Circular Letter No.: 2024.194

Issue Date: 22 March 2024

Application: BEAM Plus NB Version 2.0

Effective Date: 2 July 2024

SS 1 Pedestrian-oriented and Low Carbon Transport

1. The Technical Circular Letter hereby announces an update to the credit content for **SS 1 Pedestrian-oriented and Low Carbon Transport** under BEAM Plus NB v2.0.

2. The aim of the update is to clarify the following:

    - Omissions of assessment criteria related to mechanical means to assist pedestrian movement and the submittals requirement related to an evidence of shuttle services in project completion at Compliance Assessment (CA) Stage for **SS 1a Accessibility to Public Transport**;

    - Applicability for all sub-items (no exclusion) under the score table of the pedestrian-oriented transport planning measures for **SS 1b Pedestrian-oriented Access**; and

    - Update on assessment requirement of EV charging facilities for **SS 1d Charging Facilities for Electric Vehicle (EV)**.

3. The requirements given in Section 1.3 and Section 3.1 of the BEAM Plus NB v2.0 Manual (2023 Edition) are hereby updated with the enclosures in Annex A and Annex B of this Technical Circular Letter respectively.

    - Page Annex A-1 shall replace all contents in Section 1.3 Summary of Credits specified in Page 15 of the Manual; and

    - Pages Annex B-1 to B-10 shall replace all contents in Section 3.1 on SS 1 specified in Pages 129 to 138 of the Manual.

4. Approved PA projects: For projects that have already completed PA and have certain assessment approach approved, the Applicant may opt to adopt the same assessment criteria for FA or voluntarily comply with this Technical Circular Letter. For the avoidance of doubt, the Applicant shall provide PA evidence (e.g., extract of the PA report, documents submitted for assessment in PA, etc.) in subsequent assessments to support the intention of using the same assessment methodology as in PA.

5. For the ease of reading, the credit content in Pages Annex B-1 to B-10 of this Technical Circular Letter has incorporated the published FAQ #210 for SS 1. The Applicant shall observe the respective FAQ for the issue date.

Ir Colin Chung
Chairperson of Standards Sub-committee

Annex A:
Updated Credit Content for Section 1.3 under BEAM Plus NB v2.0

	Section	Credit Requirement	Extent of Application	Credit
SS 1	Pedestrian-oriented and Low Carbon Transport	(a) Accessibility to Public Transport 1 credit for achieving Accessibility Index of 15 or more for all buildings of a development. (b) Pedestrian-oriented Access 1 credit for achieving 50% or more of the pedestrian-oriented transport planning measures. 1 additional BONUS credit for achieving 100% of the pedestrian-oriented transport planning measures. (c) Cycling Facilities and Network Integration 1 BONUS credit for providing cycling facilities within the Site and integrating with the public cycling network if a public cycling network exists or has been planned nearby. (d) Charging Facilities for Electric Vehicle (EV) 1 BONUS credit for providing EV medium chargers for at least 50% of all car parking spaces and EV charging-enabling for all car parking spaces (including visitor car parks).	All buildings	2 + 1 additional BONUS + 2 BONUS
SS 2	Neighbourhood Amenities	(a) Amenities for Building Users 1 credit where adequate amenities for building users are located within the site or 500m walking distance/ an equivalent horizontal commuting time from the site entrance(s). (b) Shared Amenities for Neighbourhood 1 credit where adequate shared amenities for the neighbourhood are provided within the site and are made available for public use.	All buildings	2

Annex B:
Updated Credit Content for Section 3.1 under BEAM Plus NB v2.0

3 Sustainable Site 3.1 Neighbourhood Integration

SS 1 Pedestrian-oriented and Low Carbon Transport

Extent of Application All buildings

Objective Encourage the use of pedestrian-oriented, low carbon and/ or public transport, with an aim to create a safer, more sustainable and appealing environment that promotes human interaction, a sense of place as well as integration with the surrounding pedestrian transport network.

Credits Attainable 2 + 1 additional BONUS + 2 BONUS

Credit Requirement

(a) Accessibility to Public Transport

1 credit for achieving Accessibility Index of 15 or more for all buildings of a development.

(b) Pedestrian-oriented Access

1 credit for achieving 50% or more of the pedestrian-oriented transport planning measures.

1 additional BONUS credit for achieving 100% of the pedestrian-oriented transport planning measures.

