

Planning Officer’s Report - LDCA February 2020

APPLICATION	2019/114 – Proposed New HM Prison and Custody Building
PERMISSION SOUGHT	Permission in Full
REGISTERED	18 December 2019
APPLICANT	Prison Project Board (Agent: Technical Services – ENRD)
PARCEL	LWNO446
SIZE	94.0 acres
ACTUAL SITE SIZE	10.85 acres
LOCALITY	Bottom Woods, Longwood North
LAND OWNER	Crown Land
ZONE	Coastal Zone/NCA
CONSERVATION AREA	Important Wirebird Area
CURRENT USE	Grazing
PUBLICITY	The application was advertised as follows: <ul style="list-style-type: none"> ▪ Independent Newspaper on 20 December 2019
EXPIRY	10 January 2020
REPRESENTATIONS	Two representations were received: (St Helena National Trust, in the form of an objection) (St Helena Airport Ltd, as a response to the Conservation Management Plan which accompanies this application)
DECISION ROUTE	Delegated / LDCA / EXCO
SITE VISIT	Carried out by the Planning Officer, Agent and Prison Manager on 28 January 2020

A. CONSULTATION FEEDBACK

- | | |
|-------------------|--------------|
| a) Water Division | No Objection |
|-------------------|--------------|

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b) Sewage Division	No Objection
c) Energy Division	No Objection – General Comment
d) St Helena Fire & Rescue	No Response
e) St Helena Roads Section	No Objection
f) Heritage	No Response
g) Environmental Management	No Response
h) Public Health	No Response
i) A&NR	No Response
j) Property Division (Crown Est)	No Response
k) St Helena Police Services	Not Response
l) Aerodrome Safe Guarding	Objection - Comment
m) Enterprise St Helena (ESH)	No Objection
n) National Trust (NT)	Objection (Extension was given for NT to comment)
o) SURE SA Ltd	No Objection

B. DEVELOPMENT DETAILS SUMMERY

The application is for a new Prison and Custody Suit at Bottom Woods. The building will of single storey and of a traditional St. Helena styling, with its concrete floors and ceilings, rendered concrete blockwork under an inverted box ribbed roofing. The new prison is centered on around 26-single occupancy cells, configured in a cross shape, together with associated rooms to provide: education, rehabilitation, training, medical room, sports, healthcare, worship, kitchen, recycling, storage, visiting, administration works, horticulture and security.

The new prison build includes excavation and site strip to form the build platform. Surface & Foul Drainage will be designed using sustainable urban drainage system (SUDS). The site demands extensive and complex underground service installations, Electricity, Water, Communications, together with CCTV, street and security lighting, which will require security installed in a large number of ducts, closely coordinated between all providers.

Adjacent to the main structure will be the fenced female and male exercise yards and a fenced garden area. The entire site will be surrounded in a specific prison grade double fence to comply with appropriate UK ministry of Justice Prison Standards.

The prison site will utilize green renewable technologies such as Photovoltaic panels, solar water heating, wind catchers, rainwater harvesting and a dedicated sewage treatment solution.

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The access road is proposed to lead directly off the Haul Road and run along the North West boundary to the prison site with 40 parking spaces to meet the with parking requirement of the prison and visitors, the increase capacity is for future resultant staff and visitor increase, these parking spaces will be located next to the access road but outside of the perimeter fencing.

