

Sceilg Mhichíl
2024 OPW Maintenance Plan
Date of Issue – 20th March 2024



OPW Oifig na
nOibreacha Poiblí
Office of Public Works

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1. Introduction

This report aims to outline the maintenance works to be carried out by OPW at the start of the 2024 season at Sceilg Mhichíl. The OPW carry out annual maintenance works on the island prior to the commencement of the tourist season. The purpose of the works is to make the island safe for the general public, OPW personnel, contractors, consultants, etc. The works include site set up, safety sweeps, removal of stones and debris, cleaning of vegetation, repair works, etc.

At the start of each season, the OPW carry out an inspection of the island to identify any damage that might have occurred during winter i.e. rock falls, broken windows due to storm damage, etc.

Presently, the OPW carry out maintenance works four weeks prior to the opening of the island for visitors during summer. The island is normally open to visitors from mid-May to the end of September during the summer season, weather permitting.

Sceilg Mhichíl was inscribed on the World Heritage List in 1996 for its unique cultural and natural attributes. The uniqueness of the dry stone monastic structures displays the architectural achievement of the monks in such a remote and severe environment. The island is also important for being a destination for breeding seabirds and has a unique eco-system. Sceilg Mhichíl is a designated Special Area of Conservation (SAC) under the Habitats Directive (92/43/EEC) and a designated Special Protected Area (SPA) under the Birds Directive (79/409/EEC). Both directives form part of Natura 2000, a European network of protected sites.

The OPW co-ordinate with the National Monuments Service (NMS) and National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage (DHLGH) to ensure the protection of the island's archaeology and wildlife. The NPWS appoint an Ecological Clerk of Works on an annual basis to monitor and mitigate the impacts of the works on the seabird population on Sceilg Mhichíl. The appointed Ecological Clerk of Works will be present on Sceilg Mhichíl during the maintenance works carried out by OPW prior to the opening of the island.

2. General Description

The island of Sceilg Mhichíl lies 11.6 km off the most westerly point of the Iveragh Peninsula, Co. Kerry (SMR: KE 104A-001; National Grid Reference 024812 060654). The island is approximately 21.6 ha in area. The WHP is owned by the Minister for the Department of Housing, Local Government and Heritage on behalf of the Irish State. The Lower Lighthouse. Lighthouse tower and helipad are owned by the Commissioners of Irish Lights (CIL).

The island’s geological composition consists of Devonian Red Sandstone, formed in the Devonian Age approximately 400 million years ago. The topography that we see today is the result of rock formations that occurred circa 100 million years ago. Sceilg Mhichíl was also cut off from the mainland during the sea level rises resulting from the end of the last ice age approximately 10,000 years ago.

There are two main components of the WHS on the island. One is on the North Peak, the monastery enclosure located on the eastern side of the island that comprises a series of terraces, dry stone enclosing walls, three cisterns, seven corbelled cells (six intact) and two oratories. There are also the remains of St Michael’s Church. This part of the monastic settlement was accessed via a series of three stairways, only one of which is accessible today.

The second part of the World Heritage site is located on the South Peak with the remains of a hermitage, constructed ledges and altar remains.

The post-medieval industrial heritage of the island are the twin lighthouses and lighthouse road, built in the 1820s, the 19th-century pier, and the Commissioners of Irish Light’s helipad.

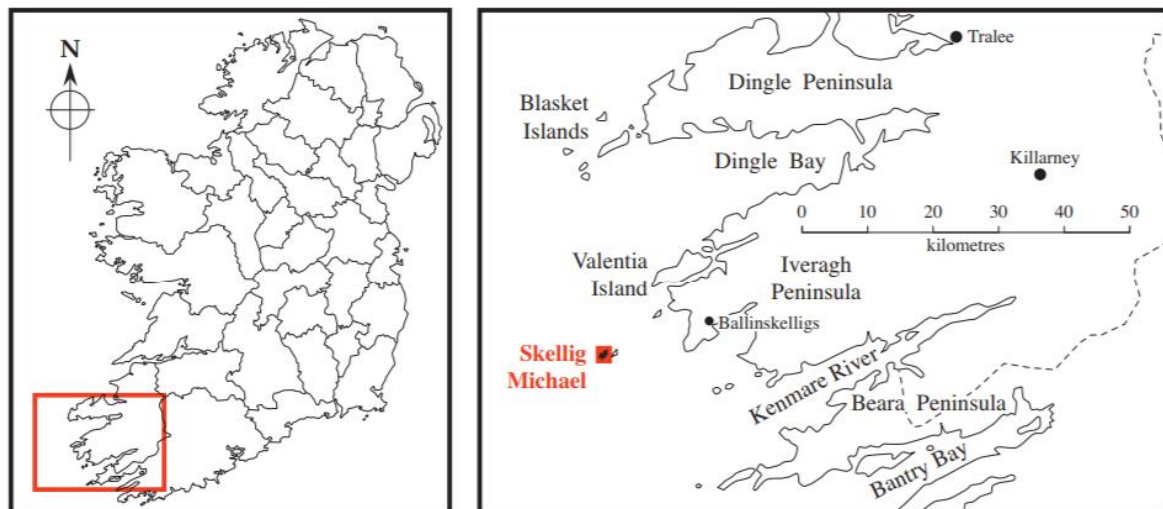


Figure 1 - Location Map of Sceilg Mhichíl (Bourke, Hayden, & Lynch, 2011)