(c) Cycling Facilities and Network Integration

1 BONUS credit for providing cycling facilities within the Site and integrating with the public cycling network if a public cycling network exists or has been planned nearby.

(d) Charging Facilities for Electric Vehicle (EV)

1 BONUS credit for providing EV medium chargers for at least 50% of all car parking spaces [1] and EV charging-enabling for all car parking spaces (including visitor car parks) [1].

Assessment

(a) Accessibility to Public Transport

1. Indicate the distances shown alongside unhampered walking routes within a walking distance of 1,000m from the site main entrance(s) to each public transport [2] stop or the main entrance of each station in vicinity on an A3-sized scaled drawing.

2. Provide evidence of service frequencies of the public transport.

3. Calculate the Accessibility Index (AI) [3] for all buildings of a development using the prescribed form.

1 The “car parking spaces” in this credit shall refer to private car parking spaces and motorcycle parking spaces. The following can be excluded in the assessment: (i) Loading/ unloading bay; and (ii) Car parking space for operational vehicle such as light goods vehicle, light bus, medium/ heavy goods vehicle, coaches, etc.

2 Public transport includes railways, bus (franchised bus/ non-franchised public bus), green minibus (GMB), tram and ferry.

3 Transport for London. Public Transport Accessibility Levels. [ONLINE]. Available at: https://data.london.gov.uk/dataset/public-transport-accessibility-levels. [Accessed April 2021].

3.1. Use service frequency data at peak periods for the calculation of waiting time.

3.1.1. The Applicant shall propose any hour on a weekday as the "peak hour" for the calculation of Accessibility Index (AI). In view of different building natures (e.g. non-residential/ non-commercial building types such as stadium, museum, etc.), the "peak hour" may be considered as any hour on a weekend with justification. The service frequency data of the identified public transport shall be selected at the same "peak hour".

3.1.2. Considering the same proposed "peak hour', the shortest headway (in minutes) from service frequency data could be adopted for each of the identified public transports. For example, given that the service frequency of public transport is 15-20 minutes within the "peak hour", the lower bound (i.e. 15 minutes) could be adopted in the AI calculation.

3.2. Adopt a walking speed of 80m per minute for the calculation of walk time.

4. Provide evidence issued by a government agency or a quasi-government body for the targeted operation date of any future public transport services/ facilities. Future services/ facilities provisions not operable at the time of building completion will be accepted if they will be in operation no later than one year after the occupation of the proposed development.

5. For a site served by dedicated shuttle service vehicles for the development and to be considered under the AI method, provide the following:

5.1. Proposal of service provision:

5.1.1. Routes and stops of the shuttle services providing connection links to the public transport,

5.1.2. Capacity of the shuttle service vehicles,

5.1.3. Locations of the shuttle service drop-off/ pick-up points, and

5.1.4. Operating frequency of the services.

5.2. Justification of the adequacy of the service if the capacity of the shuttle service vehicles is below 16 passengers.

5.3. An undertaking letter by the developer/ property owner for the provision of the shuttle service for a minimum of 5 years.

(b) Pedestrian-oriented Access

1. Demonstrate compliance for the pedestrian-oriented transport planning measures using the following score table.

2. Complete the prescribed form to indicate whether the following sub-items are achieved or not.

3. Provide justifications for each of the achieved sub-items and descriptions with illustrations, drawings and photos of measures adopted.

Safe Environment		**Score**
a	Segregation between main pedestrian pathways and vehicular traffic for private cars/ taxis within the Site if there is no speed limit or the targeted speed is higher than 20 km/h; **OR**	1
	Vehicular traffic calming measures adopted and speed limit signs provided for a speed of no more than 20 km/h for over 50% of roads within the Site; **OR**	1
	Vehicular traffic calming measures adopted and speed limit signs provided for a speed of no more than 20 km/h for 100% of roads within the Site.	2
b	Whole length of main pedestrian pathways to be overlooked from any normally occupied spaces of buildings within or outside the Site.	1
c	Illuminance of all pedestrian pathways within the Site is at least 50 lux.	1
Convenient Environment		**Score**
d	Short and direct pathways as compared to the vehicular access/ pathways.	1
e	Minimised level changes for pathways meeting recommended design requirements of barrier-free access in Chapter 4 of BFA 2008.	1
f	Widths of the street furniture and greening zones along the main pedestrian pathways meeting recommended widths of HKPSG Chapter 8 [4].	1
g	Widths for the main pedestrian pathways meeting recommended widths of HKPSG Chapter 8 [4].	1
h	Clear and easily understood wayfinding signage is sited prominently and in predictable locations within the Site.	1
Pleasant Environment		**Score**
i	Car parking spaces not exceeding the minimum requirement from the government, excluding parking for shuttle service vehicles; **OR**	1
	No car parking is provided other than provisions intended for use by people with a disability and for shuttle service vehicles.	2
j	Planting zone of a minimum width of 1m along the main pedestrian pathways.	1
k	Main pedestrian pathways under cover or shaded by trees.	1
l	Pedestrian pathways designed with high architectural/ landscape quality, with design features intended for human delight/ celebration of culture or public art.	1
Note: Main pedestrian pathways are defined as pathways of width not less than 2m for pedestrian circulation from building main entrance(s) to site entrance(s) or amenities within the site.		

