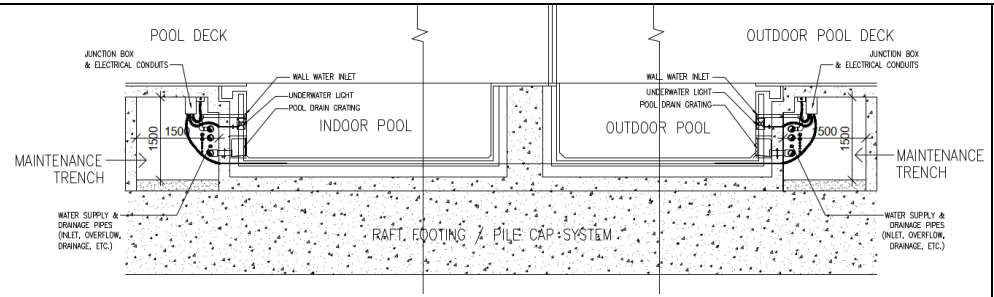
Summary of Items Discussed in 1/2023 APSEC Discussion Forum on 10 February 2023

	Items proposed by Convenors for Discussion	Summary of Discussion and BD's Response
	Items raised by HKIA	
1.	**<u>Maintenance Trench for On-grade Swimming Pool</u>** For on-grade and suspended swimming pools constructed on raft footing or pile cap or as suspended structures, maintenance trench is required along the pool sides to house the **filtration system water supply, overflow and drainage pipes, and also electrical system for pool lighting**. The trenches are required for the following reasons: - (i) The trench allows regular visual inspection of the pipework for the early discovery of any water leakage to avoid loss of water and ensure water conservation. (ii) The trench provides space for pipework maintenance and replacement when defective pipework is found during regular inspection. (iii) As uPVC pipes instead of metal pipes are used for pool to avoid corrosion by chlorine, the pipework is susceptible to damage if they have to be surrounded by backfilling material. Would BD favorably consider to grant GFA exemption for the trench and not to include the exempted area in the 10% overall cap?	BD advised that the maintenance trench along the pool side was not required to be included in GFA calculation if it was of reasonable size and its abuse would be unlikely.

		
2.	**<u>Code of Practice on Access for External Maintenance (AfEM Code)</u>** It is our understanding that the maintenance and repair (M&R) access requirements on inspection and maintenance/repair are different according to the AfEM Code. The provision of suspended working platform (gondola system) can facilitate routine visual inspection of external walls/building services and even some minor maintenance/repair works. But it shall not be considered as the only means of M&R access for reaching 100% of the building envelope due to its limitation of operation in terms of size and manoeuvring flexibility. For some building designs with irregular shape or projections from external walls, the erection of temporary scaffolding should be more appropriate means for detailed inspection and substantial repair works. Would BD please advise if the above understanding is correct that suspended working platform reaching the entire building envelope is not necessary?	BD advised that the compliance with the AfEM Code did not preclude the use of temporary scaffolding for substantial repair. However, M&R access should also cater routine maintenance of the building including cleansing, inspection and localised repair / replacement of defective building elements and components, etc. The use of alternative means such as scaffolding should be considered on case basis. The AP should demonstrate to the satisfaction of BD that the proposed M&R access would not be inferior to the deem-to-satisfy provisions stipulated in the AfEM Code and should exercise due considerations on the following: (i) adequate access should be provided through common area for conveying materials and erection of scaffold; (ii) the design of building projection, building recess and free-form building profile should enable the erection of temporary scaffold in compliance with the Guidelines on the Design and Construction of Bamboo Scaffolds; and

		(iii) adequate permanent edge protection and works restraint / fall arrest system should be provided for workers to erect the scaffold.
3.	**<u>Minimum Headroom required for Refuse Collection Vehicles (RCV)</u>** It comes to our attention that the Food and Environmental Hygiene Department (FEHD), through the comments on general building plan (GBP) submissions, has recently conveyed the following specifications and operational requirements of RCV, which are more stringent and do not tally with the specifications stated in PNAP APP-35: *"The headroom along the RCV passage from the entrance to the exit should be* ***at least 4.5m****. At the point where the RCV is parked for loading/bin-lifting operation, the clear headroom should* ***not be less than 5.5m.****"* This will have profound implication on the storey height at G/F. Would BD please clarify with FEHD if the above are the new requirements for their refuse collection service, and if affirmative, more lenient approach in accepting storey height at G/F for the purpose of regulation 23(3)(a) of the Building (Planning) Regulations (B(P)R) may need to be considered by BD.	BD advised that the specifications of the RCV currently in use by FEHD specified in PNAP APP-35 were still applicable. In case of high headroom required by FEHD, BD would take a pragmatic approach and consider the case merits subject to AP's justification and the comments of the relevant government departments. HKIA would provide case details of the concerned developments for BD's further liaison with FEHD. [**Post-meeting note:** Upon receipt of further information from HKIA, BD discussed with FEHD on the issue. BD was liaising with FEHD to provide update on the limiting specifications of RCV stated in PNAP APP-35.]

