



KABUL, AFGHANISTAN

**RESIDENTIAL AND STAFF AMENITIES
FOR THE AUSTRALIAN EMBASSY**

**PART 1:
RESIDENTIAL ACCOMMODATION**

**PART 2:
STAFF DINING AND RECREATIONAL AMENITIES**

**STATEMENT OF EVIDENCE FOR PRESENTATION TO
THE PARLIAMENTARY STANDING COMMITTEE ON
PUBLIC WORKS**

SUBMISSION 1



Australian Government

Department of Foreign Affairs and Trade

Overseas Property Office

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1 IDENTIFICATION OF THE NEED

1.1 Project objectives

- 1.1.1 Afghanistan is a complex environment where the conduct of diplomatic functions is undertaken at high risk. In the capital Kabul, this high risk means access to, and movement between, Australian diplomatic residential and office accommodation must of necessity, for the day-to-day safety of staff, be tightly controlled through special physical and operational security measures. The Australian Government leases numerous separate properties located in the diplomatic quarter of Kabul. The residential property footprint is dispersed throughout a number of blocks. The existing chancery compound is made up of leased properties supporting diplomatic activities further outlying leased properties providing residential accommodation, including the Head of Mission (HOM) residence. The Embassy's security close personal protection teams are housed in a separate compound.
- 1.1.2 There is an urgent need to improve the security and Work, Health and Safety (WHS) conditions of staff at post, through substantial enhancements to their amenities and residential accommodation by consolidating the current property footprint to the extent possible.
- 1.1.3 The Department of Foreign Affairs and Trade (DFAT) therefore seeks approval from the Parliamentary Standing Committee on Public Works (PWC) to proceed with a project which includes two associated parts to improve substantially the current residential situation and associated staff amenities.

PART 1: Residential Accommodation. It is proposed to reconfigure, adapt and refurbish a leased three storey house on a 21.58m x 43.27m (934sqm) site into a 12 bedroom residential building complete with en-suite bathrooms, communal living areas and associated services infrastructure to provide secure accommodation for Australian Government officers.

PART 2: Staff Dining, Representational, Recreational & Amenities. It is proposed to redevelop/refurbish these four leased un-refurbished properties, nominated as 'W', 'X', 'Y' and 'Z', into a self-sufficient compound for use as embassy representational and communal staff facilities. Each block is 43.50m deep and averages 16.50m wide thereby providing a combined site of approximately 2,890sqm.

- 1.1.4 The Project will be managed by the Overseas Property Office and Services (OPO) in DFAT.
- 1.1.5 The proposed project will provide the Australian Embassy with a contiguous secure zone around the chancery. This will minimise the current need for embassy personnel to always travel under secure escort to and from the chancery and between residences and amenities, including on a public road, and will therefore greatly enhance security arrangements. It will also establish a suitable safe space for official meetings and events in

support of Australian objectives in Afghanistan. Finally it will improve the standard of living and recreational amenities available to embassy personnel in an environment that is highly restrictive.