4 Planning Department. Hong Kong Planning Standards and Guidelines. Chapter 8: Internal Transport Facilities. [ONLINE]. Available at https://www.pland.gov.hk/pland_en/tech_doc/hkpsg/sum/pdf/sum_ch8_en.pdf. [Accessed April 2021].

4. The following assessment requirements for car parking facilities shall be fulfilled for scoring the first point under Pleasant Environment:

    4.1. The car parking spaces not exceeding the minimum requirement from the government (lease/ engineering conditions). If no requirement is stipulated in lease/ engineering conditions, the lower bound number of any recommended range in HKPSG Chapter 8 [5] or Transport Department (TD)'s advice shall be followed;

    4.2. Simultaneous free flow of vehicles in and out of the car park at the point of access; and

    4.3. Provisions to avoid ground contamination from oil run-off by:

        4.3.1. For covered parking spaces: Petrol interceptors, and

        4.3.2. For open parking spaces: Petrol interceptors or, if there is no open transport interchange/ vehicular servicing area, pervious paving and construction with a maximum gradient of 1:20, a depth of at least 600mm from top surface of paving to anticipated highest water table, and a permeability rate of at least 0.1mm/sec.

5. Demonstrate that the width of each horizontal screen, covered walkway or trellis over main pedestrian pathways shall be at least 2m.

6. If shading for main pedestrian pathways is provided by trees at-grade, demonstrate by an ecologist or a landscape architect that:

    6.1. The shade provided should be a continuous strip of trees planted along the pedestrian route.

    6.2. Suitable species of broadleaved trees (not palms conifers) with sufficient anticipated crown diameters are provided to offer shade.

    6.3. The tree coverage shall be measured using the estimated crown diameters of 10 years after landscape installation, with evidence of crown measurement of the species taken in similar local growing conditions.

    6.4. A shaded pedestrian route of a minimum width of 2m under the trees shall be demonstrated on plan.

(c) Cycling Facilities and Network Integration

1. Demonstrate that there is a public cycling network within 500m walking distance from the perimeter of the site, either existing or planned (to be in operation no later than one year after the occupation for the proposed Project).

2. Demonstrate that the following facilities are provided by means of layout and drawings, supplementary calculations and photos of the installed facilities:

    2.1. Cycling tracks and parking facilities complying with the requirements in Section 6 – Cycling of Internal Transport Facilities presented in the Chapter 8 of HKPSG [6] or Transport Department (TD)'s requirements.

5 Planning Department. Hong Kong Planning Standards and Guidelines. Chapter 8: Internal Transport Facilities. [ONLINE]. Available at https://www.pland.gov.hk/pland_en/tech_doc/hkpsg/sum/pdf/sum_ch8_en.pdf. [Accessed April 2021].

6 Planning Department. Hong Kong Planning Standards and Guidelines. Chapter 8: Internal Transport Facilities [ONLINE]. Available at: https://www.pland.gov.hk/pland_en/tech_doc/hkpsg/sum/pdf/sum_ch8_en.pdf. [Accessed April 2021].

2.2. The cycling tracks comply with the following conditions:

2.2.1. A continuous cycling network within the Site and the existing/ planned public cycling network if the public cycling network is immediately adjacent to the Site; and

2.2.2. The cycling network within the Site shall have physically designated in-/ off-street cycle tracks or are integrated with roads designed for a target speed of 20 km/h or slower.