	Items raised by HKIE	
4.	**<u>Shallow Foundation in Reclaimed Land with Consolidation Substantially Completed – Clause 2.4.4 of Code of Practice for Foundations 2017 (Foundation Code)</u>** According to Clause 2.4.4 of the Foundation Code, *"for practical design purpose, the effect of consolidation may be ignored when the ground has undergone a minimum of 95% of primary consolidation settlement. In the absence of a detailed consolidation assessment, the number of years after reclamation required to achieve the 95% degree of consolidation for marine clay of an aggregate thickness H could be taken as follows:"* The above table however does not apply to situation where extensive shallow foundation with high soil bearing pressure will be placed to further consolidate the reclaimed land. To avoid subjective interpretation, would BD please clarify the extent of shallow foundation and the adopted soil bearing pressure in the design to which the above table is not applicable.	BD advised that the said requirement in Clause 2.4.4 of the Foundation Code was imposed in response to comments received from the then BSC and APSEC members in 2016. The applicability of the table in the said Clause should be determined on case basis. BD would consider deliberating the issue in the Technical Committee (TC) on the Code of Practice for Foundations.

Thickness of clayey deposits without interbedding sand/silt layers, H	Number of years
$H \leq 5m$	10
$5m < H \leq 10m$	20
$10m < H \leq 15m$	30

5.	**<u>Presumed Allowable Bearing Capacity and Shaft Friction for Foundations</u>**
	
	(a) Design in Igneous Rock and Marble
	GEO has recently updated the Technical Guidance Note (TGN) 53 on 19 January 2023 and TGN 26-1A on 18 January 2022, revising the presumed allowable bearing capacity and shaft friction for category 1(a), 1(b) and 1(c) rock as well as marble. Will BD accept the same presumed allowable bearing capacity and shaft friction for foundation designs in private development? Copy for TGNs are enclosed for your easy reference.
		For (a), BD advised that whilst amendment to the Foundation Code had yet been made, BD in general would accept the presumed allowable bearing capacity of marble as specified in TGN 26-1A. As for igneous rock, BD would consider deliberating the issue in the TC on the Code of Practice for Foundations. Meanwhile, submission of foundation plans adopting the enhanced allowable bearing capacity and shaft friction specified in TGN 53 would be considered on case-by-case basis and might be referred to the Structural Engineering Committee for deliberation as necessary. Practitioners were encouraged to make use of the pre-submission enquiry service to resolve the issue before formal submission.
		
		For (b) and (c), BD advised that the issues had been raised by TC members of the Foundation Code. The issues were being considered and might be discussed in the TC.

Table 1 – Presumed Allowable Bearing Capacity and Shaft Friction for Foundations in Igneous Rocks

Category	Description of Igneous Rocks	Presumed Allowable Bearing Pressure (kPa)	Presumed Allowable Bond or Friction (kPa)
1(a)	Fresh to slightly decomposed strong to very strong granite or volcanic rock of material weathering grade II or better, with 100% TCR of the designated grade which has a minimum UCS of rock material not less than 75 MPa (or an equivalent point load index strength PLI50 not less than 3 MPa)	12,500	1,000 (under compression or transient tension) 500 (under permanent tension)
1(b)	Fresh to slightly decomposed strong granite or volcanic rock of material weathering grade II or better, and with not less than 95% TCR of the designated grade, which has a minimum UCS of rock material not less than 50 MPa (or an equivalent point load index strength PLI50 not less than 2 MPa)	10,000	
1(c)	Slightly to moderately decomposed moderately strong granite or volcanic rock of material weathering grade III or better, and with not less than 85% TCR of the designated grade, which has a minimum UCS of rock material not less than 25 MPa (or an equivalent point load index strength PLI50 not less than 1 MPa)	7,500	700 (under compression or transient tension) 350 (under permanent tension)
1(d)	Moderately decomposed, moderately strong to moderately weak granite or volcanic rock of material weathering grade III or better, and with not less than 50% TCR of the designated grade.	3,000	300 (under compression or transient tension) 150 (under permanent tension)

TGN 53_Presumed bear

TGN26-1A_rev_Marble.pdf

(b) Presumed allowable bond or friction between rock and concrete or grout for piles

Table 2.2 of the Foundation Code and TGN 53 allowed the use of bond friction between category 1(d) or 2 rock and concrete/grout. However, Clause 5.4.2(1)(a) of the Foundation Code specified that the rock socket for socketed steel H-piles should be formed in category 1(a), 1(b) or 1(c) rock. For mini-piles, Clause 5.4.8(2)(b) of the Foundation Code specified that the rock socket should be formed in category 1(a), 1(b) or 1(c) rock. Will BD consider accepting socketed steel H-piles and mini-piles socketed into category 1(d) or 2 rock as per Table 2.2 of the Foundation Code (extracted below for your easy reference)?

