

**HERITGAE IMPACT ASSESSMENT IN RESPECT OF
ACTIVITY CENTRE FOR THE PROMOTION OF CHINESE
HISTORY AND CULTURE IN KOWLOON PARK**

BACKGROUND

The Project aims to convert Block 58, the Former Whitfield Barracks (please refer to figure 1 for the location plan) to the Activity Centre for the Promotion of Chinese History and Culture in Kowloon Park (the Activity Centre hereafter). The Project Proponent is the Leisure and Cultural Services Department (LCSD hereafter), while the Works Agent is the Architectural Services Department (ArchSD hereafter).

2. The Project comprises three sites in Kowloon Park. Site 1 houses the Former Whitfield Barracks Block 58 and the open space to it north, while Sites 2 and 3 are two nearby open spaces. In Site 1, the revamped Block 58 would accommodate the reception and the major multi-purpose rooms/ classroom for the Activity Centre; while a New Annex Building would be added and connected to Block 58 to house ancillary services for the Activity Centre. Sites 2 and 3 would provide landscape facilities for Kowloon Park under the same Project.

3. The Former Whitfield Barracks (the Barracks hereafter) was first established in 1864; while Block 58 was built in 1891-1895 as one of the very first batch of permanent barrack buildings constructed in the Barracks for accommodating the increased garrison. By the 1920s, over a hundred buildings were erected in the Barracks. It was believed that the Barracks was used as an internment camp during the Japanese Occupation (1941-1945), and it then temporarily housed the prisoners of war after the War before returning to barracks use. Block 58 was used for Office & Stores/ Living Accommodation by that time. The British Ministry of Defence started to hand over the Barracks to the Hong Kong Government in 1969 for converting the Barracks into Kowloon Park.

4. Stage 1 construction of Kowloon Park was completed in 1970 and Kowloon Park was officially opened in the same year. In the 1970s, Block 58 was used to support services by the Urban Services Department. Since the 1980s, it has supported the operation of the Museum of History as storage and workshops. It was accorded a Grade 1 Historic Building in December 2009 by the Antiquities Advisory Board.

STATEMENT OF CULTURAL SIGNIFICANCE

A. Historic and Contextual Significance

5. The establishment of the Former Whitfield Barracks does not only show the military and defence strategies of the British adopted in Hong Kong and in Asia Pacific region during early colonial periods, but also fundamentally dictated the urban development in Kowloon Peninsula. Its extensive construction phase during the 1891 to 1922 marked the historic period of military development in Hong Kong, which reflected the turbulent eras in the region. Its evacuation in the 1960s also reflected the end of those eras. Previously known as Block A or Block S58, Block 58 was one of the very first (if not the first) barrack block built in the Former Whitfield Barracks and still remains nowadays.

6. The formation of Kowloon Park, on the other hand, represented the Hong Kong Government's commitment in response to the public's long request for a green space in the congested Tsim Sha Tsui district and thus reflected the establishment of post-WWII modern Hong Kong when people's livelihood started to be uplifted. Together with other remaining structures of the Former Whitfield Barracks, namely Block S61 and S62 (current Heritage Discovery Centre, Block S4 (current Health Education Exhibition and Resource Centre), Block 58 (current Storage for the Museum of History) is not only supporting the cultural activities in Kowloon Park but also contributing the historic ambience of the Park.

B. Architectural Significance

7. The Former Whitfield Barracks, during its greatest extent (building number-wise), carried over a hundred buildings and showcased various types of British military architecture in the late 19th century till the mid of 20th century. Block 58 is a typical Colonial Neo-Classical army barrack building with functional design and with minimal decoration. It was designed along the lines of the standard British military barracks and followed the British architectural styles. However, local techniques and materials were adapted to accommodate the hot and humid local climate. Timber flooring and roof structures with king posts are two of the important fabrics to reflect building materials used in the late 19th century. However, some alterations done for adaptive use have diminished the beauty of the building, in particular, the enclosure of verandahs in 1986-89.

C. Social Significance

8. Due to the Former Whitfield Barrack's military nature, except its four boundary walls, its buildings and happenings within the Site was not well recognized by the public, despite that it had stood in the busiest area of Hong Kong for a century. Kowloon Park has, on contrary, opened up the site for public enjoyment for half a century and become one of the most important public parks in Hong Kong.

9. Block 58 has been kept as a museum storage in the last 40 years, but not opened to the public. The Project would bring a good opportunity to open the building to the public and to enhance its social value.

HERITAGE IMPACT ASSESSMENT

10. In accordance with the Development Bureau (DevB) Technical Circular (Works) No.1/2022, a Heritage Impact Assessment ("HIA") has been carried out with the objective of drawing up a Conservation Management Plan and assessing the heritage impact of the proposed project scope and design. The HIA sets out to identify possible impacts to the Site and the cultural significance 50m around the Site (if any) due to the proposed adaptive reuse, propose mitigation measures to alleviate adverse impacts to significant fabric, and provide recommendation on the future implementation of the Project.

A. Project Proposal

11. The Project is to adaptively reuse and convert the Former Whitfield Barracks Block 58 in the Kowloon Park into an Activity Centre for the Promotion of Chinese History and Culture (the Activity Centre hereafter). Apart from the adaptive reuse of the existing historic building, a new annex building will be added next to it to accommodate supporting services for the Activity Centre and the surrounding open space will be upgraded to enhance connection with the existing Hong Kong Heritage Discovery Centre (HDC) and the Kowloon Park.

12. The proposed scope of the Project includes the following:

- (a) In Site 1, adaptively reusing the existing Block 58 of the Former Whitfield Barracks,

- (b) In Site 1, next to Block 58, introducing a New Annex Building and enhanced Open Space, EVA, loading/ unloading bay and the connection to Hong Kong Heritage Discovery Centre, and
- (c) In Sites 2 & 3, providing landscape facilities in Kowloon Park.

B. Conservation Principles

13. The Conservation Policies and Guidelines to conserve and interpret the Site are as follows:

(a) Use

- Since the usage of Block 58 as a military barrack building cannot be continued, the new use should be compatible to the Site or neighbouring context (e.g. leisure and cultural related use);
- The allowable structural loading of the existing historic building should be taken account when choosing the new use. It is estimated that the existing G/F and 1/F timber floor structure can support live loads of 5kPa and 4kPa respectively (subject to the finding of the final structural appraisal report).

(b) Setting

- The setting of Block 58 as a building sits at the south end of Kowloon Park/ the Former Whitfield Barracks, which is built on a plateau overlooking Hoiphong Road, should be retained. Trees (except OVTs) on the slope between Block 58 and the south boundary wall of the Former Whitfield Barracks that block the mentioned view should be pruned or transplanted if possible;
- The low-rise nature (2 storey) of Block 58 and other old barrack buildings in Kowloon Park as well as rich greenery environment of Kowloon Park should be retained. Any new ancillary building required to support the new function of Block 58 should be lower than Block 58 and of compatible massing and avoid disturbance to the existing trees in Kowloon Park, in particular OVTs, as far as possible;
- Heritage values of the entire Kowloon Park/ the Former Whitfield

Barracks and the identified heritage items inside it should be respected and preserved, by enhancement to any form of connection (in terms of physical, visual, activity and even interpretation, etc.).

(c) Interpretation

- Public-accessible areas should be reserved for interpretation in Block 58 to explain and promote to the general public the cultural significance of the building and the Site where it is located. Possible topics for interpretation are listed below:
 - The historic and contextual values of Block 58 and the Former Whitfield Barracks,
 - The architectural values of Block 58 (and Block S61, S62 and S4) as one of Neo-Classical barrack buildings in Hong Kong, and
 - The conservation/ adaptive reuse process;
- Some areas in Block 58, including open verandahs and the future reception area should be reserved for interpretation that allows public accessibility.

(d) Preservation of Building Fabrics

- In general, CDEs of significance listed in HIA should be preserved or restored in any future adaptive reuse for the Site as far as possible. Examples of CDEs with very high and high significance are:
 - i. Site setting: Plateau higher than street level to maintain a vista to overlook the harbour, remaining barrack blocks within Kowloon Park, south and west boundary walls with the OVTs on the slope between the site and boundary wall, boundary stone “W.D. 5”, and the view to Hoiphong Road and to Kowloon Park,
 - ii. Exterior of Block 58: Building mass and form, front (north)

façade, side (east & west) façades, back (south) façade, external staircase at north façade, southeast corner and northwest corner, pitched roof in the middle with double pan, double roll Chinese clay tiles and monitor roof, and chimneys with moulding, and

iii. Interior of Block 58: Building layout consisted of the front, middle and rear portions, building structure, two granite staircases and verandas at both front and rear portions from G/F to 1/F, chimney stacks and the cross walls on the two sides of the chimney stacks, segmental arches composed of brick in B/F, chimney stack bases in B/F, switch box with signage indicating barrack use in B/F, and cast iron air grille in B/F;

- Intrusive later alterations should be removed to restore the hidden / disturbed CDEs as far as possible.