C. PLANNING HISTORY

The Proposed New HM Prison and Custody Building was considered by the Land Development Control Authority (LDCA) for OUTLINE permission on the 4th of September 2019, development application reference 2018/77. The LDCA recommended to the Governor-in-Council to approve the development application with number of conditions. The Governor-in-Council discussed the development application at the Executive Council meeting on 17th September 2019 and the Application for OUTLINE permission was approved with conditions as recommended by the LDCA. The decision notice to the applicant was issued on the 8th October 2019 confirming the grant of permission subject to the conditions as set out below:

- 1) **Permission:** *This **Outline Permission** will lapse and cease to have effect on the day, 2 year from the date of this Decision Notice unless an Application for Full Development Permission has been submitted by that date – extension may be requested with written approval from the CPO on behalf of the Authority.*
Reason: *required by Section 31(1) of the Land Planning and Development Control Ordinance 2013.*

- 2) *The Application for **Full Development Permission** referred to in Condition (1) above shall include:*
 - a) *Details with regards to Site Preparation and Excavation, including Access from the Main Road, services, stability of land via gabions, drainage systems, treatment of the sewage system and re-use of grey-water;*
 - b) *Final Building Designs, service installations, Exterior Finishing (Materials and Colour Schemes) as well as Landscaping Details and security fencing and lighting;*
 - c) *Complete Infrastructure Service Supply Drawings (Water, Sewage Handling, Storm-water Management (roofs and hard surfaces) as well as Electricity Supply);*
 - d) *Details regarding Management of existing on-site Electricity Infrastructure and possible realignment thereof to ensure continued short-term (i.e. during potential realignment) as well as long-term service provision to the area as a whole.*
 - e) *Conservation Management Plan for the Important Wire Bird Conservation Area with an appropriate level of funding for a period of at least five years post construction of the development; the commitment to the care and mitigation of the land as an important Wirebird area to be reviewed at the detailed stage to take account of the fact that any funding allocation will be considered during the annual planning and funding process.***Reason:** *to ensure Appropriate, Sustainable and Sensitive Implementation of the site in accordance with LDCP Policies relating to the Coastal Zone and the Important Wire Bird Conservation Area management to overcome the impact of the disturbance caused by the development.*

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D. PLANNING OFFICER'S APPRAISAL

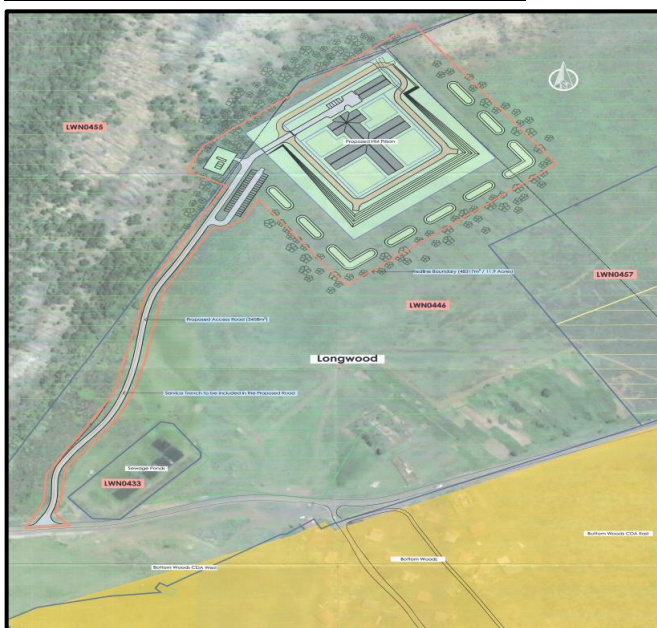
Location: The development site lies approximately 280m north of the Haul Road that provide a link between the Airport and Rupert's Wharf. The access to the area of proposed development will be via a new (approximately 400m) access road on the northwestern boundary, see Diagram 1 (Site Location) and Diagram 2 (Site Layout with Access Road).

The application site is approximately 10.85 acres and is part of a larger greenfield site that is approximately 94.0 acres situated in a predominantly agricultural area, also designated as a Wirebird area. The actual enclosed area of the development, considered to be the built development is approximately 5.20 acres and this is 5.5% of the total greenfield site.

Diagram 1: Site Location



Diagram 2: Site layout and Access Road



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Site: The Development site is within a predominantly agricultural area, with the immediate adjacent land used for animal grazing. The area is also designated as an Important Wirebird Zone.