Table 2.2 Presumed Allowable Bond or Friction Between Rock and Concrete or Grout for Piles

Category of rock as defined in Table 2.1	*Presumed allowable bond or friction between rock and concrete or grout for piles (kPa)*	
	Under compression or transient tension	*Under permanent tension*
1(c) or better	700	350
1(d) or 2	300	150

(c) Steel H-piles Driven to Bedrock

Clause 5.4.11(2)(b) of the Foundation Code specified that *"piles should be founded on or close to rock not inferior to category 1(d) defined in Table 2.1."* Will BD consider accepting steel H-piles driven to category 2 rock / Class II or better Marble?

6.	**<u>Post Construction Proof Drilling for Frictional Piles without End Bearing Capacity</u>** According to Clause 7.4.4 of the Foundation Code, post construction proof drilling shall be conducted to ascertain the soundness of concrete/rock interface for each of the large diameter bored piles, barrettes and the like. For specific site and geological conditions, frictional bored piles or frictional barrettes may be adopted as the foundation system. The design principle of these frictional piles is identical to that of socketed steel H-pile, i.e. the pile capacity is wholly contributed by the bond friction between concrete and soil/rock and the end bearing resistance is totally ignored. Hence, interface condition is not a concern for frictional piles. It is noticed that in the common conditions and requirements imposed in approval letter for Foundation Works (Large Diameter Bored Piles) (SE-SA6 (5/2021)), conditions are imposed under item 6 in section 17(1) of the Buildings Ordinance (BO) for post-construction proof drilling for frictional bored piles, as well as in accordance with the aforesaid Clause of the Foundation Code. Would BD please review and amend Clause 7.4.4 of the Foundation Code to reflect the design intent for better works efficiency and cost effectiveness?	BD advised that according to Clause 8.4 of the Foundation Code, for large diameter bored piles, barrette piles and hand-dug caissons, other suitable acceptance criteria for the loading test with full justification might be used. Post construction proof drilling might not be necessary for large diameter bored piles, barrettes and the like where the pile capacity was solely contributed by bond friction along pile shaft. Approval conditions of adopting loading test as proof test may be imposed for such foundation types as necessary. BD may consider refining the common conditions and requirements imposed in approval letter for Foundation Works (Large Diameter Bored Piles) (SE-SA6 (5/2021)) for such types of foundation.

7.	**Design of Moment Connections according to Code of Practice for the Structural Use of Steel 2011 (2021 Edition) (Steel Code)** According to Clause 6.11 of the Steel Code, the detailing and design of connections must be consistent with the assumptions used in design calculations. Connections should be able to transmit forces and moments calculated in the design. Joints in Steel Construction: 1995 - Moment Connections published by the Steel Construction Institute in association with the British Constructional Steelwork Association Limited (SCI/BCSA Moment Connections) is a listed reference in Annex A of the Steel Code. This publication provides a guide to the design of moment connections in steelwork. For example, according to Clause 2.5 of SCI/BCSA Moment Connections, for braced frames and single storey portals, well-proportioned connections designed for strength alone may be assumed to be rigid and the respective standardised connections in the publication are examples of this type of connection (extracted copy attached).  Extract of SCI_BCSA Momen Would BD please confirm if the guidance of SCI/BCSA Moment Connections on modelling moment connections in steel frames complies with the requirements of the Steel Code?	BD advised that the guidance of SCI/BCSA Moment Connections was considered as a general design reference for moment connections in steelwork and the steel connections in structural plan submissions should be designed in accordance and complying with the Steel Code. BD also advised that the TC on the Steel Code was reviewing the classification for joint rigidity and considering to provide some guidelines/illustration diagrams in the Steel Code.

