**Guide for Consultant Employed by the Applicant of the EV-charging at Home Subsidy Scheme (“EHSS”) for the Design of Electric Vehicle Charging-Enabling Infrastructure (“EVCEI”) and Associated Installations in the Car Park**

**Part A: Feasibility Assessment**

**Introduction**

1. According to paragraph 8.4 of the “EHSS – Application Notes” issued by the Environmental Protection Department (“EPD”), the consultant employed by the applicant shall carry out a feasibility assessment of installation of EVCEI in the car park, including assessment of coverage of parking spaces, technical feasibility of the installation works, and the need to upgrade power supply capacity.
2. The consultant shall also provide the estimated cost of the installation works to the applicant for consideration.
3. A sample of feasibility assessment is shown in Part B of this Guide. The feasibility assessment is aimed to give a better understanding of the preliminary design and proposed works of the EVCEI in facilitating EPD’s approval prior to performing the tendering exercise for employment of a contractor under the EHSS.
4. The feasibility assessment must be issued by the consultant’s Registered Professional Engineer (“RPE”) and agreed by the applicant of the EHSS. The Part B of this Guide should be completed and submitted together with the duly signed Part C of this Guide on confirmation of the feasibility assessment as well as the project cost estimation to the EPD for record purpose before proceeding to the detailed design and works specifications.

[Restricted: Do not disclose and upload the completed Part A to F of this document on the EHSS E-Tendering Platform during the tendering exercise, including the feasibility assessment, project cost estimation and project checklist, etc.]

*Updated in November 2021 (Version 3)*

**Part B: Sample Feasibility Assessment**

**Feasibility Assessment on the Electric Vehicle Charging-Enabling Infrastructure (“EVCEI”) and Associated Installations under**

**the EV-charging at Home Subsidy Scheme (“EHSS”)**

|  |  |
| --- | --- |
| **Consultant** |  |
| Name of Consultant: |  |
| Name of Contact Person: |  |
| Contact no.: |  |
| E-mail address: |  |
|  |  |
| **Applicant of the EHSS** |  |
| Name of Applicant: |  |
| Name of Car Park: |  |
| Address of Car Park: |  |
| Name of Contact Person: |  |
| Contact no.: |  |
| E-mail address: |  |

1. **Power Supply in the Project**

|  |  |
| --- | --- |
| 1. The total number of eligible parking spaces covered in the approved application under the EHSS | \_\_\_\_\_\_\_\_ Nos |
| 1. The total number of eligible parking spaces covered in the assessment under the EHSS | \_\_\_\_\_\_\_\_ Nos |
| 1. The total power supply capacity required for the electric vehicle charging-enabling infrastructure (“EVCEI”) | \_\_\_\_\_\_\_\_ kVA |
| 1. The total number of transformers involved in designing the EVCEI | \_\_\_\_\_\_\_\_ Nos |
| 1. The total number of low voltage (LV) cutouts involved in designing the EVCEI 2. **Proposal and Undertaking by the Consultant** | \_\_\_\_\_\_\_\_ Nos |
| 1. liaise with the power company for issues relating to the power supply and electrical installation works. | (Yes / No) |
| 1. liaise with the power company for determining the location(s) of meter boards for installation of electric meters and accessories. | (Yes / No) |
| 1. propose method statements and work plans for the alteration and addition works (“A&A works”) for the switch room and / or transformer room and details of fixed installations required and associated builder’s works, if needed. | (Yes / No /  Not required) |
| 1. propose method statements and work plans for power system upgrading works, if needed. | (Yes / No /  Not required) |
| 1. propose any underground excavation works in the car park and the development, if needed. | (Yes / No /  Not required) |
| 1. propose the location(s) of busbar chambers, distribution boards, electric meters, cabinets or any installations required outside the switch room(s). | (Yes / No /  Not required) |
| 1. propose method statements for installation of EVs charging for “island” or stand-alone parking spaces and outdoor parking spaces without nearby vertical permanent structures for mounting of isolating switches. | (Yes / No /  Not required) |
| 1. propose the power system design for charging EVs if the power supply cannot 100% cover all eligible park space in the car park according to the power company’s written advice. 2. seek FSD’s advice and the applicant’s agreement to include a fire detection system in the car park according to the FSD Circular Letter No. 4/2020 (except those provided with sprinkler system). | (Yes / No /  Not required)  (Yes / No /  Not required) |
|  |  |

1. **Proposed Layouts / Reference Drawings**

*(Note - according to the Design Guidelines for Electric Vehicle Charging-enabling Infrastructure under the EHSS (“Design Guidelines”), the power supply system and distribution circuits designed by the consultant should meet the needs of the applicant and the owners of the parking spaces. The consultant is advised to insert layouts, drawings or photos in this section to illustrate the result of the installation works to the applicant for consideration and approval.)*

1. **Estimated Project Cost to Applicant for Consideration**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Description | Qty | Unit | Rate | HK$ |
| A. | Costs for related A&A works, Minor works and Builder’s work required (if needed) |  | No. |  |  |
|  |  |  |  |  |  |
| B. | Costs for power system upgrading works and electrical installation works. |  | No. |  |  |
|  |  |  |  |  |  |
| C. | Costs for fire detection installation works (if needed) |  | No |  |  |
|  |  |  |  |  |  |
| D. | Costs for other necessary works |  | No |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total: | | | | |  |

**Part C: Confirmation of the Feasibility Assessment by the Employed Consultant’s Registered Professional Engineer (“RPE”) and the Applicant of the EHSS**

To: the Environmental Protection Department,

I (name in full) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, registered professional engineer, hereby confirm that I have consulted the Applicant, Power Company, Authorized Person, relevant Government Departments, and other professional disciplines for the preliminary design of EV charging-enabling infrastructure and associated installations in the car park (name of car park) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at (address of site) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and the Feasibility Assessment submitted to the applicant complies with the Design Guidelines for Electric Vehicle Charging-enabling Infrastructure under the EV-charging at Home Subsidy Scheme and other relevant ordinances.

|  |  |
| --- | --- |
| Name of RPE: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| RPE Registration No.: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Position: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Company: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Company Chop: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Date: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Owners’ Corporation / DMC Manager / All the owners of the building(s) concerned collectively\*\* (The Applicant) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hereby confirm that the Feasibility Assessment prepared by the employed consultant has been accepted, and agree that the consultant shall devise the detailed works specifications basing on the method statements and design proposed in the Feasibility Assessment.