The proposed site is situated on a small portion of the Proposed Wirebird National Conservation Area in Bottom Woods, locally known as the Goat Pen. It is also close to the Meteorological Office and proposed Sports field and associated infrastructure. There is a residential area to the north to be developed as a housing led CDA with associated commercial development and supporting infrastructure.

The site forms the apex of a hill and land falls away mainly to the North and South. The site is on the Southern slope grassland but for the aforementioned car parks.

The area to the north, east and south-eastern side of Haul Road is rugged terrain beyond which are the civic amenity site and the Millennium Forest. The area directly south of Haul Road in line with development site is mix of open space, grassland, agricultural and residential and area to the west is mainly agricultural. The open space to the west of the existing residential area is the Bottoms Wood CDA being developed for around 50 residential units, retail use and community facilities. This development was granted hybrid development permission by the Governor-in-Council in December 2019. The residential properties are considerable distance from the proposed development site to have any significant impact on the amenities of the residential properties and other uses.

A new dedicated access road will connect the development to a new signalised junction at the Haul Rd. When completed, this road will minimise the impact of construction and later operational traffic on the local road network.

The site falls within the boundary of the Bottom Woods Important Wirebird conservation area and therefore, concerns are that the proposed prison development will significantly impact on the Wirebird habitat within a protected area. However, the Conservation Management Plan that is part of this development application considers these issues and outlines management actions for the future conservation and management of this site. The Management Plan list phased implementation of these actions during preconstruction, construction and 5 years post construction. The actions proposed will not only ensure Wirebird safety but will also deal with issues regarding noise pollution, light pollution and other pollutants identified in the EIA. The purpose of the management plan is twofold; to enhance the areas of the existing grassland by reducing invasive, non-native scrub cover and the planting of endemic plants, and to implement a new rotational farming system, both of which will contribute towards improving and enhancing the existing poor quality Wirebird

habitat. In line with the goals of the Saint Helena Invertebrate Conservation Strategy 2016 to 2021, the management plans objective is to halt and reverse habitat loss and fragmentation, through expanding habitat area, quality and connectivity, and take action to contain the spread of invasive plants and animals, and reverse their damage through conventional and innovative measures based on priority endemic species and sites.

The management plan also notes, as previously conveyed in the EIA that the site of the new prison is currently unsuitable for Wirebirds due to low grazing pressure and the consequent growth of tall vegetation.

The development will require a site strip and site excavation to form the build platform. The entire build including the section of access road to the North West of the prison building and the sewage plant sits between the 450 and 440 contour, thus requiring a three terrace excavation of three metre high terraces to create a level platform. The extent of the excavation is reflective of the scale of the development which spans over eighty metres from the rear to the front of the excavation. The proposed excavation will be conducive in providing a backdrop to the development which complies with the Coastal Zone Policy CZ.3 (e) *where the development is not within 250m of the shore, the development is sited such that it has land at least 10m higher than the development on at least two sides of it within a distance of 250m;*

The site sewage works will include a sewage treatment plant producing treated effluent that will be safe enough to use for agricultural irrigation, with overflow discharge into nearby Billberry Field Gut. The proposed configuration is based on the Trickling Filter Process.