1.2 Background

- 1.2.1 The Australian Embassy chancery was opened in Kabul by then Prime Minister Gillard on 6 November 2011 after previously operating on a temporary basis from the US Embassy and earlier from the Serena Hotel. The establishment of a diplomatic presence in Kabul was driven by Australia's participation in the International Security Assistance Force (ISAF) which was established by the United Nations Security Council in 2001. In October 2006 the North Atlantic Treaty Organisation (NATO) assumed control over security across the whole of Afghanistan. Following conclusion of ISAF's mission in 2014, security responsibility returned to Afghan National Security Forces.
- 1.2.2 The current office and residential accommodation requirements are split between a number of leased properties spread over several blocks in the semi-secure area of central Kabul. The security situation in Kabul is poor and deteriorating. It is now urgent that we establish a contiguous security zone around the chancery, including residential accommodation, facilities suitable for representational use, adequate dining facilities and reasonable amenities, in a way that addresses security risks and reflects heightened WHS risks.
- 1.2.3 Funding was previously approved through a New Policy Proposal (NPP) to construct a residential compound in Kabul to allow for an expanded staff presence. This project is no longer required in its original form and the current proposals reflect changing circumstances and requirements.
- 1.2.4 Nevertheless, there still exists a need to substantially improve staff amenities and improve security for the whole-of-post by consolidating the property footprint and reducing staff and vehicle movements in a high risk zone. We have investigated the possibility of co-locating with other Diplomatic missions in Kabul, and found these to be not feasible. Our preferred option is to provide our own suitable residential accommodation in close proximity to the chancery in a manner that meets the immediate and future needs of the mission.
- 1.2.5 Consolidating the Embassy property footprint will significantly enhance the physical and day-to-day operational security for all staff, improve the standard of accommodation and amenities as well as their accessibility, strengthen our compliance with WH&S legislative obligations, and provide flexibility to meet the evolving needs of the mission. Provision of the refurbished staff residence and amenities in a contiguous secure property footprint will represent a reduction in scope and budget over what was previously envisaged.

1.3 Description of proposal

Part 1: The “Residential Accommodation: This comprises the reconfiguration, adaption and refurbishment of a leased four storey local architectural style residence (basement, ground, first and second floors) and outbuildings. The proposal includes incorporation of 12 separate bedrooms of modest size, each with an en-suite bathroom. Communal spaces will be provided as well as a security safe room, gym and an open landscaped area at the front of the property. New services infrastructure, secure perimeter and other physical security measures will also be incorporated. The accommodation greatly enhances security and will be contiguous along one boundary wall with the existing chancery compound. This will facilitate alternative means of egress in case of emergency. It also means embassy personnel will be able to access chancery communications systems during periods of heightened threats for vehicle movements (at present if embassy personnel are ‘locked down’ at residences they are isolated from each other and have no access to chancery communications).

- 1.3.1 Part 2: Dining, Representation, Recreational & Staff Amenities (known as W, X, Y and Z buildings):
This proposal comprises the consolidation of four properties to provide much needed staff amenities. The works include the reconfiguration, adaption and refurbishment of two leased local architectural style houses including outbuildings and the demolition of two houses to create a contiguous secure compound for staff. The complex will provide common and private dining areas with commercial kitchen, communal recreational amenities, storage, facilities management workshops, electrical generation and other service infrastructure plant and equipment, secure controlled vehicle and pedestrian entries, covered vehicle parking as well as limited outdoors entertaining areas. A secure perimeter wall and other security measures will be provided within this compound. The proposed project would also establish a suitable space to be used for meetings and functions in pursuit of Australian interests in Afghanistan. The security situation in Kabul means that alternative options, such as restaurants and hotels, cannot be used for such purposes. The highly restrictive nature of life for embassy personnel in Kabul also underscores the need to improve amenities which were implemented at a time when Embassy personnel had greater access to outside facilities.

1.4 Options considered

- 1.4.1 The 2013-14 Budget round approved a NPP with funding received for the construction of custom-built residential accommodation. The previous requirement for 36 to 40 residential apartments has been modified due to changed staffing levels and new lease options.
- 1.4.2 Co-location with like-minded missions was explored but proved unsuccessful.

1.5 Reasons for adopting proposed course of action

- 1.5.1 Completion of the projects will achieve the following.
- (a) A consolidated property footprint that creates a contiguous security Embassy zone for the first time.
 - (b) Improved security access between Embassy properties, particularly for access, including by road, to and from the Chancery, residences and amenities within the secure Embassy zone.
 - (c) Reduced and simplified daily escorted staff movements to and from the Chancery and other properties and amenities.
 - (d) Lessened constraints on staff movements, which to date are subject to guard schedules and related workload demands and commitments.
 - (e) Improved physical and operational mitigation security measures.
 - (f) Reduced risks to staff being isolated during complex and other terrorist threats and attacks.
 - (g) New and refurbished accommodation and amenities with enhanced WH&S standards.
 - (h) Reduced project scope and budget over what was previously approved in the NPP.