|  |  |
| --- | --- |
| Name of Applicant’s Representative: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Applicant’s Representative: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Stamp: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Date: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \*\* Delete as appropriate |  |

**Part D: Detailed Design and Works Specifications on Procuring the Services of Contractor for the EVCEI and Associated Installations under the EHSS**

**Introduction**

1. According to the paragraph 2.1(d) of the Guidance on Preparation of Specifications for Employment of Consultants and Contractors for Installation Works under the EHSS (“Guidance on Preparation of Specifications”) issued the Environmental Protection Department (“EPD”), the consultant shall prepare detailed works specifications for the works of the EVCEI basing on the proposed design with modifications as instructed by the applicant and incorporate comments of the EPD’s advisor as appropriate, and to seek agreement of the detailed works specifications from the applicant and approval from the EPD with reference to the Design Guidelines for Electric Vehicle Charging-enabling Infrastructure under the EHSS (“Design Guidelines”) issued by the EPD.
2. A project checklist for the employed consultant to devise the works specifications basing on the feasibility assessment and agreement of the applicant is shown in Part E of this Guide. The project checklist is aimed to give a better understanding of the detailed design and works specifications of the EVCEI in facilitating EPD’s approval prior to perform the tendering exercise for employment of a contractor under the EHSS.
3. The works specifications must be prepared by the consultant’s Registered Professional Engineer (“RPE”) and agreed by the applicant of the EHSS. The works specifications should be submitted together with the project checklist in Part E, and duly signed Part F of this Guide on confirmation of the project checklist as well as two sets hard copy of tender documents and tender drawings to the EPD’s advisor for comment. After incorporated comments of the EPD’s advisor, three sets hard copy of finalized tender documents and tender drawings should be submitted to the EPD for approval.
4. All hard copy documents required should be delivered to the following address during the office hours (09:00 - 17:00, Monday to Friday (except public holidays)) –

Electric Vehicle Section (3)

Air Quality Management Division

Environmental Protection Department

33/F, Revenue Tower

5 Gloucester Road

Wan Chai

Hong Kong

(From: *Name of Applicant / Name of Car Park*)

[Restricted: Do not disclose and upload the completed Part A to F of this document on the EHSS E-Tendering Platform during the tendering exercise, including the feasibility assessment, project cost estimation and project checklist, etc.]

*Updated in January 2023 (Version 3)*

**Part E: The Project Checklist composes of the Design Checklist and Tender Document Checklist for the Employed Consultant to devise the Detailed Design and Works Specifications on Procuring the Services of Contractor for the EVCEI and Associated Installations under the EHSS**

