutory forms such as the Work Completion of an Installation) Certificate (i.e. Form WR1 (A) be issued under the name of the applicant; and		and fully, including contract management; and  (c) The party by which the applicant is awarded with the subcontract, and the upstream	(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
(8) The applicant shall be able to arrange joint site inspections for the government's examination of quality and workmanship of the submitted job reference within normal office hours; and	ne	contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the steam and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
(0)	TT1	6 16 1 64 2	compressed air installation contractor for the	(0)	
(9)		cope of work for each of these 2 contracts must all of the following requirements:	project work.	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(10)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the steam and compressed air installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the steam and compressed air installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the

A. Entry on Probation	B. Confirmation	C. Direct Entry
concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer		Qualified Engineer
Employ at least 1 no. qualified engineer (Mechanical or Building Services discipline) with adequate and relevant project management experience.		Employ at least 1 no. qualified engineer (Mechanical or Building Serviecs discipline) with adequate and relevant project management experience.
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades		Employ adequate nos. of craftsman in the following trades

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A. Entry on Probation	B. Confirmation	C. Direct Entry
(A) Mechanical Fitter  Minimum score required 20 marks Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks  (B) Electrician  Minimum score required 20 marks Qualified Electrician 20 marks		(A) Mechanical Fitter  Minimum score required 20 marks Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks  (B) Electrician Minimum score required 20 marks Qualified Electrician 20 marks
Intermediate Electrician 15 marks Ordinary Electrician 8 marks  Statutory Registration		Intermediate Electrician 15 marks Ordinary Electrician 8 marks  Statutory Registration
The applicant shall have staff meeting the following statutory registration requirements:		The applicant shall have staff meeting the following statutory registration requirements:  — Registered Electrical Worker (REW) registered
Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)  The REW can be the Qualified Engineer, Technical		under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)  The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.
Support Staff or Craftsman.  4. Plant and Equipment**(See Remarks on the end page of this Appendix)		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 28</b> for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 28</b> for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m <sup>2</sup> and the minimum workshop + storage area shall be 40 m <sup>2</sup> . Documentary evidence		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence
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A. Entry on Probation	B. Confirmation	C. Direct Entry
(e.g. purchase/lease agreement) to prove right of use shall be produced.		(e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.  Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department : <u>Highways Department</u>	
Works Category : <u>Structural Steelwork</u>	Specialist Contractor
Brief Scope of Category:  The scope of work in this category and class covers the fabrication and erection of structure.	ctural steelwork for highway structures.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory completion of at least 3 projects in the fabrication and erection of structural steelworks for permanent civil engineering or building structures in the past 3 years, each with a value of \$ 0.5 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

#### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

Not Applicable

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional and technical staff experienced in the design, fabrication and erection of structural steelwork.

Local workforce for erection of steelwork.

At least 3 qualified welders to BS 4570, BS EN287-1 or BS 4872: Part 1 as appropriate. Copies of their certificates are required.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Welding plant.
- b. Lifting crane.
- c. Drilling machine.
- d. Bending machine.
- e. Lathe.
- f. Shearing machine.
- g. Flame cutting machine.
- h. Plate rolling machine.
- i. Grit blasting equipment.
- j. Grinder.
- k. Planing, shaping and slotting machine.
- 1. Milling machine.
- m. Boring and surfacing machines.
- n. Oven/cabinet with drying facilities for storing electrodes.

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## **Direct Entry**

## 6. Office/Workshop Facilities

Local office in Hong Kong is required. Fabrication yard with the equipment listed above. The applicant may be required to arrange for a visit to the fabrication yard.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information, method statements and fully documented quality assurance and control system for fabrication and erection of steelwork. Works must comply with Section 18 of the General Specification for Civil Engineering Works.

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Works Category Class <u>I</u>	: <u>-</u>	Supply and Installation of Bearings for Highway Structures  Mechanical Bearings	Specialist Contractor
Brief Scope of Ca	tegory	y/Class:	
-		is category and class covers the supply and installation of mechanical bridge be and class for the supply and installation of a particular bearing proposed in the a	

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#### **Direct Entry**

### 1. Job Experience

Satisfactory performance of the bearing in service. A list of job references where the bearing has been installed, together with at least 3 references from the clients or maintenance authorities for projects completed in the past 3 years, must be submitted. The number of bearings installed in each project must not be less than 6. The applicant may be required to arrange site visits to verify the references.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the bearing shall be operating a quality management system certified by an internationally recognized certifying body.

# 3. Top Management \*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional and technical staff experienced in bridge design and installation of bearings.

Local workforce capable of installing the bearing. A mock-up installation may be required.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Equipment required for the installation of the bearing as specified by the manufacturer.
- b. Mechanical grout mixer.
- c. Mechanical grout pump.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information and method statements. The design, manufacture and installation must comply with Section 20: Part 2 of the General Specification for Civil Engineering Works and Section 9 of the Structures Design Manual for Highways and Railways. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the bearing and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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Managing Department:	Highways Department

<b>Works Category</b>	:	Supply and Installation of Bearings for Highway Structures	Specialist Contractor
Class II		Electomonia Despings	

# **Brief Scope of Category/Class:**

The scope of work in this category and class covers the supply and installation of elastomeric bridge bearings for highway structures. The applicant will be included in this category and class for the supply and installation of a particular bearing proposed in the application. The bearing must be a proprietary product.