1.6 Environmental impact assessments

- 1.6.1 There is no known requirement for this proposal to undergo an environmental impact assessment.

1.7 Heritage considerations

- 1.7.1 The 'Residential Accommodation' contains a series of ornate carvings and other design features which the owner of the property has requested remain in place. This request will be taken into consideration during the design development phase.
- 1.7.2 There are no known heritage considerations associated with the refurbishments of any of the properties.

1.8 Details of organisations consulted

- 1.8.1 Consultations have been held with DFAT's Diplomatic Security Branch, the Embassy in Kabul, DFAT's Pakistan and Afghanistan Branch and DFAT's Financial Management Branch.

1.9 Amount of revenue derived from the project

- 1.9.1 There is no revenue derived from the project as these properties are leased and not part of the owned estate.

2 TECHNICAL INFORMATION

2.1 Location and climate

- 2.1.1 Afghanistan is a land-locked and mountainous country with a population of over 30 million. Ringed by the Hindu Kush mountain range, Kabul one of 34 provinces, is situated in the mid north east of the country and has been the capital since 1776. Kabul is Afghanistan's largest city with a population of approximately five million people.
- 2.1.2 Kabul is situated approximately 1815 m (6000 feet) above sea level and has a semi-arid climate with precipitation concentrated in the winter as snow and in the spring months. During the winter months (November to March) Kabul can experience high levels of snow fall with temperatures falling to as low as minus 7°C. Summers are hot and dry with low humidity with typical high temperatures around 30° to 32°C. However during heat waves the temperatures can often exceed 38°C while pollution and dust are prevalent features of living in Kabul.

2.2 Scope of work

- 2.2.1 The scope consists of reconfiguration, refurbishment and remediation works including the provision of new services infrastructure and security requirements of five leased residential housing lots that were constructed in the 1960's and 70's used as family homes and vacated circa 2000. The properties were earlier leased to other foreign Governments. The buildings are structurally sound but currently are uninhabitable due to lack of services and require extensive remediation/replacement of such aspects as failing roofs, rising damp, failing internal finishes and building services as well as major internal and external refurbishment work.
- 2.2.2 Part 1: The proposal involves reconfiguration of the House adjacent to the chancery into residential accommodation for Australian embassy staff with 12 bedrooms complete with en-suite bathrooms, communal indoor spaces plus outdoor landscaped areas, a gym, laundry, storage, associated services infrastructure and security measures including a safe room. The accommodation building will be integrated with the existing chancery compound through a common boundary wall which will facilitate staff movement and also provide alternative means of egress in case of emergency.
- Part 2: The proposal involves four houses known as (Buildings W, X, Y and Z). The works will include the demolition of two houses to enable new works in order to link the other reconfigured and refurbished houses into one complex to provide a self-sufficient compound for communal embassy use. The amenities will include common and private dining areas, a commercial kitchen serving 90 meals three times a day, representational

and meeting spaces along with other internal and external landscaped relaxation areas, a safe room, facilities management workshops, storage, covered parking for official vehicles, a generator power plant plus associated new services infrastructure. Controlled secure vehicle and pedestrian entries will be provided at the boundary, all located within a secure perimeter. The staff amenities facility will be located across a public road directly opposite the chancery compound greatly reducing the need for secure vehicle transportation.