3. 2024 Annual Maintenance Works

3.1. Landing Pier

The landing pier at Blind Man’s Cove is the only point of access to the Sceilg Mhichíl by boat. The landing pier is used by tourists, OPW personnel, consultants, etc. It is also used to transport materials to and from the island. The maintenance of the landing pier by the OPW is essential to ensure safe access to the island. The maintenance works to be carried out by the OPW include cleaning the landing pier of debris, ensuring that the access steps and handrails are secure, and securing any loose stones. The landing pier is cleaned with chlorus to remove the algae following the winter months. The removal of algae is essential to prevent serious slipping and tripping hazards. Debris is removed from the crane pit to ensure correct installation of crane.

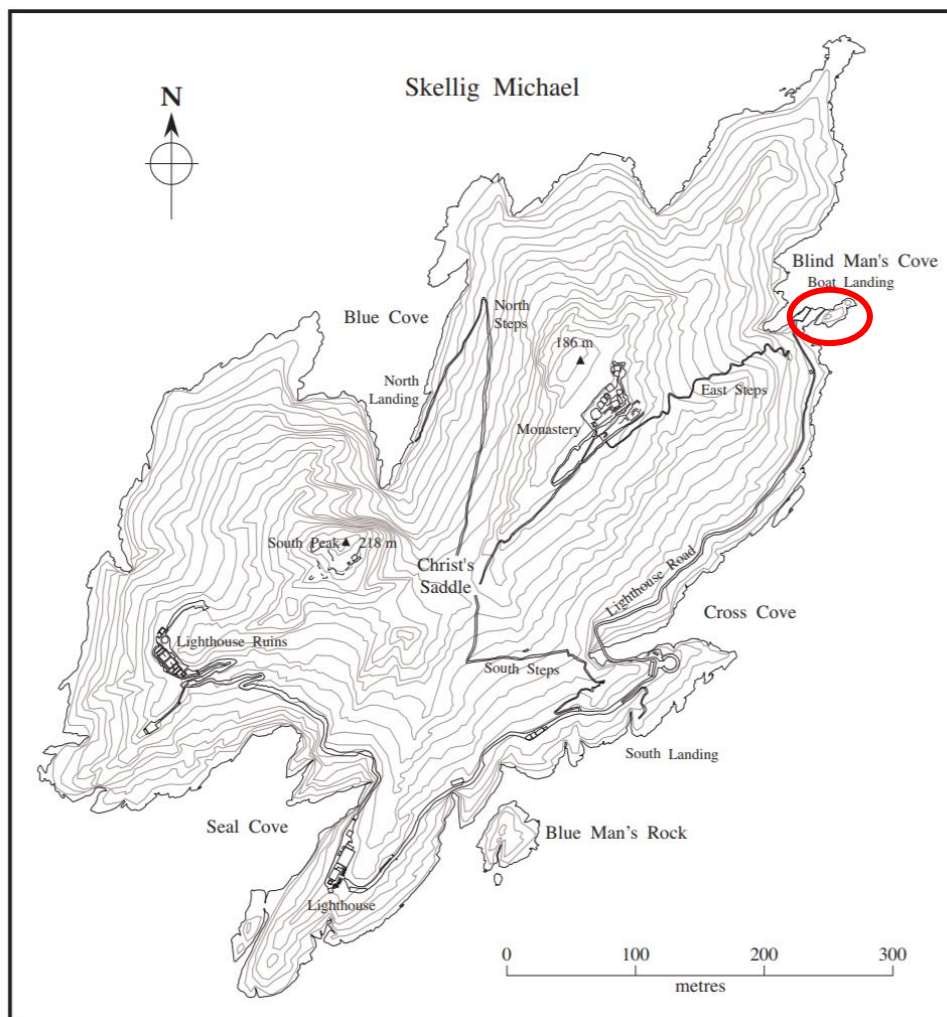


Figure 2 - Location of Landing Pier



Figure 3 - View of the Landing Pier



Figure 4 - View of the Landing Pier

3.2. Lighthouse Road

The lighthouse road at Sceilg Mhichíl contains the lower lighthouse road which extends from the landing pier to the lower lighthouse compound, and the upper lighthouse road which extends from the lower lighthouse compound to the upper lighthouse compound. The lower lighthouse road is accessible to tourists, OPW personnel, contractors and consultants. The upper lighthouse road is only accessible to OPW personnel, contractors and consultants.

The lower lighthouse road is used by visitors to access the South steps towards the Monastery. It contains the visitors toilet which is located near the helipad. Tourists can only access the lower lighthouse road until they reach the South steps. The upper part of the lower lighthouse road contains the site huts, used by OPW guides, OPW staff, contractors and consultants. The lower lighthouse road is also used to access the lower lighthouse compound and the upper lighthouse road.