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#### **Direct Entry**

### 1. Job Experience

Satisfactory performance of the bearing in service. A list of job references where the bearing has been installed, together with at least 3 references from the clients or maintenance authorities for projects completed in the past 3 years, must be submitted. The number of bearings installed in each project must not be less than 6. The applicant may be required to arrange site visits to verify the references.

### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the bearing shall be operating a quality management system certified by an internationally recognized certifying body.

# 3. Top Management \*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional and technical staff experienced in bridge design and installation of bearings. Local workforce capable of installing the bearing. A mock-up installation may be required.

# 5. Plant and Equipment \*\*(See Remarks on the end page of this Appendix)

- a. Equipment required for the installation of the bearing as specified by the manufacturer.
- b. Mechanical grout mixer.
- c. Mechanical grout pump.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

## 7. Training Facilities

Not Applicable

#### 8. Others

Satisfactory technical information and method statements. The design, manufacture and installation must comply with Section 20: Part 2 of the General Specification for Civil Engineering Works and Section 9 of the Structures Design Manual for Highways and Railways. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the bearing and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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Managing Department :	Highways Department

Works Category : <u>Supply and Installation of Expansion Joints for Highway Structures</u> Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers the supply and installation of expansion joints for vehicular bridges. The applicant will be included in this category for the supply and installation of a particular expansion joint proposed in the application. The expansion joint must be a proprietary product.

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### **Direct Entry**

#### 1. Job Experience

Satisfactory performance of the expansion joint in service. A list of job references where the expansion joint has been installed, together with at least 3 references from the clients or maintenance authorities for projects completed in the past 3 years, must be submitted. The number of expansion joints installed in each project must not be less than 3. The applicant may be required to arrange site visits to verify the references.

#### 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the expansion joint shall be operating a quality management system certified by an internationally recognized certifying body.

# 3. Top Management\*(See Remarks on the end page of this Appendix)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

#### 4. Technical Staff

Professional and technical staff experienced in bridge design and installation of expansion joints.

Local workforce capable of installing the expansion joint. A mock-up installation may be required.

# 5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)

- a. Equipment required for the installation of the expansion joint as specified by the manufacturer.
- b. Pneumatic breaker with compressor.
- c. Oven for melting binder.
- d. Welding equipment.
- e. Concrete vibrator.
- f. Mechanical mortar mixer.
- g. Generator.
- h. Concrete cutter.
- i. Gas burner.
- i. Air blower.

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

# 7. Training Facilities

Not Applicable

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### **Direct Entry**

#### 8. Others

Satisfactory technical information and method statements. The design, manufacture and installation must comply with Section 20: Part 4 of the General Specification for Civil Engineering Works and Section 11 of the Structures Design Manual for Highways and Railways. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted. The manufacturer for the expansion joint and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost. Trial installation on a private/Government work site may be required. For the latter case, the trial will be subject to the applicant accepting the liability for replacing the joint with an approved joint should the joint be found unsatisfactory. The assessment period of the trial is 12 months.

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Managing Department :	Water Supplies Department	
Works Category :	Supply and Installation of Pumpsets and Associated Pipework	Specialist Contractor
Brief Scope of Category The scope of work in the associated equipment	nis category covers the supply, fabrication, installation, testing, and delivery to site	e of pumpsets, pipework, fittings, valves and
	nary Status  with the criteria of 'Entry On Probation' will be admitted initially on probation plied with the criteria of 'Confirmation'. Contractors complying with the criteria	

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	A. Entry On Probation	B. Confirmation	C. Direct Entry
1.	Job Experience  Possess at least five years experience in the supply and installation of large pumping plant (with an input power requirement not less than 250kW), either in the capacity of a contractor or sub-contractor in private sector or Government contracts.  The contractor should either have an agency agreement with a reputable pump manufacturer or have a close-link relation with (such as a subsidiary company of) a contractor with sufficient experience in the supply and installation of large pumping plant (with an input power requirement over 500kW) for direct technical support and services.	Satisfactory completion of one contract without any adverse report for the duration (including the maintenance period) of the contract. The contract should consist of at least a large pumpset with an input power of 500 kW.	Possess at least five years experience in the supply and installation of large pumping plant (with an input power requirement of 500kW and over), either in the capacity of a contractor or sub-contractor in private sector or Government contracts.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		
	Not Applicable	Not Applicable	Not Applicable
3.	Top Management *(See Remarks on the end page of this Appendix) At least one of the managers and professional staff should possess minimum qualification of corporate membership of a recognized professional institution in mechanical engineering discipline i.e. MIMechE, MHKIE or equivalent with relevant experience.	The contractor can provide proof that the company's management capabilities remain the same or have become better than that at the time when the company was admitted to the List on probation.	At least one of the managers and professional staff should possess minimum qualification of corporate membership of a recognized professional institution in mechanical engineering discipline i.e. MIMechE, MHKIE or equivalent with relevant experience.
4.	Technical Staff Minimum of three qualified technical and supervisory persons as well as 10 tradesmen/workers. The technical and supervisory staff should possess minimum qualification of Higher Certificate in Mechanical Engineering or equivalent with at least five years relevant experience.	The contractor can provide proof that the company's technical capabilities remain the same or have become better than that at the time when the company was admitted to the List on probation.	Minimum of three qualified technical and supervisory persons as well as 10 tradesmen/workers. The technical and supervisory staff should possess minimum qualification of Higher Certificate in Mechanical Engineering or equivalent with at least five years relevant experience.