2.3 Site selection and site description

- 2.3.1 The proposed sites recognise the deteriorating security environment and the tight restrictions placed on staff movement both within and outside the proposed consolidated Embassy security zone. The residential blocks were selected as suitable owing to the close proximity to the existing embassy compound, the HOM Residence and another complex of residential accommodation used by Australian staff. This proposal, to the extent possible, will bring closer together the office, residential and staff recreational and amenities thereby consolidating people movements in a high risk zone. There are limited options for acquiring additional suitable diplomatic accommodation in this zone.
- 2.3.2 The suburban district in which the properties are located is flat and planned in a regular 90 degree grid of public access roads. The major access roads in the diplomatic district are guarded by numerous armed control posts including those controlled by Australia. All the properties are typical of the residential district with south facing gardens and traditional out houses.
- 2.3.3 Part1: The 'Residential Accommodation' site: This un-refurbished property with area of 934sqm shares its long boundary (43.27m) with the existing chancery compound while other boundaries are shared with properties occupied by other diplomatic missions. This site shares a common boundary with the existing embassy compound which will facilitate ease of movement of staff, provide access to service utilities and provide alternative means of egress in case of emergency.
- 2.3.4 Part 2: The 'Staff Amenities': The four contiguous sites known as W, X, Y and Z that are to be consolidated into one compound are located across a public access road directly opposite the existing chancery compound and the 'Residential Accommodation' site. The sites are flat and share long boundaries with each other. Each long boundary is 43m while the widths average 16.50m for an overall compound width of 65.90m providing a combined area of 2,890sqm.

- 2.3.5 The existing HOM Residence and the other embassy residential properties will be connected to the rear of the 'Staff Amenities' compound through common boundary walls. The proximity of the properties will facilitate ease of movement of staff and provide alternative means of egress in case of emergency.
- 2.3.6 Two other like-minded diplomatic properties adjoin the rear boundary line of the compound which will also enhance perimeter security and egress in an emergency.
- 2.3.7 Consistent with most areas in Kabul and in the subject district, none of the properties have access to municipal engineering services or utilities, thereby all properties require plant and equipment in order to be self-sufficient. Water to properties is supplied by deep well bores.

2.4 Zoning and approvals

- 2.4.1 There are no zoning considerations required for these proposal, and owing to the nature of the security and political situation in Kabul, there will not be any formal construction approvals required.
- 2.4.2 Consultation with the building owners will be undertaken in respect to the proposals for the reconfigurations, refurbishment and adaptations required of the properties.

2.5 Land acquisition

- 2.5.1 As the properties are all separately leased there are no considerations in respect of land acquisition.

2.6 Codes and standards

- 2.6.1 The appropriate use of International (British) and Australian Codes, Standards and Regulations in respect of the design and material and equipment selection will be undertaken by the design consultant throughout the design development phases. It is proposed that electrical design works will be documented to Australian Standards as part of the life safety consideration.

2.7 Architecture

- 2.7.1 The architectural components of the design development consists primarily of internal reconfiguration and refurbishment of existing local vernacular style houses. Therefore considerable effort will be placed on the interior design aspects including selection of colours, materials, fittings and fixtures and the furniture in order to enhance as much as possible the difficult restricted living conditions of the Australian based staff in Kabul.
- 2.7.2 To counter the impact of living within fortified compound walls in a high security environment additional consideration will be given to the use of external soft landscaping, murals and various 'cover from external view' screens. Locations for over-sight screens for instance could be around rooftop terraces and above perimeter walls.
- 2.7.3 Generally all interiors and exteriors will be refurbished and re-decorated. All external windows and all external and internal doors will be replaced

as required. The design of the external windows and doors will be specified in accordance with the DFAT security requirements.

- 2.7.4 Building extensions will be constructed in masonry or reinforced concrete.
- 2.7.5 Generally the roofs will be dismantled and re-roofed to ensure waterproofing and insulation. All roof terraces will be repaired and retained. All basements will have remedial damp-proofing in order to remove the rising damp problems and prevent it from returning. Existing stone floors and stairways will be retained and repaired as required.