(e) Intervention to Building Fabrics

- In general, alterations and additions to Block 58 and the Site to suit new use and safety enhancement is acceptable, in order to keep the building in appropriate use. However, they should be well planned with minimum intervention approach, so as to minimize impact to the cultural significance of the building. Character-defining elements of lower significance and of less authenticity can allow more alterations to suit adaptive reuse;
- The design of any alteration and addition works should follow the following principles:
 - i. Reversible alterations / additions,
 - ii. Compatible with but distinguishable from the original fabrics,
 - iii. For any new annex, massing compatible with and height lower than Block 58 and other barrack building within the Site,
 - iv. Minimum physical and visual impact on Block 58 as well as other heritage items in the Site, as well as visual impact on the vistas from Block 58 to other heritage items in the Site and

Hoiphong Road, and

v. Minimum disturbance to the existing trees, in particular the OVTs;

- Building services should be well planned to avoid visual impact on the historic building.

(f) Management

- It is necessary for the property management and operation teams of the adaptive reused Block 58 and even those of Kowloon Park to understand the cultural significance of Block 58 and the Site and have certain knowledge on how to conserve it; and
- A Maintenance Plan and a Maintenance and Operational Manual should be drawn up, to ensure that the building is kept in good condition and properly used during operation. This should include a detailed plan for the regular upkeep of the built fabric.

(g) Documentation

- A documentation mechanism should be set up. All the studies, researches, investigation findings, mock up results should be kept in proper filing. Cartographic and photographic surveys to properly record the historic building shall be conducted before and after the alteration works. Any future repair works during operation of the new use should be properly documented. All these records should be kept in appropriate means and media.

C. Key Design Proposal

14. The key proposed works for the Project are listed below:

(a) Overall site approach

- The project intends to adaptively reuse Block 58 of the Former Whitfield Barracks for accommodating the reception, multi-purpose rooms, a classroom and study rooms for education purpose for the Activity Centre;

- A New Annex Building will be added to the northwest of Block 58 to house ancillary services for the Activity Centre, such as Artifacts Room, Gallery, Toilet, Baby Care room, Office, building services such as fire services water tanks, transformer, etc.. It will also equip with an open corridor for the connection to Block 58 and the loading/ unloading bay;
 - An emergency vehicular access (EVA) to serve both Block 58 and the New Annex Building, a loading/ unloading bay adjacent to the New Annex Building, enhanced landscape areas with benches, rain shelters and trees will be introduced to the north of Block 58; and
 - A continuous landscaped walkway will be added for connecting the New Annex Building and Hong Kong Heritage Discovery Centre.
- (b) Conservation and conversion works for Block 58:
- Building exterior

The following restoration works will be carried out:

- i. To remove intrusive later added concrete tanks and metal gates and fences to the north and east of Block 58;
- ii. To remove intrusive later added ramps, metal sheds, metal decks, pulley systems, hoist beam and shutters attaching to/ installed on the facades of Block 58;
- iii. To reopen the blocked openings of verandahs on G/F and 1/F, restore the lost cast iron balustrade;
- iv. To replace the unsightly later added louver/ brick/ metal gate blockage to the segmental arch openings on LG/F by new mesh/ grille;
- v. To remove later added rainwater pipes and replan new rainwater pipes and gutter system;

- vi. To remove later added building services installation on facades and roof and relocate equipments to the New Annex Building and pipeworks to interior pipeducts;
- vii. To restore the three external granite staircases by removing their later-added roofs, and restoring/ repairing cast-iron balustrades;

However, there will be alterations, including:

- viii. To add 1100mm high new glass balustrade behind the restored cast iron balustrades of verandahs and external granite staircases;
 - ix. To introduce a new ramp next to the front façade to give barrier free access to the entrance/ reception of Block 58; and
 - x. To add fall arrest system to flat roofs.
- Building structure

The following upgrading works to the existing building structure will be needed:

- xi. Fire resisting property of the existing timber floor structure of G/F and 1/F and the existing concrete floors of G/F and 1/F verandahs has to be enhanced by introducing fire-resisting boards, and that of the existing timber roof structure by introducing fire-retarding paint.
- Building interior

The layout and setting of the interior will be largely retained and restored, including:

- xii. The front and rear verandahs on G/F and 1/F will be reopened as open verandahs;
- xiii. The two existing internal staircases at verandahs will be kept as balcony approached staircases, with cast iron balustrades

repaired/ restored and 1100mm high glass balustrades added behind them;

- xiv. The middle portion will be repartitioned but the original cross walls and chimney stacks will be preserved; fireplaces in public-accessible rooms will be restored (subject to the existing physical evidence and findings of archives); and later-added vinyl flooring and false ceiling will be removed to reveal the original timber flooring and timber roof structure;
- xv. The later introduced door/ window openings will be blocked while most of the original door/ window openings will be restored. Timber windows and doors, of which original ones have all been lost, will be restored by making reference to old photos as far as possible; and
- xvi. The entire LG/F and its features will be preserved.

But, there will be a few alterations, which mainly include the following:

- xvii. A new circulation staircase will be introduced on G/F middle portion to provide easy access between G/F and 1/F at the new reception area for the visitors, and door/ window openings will be widened for similar reasons. As a result, a double height space will be created to give a welcoming visitor receiving area. However, these will mean that localized timber flooring and joists of 1/F, localized brick walls on G/F and 1/F next to the reception will need to be removed;
- xviii. Rendering of selected cross walls will be removed, if technically possible, to reveal the facing brick walls to give a historic ambience;
- xix. Raised timber decking will be added to verandah floors to match their floor levels with the rooms in the middle portions for barrier free access;
- xx. Some of the original window openings will be converted to doors so as to suit new uses and layout;

- xxi. Subject to the approval of the Fire Engineering Study Report, all doors and windows will be protected by sprinkler on their both sides, if they are located within 6m from the existing internal staircases to compensate for fire rated construction deficiency, and
- xxii. New building services will be introduced in the building interior, including fire services installation, air-conditioning, lighting and electrical upgrading, etc..

D. Mitigation Measures for the Conversion Works

15. For areas where impact of the conversion works could not be avoided, the following mitigation measures are to be implemented based on the conservation principles stated above:

- (a) For the design of the New Annex Building, connection walkway and landscape areas:
 - The New Annex Building to the north of Block 58 is located to the west end of Kowloon Park as far as possible to reduce the extent of view blockage to both Block S61 and Block 58. The building mass and height is minimized by putting the FS/ sprinkler tanks and pumps in basement. The building is compatible with Block 58 by size but distinguishable from Block 58 by contemporary architectural language and materials;
 - Geotechnical assessment has been carried out and confirmed that the construction works will not affect the geotechnical features/slopes in the vicinity. The New Annex Building will sit on footing with a basement located away from Block 58 and Block S61 and of limited size and depth, thus only open cut excavation is needed and piling works are avoided. In this connection, it is predicted that settlement of Block 58 and S61 will be limited and vibration is not anticipated. Monitoring checkpoint with limit level will be installed to Block 58, Block S61, S62 and West and South Boundary Walls of the Former Whitfield Barracks to monitor any structural impact from the works;
 - Landscape enhancement and connection walkways are designed in

a manner to enable outdoor events and enhance visual and physical connection between Block 58 and Block S61 to let Block 58 better integrate into Kowloon Park.