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	A. Entry On Probation	B. Confirmation	C. Direct Entry
5.	Plant and Equipment**(See Remarks on the end page of this Appendix) Not Applicable	Not Applicable	Not Applicable
6.	Office/Workshop facilities A workshop in Hong Kong furnished with the necessary tools, specialised equipment and other supporting facilities.	The contractor can provide proof that the company's workshop facilities remain the same or have become better than that at the time when the company was admitted to the List on probation.	A workshop in Hong Kong furnished with the necessary tools, specialised equipment and other supporting facilities.
7.	Training Facilities Not Applicable	Not Applicable	Not Applicable
8.	Others The Contractor should provide full details of the equipment supplied and installed under previous contracts to demonstrate his capability of complying with WSD's standard technical specification.	The Contractor should provide full details of the equipment supplied and installed under previous contracts to demonstrate his capability of complying with WSD's standard technical specification.	The Contractor should provide full details of the equipment supplied and installed under previous contracts to demonstrate his capability of complying with WSD's standard technical specification.

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Managing Department :	Water Supplies Department

**Works Category** : Supply and Installation of Water Treatment Plant

**Specialist Contractor** 

## **Brief Scope of Category:**

The scope of work in this category covers the design, manufacture and installation of water treatment plant in public supply systems for treating raw water to potable standard acceptable to the Water Supplies Department and for processing water treating effluent to a quality acceptable for disposal.

# **Definition of Probationary Status**

Except in the most exceptional circumstances, a contractor will be admitted initially on probation.

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A. Entry On Probation	B. Confirmation
1. Job Experience  The applicant should possess a minimum of 10 years experience in the design, manufacture and installation of water treatment plant in public supply systems for treating raw water to potable standard acceptable to the Water Supplies Department and for processing water treatment effluent to a quality acceptable for disposal. Also, they should have completed successfully 2 water treatment works each of capacity at least 150 Mld in the past 10 years.	The probationary contractor has satisfactorily completed one contract and he has not received any adverse report for the duration (including the maintenance period) of the contract.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Not Applicable	Not Applicable
3. Top Management*(See Remarks on the end page of this Appendix) Not Applicable	Not Applicable
<b>4. Technical Staff</b> The applicant should have an established organization comprising qualified professional and technical staff from Civil, Electrical, Mechanical and Chemical Engineering fields with at least 5 years relevant experience.	see item (8)
5. Plant and Equipment**(See Remarks on the end page of this Appendix) Not Applicable	Not Applicable
<b>6. Office/Workshop Facilities</b> The applicant should have local supporting workshop facilities and allow inspection of such facilities by Government representatives.	see item (8)
7. Training Facilities Not Applicable	Not Applicable
<b>8. Others</b> The applicant should have at least 3 years trading record with manufacturers who are able to supply specialized materials and equipment for the work and provide him with technical support when required.	The probationary contractor can provide proof that the company's financial, technical and management capabilities have remained the same or have become better than the time when he was admitted on the List on probation.

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Managing Department: Highways Department

Works Category: Supply of Bituminous Pavement Materials and Construction of

**Supplier / Specialist Contractor** 

**Special Bituminous Surfacing** 

## **Brief Scope of Category:**

The scope of work in this category covers the supply of the bituminous pavement materials and the laying of the special bituminous surfacing as described in Works Branch Technical Circular No. 17/96.

## **Definition of Probationary Status**

The probation period is 2 years. The probationary contractor will be assessed at the end of the probationary period on the basis of capability and performance locally to determine whether the contractor is eligible to be confirmed, or remains as a probationary contractor, or is required to be removed from the List.

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B. Confirmation	C. Direct Entry
The probationary contractor will be assessed at the end of the probationary period on the basis of capability and performance locally. The requirements are the same as those required for "Direct Entry".	Satisfactory completion of at least 3 projects in supply of bituminous pavement materials and construction of special bituminous surfacing in the past 3 years, demonstrating adequate management and technical support for a general supply of bituminous pavement materials to the local market. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.
	Not Applicable
	Not Applicable
	Professional, technical staff and work force experienced in the supply of bituminous pavement materials and construction of special bituminous surfacing.
	<ul> <li>Adequate equipment required:</li> <li>a. Mixing plant having at least four separate cold feed bins, four hot storage bins, a rotary drum dryer, temperature monitoring devices, and sampling devices for taking samples of hot aggregates, fillers and bitumen before mixing.</li> <li>b. Heating and storage tank fitted with circulating pumps and thermostatically controlled heaters for bitumen.</li> <li>c. Heating and storage tank fitted with high shear mixer for pre-blended type of modified binder.</li> <li>d. Insulated surge bin fitted with heating devices to maintain temperature of the hot-mix.</li> </ul>
	The probationary contractor will be assessed at the end of the probationary period on the basis of capability and performance locally. The requirements are the same as those required