2.8 Master planning and site planning

- 2.8.1 Part 1: 'Residential Accommodation'. Minimal site planning is required for this refurbishment project as the site will be amalgamated to the extent possible into the existing chancery compound. Appropriate privacy provisions including the outdoor landscaping and amenity area will be considered.
- 2.8.2 Part 2: 'Staff Amenities'. The four contiguous blocks to be developed as an integrated compound will be planned to provide as much inside and outside staff recreational amenities as practicable. Perimeter security, controlled secure vehicle and staff/visitor entries, the externally located facilities management workshops, major plant and equipment zones for services infrastructure and under-cover vehicle parking accommodated on the compound will require sympathetic planning consideration during the design development to provide visual and privacy landscaped buffers for the staff amenity areas.

2.9 Materials and finishes

- 2.9.1 Materials will be selected to present quality finishes that are durable and require minimum maintenance. Consideration towards climate and the environment will strongly influence the design decisions in addition to the recognition that many of the materials and equipment may need to be imported into Afghanistan. These may include glazing components, steel window and door sections, mechanical plant and equipment, technical security components, electrical and hydraulic fixtures and fittings, possible structural steelwork, security gates and guardhouse components, and joinery components.
- 2.9.2 Locally available stone and other hardwearing materials will be used for floors in public areas, entrances and other heavy use areas.
- 2.9.3 Non-load bearing internal walls will be timber/ steel stud framed partitions with painted plaster-board, or where required constructed of rendered and painted masonry. Internal security for safe rooms will be constructed in accordance with DFAT security standards and requirements.
- 2.9.4 Wet areas will be finished with ceramic or stone tiles to walls with slip resistant vitrified tiles or stone to floors. New sanitary ware will be provided.
- 2.9.5 Ceiling finishes will include painted plasterboard, possible perforated acoustic ceilings, and other suitable materials.
- 2.9.6 General floor finishes will be a mixture of locally available stone, carpet tiles, vinyl, treated concrete, concrete tiles, treated cement or other

materials as appropriate for the functional requirements of the nominated areas.

2.10 Structure

- 2.10.1 The existing buildings proposed for refurbishment are robust and of masonry and reinforced concrete slab construction. Documentation of the original construction does not exist to enable the evaluation of structural design considerations. The consultant's technical due diligence report undertaken in 2014 did not raise any issues relating to the structural condition that prevents the adaption of the existing buildings. All new construction, additions and modifications will be designed to international structural engineering standards and the local seismic conditions.
- 2.10.2 Structural design to the requisite standards will be undertaken in respect of the construction of new structures, refurbishment of existing building fabric of the houses including any extensions, the construction of safe rooms and the necessary internal demolition, with new supporting structures to be constructed in reinforced concrete or masonry as required.
- 2.10.3 Specialised structural design will be required for such items as the security controlled vehicle and pedestrian entries, all guardhouses and the perimeter blast mitigation protection which will be specified and constructed in accordance with DFAT's security requirements.

2.11 Mechanical services

- 2.11.1 The mechanical services will be designed to provide a high quality, safe, and comfortable indoor environment given the prevailing conditions.
- 2.11.2 The air conditioning systems will be designed with appropriate zoning to maintain good temperature regulation in areas with different thermal exposure or load characteristics. New individual split air conditioning units comprising individual indoor and outdoor units for each space. Typically the units will be rated at 18,000Btu's to 24,000Btu's, wall mounted, reverse cycle to provide winter heating and summer cooling. Units will incorporate low ambient control for temperature operation.
- 2.11.3 Ventilation rates will comply with the BS Building regulations Part F or the Chartered Institution of British Services Engineers (CIBSE) standards. WC's to have an air change rate of not less than six changes per hour to maintain good ventilation. Kitchen ventilation shall be via extractor hood at 35litres/second. It is proposed to use through the wall HRV units complete with a three speed controller for the bedroom accommodation to provide a simple form of ventilation and to allow the occupants to have some control. However all communal spaces will be provided with 10litres/second/person of fresh air.
- 2.11.4 Mechanical ventilation will not be required if the windows are openable. Safe rooms will be fitted with a dedicated ventilation system.
- 2.11.5 All plant and equipment will receive power from the dedicated generator plant located within the compounds.