|  |  |
| --- | --- |
| **Consultant** |  |
| Name of Consultant: |  |
| Name of Contact Person: |  |
| Contact no.: |  |
| E-mail address: |  |
|  |  |
| **Applicant of the EHSS** |  |
| Name of Applicant: |  |
| Name of Car Park: |  |
| Address of Car Park: |  |
| Name of Contact Person: |  |
| Contact no.: |  |
| E-mail address: |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Notes: | | | | | | | | | |  | | |
| \* Delete as appropriate; and  # Provide information as appropriate. | | | | | | | | | | | | |
| 1. **Design Checklist** | | | | | | | | | |  | | |
|  | 1. **Complying the Requirements of the EHSS and other relevant Ordinances** | | | | | | | | | | | |
|  | 1.1 | The following documents and design guidelines have been referred, and the design and works specifications meet with the requirements – | | | | | | | | | | |
|  |  | (a) | | | | | EV charging at Home Subsidy Scheme – Application Notes (the latest version) issued by the EPD. | | | (Yes / No\*) | | |
|  |  | (b) | | | | | Guidance on Preparation of Specifications for Employment of Consultants and Contractors for Installation Works under the EV-charging at Home Subsidy Scheme (the latest version) issued by the EPD. | | | (Yes / No\*) | | |
|  |  | (c) | | | | | Design Guidelines for Electric Vehicle Charging-enabling Infrastructure under the EV-charging at Home Subsidy Scheme (the latest version) issued by the EPD. | | | (Yes / No\*) | | |
|  |  |  | | | | |  | | |  | | |
|  | 1.2 | The design and works specifications of the EVCEI fully comply with all applicable standards, codes of practice, rules and regulations, including but not limited to the Electricity Ordinance and its subsidiary regulations, Code of Practice for the Electricity (Wiring) Regulations and its subsidiary code 26S - Charging Facilities for Electric Vehicles, Building Ordinance and its subsidiary regulations, Buildings Energy Efficiency Ordinance, Code of Practice for Fire Safety in Buildings, Code of Practice for Minimum Fire Service Installations & Equipment and Inspection, Testing and Maintenance of Installations & Equipment, and power company’s supply rules. | | | | | | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  |  |  |
|  | 1. **Coverage and Power Supply Capacity** | | | | | | | | |  |  |  |
|  | 2.1 | The number of eligible parking spaces covered in the works specifications under the EHSS is \_\_\_\_\_\_\_\_\_\_\_\_. | | | | | | | | | | |
|  | 2.2 | The total power supply capacity required for the EVCEI at item 2.1 above is \_\_\_\_\_\_\_\_\_\_\_\_ kVA. | | | | | | | | | | |
|  | 2.3 | (a) | | | | | The power company has been approached and they can provide the required power supply capacity for simultaneous charging at all eligible parking spaces in the car park as follows# – | | | | | |
|  |  |  | | | | | (i) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (ii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (iii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (iv) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (v) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (vi) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (vii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (viii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  | (b) | | | | | The power company cannot provide the required power supply capacity at this moment but they confirm that the required power supply capacity will be available within three years as follows# – | | | | | |
|  |  |  | | | | | (i) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (ii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (iii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (iv) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (v) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (vi) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (vii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  |  |  | | | | | (viii) | \_\_\_\_\_\_ kVA located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
|  | 1. **Design of Power Supply System** | | | | | | | | |  | | |
|  | 3.1 | | | Following liaison with the power company, agreement of the applicant has been sought on the proposed design of power supply system and circuits for the EVCEI to be installed. | | | | | | (Yes / No\*) | | |
|  | 3.2 | | | Is there any fees or charges levied by the power company in providing the required power supply capacity? | | | | | | (Yes / No\*) | | |
|  |  | | |  | | | | | |  | | |
|  | 3.3 | | | If “Yes” on item 3.2 above, the amount of fees or charges is# HK$\_\_\_\_\_\_\_\_\_\_\_\_\_. The amount shall be payable by the contractor to be employed by the applicant under the EHSS and be included in the works tender document. | | | | | | | | |
|  |  | | |  | | | | | | | | |
|  | 3.4 | | | The EVCEI is designed to support 1-phase 32A medium charging for – | | | | | | | | |
|  |  | | | (a) | | | all eligible parking spaces simultaneously; or | | | ❑ | | |
|  |  | | | (b) | | | if “No” in sub-item (a) above, at least 50% of all eligible parking spaces; or | | | ❑ | | |
|  |  | | | (c) | | | if “No” in sub-item (b) above, the power company confirm that the power supply can be upgraded to the capacity as mentioned in item 2.3(b) above within 3 years from the date of successful application for subsidy under the EHSS. | | | ❑ | | |
|  | 3.5 | | | If the power supply capacity cannot support simultaneous medium charging at all eligible parking spaces in the car park(s), the agreement of the applicant has been sought to implement one of following options – | | | | | | | | |
|  |  | | | (a) | | | zoning of power supply to parking spaces with control devices housed inside metal enclosure(s) with suitable IP rating to enable switching of power supply to each zone in turn. | | | ❑ | | |
|  |  | | | (b) | | | reduced charging current with 1-phase 20A for each eligible parking space and the EVCEI installation has been designed to allow future implementation of a load management system, if needed, to achieve maximum 1-phase 32A charging without the need to replace electric cables or any fixed electrical installation. | | | ❑ | | |
|  |  | | | (c) | | | load management system which is excluded from the EVCEI installation works with both the supply and installation costs to be borne by the applicant. | | | ❑ | | |
|  |  | | |  | | | | | |  | | |
|  | 3.6 | | | There is existing EV charging facilities in the car park. | | | | | | (Yes / No\*) | | |
|  | 3.7 | | | If “Yes” in item 3.6 above, will the existing EV charging facilities be integrated to the EVCEI under the EHSS? | | | | | | (Yes / No / N.A.\*) | | |
|  |  | | |  | | | | | |  | | |
|  | 3.8 | | | If “Yes” in item 3.7 above, the applicant has obtained the EPD’s approval to integrate the existing EV charging facilities with the EVCEI under the EHSS. | | | | | | (Yes / No / N.A.\*) | | |
|  | 3.9 | | | If “Yes” in item 3.8 above, the design and installation of the existing EV charging facilities has been checked in order and modified, if required, to meet the latest requirements. | | | | | | (Yes / No / N.A.\*) | | |
|  | 3.10 | | | If “No” in item 3.7 above, the fireman’s emergency switch has been designed to cut off the power supply to the existing EV charging facilities as well as the EVCEI under the EHSS. | | | | | | (Yes / No / N.A.\*) | | |
|  | 3.11 | | | The method statements and work plans have been submitted to the applicant for agreement on upgrading the power supply system. | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 1. **Design of Main Switchboard** | | | | | | | | |  | | |
|  | 4.1 | A new main switchboard is designed for the EVCEI with adequate installation space, safe access and maintenance clearance. | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 4.2 | Modification of existing main switchboard is required for the addition of panel(s) and/or switchgear for the power supply to the EVCEI. | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 4.3 | If “Yes” in item 4.2 above, it is technically in order for the addition of panel(s) and/or switchgear at the existing switchboard. Also, there are safe access and adequate clearance space provided for operating and maintenance works after the modification of existing switchboard. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 4.4 | The EVCEI involves addition/replacement of complete electrical circuit(s) at rating of 400A or above and is designed in full compliance with the Code of Practice for Energy Efficiency of Building Services Installation on major retrofitting works. *(Please see item (b)(i) of Table 10.1 of the Code of Practice for Energy Efficiency of Building Services Installation)* | | | | | | | | (Yes / No\*) | | |