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A. Entry On Probation	B. Confirmation	C. Direct Entry
e. Measuring and weighing equipment for batching.	D. Commination	e. Measuring and weighing equipment for batching.
f. Vehicles for transportation of bituminous materials.		f. Vehicles for transportation of bituminous materials.
g. Self-propelled paving machine with a screw auger and attached screed.		g. Self-propelled paving machine with a screw auger and attached screed.
h. Smooth three-wheeled steel-wheeled roller with a mass of between 6 tonnes and 12 tonnes or vibratory tandem steel-wheeled roller with an effective mass of between 6 tonnes and 12 tonnes.		h. Smooth three-wheeled steel-wheeled roller with a mass of between 6 tonnes and 12 tonnes or vibratory tandem steel-wheeled roller with an effective mass of between 6 tonnes and 12 tonnes.
<ol> <li>Smooth pneumatic tyred-roller with a mass of between 12 tonnes and 25 tonnes, and with not less than seven overlapping wheels.</li> </ol>		i. Smooth pneumatic tyred-roller with a mass of between 12 tonnes and 25 tonnes, and with not less than seven overlapping wheels.
j. Tack coat spraying machine.		j. Tack coat spraying machine.
k. Mechanical rammers, vibrating plates and hand-tools for compaction work.		k. Mechanical rammers, vibrating plates and hand-tools for compaction work.
Equipment for testing related to the production and laying of bituminous materials.		Equipment for testing related to the production and laying of bituminous materials.
6. Office/Workshop Facilities Not Applicable		Not Applicable
7. Training Facilities Not Applicable		Not Applicable
8. Others		
a. Satisfactory technical information and method statements. Works including the design mix and details of composition of the materials must comply with Section 9 of General Specification for Civil Engineering Works and/or other specified requirements. Other equivalent national standards may be considered in lieu of the standards referred to in the Specifications.		a. Satisfactory technical information and method statements. Works including the design mix and details of composition of the materials must comply with Section 9 of General Specification for Civil Engineering Works and/or other specified requirements. Other equivalent national standards may be considered in lieu of the standards referred to in the Specifications

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A. Entry On Probation	B. Confirmation	C. Direct Entry
<ul> <li>b. Acceptable manufacturing details of the bituminous pavement material and quality control procedure during manufacture. The applicant is also required to arrange visits to inspect the facilities where the bituminous pavement material is manufactured. Where such facilities are overseas and if it is not practical to carry out an inspection, the applicant may be required to arrange for an independent report on these aspects at his own cost.</li> <li>c. Satisfactory site demonstration in construction of special bituminous surfacing to demonstrate that the techniques and workmanship comply with the specified requirements.</li> <li>d. Proof of meeting building requirements and showing the proper land use of the bituminous material mixing plant from Buildings Department, Lands Department and Planning Department are required.</li> <li>e. The applicant must also meet the environmental requirements of Environmental Protection Department for the production of bituminous materials.</li> </ul>		<ul> <li>b. Acceptable manufacturing details of the bituminous pavement material and quality control procedure during manufacture. The applicant is also required to arrange visits to inspect the facilities where the bituminous pavement material is manufactured. Where such facilities are overseas and if it is not practical to carry out an inspection, the applicant may be required to arrange for an independent report on these aspects at his own cost.</li> <li>c. Satisfactory site demonstration in construction of special bituminous surfacing to demonstrate that the techniques and workmanship comply with the specified requirements.</li> <li>d. Proof of meeting building requirements and showing the proper land use of the bituminous material mixing plant from Buildings Department, Lands Department and Planning Department are required.</li> <li>e. The applicant must also meet the environmental requirements of Environmental Protection Department for the production of bituminous materials.</li> </ul>

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**Managing Department:** Architectural Services Department

Works Category: Survey of Government Land Pressure Receivers subject to Steam and Air

**Specialist Contractor** 

**Pressure (but excluding Steam Boilers)** 

## **Brief Scope of Category:**

The scope of work in this category covers the carrying out of examination and test to ensure that the pressure vessels are in safe working order and comply with the Boiler and Pressure Vessels Ordinance, Cap. 56.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and the surveys should preferably be of various types and classes as mentioned in the Boilers and Pressure Vessels (Forms) Order; and
		(2) The applicant shall provide documentary evidence to substantiate experience, such as copies of the Certificate of Fitness of the inspected vessels signed by a Qualified Boiler Inspector or Qualified Air Receiver Inspector of the applicant, contract agreement, correspondence etc.; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference; and
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 5 surveys, which were completed within the past 3 years for site inspection; and
		(5) At least 2 of the above 5 surveys shall be completed within the past 12 months or at final stage; and
		(6) The applicant shall be able to arrange joint site inspections for the government's examination of the quality of the submitted job reference within normal office hours; and
		(7) The scope of work for each of these 5 surveys shall cover the nature of works as described in the "Brief Scope of Category".