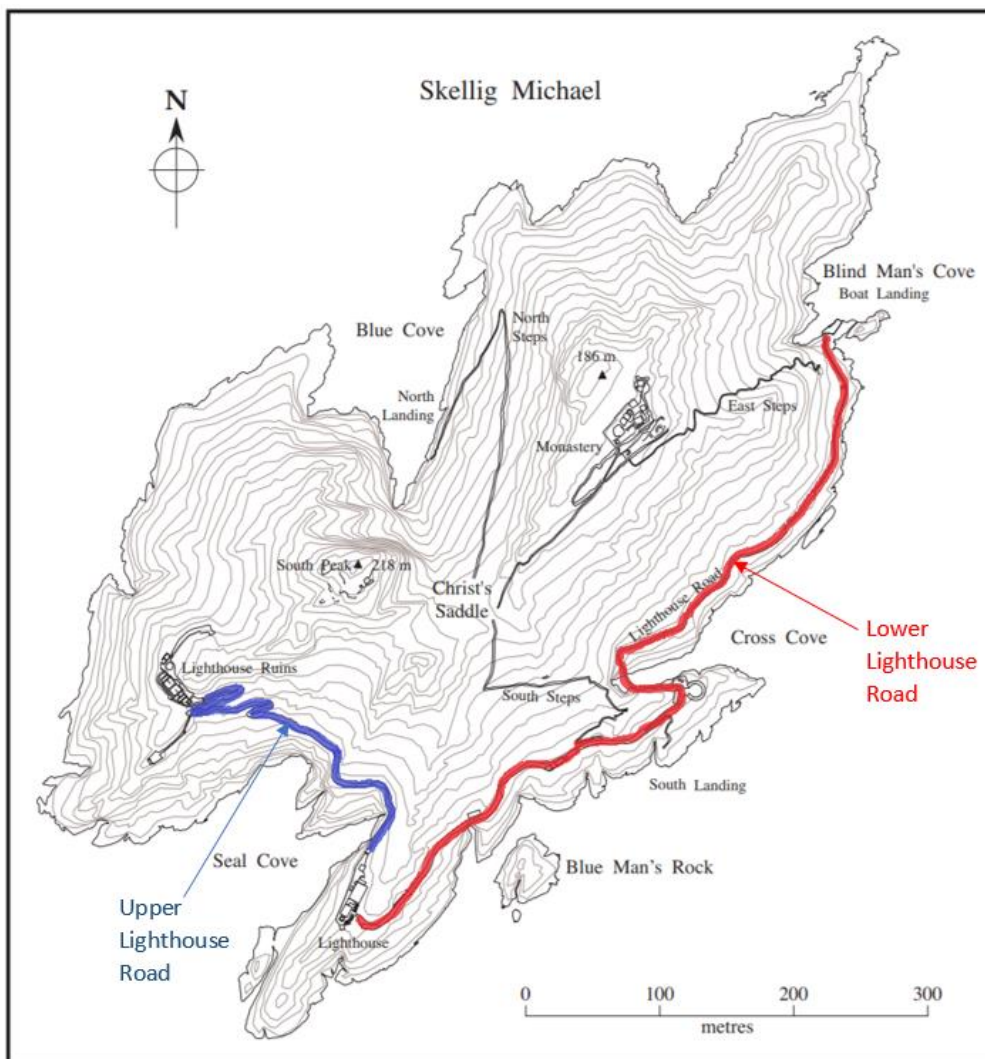


Figure 5 - Locations of the Lower and Upper Lighthouse Roads



Figure 6 - View of the Lower Lighthouse Road



Figure 7 - View of the Upper Lighthouse Road

The OPW carry out cleaning and maintenance to the lower and upper lighthouse roads at the start of each season. The works include the removal of debris and a safety sweep to the sloped areas above the lighthouse road. The lighthouse road is prone to rock falls from the upper sloped areas which are only accessible by rope access by OPW operatives. The OPW appoint a Level 3 IRATA operative to work alongside the OPW operative when carrying out safety sweeps. The safety sweeps are also monitored by an Ecological Clerk of Works appointed by NPWS to assess the impacts of the works on the nesting seabird population.

The purpose of the safety sweeps is to remove any threatening rocks from the sloped areas along the Lighthouse Road. The rocks are either removed to a safer location or broken up and brought down in a controlled manner.



Figure 8 – Excerpt from *Envirico Natura Impact Statement*

Additionally, the OPW carry out cleaning works to the protective canopy located on the Lower Lighthouse Road. The purpose of the canopy is to deflect stones and debris that fall down from the upper sloped areas. This is to provide safe access for all the visitors to Sceilg Mhichíl. The existing canopy on Sceilg Mhichíl was extended by approximately 100 linear meters in the 2022 season following a serious rock fall that occurred on the Lower Lighthouse Road on 13th June 2022.

The maintenance works to the canopy include the cleaning of stones, debris and potential rock falls. The works also include inspection and securing of the canopy. Following DHLGH’s Ministerial Consent condition the cable stays to this canopy are to be removed for the duration of the summer season and reinstated at the end. The canopy is built of a scaffolding system including scaffolding tubes and timber decking. Due to the larger size of debris that might fall on the lower lighthouse road during the winter months, some of the timber boards may sustain extensive damage and would require replacement. Therefore, timber boards on the protective canopy are inspected and replaced as required. The protective canopy may also require repair works and paintwork as required.