Diagram 3: Layout of the proposed development showing site excavation

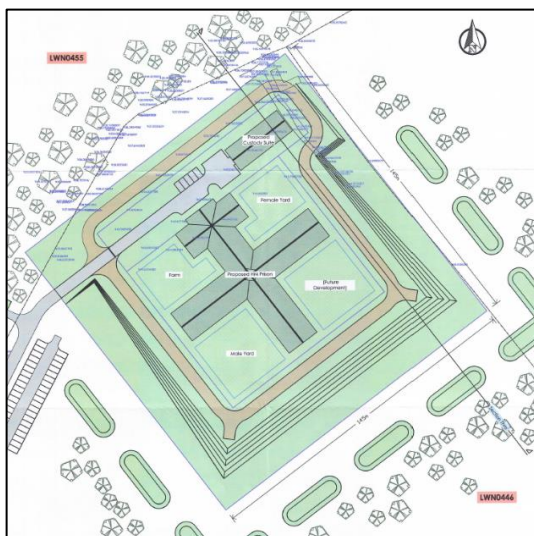
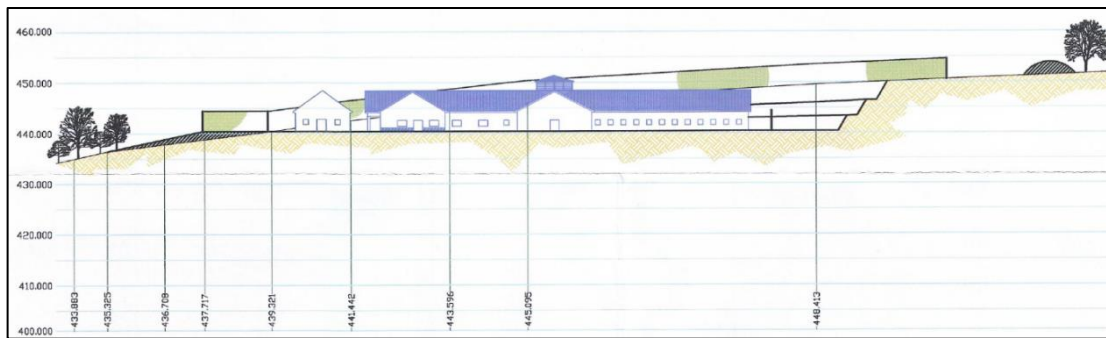


Diagram 4: Site Section Detail



The proposed development will provide a new prison centred around 26-single occupancy cells, in a single-storey block configured in a cross shape, together with associated rooms to provide: education, rehabilitation, training, medical room, sports, healthcare, worship, kitchen, recycling, storage, visiting, administration works, horticulture and security.

The Building will be of traditional St Helena styling, concrete floors and ceilings, rendered concrete blockwork, with stone cladding where appropriate, under IBR roofing. Adjacent to the main structure will be allocated female and male fenced yards and a fenced garden area. The entire site will be surrounded in a specific prison grade double fence to comply with appropriate UK Ministry of Justice Prison Standards. The prison site will utilize green renewable technologies such as Photovoltaic's, solar water heating, wind catchers, rainwater harvesting and a dedicated sewage treatment solution. The design criteria will consider the latest research principles around designing prisons such as:

Atmosphere: Ventilation, heating, lighting and acoustics are important preconditions for health and wellbeing conducive environments, and are frequently very poor in prisons. The environmental strategy for ensuring decent atmospheric conditions has been established early in the design process, with measurable performance targets, which can then be followed through at the detailed design and delivery stage. 'Soft landings' and post-occupancy processes should incorporate testing against these targets.

Privacy and personal space: Privacy and personal space are both important functional factors for creating comfortable environments. Having adequate interpersonal distances is important to wellbeing especially in the confined environment of prisons. The design will seek to give both people in custody and people working in the prison and other user's privacy and adequate personal space. Overcrowding is a strong impediment to rehabilitation.

Facilities: Establishment-wide facilities such as toilets, showers, drinking fountains, kitchenettes and rest areas are basic requirements for decent conditions for all prison users and their lack or inadequacy can be detrimental to morale in the longer term. Whilst levels of provision are generally specified for predicted populations in custody, they are often inadequate for officers, staff and external service-providers, limiting their effective ability to support rehabilitation. Standards for the provision of basic facilities for workers in the prison environment will be established and implemented.