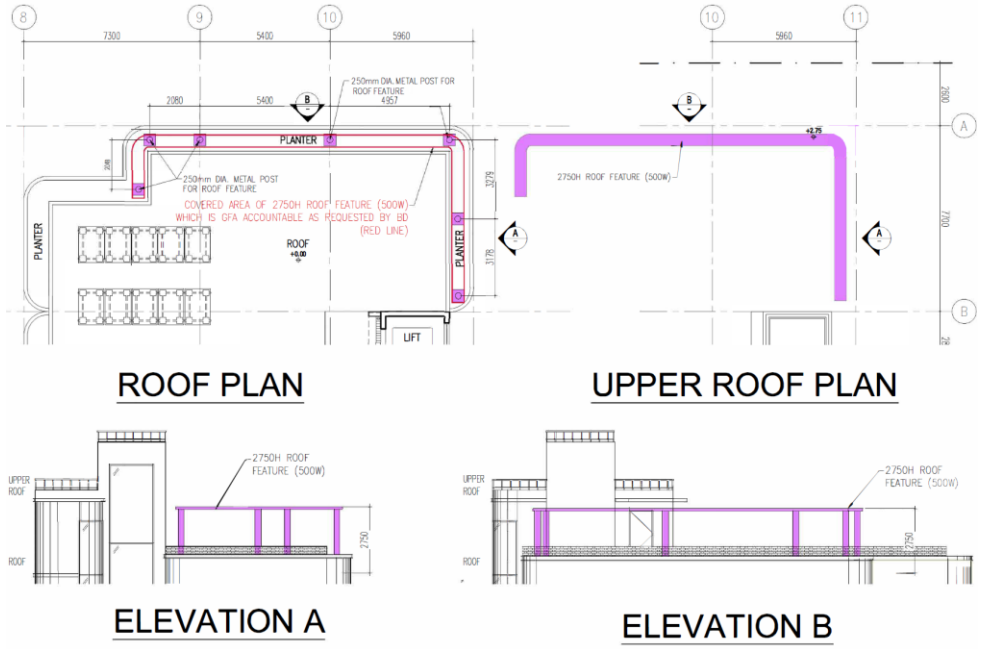
8.	**<u>Elastomeric/mechanical bearing works</u>** According to section 3 of the Building (Construction) Regulation, all materials used in building works must be of a nature and quality suitable for their intended use or purpose. The materials used must be adequately tested by recognized tests. This section is a performance-based provision. For a submission involving elastomeric/mechanical bearing works, bearing schedules indicating the performance requirements including the design loads and movements in any specified direction for the bearings are shown on the plan. Details of the manufacturers of the bearings for identification purposes may not be available at the time of the plan submission. The performance requirements in conformity with the design calculations are subject to verification. For approval, BD usually imposes conditions and requirements for submission of information on the materials and associated testing reports as per the common conditions and requirements imposed in approval letter for Elastomeric/Mechanical Bearing Works (SE-SA28 (01/2021)) at various stages of the bearing works. Would BD please confirm that other than the bearing schedules specifying the performance requirements, details of the manufacturers of the bearings are not required to be shown on the plan submitted for approval?	BD advised that as specified under the common conditions and requirements imposed in approval letter for Elastomeric/Mechanical Bearing Works (SE-SA28 (01/2021)), certain information of the quality assurance scheme of the manufacturer, such as the quality control documentation relating to the production of the bearings and documents to prove that manufacturing of the bearings were by a factory with ISO 9001 quality assurance certification, would not be required if the bearing was supplied by a manufacturer whose name and address was included in the list of approved suppliers of materials and specialist contractors for public works kept by the Development Bureau under the category of Supply and Installation of Bearings for Highway Structures. If the details of the manufacturers of the bearings were not available at the time of the plan submission, a copy of quality assurance scheme of the manufacturer would be required to be submitted prior to the application for consent to the commencement of the bearing works.

9.	**<u>Qualified Supervision and Quality Audit for Precast Concrete Construction, Modular Integrated Construction and Heat Soak Process of Tempered Glass</u>** BD has promulgated a pragmatic and flexible approach under the stepped up cross-boundary control to accept on-site audit checks by videotelephony with in Circular Letter dated 22 April 2022. Given the past 3 years of successful experience using videotelephony for qualified site supervision and Quality Audits, whilst the relaxation of cross-boundary control measures is being implemented in stage, we suggest BD to continuous accept videotelephony as an alternative arrangement for carrying out the qualified supervision and quality audit for enhancement of the industry's work efficiency.	BD advised that the enhanced alternative arrangement on such use of videotelephony adopted under the stepped up cross-boundary control was still in place. BD would notify the building professionals if the arrangement was to be ceased.
10.	**<u>Non-destructive Testing of Welds for Structural Steel Works</u>** According to the approval conditions of structural steel works, the test reports of non-destructive testing of welds shall be endorsed by Registered Structural Engineer (RSE) and kept on site for inspection by BD (extracted copy of the approval conditions attached for easy reference).  Non-destructive testing of welds (S Under the Code of Practice for Site Supervision 2009 (2021 Edition) (Site Supervision Code), RSE can assigned representative (same as the	BD advised that to ensure the quality of structural steel works, RSE's endorsement on reports of non-destructive testing of welds was necessary. While there were no requirements on such endorsement by RSE's signature on the said reports or in a written confirmation on the authenticity of the reports, RSE were reminded to endorse the said reports within reasonable time.