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		2. Technical Staff (See Annex 1 for definition of Staff Qualification)  Technical Support Staff
		Employ adequate nos. of inspectors with adequate and relevant academic qualification and working experience.
		Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Qualified Boiler Inspector (QBI) appointed as Boiler Inspector under the Boilers and Pressure Vessels Ordinance Cap. 56 and holding the Certificate of Competency in respect of all classes and types of boilers mentioned in the Boilers and Pressure Vessel (Forms) Order, with appointment not having been suspended - 1 no. (minimum); OR</li> <li>Qualified Air Receiver Inspector (QARI) appointed as Air Receiver Inspector under the Boilers and Pressure Vessels Ordinance Cap. 56 and holding the Certificate of Competency in respect of all classes and types of air receiver mentioned in the Boilers and Pressure Vessels (Forms) Order, with appointment not having been suspended - 1 no. (minimum).</li> </ul>
		Documentary proof of the registration issued by the Boiler and Pressure Vessel Authority should be provided.
		3. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate nos. of calibrated testing instruments and equipment/tools for carrying out examination and test; valid calibration certificates for testing instruments/equipment shall be available. Refer to Annex 29 for list of typical equipment, tools and testing instruments required.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 20 m² and the minimum workshop + storage area shall be 20 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Managing Department:	Architectural Services Department	
Works Category:	Survey of Government Land Steam Boilers	Specialist Contractor
<b>Brief Scope of Category</b>	:	
The scope of work in this Boiler and Pressure Vesse		re that steam boilers are in safe working order and comply with the

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and the surveys should preferably be of various types and classes as mentioned in the Boilers and Pressure Vessels (Forms) Order; and
		(2) The applicant shall provide documentary evidence to substantiate experience, such as copies of the Certificate of Fitness of the inspected vessels signed by a Qualified Boiler Inspector of the applicant, contract agreement, correspondence etc.; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 5 surveys, which were completed within the past 3 years for site inspection; and
		(5) At least 2 of the above 5 surveys shall be completed within the past 12 months or at final stage; and
		(6) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours.
		(7) The scope of work for each of these 5 surveys shall cover the nature of works as described in the "Brief Scope of Category".

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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation		<ul> <li>2. Technical Staff (See Annex 1 for definition of Staff Qualification)</li> <li>Technical Support Staff</li> <li>Employ adequate nos. of inspectors with adequate and relevant academic qualification and working experience.</li> <li>Statutory Registration</li> <li>The applicant shall have staff meeting the following statutory registration requirements:  — Qualified Boiler Inspector (QBI) appointed as Boiler Inspector under the Boilers and Pressure Vessels Ordinance Cap. 56 and holding the Certificate of Competency in respect of all classes and types of boilers mentioned in the Boilers and Pressure Vessel (Forms) Order, with appointment not having been suspended – 1 no. (minimum)</li> <li>Documentary proof of the registration issued by the Boiler and Pressure Vessel Authority should be provided.</li> <li>3. Plant and Equipment**(See Remarks on the end page of this Appendix)</li> </ul>
		Adequate nos. of calibrated testing instruments and equipment/tools for carrying out examination and test; valid calibration certificates for testing instruments/equipment shall be available. Refer <b>Annex 30</b> for list of typical equipment, tools and testing instruments required.
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 20 m <sup>2</sup> and the minimum workshop

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		+ storage area shall be 20 m <sup>2</sup> . Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Managing Department:	Architectural Services Department	
Works Category:	Survey of Lifting Appliances and Lifting Gear	Specialist Contractor
<b>Brief Scope of Category</b>	<b>:</b>	
	category covers the carrying out of examination and test to ensure that lifting appliance ories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations.	ces and lifting gears are in safe working order

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and the surveys must be relevant and should preferably for various types of lifting appliances and lifting gear. Both thorough examination and proof load test should be included in the job records. Also at least one survey should be for crane with automatic safe load indicator.
		(2) The applicant shall provide documentary evidence to substantiate experience, such as copies of the certificate of test and thorough examination issued after the survey in the approved format under the Regulations signed by the Qualified Competent Examiner should be produced for inspection; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall have at least 5 surveys, which were completed within past 3 years for site inspection; and
		(5) At least 2 of the above 5 surveys shall be completed within the past 12 months or at final stage; and
		(6) The applicant shall be able to arrange joint site inspections for the government's examination of the quality of the submitted job reference within normal office hours; and
		(7) The scope of work for each of these 5 surveys shall cover the nature of works as described in the "Brief Scope of Category".