Bulk Electrical system: As a result of the constrained existing power supply system the development intention is to create a stand-alone environment as far as practically possible and as such, it is planned to be energy efficient primarily relying on Solar systems including focus and the use of:

- a. LED Lighting
- b. Energy efficient appliances and equipment
- c. Natural Ventilation
- d. Day/Night sensor type external light fittings
- e. Solar water heating

The entire internal electrical distribution network will be carefully designed to blend in with the development as well as the natural environment. All structures, equipment and switchgear will be low profile, following natural contours. The environmental management plan for the development will form an integral part of the specification and requirements for the electrical construction work.

Primary power supply shall be via a comprehensive Photovoltaic and battery storage system with municipal supply as secondary supply. The development will be supplied from a 11 000V, 1MW, bulk metering unit agreed to be supplied by “Connect”

Dark Skies compliant Low level energy efficient area lighting will be installed in outside areas, roads and pathways.

Bulk Water system: The proposed development takes cognisance of the challenging water supply situation on St Helena and is as such proposed to be designed to be primarily stand- alone thus having minimal impact and demand on the municipal availability.

Water supply to the building will be primarily from stored water on site through rainwater harvesting into plastic tanks located around the building but shall also include a municipal pressurised water ring main supply throughout the development

to provide drinking water and as a secondary supply to these tanks governed by mechanical float switches.

It is proposed that a seamless aluminum gutter system will be installed to the perimeter of the building at fascia level to capture rainwater running from the roof. Water will be directed to various downpipes along the length of the gutters which will in turn be connected to a series of PVC pipes below ground leading into 5000L plastic water storage tanks installed at ground level around the building.

Stored water from these tanks will provide supply on demand water via a pressure pump and UV filter system to Engineers design. It is anticipated that in certain instances water may remain standing in tanks for periods of time thus Solar powered circulation pumps will be installed at each installation to ensure continuous aeration to avoid degeneration of water quality.

The tanks will also be connected to the water mains via a float switch system to ensure availability during low rainfall periods.

Waste water management system: The proposed works will include a sewage treatment plant producing treated effluent that will be safe enough to use for agricultural irrigation, with overspill discharge into nearby Billberry Field Gut. The proposed configuration is based on the Trickling Filter Process and deploys the rotating biological contactor (RBC) derivative. The process includes the following process stages:

- Primary Phase Separation via settling tanks. The settling tank allows for the gross removal of organic material by settlement and anaerobic oxidation. The settling tank makes provision for the accumulation of this material and has design features incorporated to ensure that this activity does not cause unnecessary blockages across the tank.
- All settling tanks do require servicing and desludging at some stage since the rate of sludge accumulation exceeds the slow growth rate of the anaerobic bacteria and hence their capacity to break down organic material.
- The settled sewage from the settling tank is then discharged under gravity to the RBC stage where further organic reduction and ammonia nitrification is achieved under aerobic conditions. The aerobic conditions are achieved by the rotation of the discs, on which the micro-organisms are attached and growing, at a low speed of approximately 3 to 4 RPM. The discs are manufactured from a polyurethane base and are 2m diameter discs assembled onto a 60mm steel shaft. The discs are high density and impermeable, and tend to float in the RBC basin, reducing the load imposed on the shaft. End bearings are provided to secure the unit to the RBC

basin. The energy requirement per rotor is 0.75kW and each rotor contains around 130 discs, providing adequate surface area for the corresponding organic load.

- A secondary settling tank, or humus tank, is required for the collection and removal of surplus bacteria that is removed from the discs by the rotating action of the discs in and out of the water. The design utilises the standard Dortmund type tank for this application. The collected humus is returned to the septic tank for anaerobic digestion, eliminating the need for sludge drying beds on site. A small de-sludge pump of approximately 0.35kW is provided for this purpose. Since pathogenic bacteria are not removed by the micro-organism population generated in any sewage treatment process by any adequate degree, a tertiary disinfection stage is typically deployed to eliminate the potentially disease forming bacteria. Provision has been made for disinfection (sodium hypochlorite dosage recommended).