Upper Lighthouse Road

At the end of each season along the Upper Lighthouse Road, the OPW place sand bags along the drains to protect the road and ensure it is not washed away during a storm. As part of routine works, sand bags are brought to each drainage channel on the upper road and placed along the drain. These are placed parallel along the pathway to divert water into the existing drains in the stone walls. This action occurs to ensure that during winter months heavy rainfall will not wash away the surface of the pathway. At the start of season the sand bags are removed, drains cleaned and the pathway is restored.



Figure 9 - View of the protective canopy on the Lower Lighthouse Road



Figure 10 - View of the protective canopy on the Lower Lighthouse Road



Figure 11 - View of fallen debris on the decking of the protective canopy on the Lower Lighthouse Road

Rock-falls have increased in frequency in the past five years, due to the effects of climate change. The high levels of precipitation are leading to soil erosion and rock falls. The OPW carry out a site inspection at the start of each season to identify any potential rock falls that might have occurred during the winter season. The OPW then proceed to clear any fallen rocks by breaking them and salvaging stones for future re-use. Additionally, the OPW endeavour to make the locations of rock falls safe for tourists, OPW staff, and any other visitors to the island.



Figure 12 - Example of rock fall on the Upper Lighthouse Road in the 2022 season



Figure 13 – Example of temporary safety railing installed at the Upper Lighthouse Road by OPW in the 2022 season

3.3. Monastery South Steps

The South Steps at Sceilg Mhichíl are the only access for tourists to the Monastery from the Lower Lighthouse Road. They consist of approximately 600 uneven steps. At the start of each season, and prior to the arrival of tourists, the OPW carry out essential maintenance works to the South Steps to ensure safe access for visitors. The maintenance works consist of careful checking and identifying of any repairs required. The OPW then carry out all the necessary repairs and cleaning of the steps from overgrown vegetation.

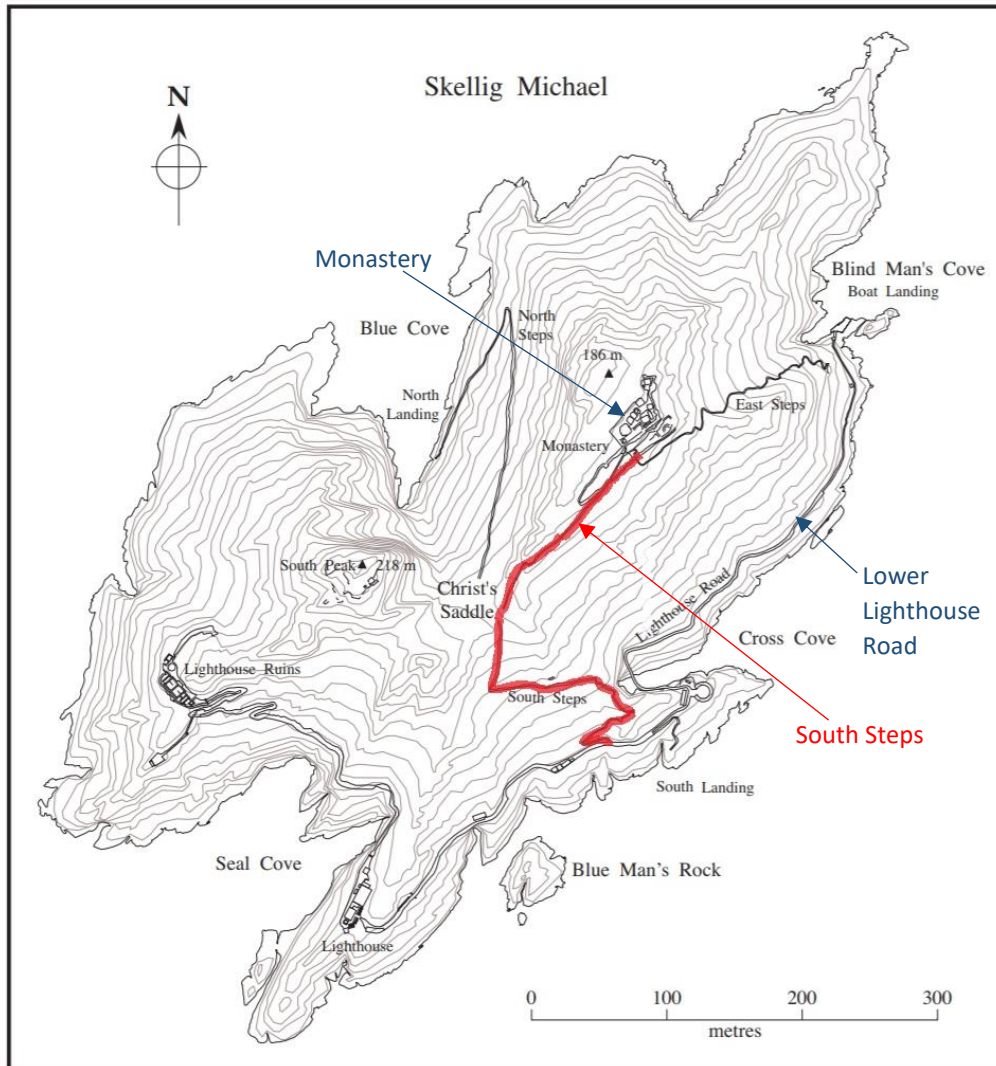


Figure 14 - Location of the South Steps



Figure 15 - View of the South Steps



Figure 16 - View of the South Steps

3.4. East and North Monastery Steps and South Peak

The East and North Steps leading to the Sceilg Mhichíl Monastery are not accessible to tourists. These steps are only accessible by trained personnel using rope access. Similarly, the South Peak at Sceilg Mhichíl is only accessible by rope access.