(b) For the conversion works for Block 58:

- For the 1100mm high new glass balustrades behind the restored cast-iron balustrades at the verandahs, (subject to structural investigation on the grading of existing concrete slab) they are to be installed on the existing concrete slabs. If the result of the investigation is unsatisfactory, they will be supported by new structural members and spanned between existing column/ wall, so that no structural strengthening works to concrete slabs are necessary in either case;
- For those to be added at the external and internal staircases, the glass balustrades should be supported by new structural members to span between existing columns and walls so as to minimize disturbance to the granite steps;
- The new mesh/ grille infilling the segmental arch openings on LG/F will allow ventilation of LG/F to avoid moisture building up in bricks, but at the same time can prevent animals entering LG/F. Also, they will be recessed from the façade to make it more distinguishable from the façade;
- If gutter installation for building code compliance cannot be exempted, the new gutters' design should be as subtle as possible, but distinguishable from the old fabrics;
- For the new ramp added in front of the front façade, protective barriers will be designed with suitable details and materials of less visual impact (e.g. glass);
- Fall arrest system on the flat roof, instead of railing, is added for enhancing maintenance safety but at the same time minimizing visual impact to the existing building;
- Subject to fire engineering study's approval and detail structural appraisal's finding, the fire resisting performance enhancement

strategy for timber structural elements in Block 58 is to preserve timber floor and roof structures and to keep them visible as far as possible since they are CDEs of very high significance. For the timber floors, the preferred enhancement option is to cover up only the soffit side of the timber floors with appropriate fire protection panel but leave the top side of the floors and the bottom side of the timber joists uncovered, so as to allow appreciation on the timber floor structure. The entire soffit of the timber floor system will only be covered up if structural appraisal proves that the charred timber joists fail to provide adequate structure integrity in case of fire. For timber roof structures, fire retardant paint will be added, so as to provide FRP enhancement and to keep them visible at the same time;

- At the new reception area, openings on floors and opening up of brick walls are localized and strengthened by light-weight steel beam and light-weight steel lintel beam/ steel box frame respectively, to avoid change of load path and additional dead load to footing. The new staircase introduced will be a light-weight steel structure due to the same reason. Staircase would be supported by existing brick wall instead of by independent footing since the former case will create less structural impact and disturbance, and less visual impact. The removed timber joist, flooring and bricks will be salvaged for necessary replacement of the very delapidated existing ones;
- Removal of rendering of selected cross walls to reveal facing brick walls will only be carried out if rendering is found to be lime in nature and be able to remove readily. The fireplace restoration will be made reference to old photos and existing physical evidence and archives of barrack buildings of the Former Whitfield Barracks as far as possible;
- The new timber decks on G/F and 1/F verandahs will be raised from the existing concrete floor to allow drainage of floor water and avoid accumulation of dampness;
- For the original window openings to be converted to doors, the original window openings' width and height will be kept when carrying out such change; the existing lintels, if discovered during

the conversion, will be preserved; while the existing window sills, if discovered, will be salvaged for replacing the dilapidated and beyond repair ones. Fanlight will be introduced above the new doors, in order to match original window head height and to differentiate the converted doors from the restored doors; and

- Pipeworks and conduits will be grouped and organized neatly to minimise coring to walls, visual impact on the interior and disturbance to the CDEs of high value. In principle, they should be planned on ceiling of spaces of less significance and inside the furring wall of the rooms, so as to keep disturbance to space of high significance (e.g. the open verandahs) minimum. Original openings into structures will be reused as much as possible to reduce the number of necessary new openings.

CONCLUSION

16. The HIA has concluded that the proposed adaptive reuse of Block 58 improves the connectivity between Block 58 and the remaining barrack blocks in Kowloon Park and enables public's usage and appreciation of the building, which thus enhances the contextual and social values of Block 58 and the Former Whitfield Barracks. The impact of the proposed conversion works at the Site is considered acceptable and manageable with the proposed mitigation measures. The Architectural Services Department will ensure that all works carried out for heritage conservation strictly comply with the requirements stipulated in the HIA as endorsed by AMO.

Leisure and Cultural Services Department
June 2023

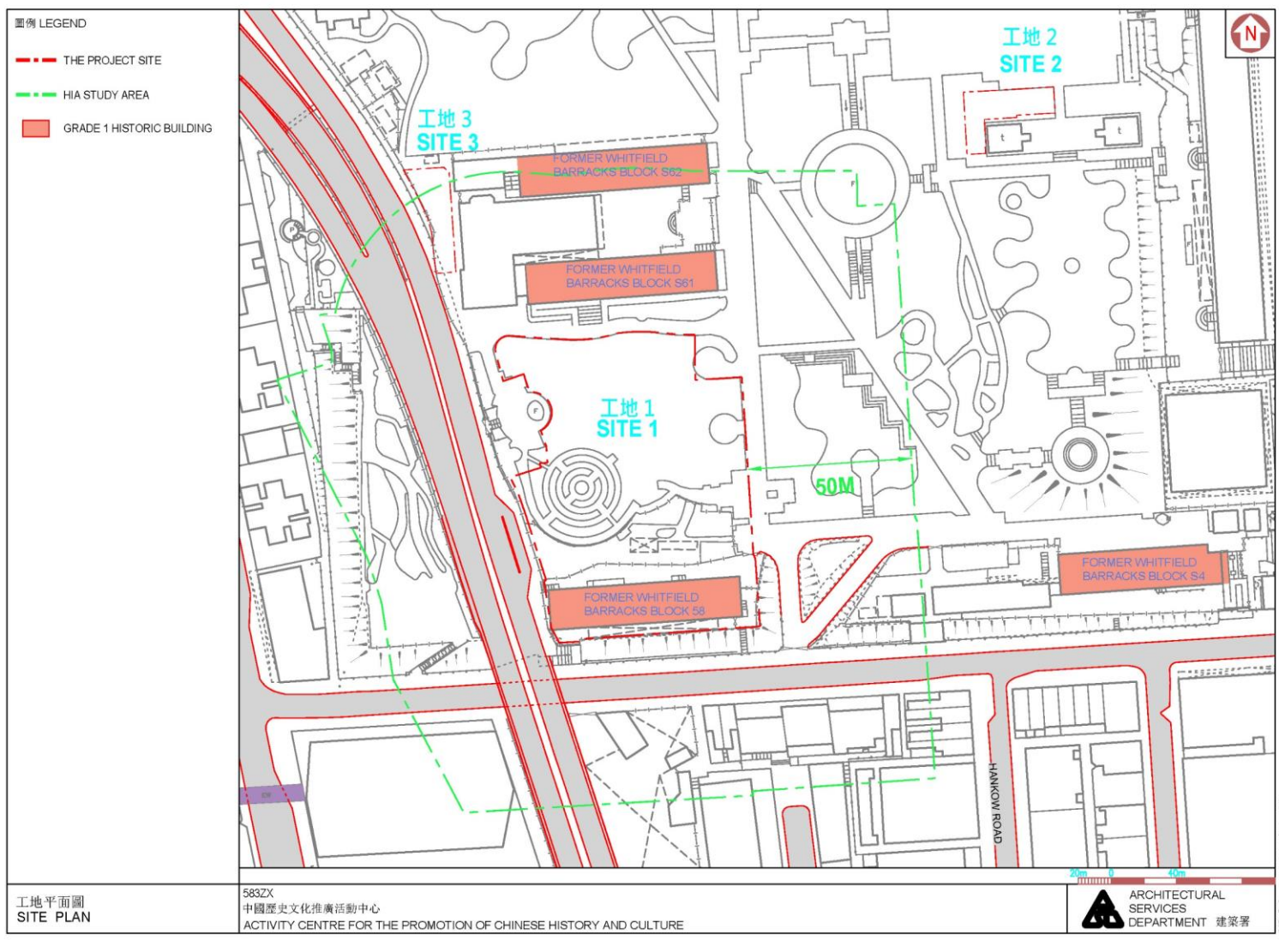
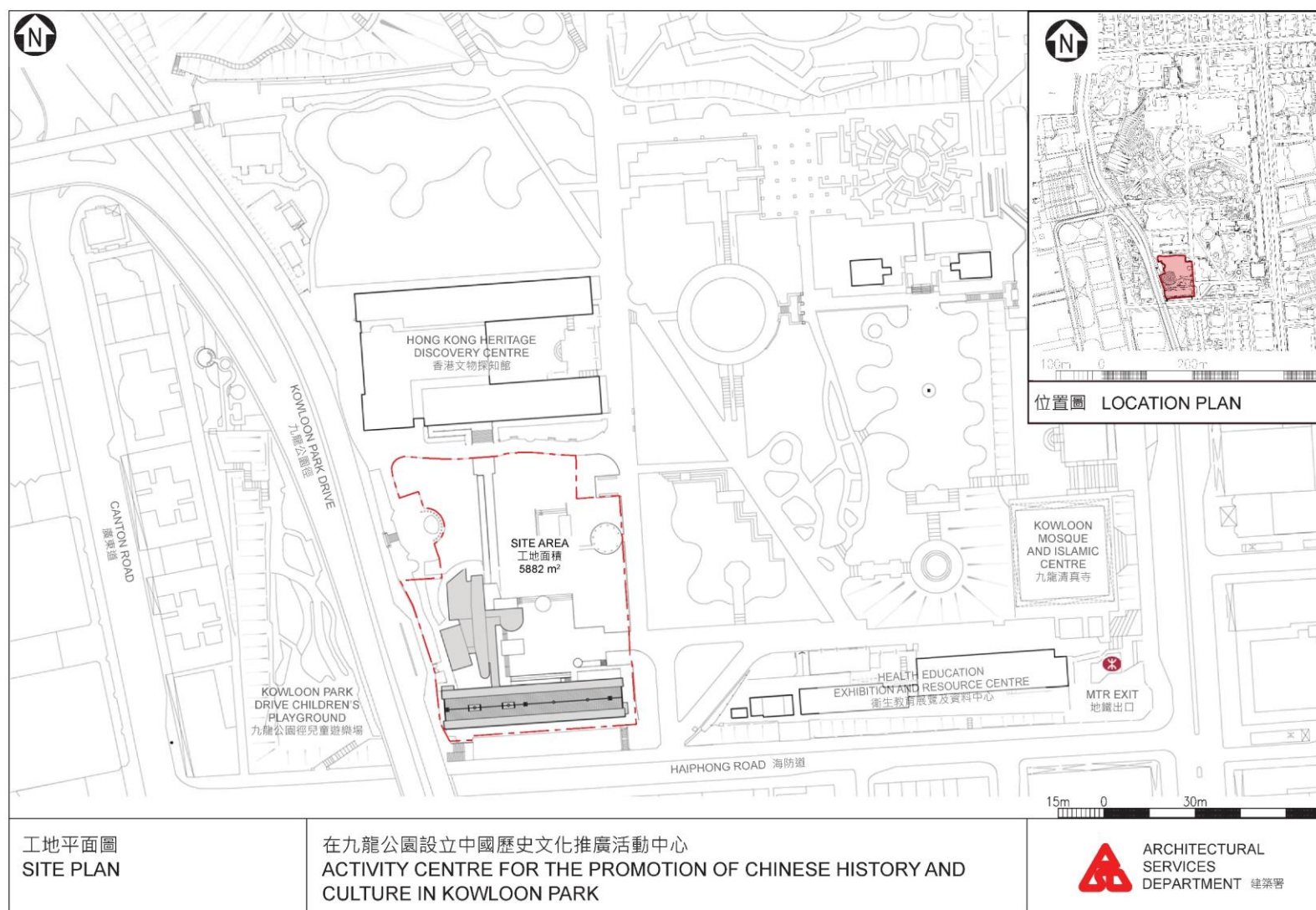