Storm water management: By virtue of the sloping topography of the site surface storm water will need to be and can be effectively managed by making use of the existing gradients and slopes by adding low earth berms and “stone pitching” mechanisms with primary objectives being the following;

- a. Reduce the speed of water flow across the site
- b. Manage and control the flow direction of surface water
- c. Disperse surface water evenly across the site without concentrating dispersal into a single area
- d. Manage the dispersal of water into adjacent storm water catch pits or channels if available. (Roads and paths)

This approach, in consultation with the landscape architect, environmental consultant and civil Engineer, will be deployed on the areas surrounding the building as well as adjacent to the respective roads and pathways. The proposed earth berms and swales do not need to be of large size and are installed merely as a means to control the direction of water flow and final locations and planning will be best done in-situ after risk areas have been identified.

Proposed earth berms will be shaped, formed and well compacted and planted over with local grass or shrubbery in order to maintain their integrity and avoid erosion of same during high rainfall and surface water flow.

Size and shape of berms will vary depending on slopes and heights of contours over which surface water is to be managed but on average will be approximately 1000mm in width and 300mm in height. Height should not be of such that during high rainfall surface water is prevented from flowing over the top of the berm. Rock swaling can also be installed behind the berm, within in catchment / flow area to assist with

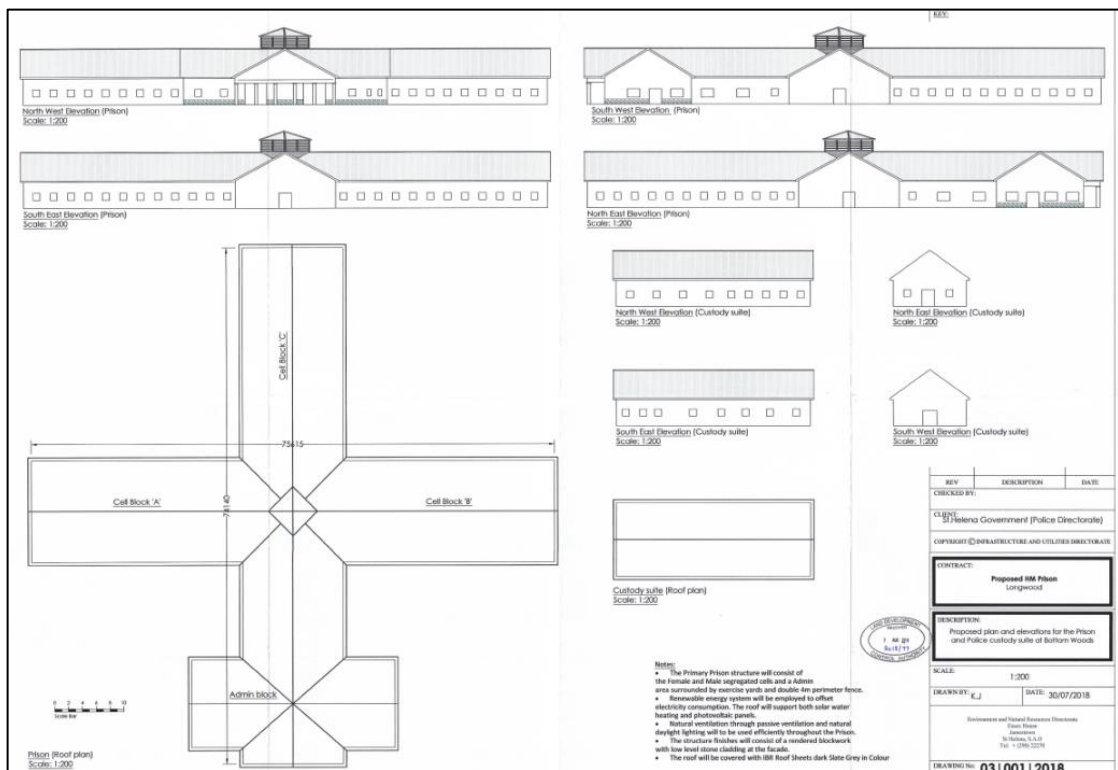
subsoil drainage.