|  | 4.5 | If “Yes” in item 4.4 above, a Registered Energy Assessor under the Building Energy Efficiency Ordinance designs the associated electrical installation and will submit the Form of Compliance and associated documents within 2 months to the Electrical and Mechanical Services Department (“EMSD”) after completion of the work. | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 4.6 | If “Yes” in item 4.4 above, a digital power analyzer is specified at the relevant switchboard(s) to monitor phase currents, phase voltages, power factors, total harmonic, etc. | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 4.7 | If “Yes” in item 4.4 above, space has been reserved inside electrical room for the total power factor and total harmonic distortion correction devices. *(Please see Figure 7.6(c)(iii) of the Technical Guidelines on Code of Practice for Energy Efficiency of Building Services Installation)* | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 4.8 | A digital power analyzer is specified on the relevant switchboard(s) to monitor phase currents, phase voltage, power factors, etc. *(Please see item 6.3 of the Design Guidelines.)* | | | | | | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 1. **Design of Sub-main Distribution** | | | | | | | | |  | | |
|  | 5.1 | The design of sub-main distribution has taken into account, but not limited to, the followings – | | | | | | | | | | |
|  |  | (a) | | | | | no diversity unless adoption of load control. | | | (Yes / No\*) | | |
|  |  | (b) | | | | | short circuit current for the selection of protective devices with suitable breaking capacity. | | | (Yes / No\*) | | |
|  |  | (c) | | | | | earth fault loop impedance for the selection of protective devices. | | | (Yes / No\*) | | |
|  |  | (d) | | | | | voltage drop and copper loss for selection of sub-main cables. | | | (Yes / No\*) | | |
|  |  | (e) | | | | | rating factors and correction factors for sizing of cable conductors. | | | (Yes / No\*) | | |
|  |  | (f) | | | | | fault discrimination and/or backup protection between upstream MCCBs and downstream MCB/RCBO/RCD has been achieved and catered in the design. | | | (Yes / No\*) | | |
|  |  |  | | | | |  | | |  | | |
|  | 5.2 | The design of sub-main cables with – | | | | | | | |  | | |
|  |  | (a) | | | | | voltage drop less than# \_\_\_\_\_\_\_\_% | | |  | | |
|  |  | (b) | | | | | copper loss (if applicable) less than# \_\_\_\_\_\_\_\_%  *(Please see Clause 7.4.4 of the Code of Practice for Energy Efficiency of Building Services Installation)* | | | | | |
|  |  |  | | | | | | | |  | | |
|  | 5.3 | If “Yes” in item 4.4 above, the followings have been taken into account for the design of sub-main circuits –  *(Please see Clause 7.6 and 7.7 of the Code of Practice for Energy Efficiency of Building Services Installation)* | | | | | | | | | | |
|  |  | (a) | | | | | total power factor | | | (Yes / No\*) | | |
|  |  | (b) | | | | | total harmonic distortion | | | (Yes / No\*) | | |
|  |  | (c) | | | | | balancing of single-phase loads | | | (Yes / No\*) | | |
|  |  | (d) | | | | | metering and monitoring facilities | | | (Yes / No\*) | | |
|  | 5.4 | Dedicated distribution board(s) is designed on each floor of the car park. | | | | | | | | (Yes / No\*) | | |
|  | 5.5 | Distribution boards for the single-phase EV charging final circuits before power company metering equipment are suitable for mounting of double-pole type protective devices. | | | | | | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 1. **Design of Final Circuits** | | | | | | | | |  | | |
|  | 6.1 | The design of final circuits has taken into account, but not limited to, the followings – | | | | | | | | | | |
|  |  | (a) | | | | | no diversity for the 32A EV charging final circuits if load management system is not selected. | | | (Yes / No\*) | | |
|  |  | (b) | | | | | short circuit current for the selection of protective devices with suitable breaking capacity. | | | (Yes / No\*) | | |
|  |  | (c) | | | | | earth fault loop impedance for the selection of protective devices. | | | (Yes / No\*) | | |
|  |  | (d) | | | | | voltage drop for selection of final circuits cables/wirings. | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 6.2 | The design of final circuits cables/wiring with voltage drop less than# \_\_\_\_\_\_\_\_\_\_%. | | | | | | | | | | |
|  | 6.3 | Each final circuit is individually protected by a protective device of suitable rating. The protective device/isolator before the power company metering equipment is of double-pole type. | | | | | | | | (Yes / No\*) | | |
|  | 6.4 | The type and characteristic of RCDs specified in final circuits comply with the requirements of Code 26S of the Code of Practice for the Electricity (Wiring) Regulations. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 6.5 | A lockable double-pole isolator is to be fixed on the nearest vertical permanent structure from each parking space that can be readily accessible for maintenance purposes and is suitably identified by durable marking and/or labelling. | | | | | | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 6.6 | For “island” or stand-alone parking spaces and outdoor parking spaces without nearby vertical permanent structures, the isolating switches are mounted on concrete plinths or mounting poles erected at the rear corners of the parking spaces. The mounting pole shall be corrosive resistant, robust in design and preferably with a height not less than 1200mm. | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 6.7 | The most economic and suitable type of wiring system has been assessed and adopted in the design of final circuits (such as 1/C cables in trunking & conduit system vs armoured cables on cable tray) | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 1. **Electricity Meters and Check Meters** | | | | | | | | |  | | |
|  | 7.1 | Electricity meters of power company are installed inside communal meter room(s). | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 7.2 | If meter room is not available, a group of meters are installed inside a weather-proof stainless-steel cabinet with the agreement of the power company and in compliance with the Code of Practice for Fire Safety in Buildings. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 7.3 | Customer check meter(s) is specified to be installed in switch room(s) to record the aggregate monthly power consumption of the EVCEI installed. | | | | | | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 1. **Fire Safety Requirements**   **(To seek advice from the Fire Services Department (“FSD”) is recommended)**   1. **Email :** [**fschq@hkfsd.gov.hk**](mailto:fschq@hkfsd.gov.hk) 2. **Telephone : 3971 4600** | | | | | | | | | | | |
|  | 8.1 | A fireman’s emergency switch is specified at vehicle entrance(s), fire control centre and/or other locations as considered acceptable by the Director of Fire Services, and is designed to cut off the power supply to the EVCEI as well as the existing EV charging facilities (if any). | | | | | | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 8.2 | The car park included in the EHSS application is sprinkler protected. | | | | | | | | (Yes/No or partly\*) | | | |
|  |  |  | | | | | | | |  | | |
|  | 8.3 | If “Yes” in item 8.2 above, modification of sprinkler pipes and sprinkler heads are required to suit the installation works of EVCEI. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 8.4 | If “No or partly” in item 8.2 above, the applicant’s agreement has been sought to install a fire detection system for those areas in the car park without sprinkler protection. *(All existing buildings planned with EV charging facilities are advised to enhance the fire safety provisions for the sake of fire safety)*. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 8.5 | If “Yes” in item 8.4 above, according to the FSD Circular Letter No. 4/2020, the fire detection system in the car park should meet the following requirements – | | | | | | | | | | |
|  |  | (a) | | | | | The total floor area of car park does not exceed 230m2 and the entire car parking facilities is covered by the fire detection system. | | | (Yes / No\*) | | |