At the start of each season OPW operatives carry out maintenance and cleaning works to the East and North Steps and to the South Peak. OPW operatives are accompanied by an appointed Level 3 IRATA operative when carrying out these works.

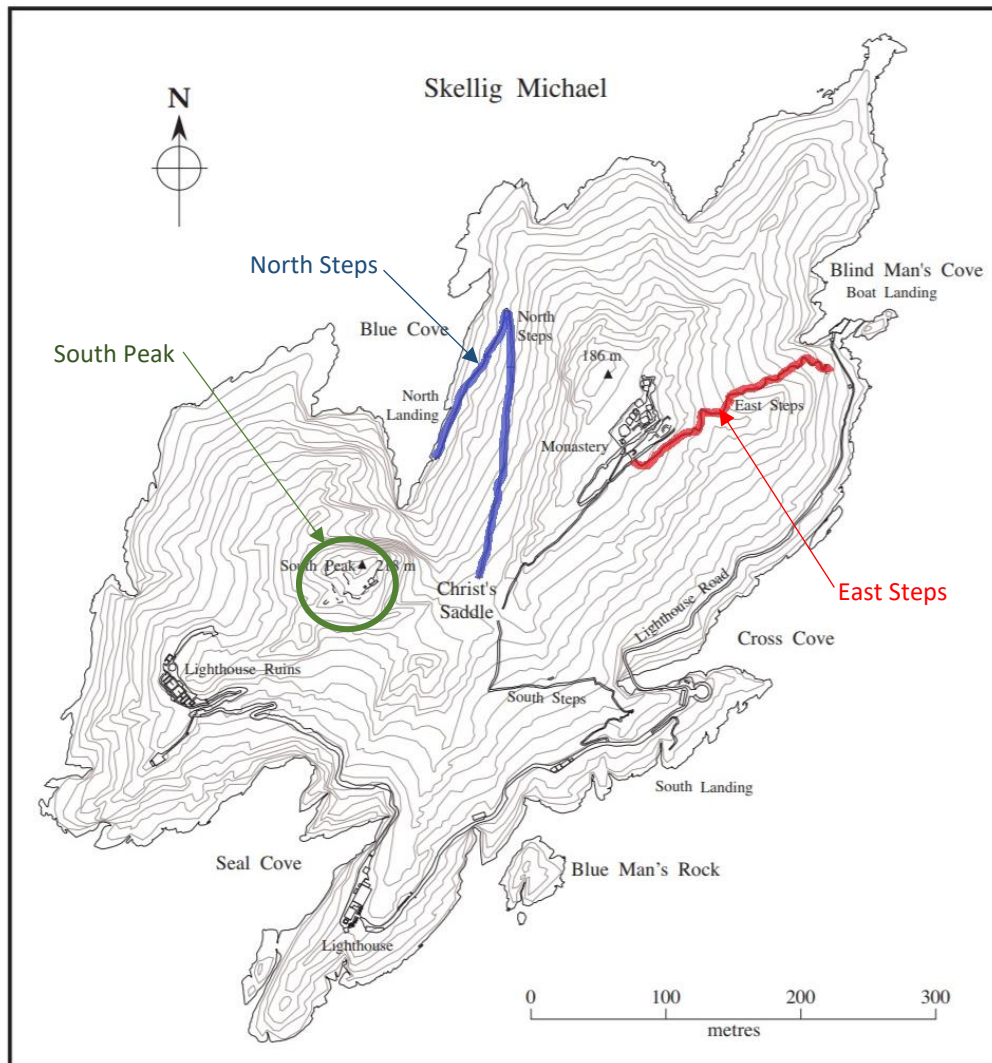


Figure 17 - Locations of the South Peak, North Steps and East Steps



Figure 18 - View of the South Peak



Figure 19 - View of the East Steps

3.5. Monastery

The early medieval Monastery at Sceilg Mhichíl is accessible by tourists when the island opens for visitors. The OPW undertake an inspection of the Monastery prior to the arrival of visitors to carry out maintenance works as necessary. This includes cleaning of stones, debris and overgrown vegetation.