2.3. For non-residential projects or non-residential portion of mixed-use projects, shower and changing facilities of at least one shower for the first 100 regular building occupants (excluding occasional visitors) and one additional shower facility for every additional 150 regular building occupants.

(d) Charging Facilities for Electric Vehicles (EV)

1. For both Indoor parking and outdoor parking space, basic EV charging-enabling/ facilities requirements are as follows:

   Provide descriptions with illustrations, schematic drawings and photos of the EV charging-enabling for ALL the car parking spaces [7] with reference to the requirements in Technical Guidelines for Electric Vehicle (EV) Charging-enabling for Car Parks of New Building Developments [8].

2. Demonstrate that 50% of all the car parking spaces [7] are provided with EV charging facilities that meet the following requirements:

   2.1. Installation of medium chargers with output power not less than 7kW;

   2.2. Sockets provided are widely applicable for various EV brands/ types of the market;

   2.3. Medium chargers with American SAE standard, European IEC standard and China GB/T standard sockets [9] shall be provided for all visitor car parks; and

   2.4. For **outdoor** EV chargers, safety requirement in IEC 60364- 7-722 is required with protection of at least IPX4.

7 The “car parking spaces” in this credit shall refer to private car parking spaces and motorcycle parking spaces. The following can be excluded in the assessment: (i) Loading/ unloading bay; and (ii) Car parking space for operational vehicle such as light goods vehicle, light bus, medium/ heavy goods vehicle, coaches, etc.

8 Technical Guidelines for Electric Vehicle (EV) Charging-enabling for Car Parks of New Building Developments [ONLINE]. Available at: https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/air/prob_solutions/files/guidelines_on_enabling_eng.pdf. [Accessed April 2021].

9 The provision shall be a mix of medium chargers with sockets in the American SAE standard, European IEC standard and China GB/T standard respectively if there are 3 or more visitor car parking spaces in the development, OR medium chargers with sockets in any of these three standards if there are less than 3 visitor car parking spaces.

Submittals

(a) Accessibility to Public Transport

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**CA**	**FA/ RFA**
SS_01a_00	BEAM Plus NB submission template for SS 1a	✓	✓	✓
SS_01a_01	Calculation for Accessibility Index (AI) [Appendix A]	✓	✓	✓
SS_01a_02	Scaled drawing on an A3-sized sheet indicating the distances alongside unhampered walking routes from site entrance(s) to stops/ stations of public transport services	✓	✓	✓
SS_01a_03	Evidence of service frequencies of public transport at the peak hour	✓	✓	✓
SS_01a_04	/	/	/	/
For future services/ facilities provisions in operation no later than one year after the completion and occupation of the proposed development, please include the following:		**PA**	**CA**	**FA/ RFA**
SS_01a_05	Evidence issued by a government agency or a quasi-government body for the targeted operation dates of any future public transport services/ facilities	✓	✓	✓
SS_01a_06	Evidence showing the actual occupation date of the proposed development [or] Declaration letter by the developer/ property owner stating the targeted occupation date of the proposed development (if the evidence is not available at the time of CA submission)	- -	✓ ✓	✓ -
If shuttle service is provided, please include the following:		**PA**	**CA**	**FA/ RFA**
SS_01a_07	Scaled building layout plans for drop-off/ pick-up point(s) of shuttle service vehicles	✓	✓	✓

SS_01a_08	Proposal of shuttle service provision: - Routes and stops that provide connection links to the public transport; - Capacity of the shuttle service vehicles; - Locations of the shuttle service drop-off/ pick-up points; and - Fixed operating frequency of the services	-	✓	✓
SS_01a_09	Justification for the adequacy of services (if the capacity of shuttle service vehicles is below 16 passengers)	-	✓	✓
SS_01a_10	Undertaking letter by the developer/ property owner that the shuttle services will be provided for a minimum of 5 years	-	✓	✓
SS_01a_11	/	/	/	/
SS_01a_12	/	/	/	/

(b) Pedestrian-oriented Access

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**CA**	**FA/ RFA**
SS_01b_00	BEAM Plus NB submission template for SS 1b	✓	✓	✓
SS_01b_01	Drawings and descriptions on the relevant pedestrian-oriented features	✓	✓	✓
SS_01b_02	Relevant parts of the lease conditions/ engineering conditions on the car park provisions (if applicable)	✓	✓	✓
SS_01b_03	Extracts of HKPSG's recommended minimum car park provisions, or Transport Department advice on minimum car park provisions (if applicable and there is no requirement stipulated for car park provision in the lease or engineering conditions)	✓	✓	✓
SS_01b_04	Layout plan showing the locations and types of car parking spaces (if applicable)	✓	✓	✓