Refuse and waste management: Refuse, recycling and waste management forms integral part of the function and operational nature of the development and facilities for the proposal includes a dedicated refuse/recycling area adjacent to the main parking area for collection and removal by the municipal service provider.

Health and Safety: The site will be secured with a single access point at the main entrance to the development as risk on St Helena is considered to be extremely low, however, visitors may well feel more secure in a managed environment despite such low risk.

A health, safety and emergency evacuation plan will be developed as part of the development construction and operational phases. By virtue of the construction and nature of the proposed buildings on the site, risk of fire spread will be relatively low and as such the need for a bulk fire main, hydrants etc. would not be deemed necessary, however, each area of the building will be zoned including Public and Service areas and as such will be equipped with fire protection equipment and safety plans.

Diagram 5: Elevations



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Diagram 6: 3D Conceptual



REPRESENTATIONS

There were two representations received to the development application advertised in December 2019 from the St Helena Airport Limited (SHAL) and Saint Helena National trust SHNT. The representations received are summarised below and with the Officer assessment;

The SHAL questions and comments raised concern the impact of the proposed development on the functions of the airport and its aviation operations, however some are general questions, comments or concerns about the overall development plans for the Bottom Woods and Horse Point area which cumulatively may have a direct or indirect effect on the airport and aviation operations.

SHAL concludes that the development plans of the prison are noted and at present are expected to have a very low impact upon airport operations. However, their concerns relate to the following:

- Roof lights: their specification, direction of illumination and intensity has potential to dazzle or confuse pilots on final approach and may also attract sea birds at night.
- Sewage Treatment Plant: is an enclosed plant and a with maturation ponds be used;
- Wind catchers: have requested detailed specification to ensure that they do not generate glare;
- Design / Pre-Construction Phase – fruit trees: what is the plan to control bird activity attracted by fruit trees;
- Overall changes to the Bottom Woods area: the number of new developments proposed and planned for Bottom Woods and Horse Point, ie. additional housing, the creation of a recreational area, petrol station, supermarket and a ground

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satellite station at Horse Point will create a significant change to the whole area and unless carefully managed could have a negative effect on the current wildlife environment and alter the behaviour of plants, animals and birds.

Officer Response:

The issues and concerns raised by SHAL can be overcome through design and detail review as set out below:

- Roof lights can be designed with Velux black-out blinds that can be programmed to close automatically at a certain time of the day or manually closed at any time of the day. The blinds not only block the travel of light externally but also prevent over heating in the building.
- The sewage treatment plant is a covered area and should have little or impact on the system or the local environment.
- The wind catcher construction will be a timber structure and not glazed. The construction of timber framework with timber louvered slats on all four sides of the wind catcher allows air to be drawn on the leeward side and thus drawn down into the interior of the building on the opposite side.

It is inevitable that there may be some minimal impact on the airport and aviation function of SHAL arising from the development and a potential impact on the local wildlife and the natural environment. These issues were discussed in detail as part of the EIA submitted with the Outline development application was considered in the decision making. The Conservation Management Plan address the issues of environmental management of the area and conservation mitigation. As regards to future development at Horse Point, this is currently at an early stage of the development process and future development application will require EIA that will and should consider the cumulative impact as part of its development assessment.