2.12 Hydraulic services

- 2.12.1 Cold Water Supply Services. A new mains cold water supply will be reticulated to the buildings provided from the existing water treatment plant and cold water booster set installed as part of the chancery compound on the assumption the existing equipment has sufficient capacity. The existing water supply is pumped from deep well bores located in the grounds of the existing properties.
- 2.12.2 Domestic Water Services. Hot water provision at 60°C will be reticulated via unvented hot water storage tanks, complete with electrical immersion heaters with maximum heat recovery of two hours, fitted with hard water resistant elements. Tanks will be sized for hot water capacity of 45 litres/person/day (showers with no bathtubs). Hot water tanks to be complete with unvented kit (expansion tank with valves, strainers, pressure relief and thermostat) as required.
- 2.12.3 Waste Water. New waste water pipework will be connected to new sewage holding and treatment tanks.

2.13 Electrical services

- 2.13.1 New External Power Distribution. New generators with associated fuel tanks and underground cabling will be provided to supply power for the staff amenity compound. In respect of the residential accommodation the electrical supply will be supplied from the existing generator power supply at the adjacent chancery compound.
- 2.13.2 Internal Power Distribution. New small power wiring installation throughout to Australian equivalent - BS7671- to include new containment, wiring and electrical accessories and equipment. Electrical distribution panels to be provided on each floor complete with mcb/30mA rcd's.
- 2.13.3 Diesel generators. Power from existing generators located on the chancery compound will be provided for daily power supply as well as for emergency purposes.

2.14 Lighting systems

- 2.14.1 Internal Lighting. A new lighting installation will be installed to achieve illumination standards in accordance with CIBSE standards. As far as possible all light fittings to be dustproof to reduce maintenance.
- 2.14.1 Emergency Lighting. An emergency lighting installation will be incorporated to Australian/ British standards and designed to achieve a minimum of 1 lux average along escape routes. Emergency lighting will be included externally at the points of exit.
- 2.14.2 External lighting will be provided to the whole site perimeter, all internal roadways, and footpaths as well as the perimeter of buildings for both security and aesthetic reasons. Luminaires will be selected for ease of procurement, visual appearance, energy efficiency and effects created. Lighting for CCTV will be selected as directed by the security requirements specified.

2.15 Lightning protection system

- 2.15.1 A new lightning protection system shall be installed to British Standard BS6651 to include all down conductors, electrodes, earth pits and air terminators.

2.16 Smoke detection system

- 2.16.1 A new analogue addressable fire alarm system to BS5839, type L2, to suit the architectural layouts will include fire alarm panels, repeater panels, optical smoke detectors, sounders, flashing beacons and manual pull stations. The system will interface as necessary with any mechanical ventilation plant and systems. The alarm systems will be relayed to the chancery and guardhouses as necessary.

2.17 EWIS/Public address system

- 2.17.1 There will be no EWIS system in the new accommodation. The chancery public address system will be extended to the residential accommodation. The Staff Amenities Compound will incorporate a public address system.

2.18 Security Specifications

- 2.18.1 The proposed sites will be fully enclosed with anti-climb perimeter walls to prevent unauthorised persons and/or vehicular traffic accessing the property grounds. The perimeters will be protected by anti-blast HESCO barriers specified by DFAT security. Additional light-weight screens will be erected in accordance with DFAT security standards on top of the perimeter walls to prevent over-sighting from surrounding buildings. The barriers will be designed to afford anti-ram protection at critical and vulnerable points.
- 2.18.2 Secure guardhouses will be erected at compound entry points. An anti-ram sally-port vehicle entry will be provided to the dining/ representation/ recreation compound, together with vehicle and pedestrian screening.
- 2.18.3 CCTV coverage and security lighting will be designed and installed in accordance with DFAT security standards, for all internal and external areas of the new compounds, including at street access points, to deter and detect intruders.
- 2.18.4 Where necessary, DFAT-compliant Access Controls Systems may be required in certain areas of the new compounds, as determined by DFAT requirements.
- 2.18.5 The building facades and perimeters will be constructed to meet DFAT blast, ballistic and intruder resistant capabilities as required by DFAT security standards.
- 2.18.6 Secure safe rooms will be constructed to meet DFAT's ballistic and related security standards with appropriate life support systems, CCTV monitoring, ventilation and a separate exit point.