SS_01b_05	Calculation of minimum car park provision (if applicable)	✓	✓	✓
SS_01b_06	Swept path diagram to show simultaneous free flow of vehicles in and out of the car park at the point of access (if applicable)	✓	✓	✓
SS_01b_07	Drawings showing the provisions in the car park to avoid ground contamination from oil run-off (if applicable)	✓	✓	✓
SS_01b_08	Plans showing a shaded pedestrian route under trees for main pedestrian pathways [and] Report on species of trees and anticipated crown diameters 10 years after landscape installation (if applicable and shading for main pedestrian pathways is provided by trees at-grade)	✓	✓	✓
SS_01b_09	Evidence of pedestrian-oriented features in project completion [or] Architect's Instruction (AI) with shop drawings, approved contractor's submission with technical information, etc. (if the evidence is not available at the time of CA submission)	- - 	✓ ✓ 	✓ -

(c) Cycling Facilities and Network Integration

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**CA**	**FA/ RFA**
SS_01c_00	BEAM Plus NB submission template for SS 1c	✓	✓	✓
SS_01c_01	Scaled drawing on an A3-sized sheet indicating the nearby public cycling network	✓	✓	✓
SS_01c_02	Drawings and calculations of cycling tracks, parking and other facilities within the site meeting stipulated requirements	✓	✓	✓

SS_01c_03	Extracts of HKPSG's recommended cycling facilities provisions, or Transport Department's advice on cycling facilities provisions	✓	✓	✓
SS_01c_04	Evidence of cycling facilities in project completion [or] Architect's Instruction (AI) with shop drawings, approved contractor's submission with technical information, etc. (if the evidence is not available at the time of CA submission)	- -	✓ ✓	✓ -
SS_01c_05	Drawings demonstrating the shower and changing facilities (for non-residential projects or non-residential portion of mixed-use projects)	✓	✓	✓

(d) Charging Facilities for EV

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**CA**	**FA/ RFA**
SS_01d_00	BEAM Plus NB submission template for SS 1d	✓	✓	✓
SS_01d_01	Drawings and description of EV charging facility provisions	✓	✓	✓
SS_01d_02	Evidence of EV charging facilities in project completion [or] Architect's Instruction (AI) with shop drawings, approved contractor's submission with technical information, etc. (if the evidence is not available at the time of CA submission)	- -	✓ ✓	✓ -

Remarks

(a) Additional Information

Recommended design requirements for barrier free access are published in the Design Manual for Barrier Free Access 2008 of the Buildings Department HKSAR.

Civil Engineering and Development Department, HKSAR publishes projects on the latest and on-going cycle track networks in its website.

Transport Department, Public Transport in Hong Kong. [ONLINE]. Available at: http://www.td.gov.hk/en/transport_in_hong_kong/public_transport/. [Accessed April 2021].

(b) Related Credit

SS P1 Minimum Landscaping Requirements

The related prerequisite requires a minimum site coverage of greenery that may contribute to the design of a pleasant environment for pedestrians.

SS 2 Neighbourhood Amenities

The related credit promotes a good pedestrian accessibility to amenities within and in the vicinity of the Site. Better integration of the surrounding pedestrian networks and pedestrian pathways within the site will achieve enhanced accessibility for building users and/ or the public.

SS 7 Biodiversity Enhancement

The related credit encourages strategies to preserve and/ or enhance the ecological value of the site in terms of habitat and biodiversity.

SS 8 Urban Heat Island Mitigation

The related credit encourages a higher overall site coverage of greenery and stipulates minimum site coverage of greenery in the Primary Zone (the 15m vertical zone of a site along the abutting street level). The enhanced greenery in the Primary Zone will contribute to a more pleasant pedestrian environment.

SS 10 Outdoor Thermal Comfort

The related credit considers the positive effect of shading by trees and the surrounding ground surface temperatures of greenery within the site.

SS 11 Stormwater Management

The related credit considers the hardscape and softscape provided with the site for infiltration and detention in stormwater management that may contribute to the design of a pleasant environment for pedestrians and the pervious construction to avoid ground contamination from oil run-off for open car park.