St Helena National Trust (SHNT):

- The issues raised by SHNT in this representation are regurgitation of the previous matters raised discussed in the reports and relate to the following:
- the affect of the proposed development on the National Conservation Area, the importance of the Wirebird as the island's only surviving endemic land bird and its habitat that is protected under the EPO and is categorised as vulnerable on the IUCN Red List of species threatened with extinction and that its conservation is of international significance for global biodiversity and crucially appropriate mitigation and compensatory measures should be put in place to safeguard the population of Wirebirds in the area of the proposed development;
- there are several planning applications in progress that affect areas of important Wirebird habitat – so each individual application needs to be assessed for

- cumulative impact;
- annual Wirebird Census is underway by the Trust this month and will be happy to share the updated population count with the Planning Office once the data has been processed;
 - a condition, requiring consultation with SHNT on the appropriate mitigation and compensatory measures to be put in place to safeguard the population of Wirebirds at the development area.

Officer Response:

In view of the fact that the principles of the development has already been established with the grant of outline development permission after careful consideration of the proposed development and the supporting document and continuing to raise these issues again at the full development application stage is a little meaningless and have raised no comments on the propose design and/or the content of the Conservation Management Plan (CMP). The CMP states that it has been prepared in full consultation with the conservation officer at SHNT. The purpose of this Plan is to address any outstanding mitigation concern raised in the EIA for the future conservation and management of the area's importance for the Wirebird. The issues regarding the cumulative impact of other developments in the area has already been responded to in the earlier representation, except to emphasise that where EIA is require to support the proposed development, it has regards to present and proposed development in the vicinity and the cumulative impact will form an important assessment and mitigation measure will address the potential impacts.

The latest correspondence received on 30th January from SHTN stating that **It is formally objecting to the development cannot be considered as this relate to issues of principle** and this should have been at the outline development application stage and the response was also received outside of the consultation period.

E. LEGAL AND POLICY FRAMEWORK

The relevant policies of the Land Development Control Plan (LDCP 2012 - 2022) that are applicable in the assessment of the proposed development are set out below:

- Coastal Zone: Policies CZ.1 & CZ.3(e)
- Social Infrastructure: Policy SI.1
- Emergency and Public Services: Policy ES.1
- Natural Heritage: Policy NH.3
- Water Supplies: Policies W.1(a) & W2
- Sewage, storm and Drainage: Policies SD1 (a, b & c), SD3, SD.5 and SD7
- Road and Transport Policies: RT1 (a, c & d), RT3 (a & b), RT5 (f) and RT7

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OFFICER'S ACCESSMENT

Outline planning permission was granted for this development with a condition that the application for full development permission shall include a number of details and design considerations for development with regards to the site and excavation, sewage system, services details and a conservation management plan for the Important Wire Bird Conservation Area with an appropriate level of funding for a period of at least five years post construction of the development. The level of information submitted with this full development application is considered to be sufficient to determine design details of the development and in compliance with the conditions.

The proposed development as HM Prison is a building is of vital National Security, and certain information should not be in the Public Domain where knowledge could compromise the Prison Security. In the application form and the supporting design access statement, general information in respect of the development, site preparation and service layouts is provided and all services will be underground and currently there are no existing services on the site.

The applicant has submitted the Conservation Management Plan as part of the application and in this respect all details and explanations from the applicant noted above in relation to the conditions of the outline approval, the Planning Officer confirms to the Authority that it supports the development application.

F. PLANNING OFFICER'S RECOMMENDATION

REFERRAL TO GOVERNOR-IN-COUNCIL

The Application to be Referred to Governor-in-Council (in accordance with Directive dated 17 April 2014): 7(b) The custody of persons sentenced or ordered by a court to be imprisoned or otherwise detained, whether for a fixed period or indefinitely or otherwise for purposes connected with the administration of justice or emergency services.

LEGAL FRAMEWORK

1) In accordance with Section 23(1) of the LPDC Ordinance, 2013, the Governor-in-Council DIRECTS the Chief Planning Officer to refer to the Governor-in-Council all Applications for Development Permission which proposes the development of buildings or sites, which are (or are proposed to be) used for (b) the custody of persons sentenced or ordered by the court to be imprisoned or otherwise detained, whether for a fixed period of indefinitely or otherwise for purposes connected with the administration of justice or emergency services (Section 7).

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