Figure 1. Project Site and HIA Study Area Indication Plan



R to C for HIA report dated 18 May 2023

Figure 2. Project Site Plan

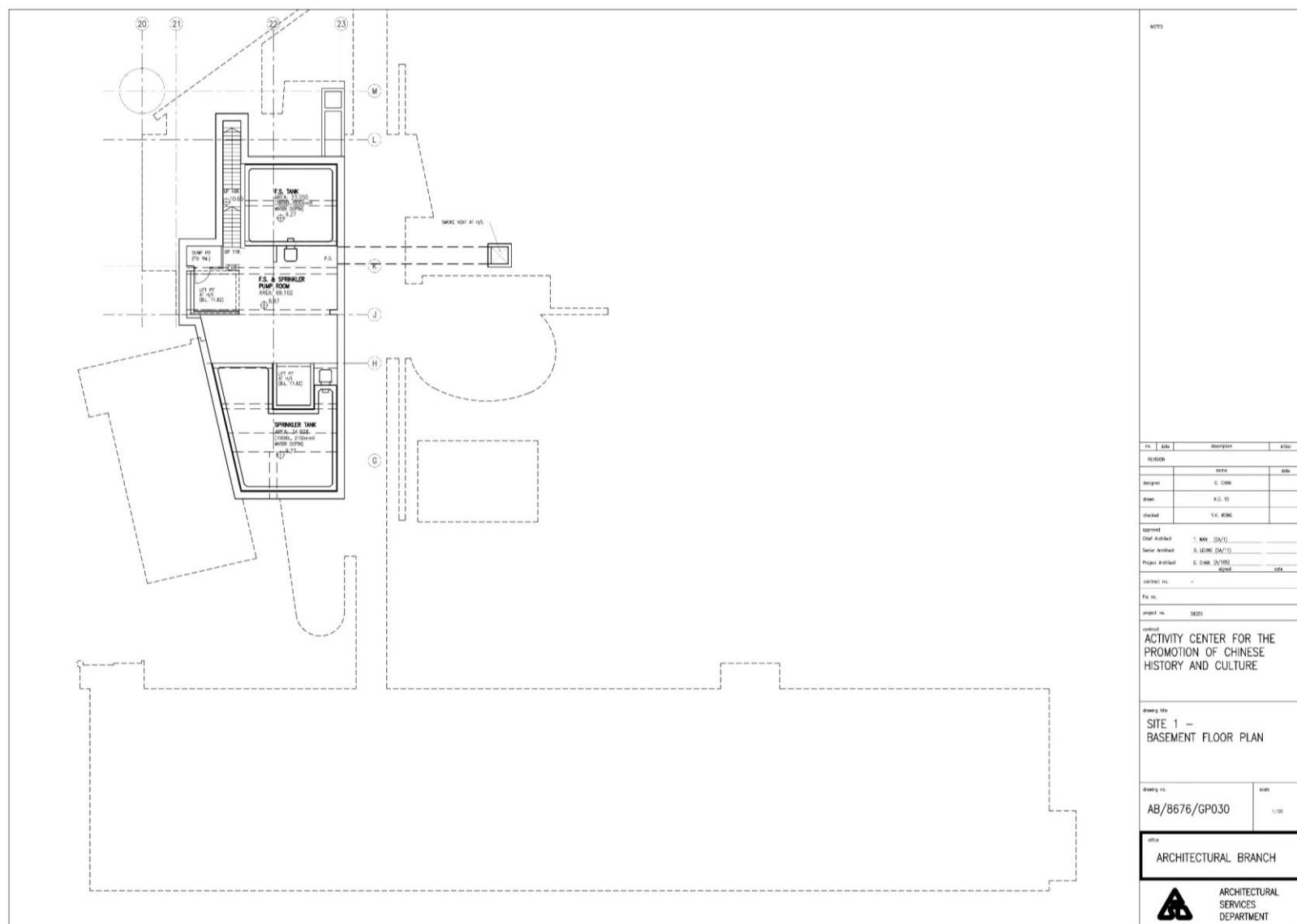
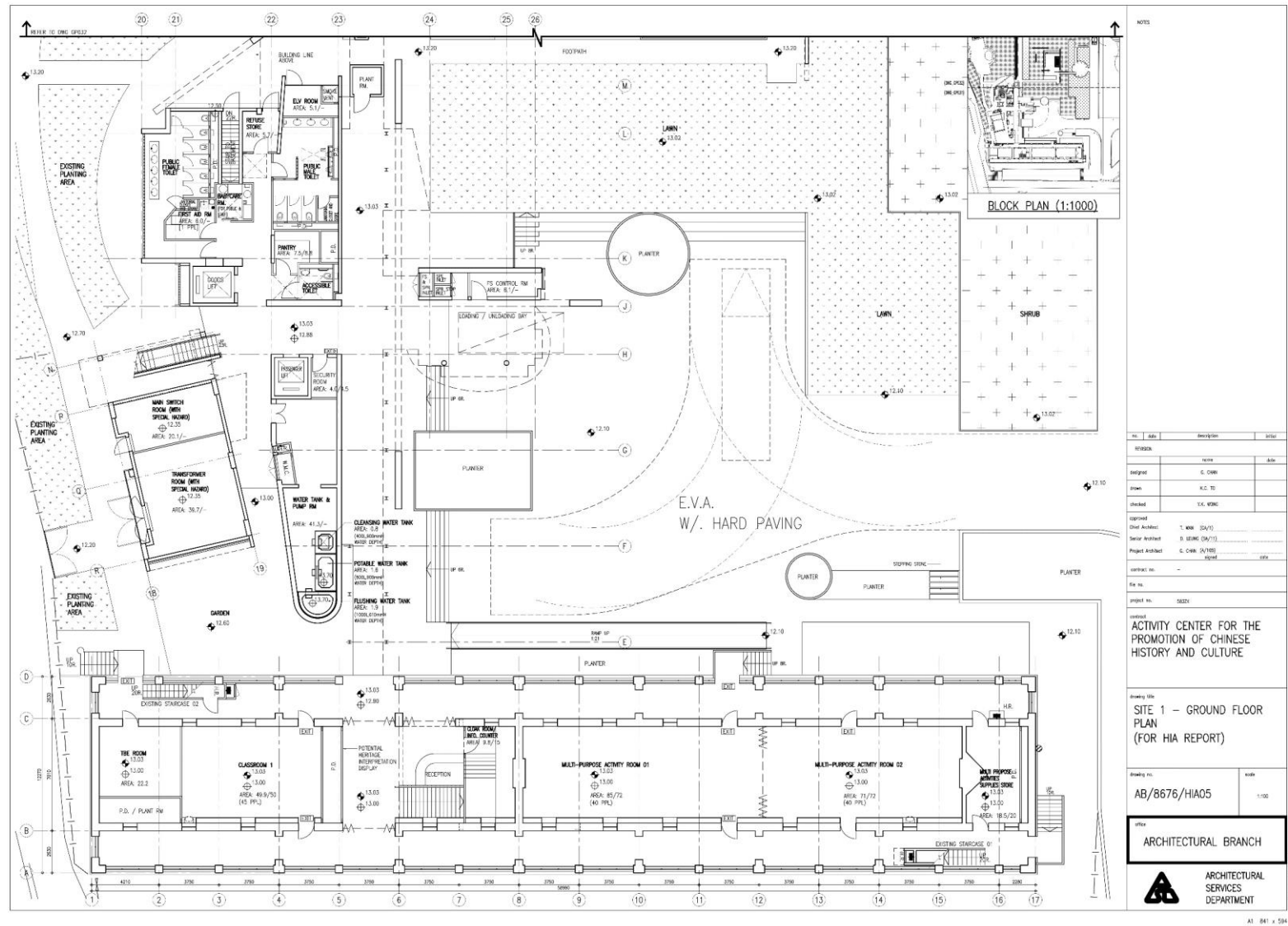