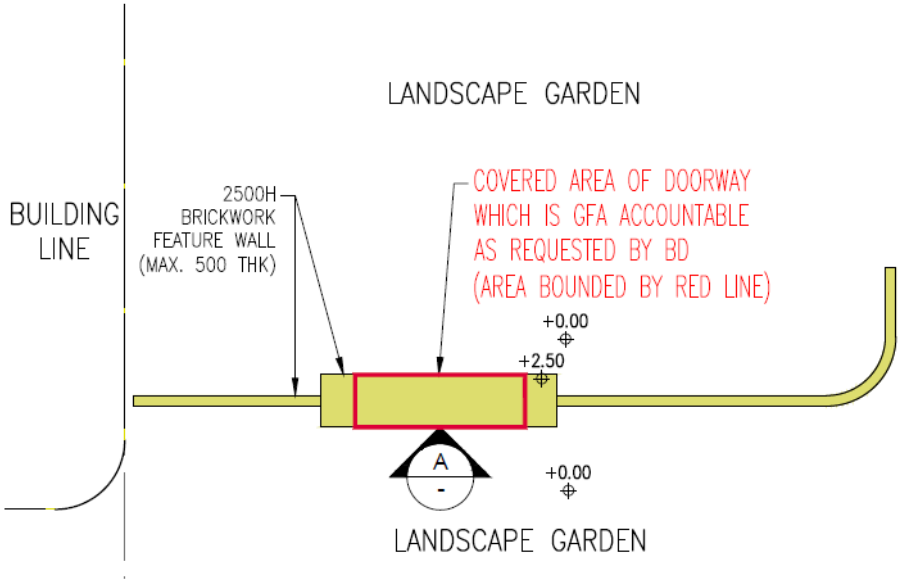
	Technically Competent Person of Grade T5 under the RSE's stream) to conduct regular qualified site supervision of the structural steel works on site. The corresponding test reports will normally be inspected by the RSE's representative during their routine site inspection. It is proposed that BD should accept the test reports of non-destructive testing of welds to be endorsed by RSE's representative as an enhancement measure for work efficiency.	
11.	**<u>Removal of Retaining Walls in Site Formation Works</u>** Occasionally, removal of retaining walls will be shown and approved in a site formation plans as so to reflect the overall design intent/concept of the site formation works. BD sometimes requests these removal works to be carried out by a Registered Specialist Contractor (Demolition). As Register Specialist Contractors (Site Formation) (RSC(SF)) are experienced in the construction of retaining walls, we consider the removal works of retaining walls shown in site formation plans by RSC(SF) are safe and more suitable. Would BD please advise whether it is acceptable?	BD advised that the scope of works of Registered Specialist Contractors in the demotion works and site formation works categories were delineated under Appendix A to PNAP APP-96. HKIE would provide case details for BD's consideration on the issue.
	Items raised by AAP	
12.	**<u>Set Back Approach – PNAP APP-132</u>** It is our understanding that the setback of building as mentioned in paragraph 3 of PNAP APP-132 should only be applied to the part of building above street level, such that part of building/ structures/ services below street level	BD advised that AAP's understanding was correct. Under paragraph 3(e) of PNAP APP-132, the setback area should contribute to improving the street environment such as enhancing air ventilation and

	could still be erected within the setback area. Please confirm if our understanding is correct.	permeability as well as promoting connectivity and walkability. In this regard, building/ structures/ services below street level (including smoke outlets covered by breakable panels on the ground of the pavement), not affecting street environmental, were generally acceptable to be erected within the setback area.
13.	**<u>Building Setback – PNAP APP-152</u>** It is our understanding that the requirement of building setback in PNAP APP-152 should only be applicable to buildings fronting street vested in the Government and maintained by the Highways Department or a private street to be surrendered to the Government, as described under regulation 18A(3)(a)(i) and (ii) of B(P)R, and it is not applicable to buildings fronting other street as described under regulation 18A(3)(a)(iiii), (iv) and (v) of the B(P)R. Please confirm if our understanding is correct.	BD advised that AAP's understanding was correct. The term "street" was defined in Appendix A to PNAP APP-152 as described under regulation 18A(3)(a)(i) and (ii) of B(P)R.
14.	**<u>Fire Resisting Enclosures to Services</u>** There are recent cases that BD officers require drainage pipes coming from upper domestic floors to be enclosed by fire barriers when passing through areas at mechanical floor below (not being protected exits and protected lobbies) even when the openings for the pipes through the fire barriers are protected with fire stops. Would BD please clarify if such fire resisting enclosures to services could be	BD advised that the fire resisting enclosures to services within the mechanical floor as mentioned in the scenario are not required in accordance with Clauses C8.2 and C8.4 of the FS Code. According to Clause C8.2 of the FS Code, every opening for passage of air-conditioning ducts, ventilation ducts, electrical trunkings, conduits, pipes, cables and the like through a fire barrier should be protected with