|  |  | (b) | | | | | The total floor area of car park exceeds 230m2 and the areas installed with EV charging facilities are covered by the fire detection system. | | | (Yes / No\*) | | |
|  |  | (c) | | | | | The fire detection system is designed in accordance with BS 5839 Part 1 or other standards acceptable to the Director of Fire Services and linked to the existing fire alarm system. | | | (Yes / No\*) | | |
|  |  | (d) | | | | | A direct line connection to the Fire Services Communications Centre is required. | | | (Yes / No\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 8.6 | If “Yes” in item 8.4 above, the siting of fire detectors has been taken into account the distance from obstruction (such as beams, partitions, air ducts and cable trays), voids, ceiling height, etc. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 8.7 | If “Yes” in item 8.4 above, fire resistant cables/wiring are used for the fire detection system and installation of fireman’s emergency switch(es). Separate conduit / trunking is specified for these fire services installations in compliance with the segregation of circuit categories as defined in the Code of Practice for the Electricity (Wiring) Regulations. | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 8.8 | For installations of the EVCEI and/or electric meters under the EHSS in the newly constructed room(s), the provision of fire detectors and/or total flooding system is required. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 1. **Builder’s Work** | | | | | | | | |  | | |
|  | 9.1 | Viable and less expensive alternatives have been implemented to serve the same functions/purposes and to avoid builder’s work such as trenching, boring of holes in walls and building structures, modification to building structures, and erection of cable support structures. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 9.2 | Advice has been sought from relevant building professional(s) whether the EVCEI installation will involve building alteration and addition works (including minor works). | | | | | | | | (Yes / No / N.A.\*) | | |
|  | 9.3 | The alteration and addition works (A&A works) for the EVCEI (including minor works) are required. An Authorized Person / Building Professional has been engaged to handle the associated works in compliance with the Buildings Ordinance and its allied regulations and EPD’s consent has been sought. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 9.4 | The A&A works has included those builder’s work requirements from power company to facilitate the upgrading of power supply. | | | | | | | | (Yes / No / N.A.\*) | | |
|  |  |  | | | | | | | |  | | |
|  | 9.5 | The A&A works (including minor works) for the EVCEI shall involve the following areas or locations# – | | | | | | | | | | |
|  |  | (a) | | | | |  | | | | | |
|  |  | (b) | | | | |  | | | | | |
|  |  | (c) | | | | |  | | | | | |
|  |  | | | | | | | |  |  | | |
|  | 1. **Other Relevant Items** | | | | | | | | |  | | |
|  | 10.1 | | | | The design of EVCEI specifies wiring in concealed conduits, power sockets and/or painting on trunkings/conduits/cable trays for decorative or aesthetic purpose etc. (This kind of costs are not covered by the EHSS). | | | | | (Yes / No\*) | | |
|  | 10.2 | | | | The works specifications and design details for the installation of the EVCEI, including but not limited to the sub-main distribution, final circuits, isolating switches, etc. as shown on the tender drawings have already given due consideration in optimizing the overall construction and material costs. | | | | | (Yes / No\*) | | |
|  | 10.3 | | | | It has been specified and use fixtures, cables, materials and equipment which are commonly available in the market. | | | | | (Yes / No\*) | | |
|  |  | | | |  | | | | |  | | |
|  | 10.4 | | | | For those electrical installation and equipment to be installed outdoor or adjacent to external openings, louvres, etc. subject to weather damage, suitable protection or electrical equipment of appropriate IP ratings have been specified. | | | | | (Yes / No\*) | | |
|  |  | | | |  | | | | |  | | |
|  | 10.5 | | | | Fire-rated enclosures have been designed and specified for the installation and equipment installed at or passing through protected areas and different fire compartments, plant rooms of fire services installations and other locations in compliance with the Code of Practice for Fire Safety in Buildings. | | | | | (Yes / No\*) | | |
|  |  | | | |  | | | | |  | | |
|  | 10.6 | | | | The cable routes, positions of equipment, installation details, etc. have been agreed with the applicant. | | | | | (Yes / No\*) | | |
|  |  | | | |  | | | | |  | | |
|  | 10.7 | | | | There are major change(s) in the detailed design compared with the feasibility assessment report, in which the estimated project cost in Part B had been based on the applicant’s consideration and agreement. | | | | | (Yes / No\*) | | |
|  |  | | | |  | | | | |  | | |
|  | 10.8 | | | | If “Yes” in item 10.7 above, the applicant has been advised the new estimated project costs which might/would exceed the subsidy ceiling of the EHSS. | | | | | (Yes / No / N.A.\*) | | |
|  |  | | | |  | | | | |  | | |
|  | 10.9 | | | | The cable colour code of the existing fixed electrical installations of the car park has been checked and is specified in the tender documents. | | | | | (Yes / No\*) | | |
|  |  | |  | | |  | | | |  | | |
|  | 1. **Letters, Submissions and Documents commented / approved by Other Parties** | | | | | | | | |  | | |
|  | 11.1 | | The load demand, power supply arrangement, schematic wiring diagram, metering facilities and arrangement, etc. have been commented by the power company. *(Copies of submitted documents and corresponding letters from the power company shall be attached to this report.)* | | | | | | | (Yes / No / N.A.\*) | | |
|  | 11.2 | | The building plans of the alteration and addition works (A&A works), if any, have been submitted and approved by the Buildings Department and other relevant Government Departments.  *(Copies of submission letter and approval letter shall be attached to this report.)* | | | | | | | (Yes / No / N.A.\*) | | |
|  | 11.3 | | The design of fire detection system has been submitted and approved by the Buildings Department/Fire Services Department. *(Copies of submission letter and approval letter shall be attached to this report.)* | | | | | | | (Yes / No / N.A.\*) | | |
|  | 11.4 | | If submission to the Buildings Department is considered not necessary, the Authorized Person shall provide a letter to confirm that the design of the EVCEI and associated installations, including but not limited to the installation of busbar chambers, MCCB boards, MCB boards, electric meters etc. at various locations in applicant’s buildings, complies with the latest “Code of Practice for the Fire Safety in Buildings”.  *(Copy of confirmation letter shall be attached to this report.)* | | | | | | | (Yes / No / N.A.\*) | | |
|  |  | |  | | | | | | |  | | |
|  | 1. **Any works not covered by the EHSS** | | | | | | | | |  | | |
|  | 12.1 | | Any items in the design, works specifications and tender documents do not cover by the EHSS.  (*Notes: Please highlight these items in the works specifications if “Yes” is selected*) | | | | | | | (Yes / No\*) | | |
|  |  | |  | | | | | | | | | |
|  |  | |  | | |  | | | |  | | |
|  | 1. **Other Supplementary Information** | | | | | | | | |  | | |
|  | 13.1 | | In addition to items listed in the above checklist, further design or supplementary information may be added below# – | | | | | | | | | |
|  |  | | (a) | | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
|  |  | | (b) | | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
|  |  | | (c) | | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
|  |  | | (d) | | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **Tender Document Checklist** | | | | | | | | | | | |  |
|  | The tender document for the installation works of the EVCEI and associated installations under the EHSS should contain, but not limited to those items mentioned below, according to the Guidance on Preparation.  Note:  Put a tick “✓” in the checkboxes for those items which have been included in the tender document. | | | | | | | | | | | |
|  |  | | | | | | | | | | |  |
|  |  | | | | | | | | | | |  |
|  | 1. **General Tender Information** | | | | | | | | | | | |
|  | 1.1 | Submission of Tender | | | | | | | | | | |