Figure 3. Proposed basement plan of Block 58 Conversion and the New Annex Building



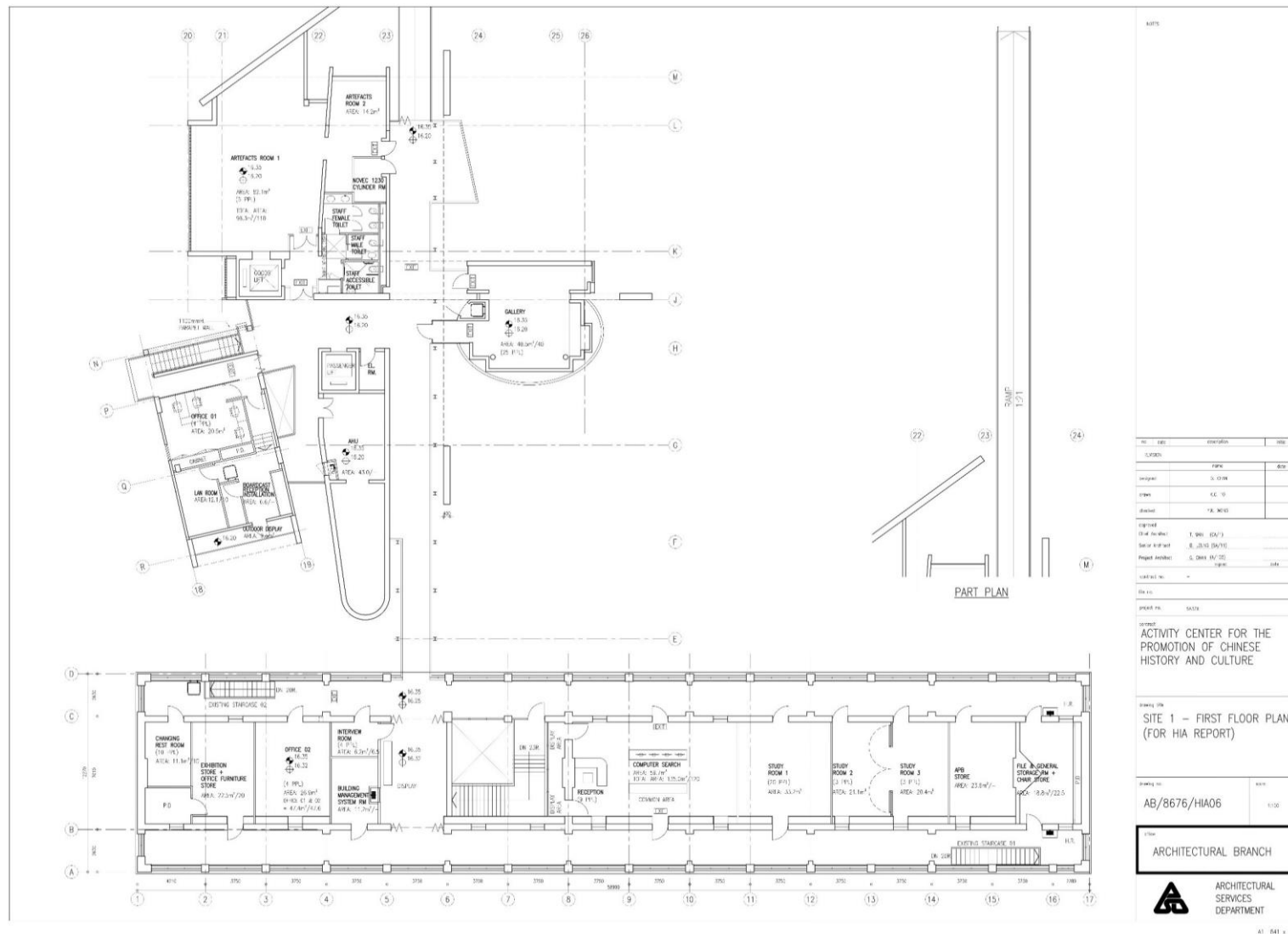


Figure 5. Proposed 1/F plan of Block 58 Conversion and the New Annex Building

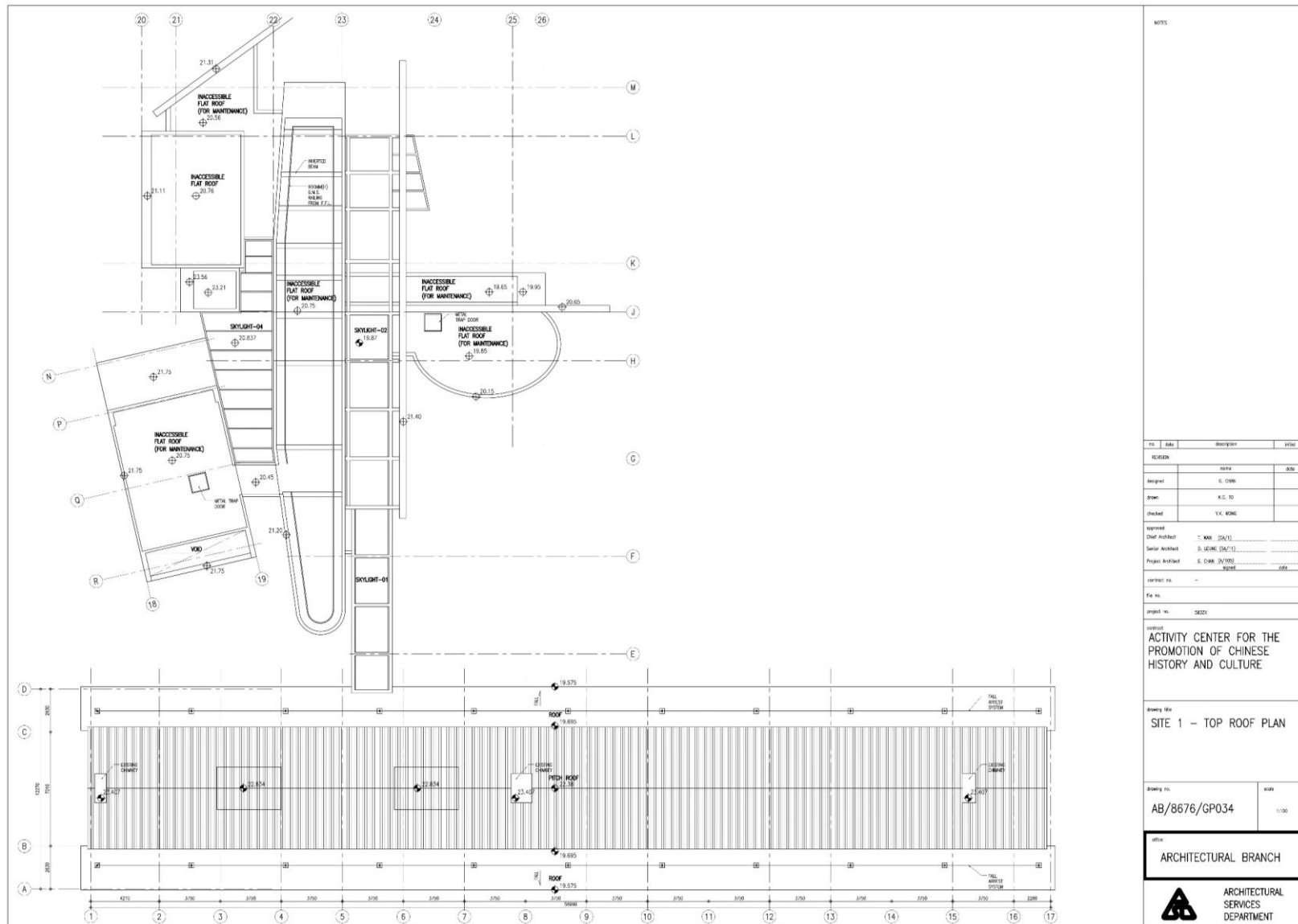


Figure 6. Proposed roof plan of Block 58 Conversion and the New Annex Building

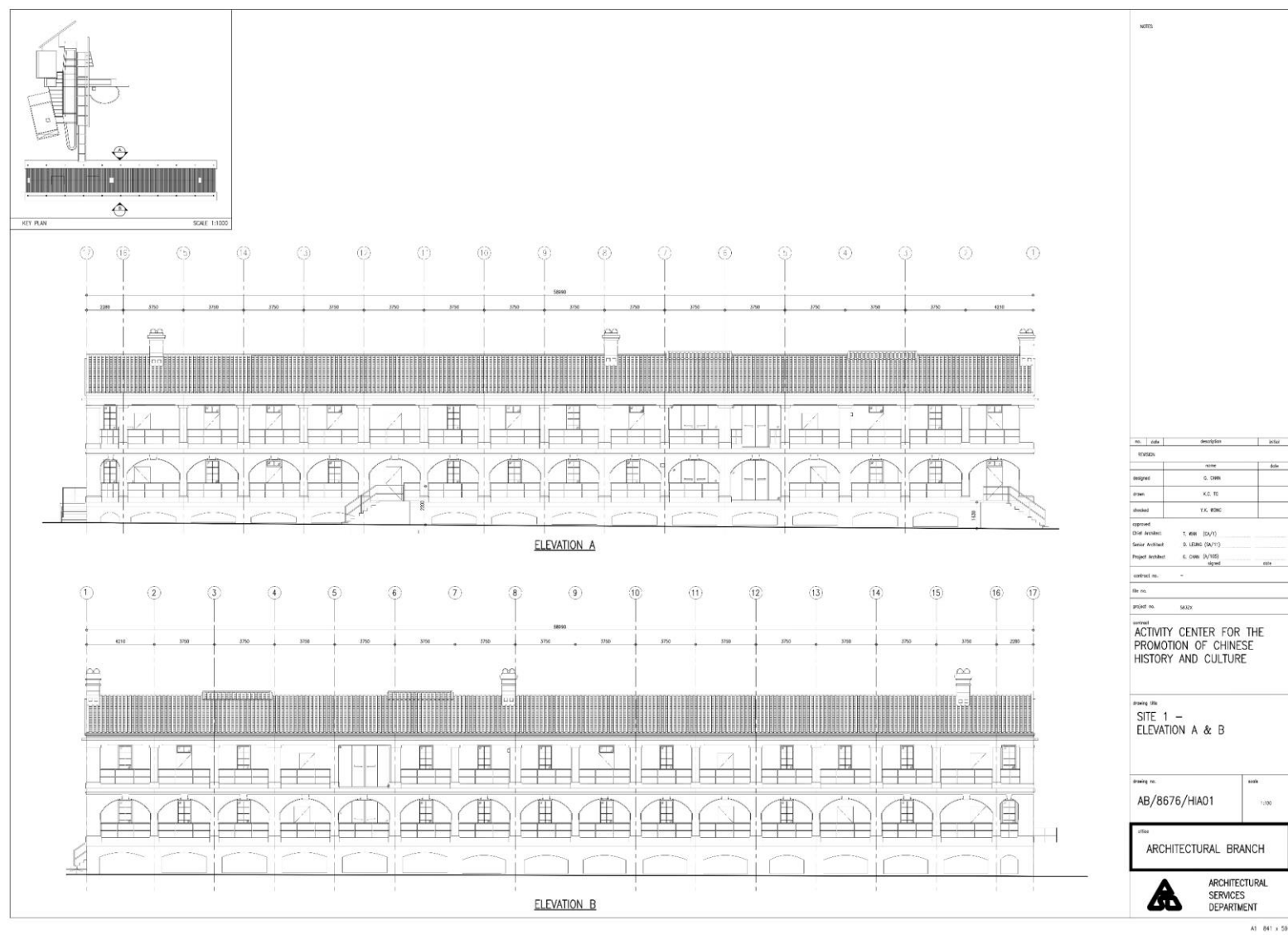


Figure 7. Proposed north and south elevation of Block 58