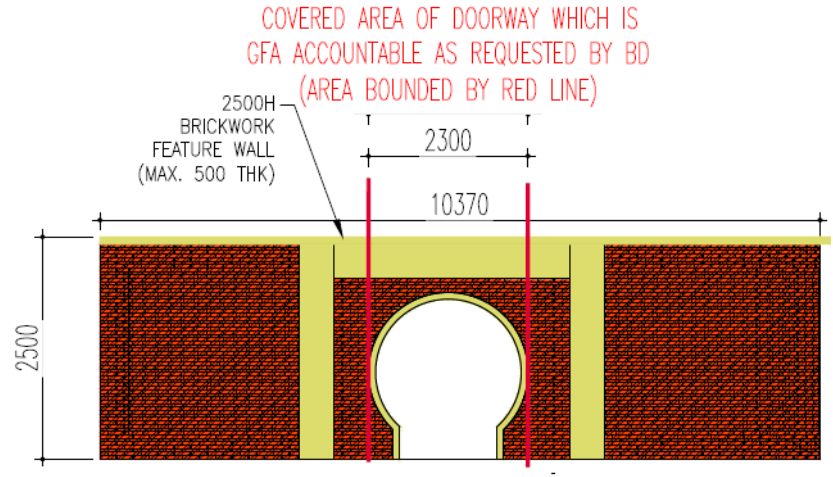
	omitted in accordance with Clauses C8.2 and C8.4 of the Code of Practice for Fire Safety in Buildings (FS Code)?	fire dampers or other suitable form of fire stop to maintain the required FRR of that fire barrier. According to Clause C8.4 of the same code, subject to Clause C8.2, building services including the associated ducts, trunkings, conduits, pipes, cables and the like were not required to be enclosed by fire barriers if they are installed within the same fire compartment.
15.	**<u>Provision for Fire Resisting Construction for Landscape Features</u>** Clause C4.3 of the FS Code states that *"where a single-storey building does not exceed 7,000 m^3 in volume and 7.5 m in height, any steelwork construction may be unprotected, provided that the building is separated from any adjoining building or the site boundary by a clear unobstructed open space not less than 6m in width"*, and the commentary of the said Clause states that *"no FRR is required for elements of construction of single-storey covered walkways on podium or ground floor if they comply with Subsection C9 and Clause C12.4 and are constructed of non-combustible materials complying with Part E."* To our understanding, similarly, no FRR is required for elements of construction for landscape features such as pavilions, covered seating benches, trellises, etc., provided that they are open on sides. Please confirm if our understanding is correct.	BD advised that subject to the design in each individual case, the commentary to Clause C4.3 of the FS Code might be applicable to amenity features similar in nature and construction to a single-storey covered walkway on podium or ground floor.

	Items raised by PBSCA	
16.	**<u>GFA Calculation of Covered Area under Roof Feature</u>** We recently received comment from BD that the covered area under a 500 mm wide roof feature on the roof of a single family house as illustrated in the attached drawing shall be GFA accountable. The roof feature is 2750 mm high from roof level and open in design, which is not likely to be abused. We opined that the roof feature shall adopt similar approach as other architectural features projecting from the external wall, such that its covered area shall <u>not</u> be GFA accountable given that the roof feature has a maximum width of 500 mm and is open in design. Please confirm if our understanding is correct.  	BD advised that GFA calculation for roof features on roof of a single family house would be considered on case basis, taking into account the chance of abuse of the roof features. For the drawing illustrated by PBSCA, BD advised that in consideration of the size of the roof feature and the low chance of abuse, the area covered by the 500 mm wide roof feature might be exempted from GFA calculation.

17.	**GFA Calculation of Covered Area under Doorway of Landscape Feature Wall** We recently received comment from BD that the covered area under the doorway of a standalone feature wall as illustrated in the attached drawing shall be GFA accountable. The feature wall is a landscape feature of 2500 mm high with a maximum thickness of 500 mm and the doorway is only 2300 mm wide. Given that the doorway is only an opening at the landscape feature wall and the covered area for such doorway is minimal, we opined that the covered area of the doorway of landscape feature wall shall not be GFA accountable. Please confirm if our understanding is correct.	BD advised that landscape features of reasonable size and rare chance of abuse might be exempted from GFA calculation. For the drawing illustrated by PBSCA, BD advised that the covered area under the doorway of a genuine landscape feature might be exempted from GFA calculation.