|  |  | (a) | | Tendering period  (*Notes - please refer to item 6.1 of the Guidance on Preparation of Specifications. The tendering period should normally be set at one month and should in no case be less than three weeks or more than six weeks, depending on the scale and scope of the works.*) | | | | | | | | ❑ |
|  |  | (b) | | Tender closing time and its arrangement during Tropical Cyclone Warning Signal no. 8 and a Black Rainstorm Warning Signal. | | | | | | | | ❑ |
|  |  | (c) | | Location of a designated strong double locked tender box in a prominent place of the applicant’s building for tenderers to deposit their tenders. | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  | 1.2 | Tender Selection | | | | | | | | | |  |
|  |  | (a) | | The tenderers should be informed on how their tenders be evaluated through a comprehensive assessment. If the tenders are evaluated basing on a marking scheme, the marking scheme should be included in the tender documents for information of the tenderers.  (*Notes – please refer to item 7.1 of the Guidance on Preparation of Specifications.*) | | | | | | | | ❑ |
|  |  | (b) | | Tenderers may be required to attend a tender interview and provide justification or demonstration of their capability of carrying out and completing the contract. If a tenderer fails to do so, their tender may be rejected by the applicant.  (*Notes – please refer to item 7.2 of the Guidance on Preparation of Specifications.*) | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  | 1.3 | Qualifications of Tenderer | | | | | | | | | |  |
|  |  | A tenderer shall meet the following qualifications and experience requirements on eligibility to submit tender to provide services in carrying out the works under the EV-charging at Home Subsidy Scheme | | | | | | | | | | ❑ |
|  |  | (*Notes – please refer to the requirements under item 5.1(a) to (g) of the Guidance on Preparation of Specifications.*) | | | | | | | | | |  |
|  |  |  | |  | | | | | | | |  |
|  | 1. **Conditions of Tender** | | | | | | | | | | |  |
|  | 2.1 | Tender Documents Issued to Tenderers | | | | | | | | | |  |
|  |  | The tender documents issued to tenderers should be clearly stated and listed out. | | | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  | 2.2 | Documents required to be returned by Tenderers | | | | | | | | | |  |
|  |  | The following documents shall be enclosed in a sealed envelope, addressed, endorsed and deposited as required in the letter of invitation to tender – | | | | | | | | | |  |
|  |  | (a) | | The Form of Tender (i.e. the tendered amount) with the specified validity period from the tender closing date, completed, signed, witnessed and dated. | | | | | | | | ❑ |
|  |  | (b) | | Schedule of Rates with each item priced, extended and totalled. | | | | | | | | ❑ |
|  |  | (c) | | Information to be Supplied by Tenderers detailed with the proposed materials and equipment offer. | | | | | | | | ❑ |
|  |  | (d) | | Tenderer’s qualifications and experience:- | | | | | | | | ❑ |
|  |  |  | | (*Notes – please refer to the requirements under item 5.1 and 6.2 of the Guidance on Preparation of Specifications*) | | | | | | | |  |
|  |  |  | |  | | | | | | | |  |
|  |  | (e) | | Two CDs containing all the submitted information and documents in items (a) to (d) above which are to be retained by the applicant and the EPD respectively. If the content of the hardcopy and the CDs are different, the hardcopy of tender will be regarded as the final appropriate submission for tender evaluation and analysis by the applicant. | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  |  | (f) | | Any non-compliance with this condition 2.2 may cause the tender to be disqualified. *(Notes – Please consider if a statement should be included to remind tenderers that any non-compliance or deficiencies in their tender submission may cause the tender to be disqualified.)* | | | | | | | | ❑ |
|  |  |  | |  | |  | | | | | |  |
|  | 2.3 | Inspection of Site | | | | | | | | | |  |
|  |  | The Site may be inspected.  *(Notes – please state the name of contact person and contact phone no. for arranging site visit before tender submission.)* | | | | | | | | | | ❑ |
|  |  |  | |  | |  | | | | | |  |
|  | 2.4 | Associated Companies  (*Notes - please refer to item (l) of Annex 2 of the EHSS – Application Notes*) | | | | | | | | | |  |
|  |  | 1. Name of consultant for the design of EVCEI and associated installation for the car park shall be shown in the tender document. | | | | | | | | | | ❑ |
|  |  |  | | | | | | | | | |  |
|  |  | 1. Tenderers are required to undertake their associated companies will not submit / have not submitted any tender in the same procurement exercise for engagement of a consultant or a contractor. All tenderers in breach of this requirement must be disqualified and any awarded contract must be terminated forthwith with no compensation. | | | | | | | | | | ❑ |
|  |  |  | | | | | | | | | |  |
|  |  | 1. The Declaration for Affiliated Corporation in the Appendix of this Project Checklist is included in the tender document. | | | | | | | | | | ❑ |
|  |  |  | |  |  | | | | | | |  |
|  | 2.5 | Probity and Anti-Collusion | | | | | | | | | | ❑ |
|  |  | (*Notes – Item (e) of the Annex 2 of the EHSS – Application Notes refers to the Guidebook issued by the ICAC. Please include the probity and anti-collusion clauses, warranty and declaration in the tender documents*) | | | | | | | | | |  |
|  |  |  | | | | | | | | | |  |
|  | 2.6 | Manpower Resources Breakdown for Submission of Tender under the EHSS is included in the tender document.  *(Notes - please refer to Annex A of Guidance on Preparation of Specifications.)* | | | | | | | | | | ❑ |
|  |  |  | |  |  | | | | | | |  |
|  | 2.7 | Other Terms and Conditions | | | | | | | | | | ❑ |
|  |  | *(Notes – please include other terms and conditions as necessary)* | | | | | | | | | |  |
|  |  |  | |  |  | | | | | | |  |
|  | 1. **Specifications** | | | | | | | | | | |  |
|  | 3.1 | Preliminaries | | | | | | | | | |  |
|  |  | (a) | | Type of Tender (e.g. lump sum tender) | | | | | | | | ❑ |
|  |  | (b) | | Payment Schedule  (*Notes - please refer to item 8 of the Guidance on Preparation of Specifications*) | | | | | | | | ❑ |
|  |  | (c) | | Schedule of Rates | | | | | | | | ❑ |
|  |  | (d) | | Contract Drawings | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  |  | (e) | | Site Condition and Site Accommodations | | | | | | | | ❑ |
|  |  | (f) | | Date for Commencement of Contract Works  (*Notes - please refer to item 8.7 of the EHSS Application Notes*) | | | | | | | | ❑ |
|  |  | (g) | | Possession of Site | | | | | | | | ❑ |
|  |  | (h) | | Time for Completion  (*Notes – to devise the works programme to optimize the manpower required for completing the works within a reasonable timeframe*) | | | | | | | | ❑ |
|  |  | (i) | | Programme of Work, Method Statement and Progress Report | | | | | | | | ❑ |
|  |  | (j) | | Installation Drawings | | | | | | | | ❑ |
|  |  | (k) | | Builder’s Work Drawings | | | | | | | | ❑ |
|  |  | (l) | | Drawings and Documents to be Submitted After Installation Completed | | | | | | | | ❑ |
|  |  | (m) | | Samples and/or mock-up installation as appropriated | | | | | | | | ❑ |
|  |  | (n) | | Ordering of Materials | | | | | | | | ❑ |
|  |  | (o) | | Inspection of Works | | | | | | | | ❑ |
|  |  | (p) | | Engagement of Specialist Contractors (e.g. Registered General Building Contractor, Registered Minor Work Contractor and/or Registered Fire Services Contractor) | | | | | | | | ❑ |
|  |  | (q) | | Contractor’s Management Team  *(Notes – please specify any requirements on the qualifications and experience of the contractor’s management team such as supervising engineer and on-site foreman)* | | | | | | | | ❑ |
|  |  | (r) | | Care and Protection of Existing Installations and Property | | | | | | | | ❑ |
|  |  | (s) | | Health and Safety  (*Notes - please refer to item 10 of the Guidance on Preparation of Specifications*) | | | | | | | | ❑ |
|  |  | (t) | | Insurances  (*Notes - please refer to item 11 of the Guidance on Preparation of Specifications*) | | | | | | | | ❑ |
|  |  | (u) | | Waste Management  (*Notes - please refer to item 12 of the Guidance on Preparation of Specifications*) | | | | | | | | ❑ |
|  |  | (v) | | Defects Liability Period  (*Notes - please refer to items 2.1(l), 4.1(g) and 9.4 of the Guidance on Preparation of Specifications. It shall not be less than one year*) | | | | | | | | ❑ |
|  |  |  | |  |  | | | | | | |  |
|  | 3.2 | Particular Specifications | | | | | | | | | |  |