A. Entry on Probation	B. Confirmation	C. Direct Entry
		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of inspectors with adequate and relevant academic qualification and working experience.
		Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements:
		<ul> <li>Qualified Competent Examiner (QCE) for lifting appliances and lifting gear in accordance with the Factory and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations Cap 59J (hereinafter referred to as the Regulations). The Competent Examiner should be a Registered Professional Engineer registered under the Engineers Registration Ordinance within the Mechanical or Marine discipline – 1 no. (minimum).</li> </ul>
		Documentary proof of the registration issued by the Engineers Registration Board should be provided.
		3. Plant and Equipment**(See Remarks on the end page of this
		Adequate nos. of calibrated testing instruments and equipment/tools for carrying out examination and test; valid calibration certificates for testing instruments/equipment shall be available. Refer <b>Annex 31</b> for list of typical equipment, tools and testing instruments required.
		4. Office/Workshop Facilities
		Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 20 m² and the minimum workshop + storage area shall be 20 m². Documentary evidence

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the Specialist List	Confirmation and Promotion of Contractors for	Minimum Technical & Management Criteria for Admission
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(e.g. purchase/lease agreement) to prove right of use shall be produced.

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<b>Managing Department:</b>	Architectural Services Department
	Architectural Services Department

Works Category: Swimming Pool Water Treatment Installation Specialist Contractor

## **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of equipment, piping and fittings for water treatment and distribution of swimming pool such as water circulation, pH control, chemical treatment, sterilization, disinfection, leisure pool, hydrotherapy pool, pool lighting installation, etc.

Definition of Probationary Status<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$34 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

	A. Entry on Probation		B. Confirmation	C. Direct Entry
1. Jo	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory	(1)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and  This contract shall be direct contract, which was signed	Not Applicable.
	quality of work compatible with Government standard; and		between the applicant and the employer of the concerned project; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and	(3)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
(3)	mechanical contractors; and  For job experience outside the HKSAR, evidences as	(4)	The scope of work for this contract must fulfill all the following requirements:	
	stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.		(a) Contract value of the work related to the category under application for confirmation exceeds \$5M; and	
job s	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	
job 1 (4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site		(c) If the contract is a term contract, all of the above requirements 4 (a) to 4 (b) shall be fulfilled in one works order.	
(5)	inspection; and  At least one of the above 2 contracts shall be completed within the past 12 months or at final stage;	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
(7)	concerned project; and  All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
(8)	be issued under the name of the applicant; and  The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the	

	A. Entry on Probation	B. Confirmation	C. Direct Entry
(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:	concerned project, all shall not be the swimming pool water treatment installation contractor for the project work.	
	(a) Contract value of the work related to the category under application for inclusion exceeds \$10M; and		
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".		
(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:		
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and		
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the swimming pool water treatment installation contractor for the project work; and		
	(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and		
	(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the		

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A. Entry on Probation	B. Confirmation	C. Direct Entry
concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		
Statutory Registration		
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		
Qualified Engineer		
Employ at least 1 no. qualified engineer (Mechanical and Building Services discipline) with adequate and relevant professional and project management experience.		
Technical Support Staff		
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.		
<u>Craftsman</u>		
Employ adequate nos. of craftsman in the following trades		

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A. Entry on Probation	B. Confirmation	C. Direct Entry
(A) Plumber/BS Mechanic Minimum score required Qualified Plumber/BS Mechanic Intermediate Plumber/BS Mechanic Ordinary Plumber/BS Mechanic 8 marks		
(B) Electrician Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks		
Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:		
<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 – 1 no. (minimum)</li> <li>Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 - 1 no. (minimum)</li> </ul>		
The LP or REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		
Qualified Welder		
Employ adequate nos. of Qualified Welder (QW)		
QW 1 no.		
The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.		
4. Plant and Equipment**(See Remarks on the end page of this Appendix)		
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation,		

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A. Entry on Probation	B. Confirmation	C. Direct Entry
operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to <b>Annex 32</b> for list of typical equipment/tools and testing instruments required.		
5. Office/Workshop Facilities		
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 30 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		

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Managing Department :	Highways Department	
Works Category :	Transparent Panels for Noise Barriers on Highways  [formerly named as "Prefabricated Architectural Walls and Finishes (Screens, Sound Barriers and Retaining Walls)"]	Supplier
Brief Scope of Categor	ry:	
and acoustic properties	is category covers the supply of transparent panels for noise barriers on highways. The and proven performance and durability. They shall functionally and aesthetically thereform safely in fire and traffic accidents and satisfactorily in glare reduction.	

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#### **Direct Entry**

### 1. Job Experience

The transparent panels shall have successfully performed in at least 1 project for noise barriers on highways or similar works in Hong Kong in the past 3 years, each with a value of \$0.5M or more. References on these projects from consulting engineer (architects or clients if there is no consulting engineer) must be submitted, which may be verified by site visits.

## 2. Registration with relevant authorities in Hong Kong (such as ISO9000 Certification, Building Authority etc.)

The transparent panels shall be manufactured under a quality management system certified by an internationally recognized certifying body.

# $\textbf{3.} \qquad \textbf{Top Management}^{*(See\ Remarks\ on\ the\ end\ page\ of\ this\ Appendix)}$

Top management shall possess relevant technical and managerial experience in the design and construction of noise barriers on highways.

#### 4. Technical Staff

Professional and technical staff experienced in the design and construction of noise barriers on highways are required.

# $\textbf{5.} \qquad \textbf{Plant and Equipment}^{**(See\ Remarks\ on\ the\ end\ page\ of\ this\ Appendix)}$

Not Applicable

## 6. Office/Workshop Facilities

Local office in Hong Kong is required.