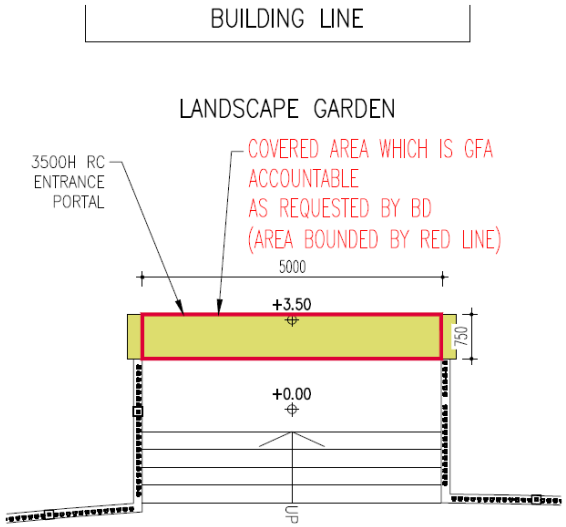
- / - MAIN ENTRANCE ENTRANCE PORTAL PLAN VIEW

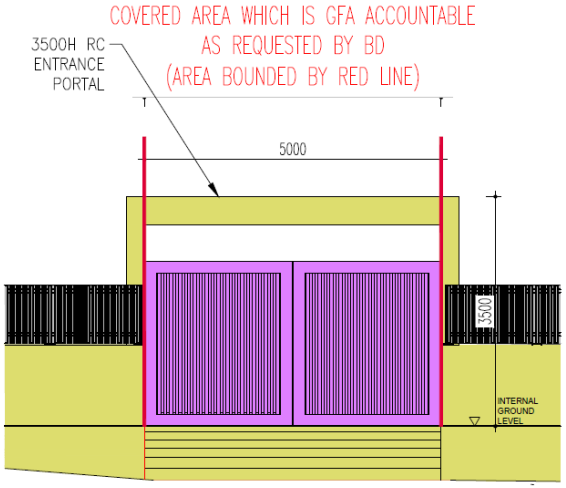


A / - PERFORATED BRICK WORK FEATURE WALL ELEVATION (MAX. 500MM THICK)

1/2023 ADF on 10 February 2023

18.	**GFA Calculation of Covered Area under Portal of Metal Gate at Main Entrance** We recently received comment from BD that the covered area under the portal for metal gate at main entrance as illustrated in the attached drawing shall be GFA accountable. The portal is 3500 mm high and 5000 mm wide with a maximum thickness of 750 mm. It is common to have a portal for the access gates at main entrance of a development for better architectural design which at the same time provides better structural stability for the heavy metal gates. As there are no other structures nearby, the chance of abuse for the portal is minimal. We opined that the covered area under the portal for metal gates at main entrance shall not be GFA accountable, given that the size of the portal is not excessive and there are no other structures nearby. Please confirm if our understanding is correct.	BD advised that the covered area under the portal for metal gate at main entrance of a development might be exempted from GFA calculation on case merits if the size of the portal was commensurate with the scale of the development.


BUILDING LINE
LANDSCAPE GARDEN
3500H RC ENTRANCE PORTAL
COVERED AREA WHICH IS GFA ACCOUNTABLE AS REQUESTED BY BD (AREA BOUNDED BY RED LINE)
5000
+3.50
750
+0.00
UP
MAIN ENTRANCE
A
-
- MAIN ENTRANCE ENTRANCE PORTAL
- PLAN VIEW


COVERED AREA WHICH IS GFA ACCOUNTABLE AS REQUESTED BY BD (AREA BOUNDED BY RED LINE)
3500H RC ENTRANCE PORTAL
5000
3500
INTERNAL GROUND LEVEL
A - MAIN ENTRANCE ENTRANCE PORTAL
ELEVATION

	AOB Items	
19.	**<u>Dedicated Processing Units (DPU)</u>** (Item raised by BD) As one of the measures in the Chief Executive's 2022 Policy Address to enhance speed and efficiency of housing supply, DPU comprising senior professional officers and professional officers would be established in BD, adopting a "facilitator" mindset to expedite the approval process of plans submitted for high-yield private residential projects (i.e. residential project of 500 units or more) and transitional housing projects. DPU would be set up in NBD1 and NBD2 respectively in Q1 of 2023. With the DPU as a facilitator, AP and RSE were encouraged to approach BD early on particular issues of their projects and make use of the pre-submission enquiry service to settle the design principles or specific design considerations before formal submission. AP and RSE were also reminded to maintain close communications with the DPU. Development Projects Facilitation Office under the Development Bureau would facilitate BD in the coordination with other government departments on the processing of GBP submissions. When the DPU was not at full steam, they would also handle submissions of other projects as appropriate. For high yield residential projects and transitional housing projects with their first GBP approved before the establishment of DPU, they would continue to be handled by the respective district teams to ensure optimal efficiency.	Members welcomed the establishment of the DPUs. On the concern about the workload of the DPUs and manpower situation of BD, BD advised there would be suitable manpower deployment with regard to the actual workload. BD supplemented that their internal workflow in plan processing would be streamlined from time to time to facilitate plan approval. BD also encouraged the AP/RSE to make wider use of the promulgated streamlining measures on plan processing to facilitate the approval process. BD advised that the use of pre-submission enquiry service could help resolving complex or controversial issues effectively. If necessary, BD would put forward such issues for consideration by the Building Committee or Structural Engineering Committee before the formal submission of GBP or structural plans to facilitate the plan approval process. BD also appealed for AP/RSE/RGE/RC's activation of accounts and wider use of the Electronic Submission Hub (ESH) which provided various useful features and functions to expedite the plan approval process. Further to the roll-out of Stage 1 of ESH on 30 June 2022 accepting electronic structural plan submissions for building works above ground not requiring cross-departmental referral (excluding alteration and addition (A&A) works), Stage 2 of ESH would be