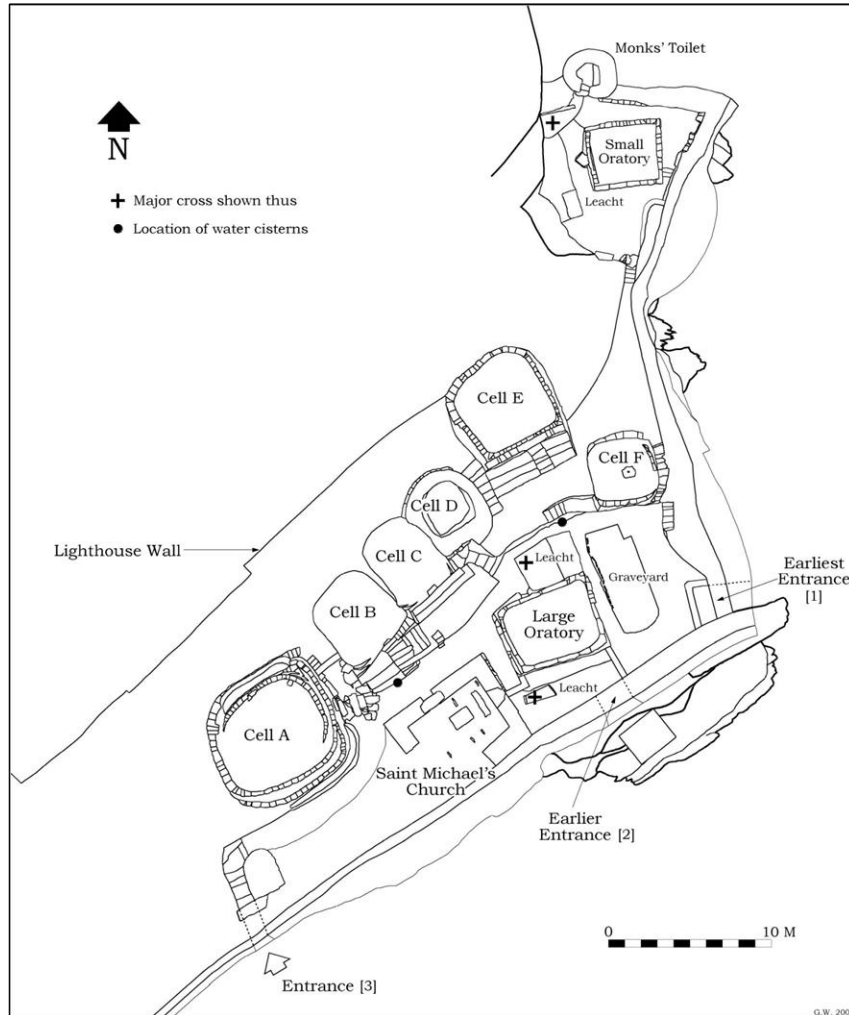


Figure 200 - Plan of the Monastery



Figure 21 - Aerial view of the Monastery



Figure 222 - View of the Monastery

3.6. Site Huts

The site huts at Sceilg Mhichíl are located on the Lower Lighthouse Road. The lower huts are normally occupied by OPW personnel, contractors and consultants. The upper huts are occupied by OPW guides. A composting toilet is also located near the OPW guides huts.

The OPW undertake a site set up at the start of each season that involves cleaning and making good of the OPW workers and guides accommodations. This includes the checking of all appliances i.e. fridges, gas cookers, etc. The works also include any maintenance required externally to the huts and checking of the existing solar panels on the roofs of the huts. OPW carpenters carry out an inspection of the site huts and make a list of all the repairs required. In addition, the OPW carry out maintenance works to the OPW composting toilet located near the OPW guides huts.

The OPW appoint a contractor at the start of each season to provide servicing to the site huts. All electrical and gas appliances present in the site huts are inspected and approved by competent contractors.