2.19 Communications

- 2.19.1 All necessary data cabling will be provided to the new project through an extension to the existing chancery networks where feasible and independent infrastructure as required, suitable for telephones, mobile phones, computers, CCTV, MATV and other security requirements.

2.20 Lift services

- 2.20.1 No lifts will be included in the refurbished projects.

2.21 Civil works

- 2.21.1 The works will include new paving for vehicles, restored and new pedestrian paths, new or refurbished external storm water drainage throughout the sites along with construction of perimeter security walls, barriers and guardhouses. Sewage treatment tanks, soak-aways and other pits will be constructed in accordance with the design requirements.

2.22 Landscape design

- 2.22.1 The garden areas for the houses will be remediated to allow for soft landscaped including grassed areas, especially to the staff recreational compound in order to provide discrete areas for staff to relax as well as the provision of paved outdoor areas in order to host representation functions and social gatherings. Walkways will be covered with lightweight translucent coverings.
- 2.22.2 The planting will be appropriate for local conditions with resilience and requiring a low level of maintenance. The landscape design will consider seasonal rainfall, soil types and the availability of water to the site. Landscaping has an important role in delineating areas and providing for privacy and screening especially to the staff accommodation building.

2.23 Operations, maintenance and warranties

- 2.23.1 Upon completion of the testing and commissioning of the installations and at the time of practical completion of construction OPO will be provided with 'as installed' drawings, material and equipment warranties, operational and maintenance manuals along with spare parts to enable the appropriate ongoing operation, maintenance and repairs of all engineering services and the building fabric.
- 2.23.2 Training requirements for the operation and maintenance of the building services and systems will be formulated between the building contractor and the embassy facilities management team.

2.24 Acoustics

- 2.24.1 To the extent possible in the residential accommodation project acoustic reduction will be designed between individual bedrooms and en-suite bathrooms as well as between bedrooms and communal spaces to mitigate sound transfer and ensure privacy.

2.25 Ecologically sustainable design (ESD)

- 2.25.1 Lighting. The use of LED or high efficiency fluorescent lighting is proposed. The advantages are reduced energy use and costs (uses at least

75% less energy than incandescent lighting and less diesel fuel consumption), a reduction in maintenance costs (lasts 35 to 50 times longer) and a reduction in cooling costs as LEDs produce very little heat.

- 2.25.2 Ventilation. By heat recovery through removal of air that is exhausting from buildings and passing it across incoming air (via non-porous surfaces) energy is saved in both the heating season and in the cooling season. Such modifications can be costly and difficult to carry out in isolation, however during total refurbishment and modification works becomes financially viable.
- 2.25.3 Replacement windows. New windows will be supplied in accordance with the security requirements but inherently will be more thermal resistant.
- 2.25.4 Roofs. Roofs to the houses will be dismantled and re-constructed complete with appropriate insulation which will increase the thermal efficiency of the heating and cooling requirements.

2.26 Provisions for people with disabilities

- 2.26.1 The Kabul contextual and building constraints limit the access for wheelchair users. Provisions and management solutions will be implemented as required for people with reduced mobility.

2.27 Heritage issues

- 2.27.1 There are no heritage issues associated with these projects.

2.28 Child care provisions

- 2.28.1 It is not DFAT Policy to provide child care facilities at its overseas missions. Kabul is a single person post and hence does not require these provisions.