|  |  | (a) | | Site of the Works | | | | | | | | ❑ |
|  |  | (b) | | Scope of the Works  (*Notes - please refer to item 4 of the Guidance on Preparation of Specifications and also include builder’s work, if any, required by power company*) | | | | | | | | ❑ |
|  |  | (c) | | Statutory Regulations | | | | | | | | ❑ |
|  |  | (d) | | Standards and Practice | | | | | | | | ❑ |
|  |  | (e) | | Code of Practice for Energy Efficiency of Building Services Installation | | | | | | | | ❑ |
|  |  | (f) | | Cable Colour Code of Existing Fixed Electrical Installations | | | | | | | | ❑ |
|  |  | (g) | | Fees or Charges  (*Notes – if there is any fees or charges levied by the power company, please specify the amount in the specification and it shall be payable by the contractor. Please add an item in the Schedule of Rates for it*) | | | | | | | | ❑ |
|  |  | (h) | | Method Statement  (*Notes – please liaise with the applicant and specify any specific requirements on the method statement for the modification of existing switchboard and installation of cables/wiring, distribution boards, metering facilities, fire services installation, building works etc. for the EVCEI installation for which the contractor shall adhere to*) | | | | | | | | ❑ |
|  |  | (i) | | Testing and Commissioning  (*Notes - please refer to items 2.1(l), 4.1(e) and 9 of the Guidance on Preparation of Specifications*) | | | | | | | | ❑ |
|  |  | (j) | | Installation Locations of EHSS Logo(s)  (*Notes - please refer to item 13 of the Guidance on Preparation of Specifications, the applicant shall display the EHSS Logo(s) on each floor of the eligible parking spaces in the application, at the entrance(s) of the car park or other prominent locations. The EHSS Logo(s) with a diameter of 450mm would be provided by the EPD. The installation location(s) should be proposed by the consultant, agreed by the applicant, and approved by the EPD during the implementation of the works*) | | | | | | | | ❑ |
|  |  |  | |  |  | | | | | | |  |
|  | 3.3 | Specification, Installation and Workmanship of Materials and Equipment  (*Notes – it is suggested to include but not limited to the following key items*) | | | | | | | | | |  |
|  |  | (a) | | Low Voltage Cubicle Type Switchboard | | | | | | | | ❑ |
|  |  | (b) | | Switchgear and Associated Equipment (including but not limited to isolating switch, fuse-switch, switch-fuse, ACB, MCCB, MCB, RCBO, RCCB/RCD, busbar chamber, distribution board, electromechanical contactors, changeover switch, digital multifunction power meter, digital power analyser, current transformers, etc.)  (*Notes – Assistive devices shall be specified to facilitate the locking of MCCBs, MCBs and RCBOs using padlocks for isolation purpose during maintenance. Isolating switches shall also be able to be pad-locked*) | | | | | | | | ❑ |
|  |  | (c) | | Wiring and Power Cables (including single core cables, multi-core armoured cables, fire resistant cables, etc.) | | | | | | | | ❑ |
|  |  | (d) | | Conduits, Trunking, Cable Tray and Cable Ladder | | | | | | | | ❑ |
|  |  | (e) | | Automatic Fire Detection System (including fire resistance cables, fire detectors, alarm indicator lamp for detector, fire alarm control panel, conventional or addressable system, etc.) | | | | | | | | ❑ |
|  |  | (f) | | Modification to existing sprinkler system (including sprinkler pipes, sprinkler head, etc.) | | | | | | | | ❑ |
|  |  | (g) | | Builder’s Work | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  | 3.4 | Tender Drawings  (*Notes – two sets hard copy of proposed design drawings shall be submitted to the EPD’s advisor for comment, and after incorporated comments of the EPD’s advisor, three sets of finalized tender drawings shall be submitted to EPD for approval*) | | | | | | | | | |  |
|  |  | (a) | | List of tender drawings shall be included in the tender documents. | | | | | | | | ❑ |
|  |  | (b) | | Layout drawings shall be suitably scaled (preferably 1 to 100 for floor plans and 1 to 25 for service/plant rooms). | | | | | | | | ❑ |
|  |  | (c) | | The electrical design drawings shall be signed by Registered Electrical Worker of appropriate grade and Registered Energy Assessor, if applicable. Building alteration and addition works drawings shall be signed by the Authorized Person and other relevant discipline’s professional, if applicable. | | | | | | | | ❑ |
|  |  |  | |  | | | | | | | |  |
|  | 1. **Schedule of Rates and Summary of Tender**   (*Notes - please refer to items 2.1(b) and 6.3 of the Guidance on Preparation of Specifications. No provisional items are allowed to be specified in the tender documents*) | | | | | | | | | | |  |
|  | A detailed price schedule shall be prepared and specified for the contractor to complete the Schedule of Rates in compliance with the specification and drawings. The use of “lump sum” in the Schedule of Rates is to be avoided wherever possible. Each item of materials and equipment should be fully described. The unit rates are for supply and fix of the materials and equipment. The total of quantities multiplied by unit rates shall be equal to the tendered price. | | | | | | | | | | | ❑ |
|  | 1. **Sample of Schedule of Rate (For reference only)** | | | | | | | | | | | |
|  | Item | | Description | | | | | Qty | Unit | Rate | HK$ | |
|  | A | | Busbar chamber units, 500A, 900mm long, 4 full size solid drawn copper busbars c/w cover and main terminals. | | | | |  | No. |  |  | |
|  |  | |  | | | | |  |  |  |  | |
|  | B | | MCB distribution boards, 200A TP&N, suitable for mounting phase and neutral DP MCB, c/w earth terminal and ferrules for outgoing cables of the total outgoing DP MCB 18 ways. | | | | |  | No. |  |  | |
|  |  | |  | | | | |  |  |  |  | |
|  | C | | Cable trunking galvanized sheet steel suspended from ceiling soffit or fixed to wall with cover, included hanger or bracket for trunking installed all the way from ceiling soffit or wall, single compartment 100 x 100 mm  ……... | | | | |  | m |  |  | |
|  |  | |  | | | | |  |  |  |  | |
|  |  |  | |  |  | | | | | | |  |
|  | 1. **Sample of Information to be Supplied by Tenderers (For reference only)** | | | | | | | | | | |  |
|  | *(Notes – it is suggested to prepare a list of major materials and equipment for the tenderers to indicate their proposed tender offer.)* | | | | | | | | | | | ❑ |
|  |  | | | | | | | | | | | |
|  | Item | | Description | | | | Brand of Product/Model | | | Place of Manufacture | | |
|  | 1. | | Moulded case circuit breaker | | | |  | | |  | | |
|  |  | |  | | | |  | | |  | | |
|  | 2. | | Distribution board suitable for mounting DP MCBs | | | |  | | |  | | |
|  |  | | ……... | | | |  | | |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part F: Confirmation of the Project Checklist by the Employed Consultant’s Registered Professional Engineer (“RPE”) and the Applicant of the EHSS**  To: the Environmental Protection Department, | | | |
| This is to confirm that the Applicant, Power Company, relevant Government Departments, Registered Electrical Worker, Authorized Person, Registered Energy Assessor, and other relevant discipline’s professional as appropriate have been consulted in order to devise the detailed design and works specifications of the EVCEI and associated installations in the car park (name of car park) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at (address of site) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and the Project Checklist in Part E has been duly completed. | | | |
|  |  | Name of RPE: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Signature: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | RPE Registration No.: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Position: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Name of Company: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Company Chop: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Date: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Owners’ Corporation / DMC Manager / All the owners of the building(s) concerned collectively\*\* (The Applicant) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hereby confirm that the detailed design and works specifications prepared by the employed consultant has been accepted and agreed. Subject to the approval from the Environmental Protection Department, invitation of tender for the engagement of works contractor for the EVCEI installation will be procured through the EHSS Open E-tendering Platform.