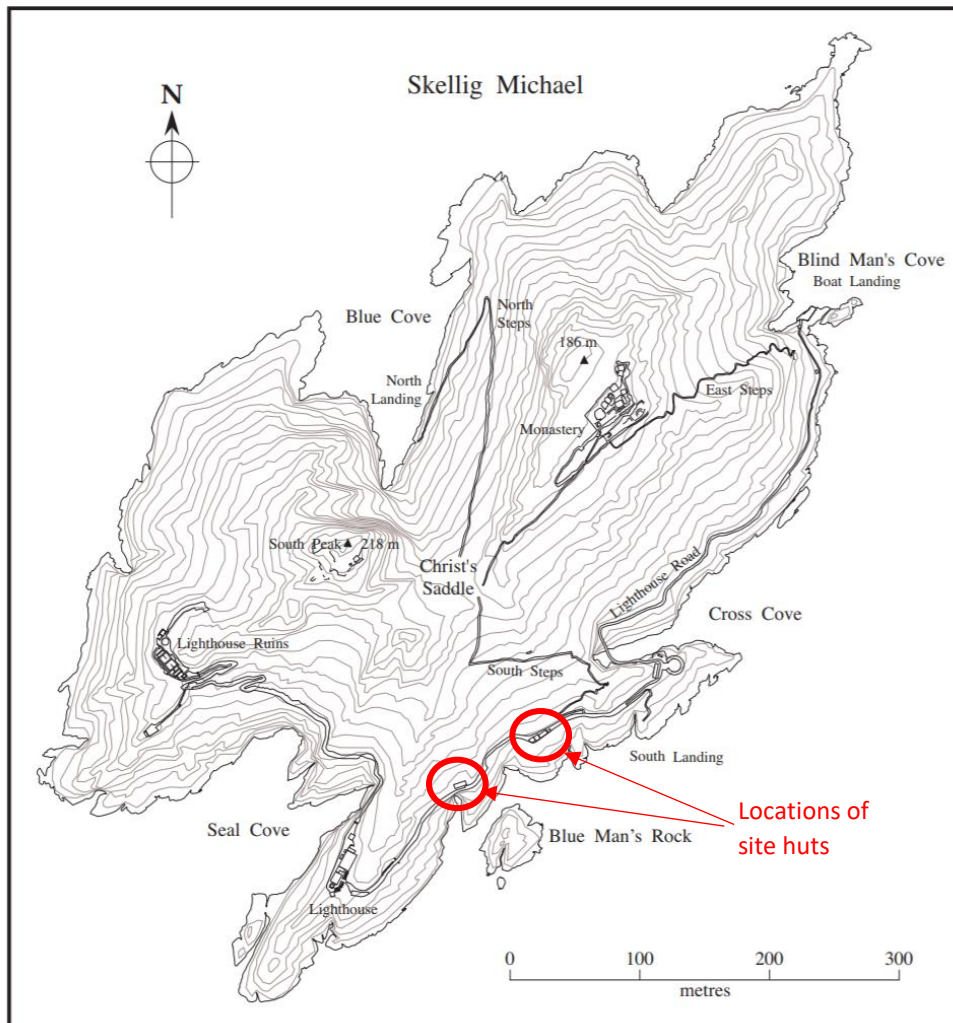


Figure 233 - Location of site huts



Figure 244 - View of the site huts on the Lower Lighthouse Road



Figure 25 - View of the site huts on the Lower Lighthouse Road



Figure 26 - View of the site huts on the Lower Lighthouse Road



Figure 257 - View of the composting toilet used by OPW guides located on the Lower Lighthouse Road

3.7. Visitor Toilets

The OPW installed new visitor composting toilets in the 2021 season near the helipad on the lower lighthouse road. The visitor toilets opened to the public on 24th August 2021 and are the first public toilets to be constructed on the island. They consist of 2 no. dry toilets and hand sanitation stations. The OPW carry out necessary maintenance works to the visitors composting toilets prior to the visitors arriving to the island.

The composting toilets are cleaned annually from solids and the composting tanks are topped up with saw dust. The tanks are emptied at the start of the season after the remains are left to decompose over the winter months. All solids and waste are removed by OPW from Sceilg Mhichíl every season and brought ashore. Once ashore, a licensed contractor extracts the waste for disposal at a licensed waste facility.