2.29 Fire protection

- 2.29.1 A new analogue addressable fire alarm system to BS5839, type L2 to suit the architectural layouts, to include fire alarm panel, repeater panel, optical smoke detectors, sounders, flashing beacons and manual pull stations will be provided. The system shall interface as necessary with any mechanical ventilation plant and systems.
- 2.29.2 The fire separation within each building and each area will be considered and planned strategically. The floors are rated by the fact they are concrete. All access to vertical shafts will be rated with either one hour rated doors or one hour rated service access points.

2.30 Security

- 2.30.1 The aim of the perimeter security is to prevent unauthorised persons and/or vehicular traffic from accessing the grounds and to provide screening of all visitors and vehicles prior to entering the complex.
- 2.30.2 As well as relying upon the perimeter security gates for vehicle anti-ram protection, vulnerable areas may be further protected using combinations of anti-ram knee walls, bollards and raised planter boxes, rising vehicle barriers, earth berms (HESCO barriers) and landscaping.

- 2.30.3 The sites are to be fully enclosed with anti-climb perimeter wall. The perimeter of the site will be protected by a barrier of sufficient strength, design and construction to deter entry. The design of the barrier will be in accordance with DFAT security requirements and should afford anti-ram protection at areas where considered vulnerable.
- 2.30.4 The guardhouse will have the capacity to handle vehicle and pedestrian traffic as required by providing smooth transition and access to the compound through a sally-port with inner and outer barriers.
- 2.30.5 Security lighting and CCTV to the interior and exterior of the perimeter wall is to be provided to deter and detect intruders.
- 2.30.6 Generally the facades and perimeter of the buildings will take into consideration blast, ballistic and/or intruder resistant capabilities to the degree possible as established by DFAT security.

2.31 Work health and safety

- 2.31.1 Compliance with WH&S standards is of high importance to DFAT. Therefore considerable attention will be given throughout the design and construction phases of the Project to meet its WH&S obligations.
- 2.31.2 WH&S practices will be implemented and enforced during the construction works at the site. These practices will be guided by relevant Commonwealth requirements applicable in the context.

2.32 Authorities and local industry consultation

- 2.32.1 Consultation with authorities in relation to check point upgrades and any external works will be undertaken through the Post.
- 2.32.2 Local industry consultation will be undertaken for pre-qualifying contractors for tendering.

2.33 Local impact

- 2.33.1 This heading is not applicable for these projects.

2.34 Project cost estimates

- 2.34.1 The out-turn estimated cost of the proposed works is AUD 23 million, and includes importation of goods, demolition, remediation, refurbishment, new fitout, construction contingency, and other related elements such as consultants' design fees, project management, site supervision, site office expenses and legal costs.
- 2.34.2 The estimate does not include any business machines, computers, artworks, furniture or white goods.

2.35 Project delivery system

- 2.35.1 The proposed delivery method will involve a traditional style of design, documentation, tendering and contracting on a lump sum basis. OPO considers that this approach represents the best value for money for the Australian Government in the difficult construction and security environment of Kabul.
- 2.35.2 It is proposed to pre-qualify contractors with proven delivery experience in Kabul. Both international and local contractor options are being

investigated as current feedback indicates there is limited interest from international contractors to undertake works in Afghanistan.

2.35.3 It is proposed to tender the 'Residential accommodation' and the 'Staff Amenities' works to the pre-qualified local/ international construction contractors.

2.35.4 The British Foreign, Commonwealth and Services Organization (FCOS) has been engaged to undertake the necessary due diligence surveys and preliminary concept designs. FCOS has the requisite capability, capacity and previous experience of delivering similar projects for both the British and Canadian embassies. This capacity has included working with local workforce to deliver high security projects.

2.35.5 All FCOS personnel involved have the requisite security training to travel to Kabul and hold necessary insurance cover with no exclusions as compared with other similar service providers.

2.36 Construction program

2.36.1 Following the PWC public hearing and subject to Parliamentary approval, the project program allows for the commencement of construction in Q3 2015 with completion of the project in Q2 2016. Practical completion will be followed by a 12 months Defects Liability Period.