	A circular letter would be issued in March 2023 to provide details of the establishment and operation of the DPU.	launched on 31 March 2023 to accept electronic plan submissions for various types of building works including demolition, drainage, excavation and lateral support, ground investigation, foundation, hoarding, site formation and all structural works (excluding A&A works), as well as the applications to commencement of works and notifications of completion of works under the BO. AP/RSE/RGE would be invited to attend briefing sessions to get prepared for the Stage 2 of ESH soon. By Q2 of 2025, Stage 3 of ESH would be further extended to cover all types of submissions including general building plans and plans for A&A works. [**Post-meeting note:** BD announced on 15 March 2023 the formation of DPU and the reduction of information items for the first general building plan submission as part of the continuous efforts to expedite the development process. Besides, two Stage 2 ESH Rollout briefing sessions were held on 13 March 2023 and 21 March 2023 respectively. AP/RSE/RGE, as well as practitioners or members of their companies / institutions / organisations were invited to enroll for the briefing sessions.]
20.	**<u>Maximum Span of Pure Cantilevered Slab</u>** (Item raised by HKIE) Whilst the Clause 9.4.1 of the Code of Practice for Structural Use of Concrete 2013 (Concrete Code) has been revised to allow the maximum span for pure cantilevered slab to be 1200 mm to address the feedback from the Industry, Appendix A to PNAP APP-68 "Design and Construction of	BD advised that Appendix A to PNAP APP-68 would be updated soon.

	Cantilever Reinforced Concrete Structures" (current revision issued in September 2012) has not been updated to tally with the aforesaid revised Concrete Code, i.e. Concrete Code (2020 Edition) (the relevant documents are extracted below for your easy reference). Would BD please update PNAP APP-68 for a consistent design requirement? <u>Clause 9.4.1 of the Concrete Code (2020 Edition)</u> **9.4 CANTILEVERED PROJECTING STRUCTURES** **9.4.1 General requirements** Instead of pure cantilevered slab arrangements, beam-and-slab arrangements should be used for spans exceeding 1200 mm. When these requirements cannot be complied with, more stringent control than those given in this Code may be necessary. A cantilevered structure should have such a thickness that the following requirements and the requirements of clause 7.3 are complied with: (a) 300 mm at the support of cantilevered beam; (b) 110 mm for cantilevered slab with span not exceeding 500 mm; (c) 125 mm for cantilevered slab with span greater than 500 mm but not exceeding 750 mm; (d) 150 mm for cantilevered slab with span greater than 750 mm but not exceeding 1000 mm; (e) 175 mm for cantilevered slab with span exceeding 1000 mm but not exceeding 1200 mm. Cantilevered structures should be reinforced with ribbed steel reinforcing bars. Cantilevered slabs should have reinforcing bars in both faces and in both directions. Cantilevered structures exposed to weathering should be provided with: (f) means to prevent accumulation of water; (g) effective waterproofing; (h) adequate fall which should not be less than 1:75; and (i) an effective drainage system. Cantilevered slabs exposed to weathering should be designed for: (j) exposure condition 2 or higher if appropriate; and <u>Paragraph 1(a) of Appendix A to PNAP APP-68 (current revision issued in September 2012)</u>	

	Guidance Notes on Design and Construction of Cantilevered Reinforced Concrete Structures **General Requirements** 1. The design of cantilevered structures should satisfy the following requirements:- (a) For cantilever of clear span more than 1000 mm, a beam-and-slab type of arrangement should be used instead of pure slab cantilever where practicable.	
21.	**<u>Witnessing of Setting-out of ELS and/or Foundation Piles by BD</u>** (Item raised by HKIE) Some BD officers requested for a separate site visit for the checking of setting out for ELS and/or foundation piles before their witnessing of trial boring, test driving and trial piles etc. Would BD confirm whether such site visit is necessary as setting-out can be verified during trial boring and test driving operation.	BD advised that there was no site visit requirement of checking setting out for ELS works and the arrangement of having a representative from BD to witness the setting out of pile foundation prior to test boring/test driving was no longer required. BD officers would be reminded of the streamlined arrangement accordingly.