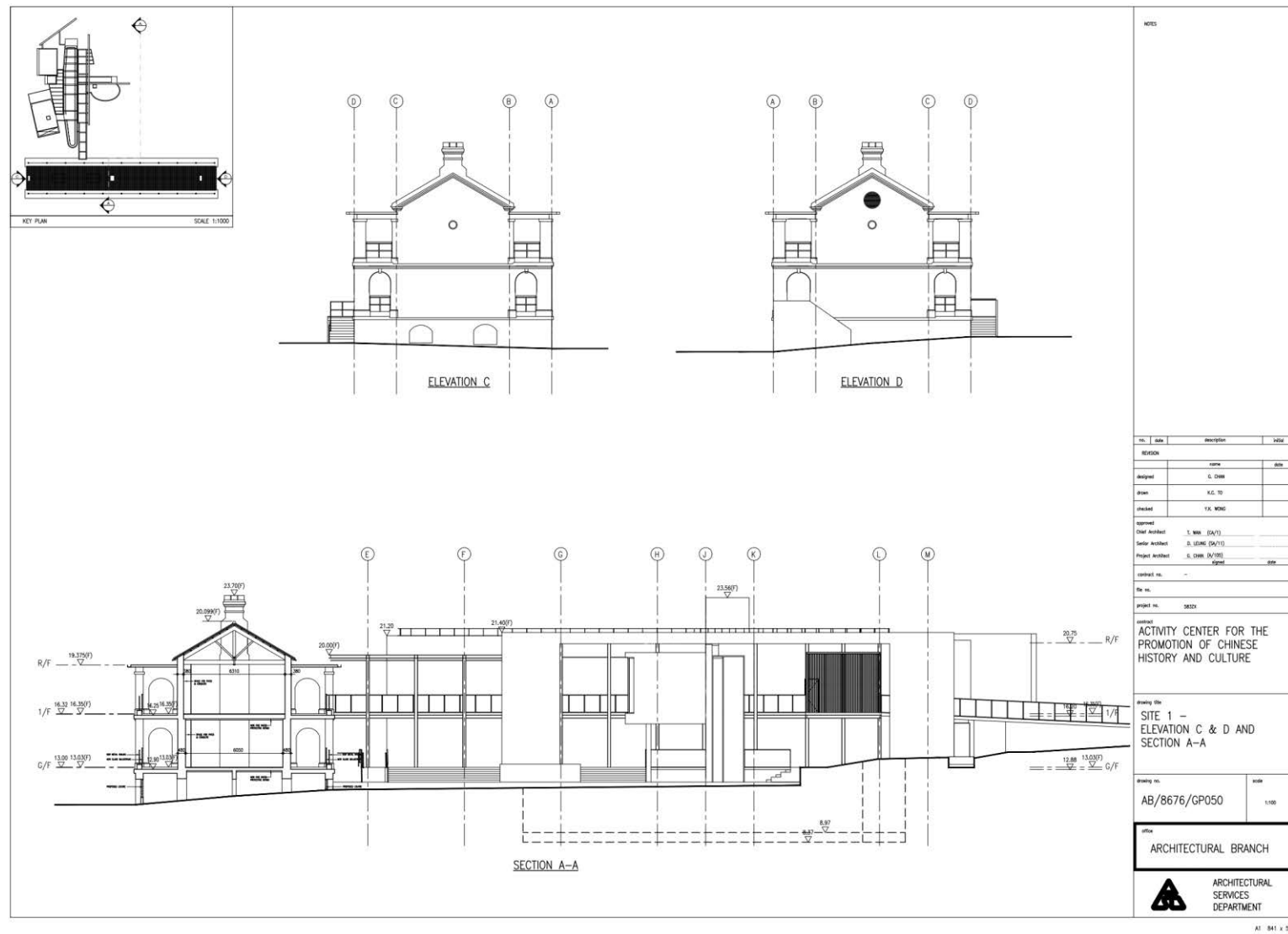


Figure 8. Proposed east and west elevation and section A-A of Block 58

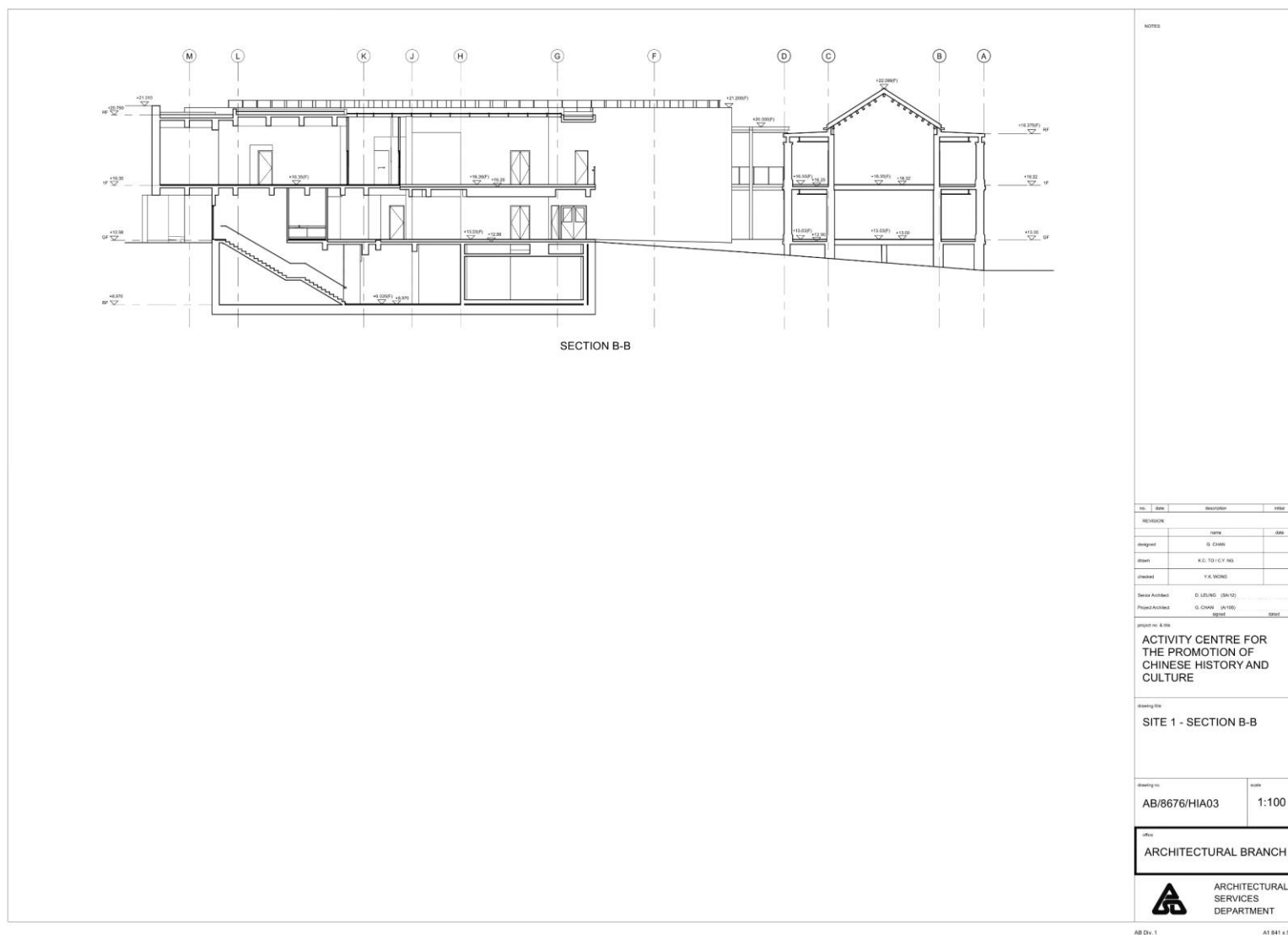


Figure 9. Proposed section B-B of Block 58

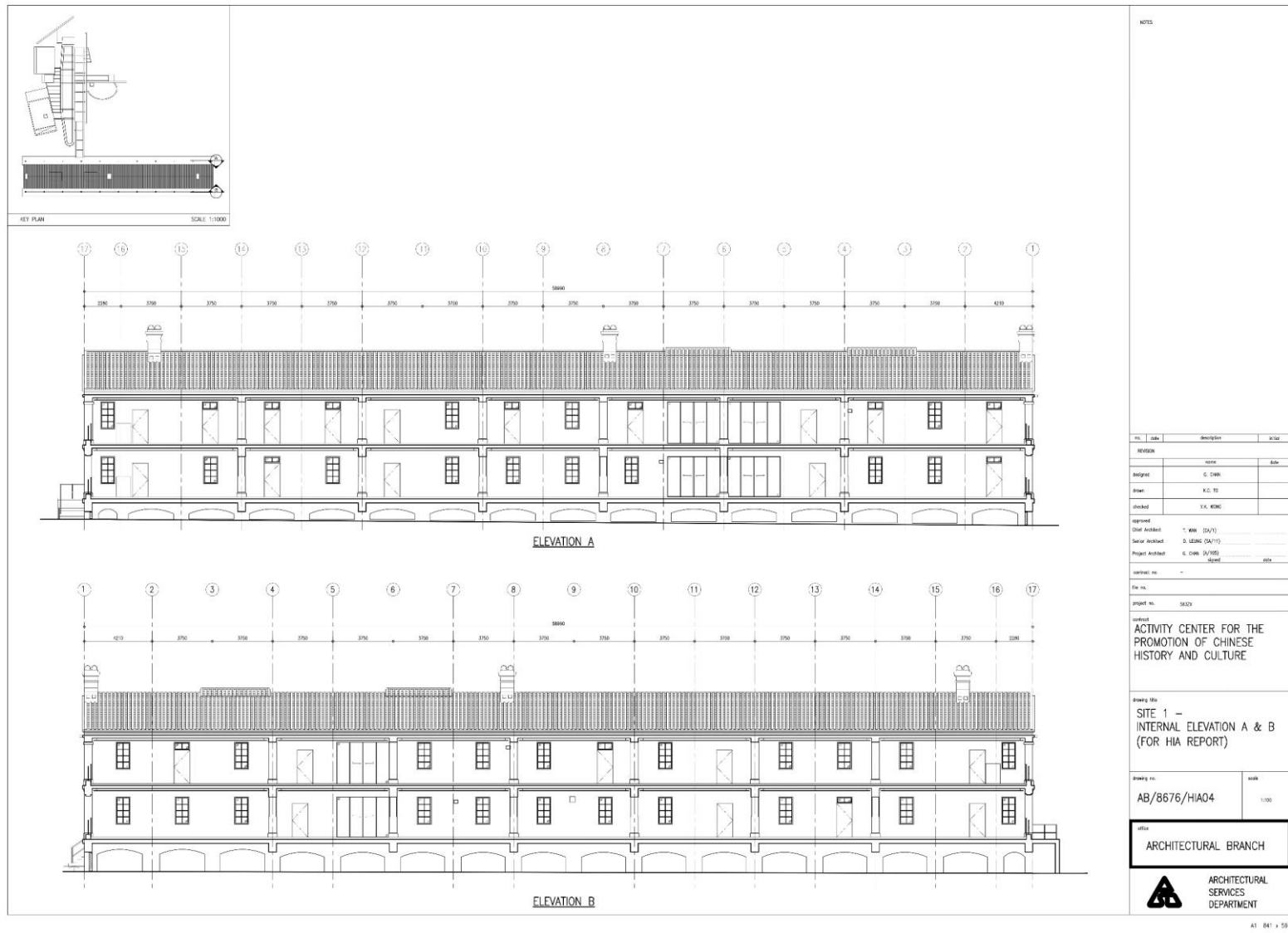


Figure 10. Proposed internal elevation A & B

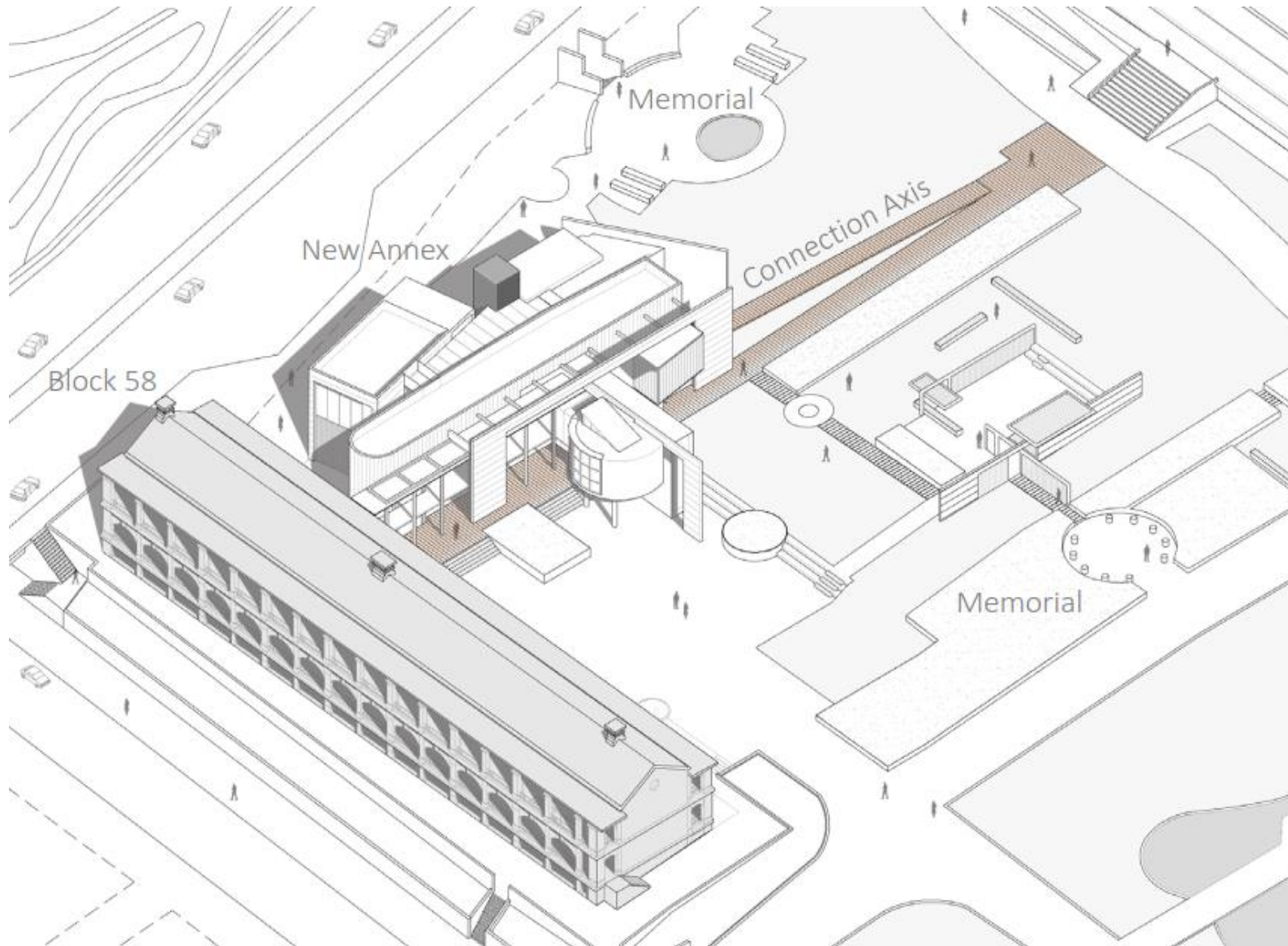


Figure 11. Artist impression of overall disposition (Axonometric view)