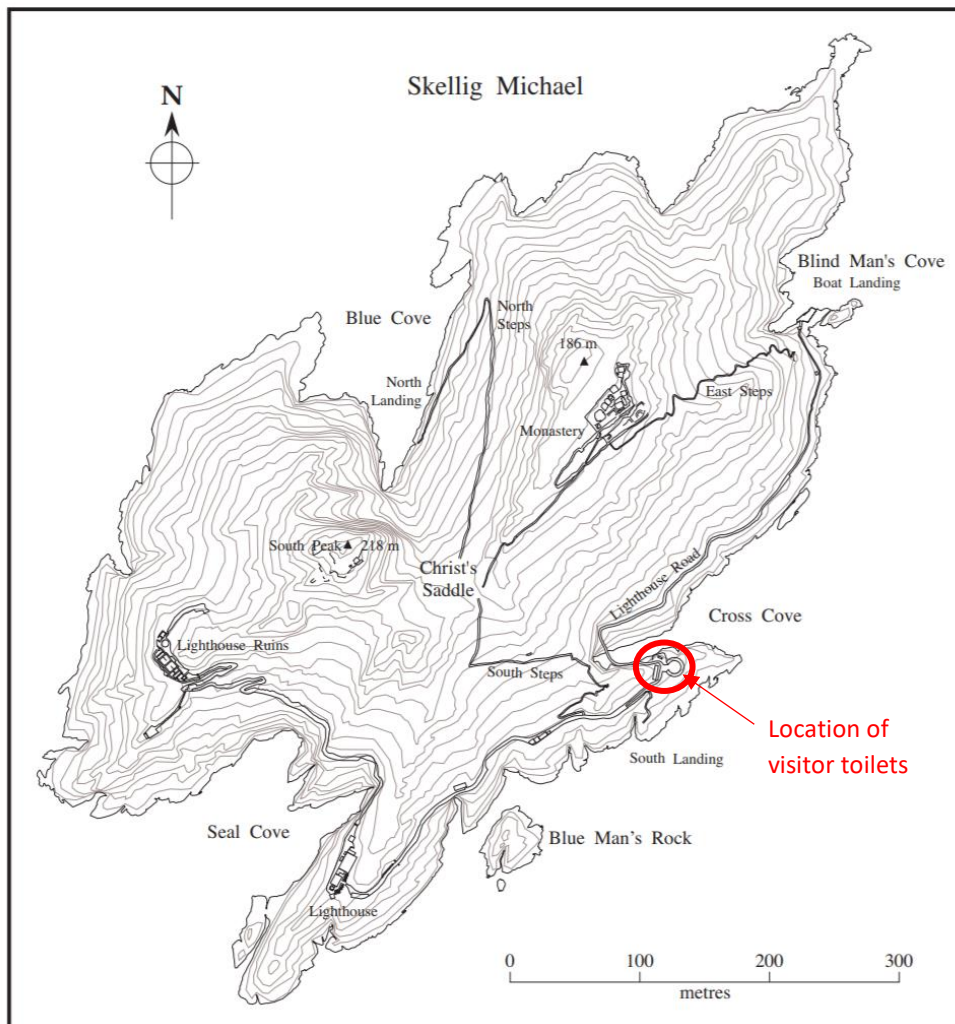


Figure 26 - Location of the visitor toilets near the helipad



Figure 27 - View of the visitor toilets near the helipad



Figure 280 - View of the visitor toilets near the helipad

3.8. Upper Lighthouse

In 2023 the floors slabs of the Upper Lighthouse were covered with plywood sheets and sand bags for protection. A site inspection will to be made to assess replacement requirements.



Figure 31 - View of the Upper Lighthouse Drone footage



Figure 32 - View of the Upper Lighthouse Protection to floor slab.

3.8. Mechanical Machinery

The OPW carry out an inspection of the mechanical machinery that will be used on the island throughout the season. These include a mechanical transporter, a small demountable hoist at the landing pier, cement mixers, muck trucks, and generators.

The mechanical machines are transported to the main land by OPW personnel at the end of each season. These are transported back to the island at the start of each season.



Figure 33 - View of the demountable hoist at the landing pier



Figure 34 - View of the demountable hoist at the landing pier



Figure 35 – Mechanical machinery on the island



Figure 36 - Mechanical machinery on the island

3.9. Rescue Exercise

The physical nature of the island and the uneven monastic steps are challenging to visitors and can cause serious accidents and injuries. The OPW has carried out two rescue exercises in 2019 that involved bringing a dummy casualty from the monastery to the pier on a stretcher. The Irish Coastguard Mountain Rescue team were involved in the rescue exercise and it is envisaged that a rescue exercise will take place during June of every year, weather permitting. The OPW will schedule a rescue exercise to take place in the 2024 season, to be agreed with the Irish Coastguard Mountain Rescue team.

During the rescue exercise, the OPW installed permanent safety anchors along the Monastery South Steps to be used in the event of an emergency. The OPW remove the safety anchors at the end of each season to prevent rusting and damage to the anchors during the winter months. The anchors are re-installed and tested by the OPW at the start of each season.



Figure 297 - Rescue exercise being carried out on site in 2019

4. Bibliography

- Department of Housing, Local Government and Heritage; Officer of Public Works; (2021). *Sceilg Mhichíl World Heritage Property Management Plan 2020-30*. Dublin: Department of Housing, Local Government and Heritage.
- Bourke, E., Hayden, A. R., & Lynch, A. (2011). *Skellig Michael, Co. Kerry: the monastery and South Peak, Archaeological stratigraphic report: excavations 1986 - 2010*. Dublin: Department of Arts, Heritage and the Gaeltacht.
- Department of Environment, Heritage and Local Government; Office of Public Works;. (2008). *Skellig Michael Heritage Site Management Plan 2008 - 2018*. Dublin: Department of Environment, Heritage and Local Government.
- Rourke, G. D. (2002). Preserving the Monuments on Skellig Michael for the Future. *Antiquity* 76.292, pp. 542-552.

Appendix A

WORKMEN CHECKLIST

Inspector: _____

The listed item should be inspected on a weekly basis and any comments / recommendations should be passed onto the relevant person.

| Item | Good | Damage | Location | Action to be taken |
|---|------|--------|----------|--------------------|
| Solar Panels | | | | |
| Batteries (Solar Panels) | | | | |
| Fire Extinguishers in Huts | | | | |
| First Aid huts | | | | |
| First Aid in work hut | | | | |
| Fire extinguisher in work hut | | | | |
| Fire Blanket | | | | |
| Smoke Alarms | | | | |
| Doors opening/closing safely | | | | |
| Steps to toilet | | | | |
| General order of toilet | | | | |
| General order of work hut (Top of island) | | | | |
| Winch system | | | | |
| Winch for scaffold | | | | |
| Monastery | | | | |
| Steps up to Landing | | | | |
| Handrail on Landing | | | | |
| Steps up from Landing | | | | |
| Handrail up from Landing | | | | |
| Pier surface | | | | |
| Clear out & removal of debris from crane pit | | | | |
| Life ring & Throw bag | | | | |
| Wall from Landing to Steps | | | | |
| Structural Steel on canopy | | | | |
| Timber sheeting on canopy | | | | |
| Removal of cable stays | | | | |
| Handheld marine sets | | | | |
| Transporter | | | | |
| Storage huts | | | | |
| Gate to huts | | | | |
| Gas cookers in huts | | | | |
| Electrical works in huts | | | | |
| Lower Lighthouse Road | | | | |
| Upper Lighthouse Road | | | | |
| Cleaning and decanting toilets | | | | |
| Showers | | | | |
| Steps to Monastery | | | | |
| North steps | | | | |
| South steps | | | | |
| Upper Monastery floor inspection replace plywood | | | | |

| | | | | |
|---|--|--|--|--|
| Permanent crash decks | | | | |
| Installation/Inspection of VHF base radio & antenna | | | | |

Details of Action to be taken and reported to:

Signature: _____