# 7. Training Facilities

Not Applicable

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### **Direct Entry**

#### 8. Others

Satisfactory technical information, including testing reports from independent organizations, shall be submitted, to demonstrate that the transparent panels and their any accessories shall meet the principles and considerations given in the Bridges & Structures Division Practice Note No. BSTR/PN/003 – Noise Barriers with Transparent Panels, issued by the Highways Department or equivalent national standards.

The materials to be approved shall possess acceptable application history of at least 5 years in weathering conditions similar to Hong Kong climate, and be subject to a 10-year performance warranty.

Note: The Bridges & Structures Division Practice Note No. BSTR/PN/003 referred to in item 8 above is available on Highways Department's website at http://www.hyd.gov.hk.

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Managing Department: <u>Architectural Services Department</u>

Works Category : <u>Turn-key Interior Design & Fitting-out Works</u> Specialist Contractor

Group I
Group II
Eligible to be awarded one contract at any one time as a Trade Test.
Eligible to be awarded more than one contract at any one time.

**Brief Scope of Category:** 

The scope of work in this category covers the design and fitting-out works for Government department/bureaux.

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	Group I	Group II
	A. Direct Entry	A. Direct Entry
1.	<b>Job Experience</b> At least 3 major local projects in design and fitting-out works of value above \$5M completed in the past 5 years and one of which shall exceed \$15M.	Not Applicable
	Registration with relevant authorities in Hong Kong (such as Quality magement System Certification, Building Authority etc.) The applicant must be an approved contractor under Buildings category in the List of Approved Contractors for Public Works.	
	Top Management*(See Remarks on the end page of this Appendix) t Applicable	
4.	Technical STaff At least one qualified Architectural and Interior Designer (AP - List of Architects); one qualified Structural Engineer (RSE); one qualified Building Services Engineer as BS Coordinator (CIBSE or HKIE (BS)); one qualified contract manager with at least ten years' management experience in construction industry (Ordinary Certificate in Building Studies); four foremen each with at least five years' experience in construction industry; six carpenters/skill workers; three qualified quantity surveying staff (Ordinary Certificate in Building Studies); four accounting staff	
5.	Plant and Equipment**(See Remarks on the end page of this Appendix) Not Applicable	
6.	Office/Workshop Facilities A design office and workshop suitable for the nature of work. Local office and local workshop in Hong Kong are required.	
7.	Training Facilities Not Applicable	
8.	Others - supporting facilities from suppliers/ manufacturers/agents - regular sub-contractors	

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Group I	Group II	
•	B. Entry by Promotion	
	1. Job Experience	
	(1) Satisfactory completion of the Trade Test (satisfactory completion of at least one ArchS contract or 1st tier sub-contract under this Works Category within the past 5 years and of value above \$10M) and have good result in the full Performance Assessment	
	(2) Sub-contract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	
	(a) The sub-contract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b) The applicant shall have undertaken the full scope of work covered in the sub-contract, solely and fully, including contract management. In other words, the applicant shall not further sublet the whole sub-contract; and	
	(c) The sub-contract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be supported by all the relevant upstream contracting parties including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the sub-contract; and	
	(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	

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2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The applicant must be an approved contractor under Buildings category in the List of Approved Contractors for Public Works.

3. Top Management\*\*(See Remarks on the end page of this Appendix)

Not Applicable

#### 4. Technical Staff

At least one qualified Architectural and Interior Designer (AP - List of Architects); one qualified Structural Engineer (RSE); one qualified Building Services Engineer as BS Coordinator (CIBSE or HKIE (BS)); one qualified contract manager with at least ten years' management experience in construction industry (Ordinary Certificate in Building Studies); four foremen each with at least five years' experience in construction industry; six carpenters/skill workers; three qualified quantity surveying staff (Ordinary Certificate in Building Studies); four accounting staff

5. Plant and Equipment\*\*(See Remarks on the end page of this Appendix)
Not Applicable

## 6. Office/Workshop Facilities

A design office and workshop suitable for the nature of work

# 7. Training Facilities

Not Applicable

#### 8. Others

- supporting facilities from suppliers/ manufacturers/agents
- regular sub-contractors

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<b>Managing Department</b>	: Architectural Services Department	
Works Category:	Uninterruptible Power Supply Installation	Specialist Contractor
Brief Scope of Catego	ry:	
_	nis category covers the supply, installation and maintenance of stati , control and monitoring accessories, which are mainly deployed to	c-type, uninterruptible power supply (UPS) systems together with support computer operations.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		General
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
		(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and
		(b) The UPS rating in at least one of the above 2 contracts should be of 80kVA or above; and
		(c) The contract shall cover the nature of works as described in the "Brief Scope of Category".
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the uninterruptible power supply system contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing

A. Entry on Probation	B. Confirmation	C. Direct Entry
· · ·		Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
		Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements:

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		<ul> <li>Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 – 1 no. (minimum)</li> </ul>
		The REW can be the Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer <b>Annex 33</b> for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		6. Others
		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Architectural Services Department Architectural Services Department	<b>Managing Department:</b>	Architectural Services Department
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Works Category: Video Electronics Installation Specialist Contractor

# **Brief Scope of Category:**

The scope of work in this category covers the supply, installation and maintenance of video cassette recorder, video camera, monitor etc. commonly used for closed circuit TV system, video recording/display system and visual system at different venues.