|  |  |
| --- | --- |
| Name of Applicant’s Representative: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Applicant’s Representative: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Stamp: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Date: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

\*\* Delete as appropriate

**Appendix**

Dear Sir/Madam,

Company Name(Note 1) : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Chinese)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (English)

On behalf of the aforementioned company, I hereby make the following declaration to the tenderee:

According to paragraph (l) of Annex 2 of the “EV-charging at Home Subsidy Scheme – Application Notes”, I confirm that the aforementioned company:

(Please put a tick 「🗸」 in the appropriate checkbox below)

□ does not have relationship with the Consultant employed by the tenderee.

□ has relationship with the Consultant employed by the tenderee, and the information of the related companies is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Company Name(Chinese) | Company Name(English) | Relationship Category  ( Note 2) |
| E.g. | XXXX工程有限公司 | XXXX Engineering Co. Ltd. | (1) |
| 1) |  |  |  |
| 2) |  |  |  |
| 3) |  |  |  |
| 4) |  |  |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Name of authorised company representative and position] [Signature of authorised company representative and company chop]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [Contact phone number] [Date]

\*Note 1: The company name must be identical to the company name shown on the Business Registration Certificate

\*Note 2: Category of relationship with other company:

* 1. “associate”, that is (i) in relation to any person, is a relative or partner of that person; or (ii) in relation to a company, one or more of the company’s directors is in common with one or more of the directors of that company / person. “director” means any person occupying the position of a director by whatever name called and includes a de facto or shadow director; and “relative” means the spouse, parent, child, brother or sister of the relevant person, and, in deducing such a relationship, an adopted child shall be deemed to be a child both of the natural parents and the adopting parent and a step child to be a child of both the natural parents and the step parent.
  2. “associated company”, that is having a stake with that company.