Figure 12. Artist impression of Block 58 from Haiphong Road park entrance (fencing on top of slope not shown for clarity)



Figure 13. Artist impression of Block 58 and New Annex from the new entrance plaza

Block 58 – Repair using the existing material only.



Figure 14. Proposed finishing material for Block 58 and New Annex



Figure 15. Artist impression of Block 58 Verandah



Figure 16. Artist impression of the proposed reception lobby (G/F) in Block 58

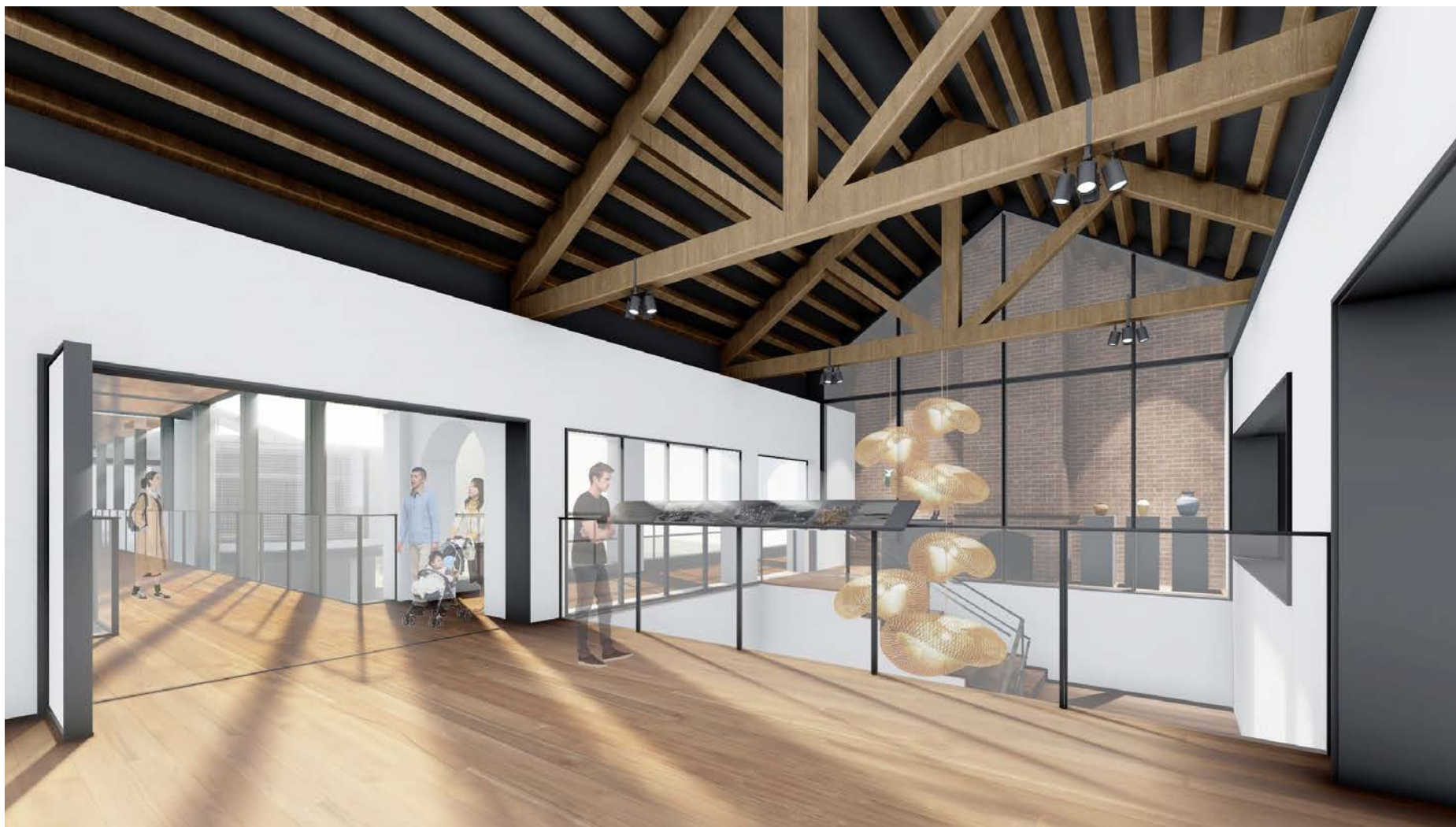


Figure 17. Artist impression of the proposed reception lobby (1/F) in Block 58



Figure 18. Artist impression of the proposed multi-purpose room on G/F in Block 58 (FRP enhancement Option 1)



Figure 19. Artist impression of the proposed multi-purpose room on G/F in Block 58 (FRP enhancement Option 2)



Figure 20. Artist impression of the proposed study room on 1/F in Block 58