**Definition of Probationary Status**<sup>#</sup> (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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<sup>\*</sup> See Remarks (1) on the end page of this Appendix.

A. Entry on Probation	B. Confirmation	C. Direct Entry
I. Job Experience     General     (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory	(1) The applicant has satisfactorily completed, within the	I. Job Experience     General     (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory
quality of work compatible with Government standard; and	between the applicant and the employer of the concerned project; and	quality of work compatible with Government standard; and
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	<ul> <li>(3) The scope of work for this contract must fulfill all the following requirements:</li> <li>(a) Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and</li> </ul>	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	<ul> <li>(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and</li> <li>(c) If the contract is a term contract, all of the above requirements 3 (a) and 3 (b) shall be fulfilled in</li> </ul>	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	one works order.  (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage.	Category" covered in the main contract; and  (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and fully, including contract management; and  (c) The party by which the applicant is awarded	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the video	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
<ul><li>(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:</li><li>(a) Contract value of the work related to the</li></ul>	electronics installation contractor for the project work.	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:

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A. Entry on Probation	B. Confirmation	C. Direct Entry
category under application for inclusion exc \$0.2M; and  (b) The contract shall cover the nature of works described in the "Brief Scope of Category".		(a) Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and
(9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:		(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".  Subcontract will not be considered as valid job reference unless it can satisfy all of the following
<ul> <li>(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and</li> <li>(b) The applicant shall have undertaken the full</li> </ul>		requirements, in addition to all the above stated requirements:  (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
scope of work covered in the subcontract, so and fully, including contract management; a  (c) The party by which the applicant is awarded the subcontract, and the upstream contraction	d vith	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
parties up to and including the main contract which is the company awarded with the direcontract by the employer of the concerned project, all shall not be the video electronics installation contractor for the project work;	or, et	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the video
(d) The applicant must present documentary evidence to prove the above requirements at met and such evidence must be substantiated all the relevant upstream contracting parties mentioned at (c) above including letters from them, which must be signed by their authors signatories to confirm that the applicant has the above requirements in the subcontract; a	by cas a case of the case of t	electronics installation contractor for the project work; and  (d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from
(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabi from the employer, the relevant parties of the	ties	them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and  (e) Notwithstanding the above, the Managing
concerned project and other sources or confirmation on the authenticity of the prooprovided by the applicant from the relevant parties of the concerned project.		Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant

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Γ	A. Entry on Probation	B. Confirmation	C. Direct Entry
	· ·		parties of the concerned project.
2	. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Statutory Registration		Statutory Registration
	The applicant shall be a Licensed Security Company engaged in Type III Security Work under Security and Guarding Services Ordinance, Cap. 460 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Licensed Security Company engaged in Type III Security Work under Security and Guarding Services Ordinance, Cap. 460 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3	. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Technical Support Staff		Technical Support Staff
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
	Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
	<u>Craftsman</u>		<u>Craftsman</u>
	Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
	Statutory Registration		Statutory Registration
	The applicant shall have staff meeting the following statutory registration requirements:		The applicant shall have staff meeting the following statutory registration requirements:
	<ul> <li>Security Personnel (SP) holding Security Personnel Permit (Cat. D) issued under Security and Guarding Services Ordinance, Cap 460 – 1 no. (minimum)</li> </ul>		<ul> <li>Security Personnel (SP) holding Security Personnel Permit (Cat. D) issued under Security and Guarding Services Ordinance, Cap 460 – 1 no. (minimum)</li> </ul>

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A. Entry on Probation	B. Confirmation	C. Direct Entry
The SP can be the Technical Support Staff or Craftsman.		The SP can be the Technical Support Staff or Craftsman.
4. Plant and Equipment**(See Remarks on the end page of this Appendix)		4. Plant and Equipment**(See Remarks on the end page of this Appendix)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer to Annex 34 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.  Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 34 for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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### Remarks:

- \* Top management shall be the President, Chairman, Director, Managing Director, Executive Director or General Manager etc.
- \*\* The plant and equipment requirements are subject to modification as technology advances and as new plant emerges. Furthermore, the type of materials and method of application that the contractors select will dictate the plant required.
- (1) The outstanding value instead of the total value of works is to be used for checking compliance with the tender limits for probationary contractors. The outstanding value of works in an existing contract shall be the difference between the original contract sum and the aggregate of all payments certified under the contract up to and including the date set for the close of tender or, if this has been extended, the extended date for the contract being procured. The outstanding value shall be taken as zero if the original contract sum is less than the aggregate of all payments certified.
- (2) The new tender/contract limits effective as from 17 July 2009 will not affect the group limits and the minimum contract value referred to in the contract experience requirement set out in this Appendix for assessing applications for admission, confirmation or promotion of contractors in the relevant categories, groups and status of the Specialist List until further notice.

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