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SPACEPORT1

Construction Environmental Management Plan
For Comhairle nan Eilean Siar

07/11/2024

Spaceport1
Construction Environmental Management Plan
for Comhairle nan Eilean Siar

November 2024

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1. PROJECT BACKGROUND

- 1.1.1. In December 2021, Comhairle nan Eilean Siar (the Comhairle) submitted a planning application under the Town and Country Planning (Scotland) Act 1997 (as amended) seeking permission to construct and operate 'Spaceport 1', a sub-orbital vertical launch spaceport, designed to provide generic infrastructure to meet the requirements of different operators of sub-orbital launch vehicles. The development site extends to 1.82 hectares of the 276-hectare Scolpaig Farm site on the Isle of North Uist (Planning Ref: 21/00646/PPD). Planning permission was granted on 26 July 2023.
- 1.1.2. Spaceport construction will be undertaken in two phases of development, the first as part of enabling infrastructure works undertaken by the developer and the second phase subject to the appointment of a Spaceport Operator in the development of site-specific infrastructure for the future operational requirements. The first phase of construction is anticipated to commence on 18 November 2024 and conclude on 21 March 2025. The second phase of construction is expected to commence on appointment of a Spaceport Operator with the anticipated construction completion date in 2027.
- 1.1.3. The Construction Environmental Management Plan (CEMP) is a live document and will be updated when necessary to include any specific requirements raised during the construction period. Phase 1 of construction is anticipated to conclude prior to the breeding season of key bird species. Subject to the timescales of delivery of Phase 2 of the CEMP, there will be a formal update in advance of Phase 2 construction works to include the provisions of any requirements relating to ornithological requirements.

2. PURPOSE OF THE CEMP

- 2.1.1. The CEMP aims to minimize negative environmental impacts during construction activities, protect natural and historical resources, and ensure compliance with environmental regulations. It outlines responsibilities, legal requirements, and mitigation measures for managing environmental impacts during the construction phase of a project.
- 2.1.2. The CEMP is a live document and should be updated and reviewed as new constraints are identified, or as changes are made to the project requirements, commitments, mitigation, or other aspects to the project and phased construction approach. This may also include seasonal sensitivities identified in advance of the breeding bird season, which, whilst not applicable to the first phase of works (if completed on programme) may have a direct impact to subsequent activities identified within phase 2 scope of works or any delays to the initial phase of works.

3. KEY ENVIRONMENTAL CONSTRAINTS

- 3.1.1. The CEMP covers the following subject areas and key environmental constraints / sensitivity:
 - **Water management** across the project including all crossings, culvert replacement, site areas and construction compounds (See Appendix F CAR License and Water Management Strategy).
 - **Pollution prevention** (including dust) and control measures to ensure compliance with the project and planning requirements, legislation and best practice.
 - **Waste and materials management** across the project to ensure best practice is implemented and all waste materials are limited initially then if required are recycled or disposed of in a sustainable manner.
 - **Noise and vibration** control measures to ensure nuisance factors are limited and action plan in the event of a 3rd party complaint.

- **Traffic management** measures, compliant with Chapter 8 of the New Roads and Street Works Act 1991, to ensure the safety of road users and site construction operatives and minimise disruption due to construction traffic (see TMO1 Traffic Management Plan).
 - **Ecological control** measures, pre-construction surveys, compliance and implementation of EIA mitigations and planning conditions across the project phases.
 - **Archaeology and Cultural Heritage** review and written scheme of investigation (WSI) and trial trench evaluation to ensure cultural heritage both designated and non-designated site are identified, and appropriate mitigation has been implemented.
- 3.1.2. Key environmental and ecological constraints are identified in Table 1. Appendix E provides the Pre-Construction Otter Survey, Bat Preliminary Roost Assessment and Otter Protection and Monitoring Plan. In line with the project programme, updates will be provided in advance of any works for Phase 2¹.

4. CONSTRUCTION METHODOLOGY

- 4.1.1. The following activities have been carried out in advance of the commencement of construction Phase 1, Table 1 summarises the status of relevant works.
- Asbestos Management - asbestos cement roofs (chrysolite) have been identified at the farmhouse barn extension, byres 1 and 3. Asbestos cement debris has been recorded in several locations with the main concentrations located at the gable end of the farmhouse extension and byre number 3 where the asbestos cement roof has collapsed to the internal and external of the structure following storm damage. Sporadic and low intensity asbestos debris is present at the perimeter of all buildings and has spread between all structures observed, and in places is partially buried within the vegetation. Asbestos roofs structures on the farmhouse barn extension and byre number 1 and will require a small amount of encapsulation and repair (minor areas of damage). These will be removed and reinstated during a later phase of works (specialist contractor).
 - Pest control - eradication of rats and removal contaminated materials within identified buildings subject to appropriate risk assessment (specialist contractor: Rentokil).
 - Ecological surveys: an otter survey and bat preliminary roost assessment (PRA)² was carried out to inform the need for any construction specific constraints and mitigation requirements e.g. European Protected Species (EPS) Licence.
 - Archaeological Evaluation: an archaeological evaluation was carried out based on trenching 11.5% of the construction footprint. A second phase of evaluation will continue before and during the initial stages of construction as part of Construction Integrated Recording (CIR)³ recommendations set out in the recommendations of the Archaeological Evaluation.
 - Construction Contractor - pre works site walkover to assess any changes to requirements (technical/ecological/cultural heritage) within the identified phase of works.
 - Ornithology - ornithological surveys (corncrake and breeding bird) require preconstruction surveys in advance of the breeding season. As construction for Phase 1 commences out with the breeding season, pre-construction surveys will be completed in March / April 2025.

¹ Breeding bird preconstruction surveys and protection plan are not applicable outwith the breeding bird season for Phase 1 works anticipated to run from November 2024 through to February 2025. Project delays with works extending into March and further phases of works will require further assessment and mitigation if inside the breeding bird season (March – September).

² A Bat PRA did not form a planning requirement, however, has been undertaken given the expanding range / knowledge of bats in the Hebrides and following public reports of bat presence in the area.

A series of mitigation measures are required in advance of construction including grass cutting regime and nest box installation.

Table 1 Summary of key planning conditions and status in relation to construction

Project Requirement	Delivery	Status
Pre-construction otter survey;	Ecologist, Atlantic58	Complete
Otter Protection and Monitoring Plan;	Ecologist, Atlantic58	Complete (Construction)
Corncrake Habitat Management Plan;	Ecologist, Atlantic58	Anticipated completion prior to 2025 Construction Period
Breeding Bird Protection Plan;	Ecologist, Atlantic58	Anticipated completion prior to 2025 Construction Period
Construction Mitigation Register;	Construction Environment Manager, Atlantic48	Completed – integrated into CEMP
Preliminary Roost Assessment (PRA) Bats;	Ecologist, Atlantic58	Completed (25 September 2024)
Water Management Strategy and CAR Licence (CAR) SEPA;	Project Designer, Robert Fraser Architecture	License Approved (22/10/24)
Archaeological Written Scheme of Investigation & Trial Trench Evaluation;	Archaeologist, Headland Archaeology	Archaeological Evaluation approved and subsequent phase of advance excavation and Construction Integrated Recording in advance of and during construction.
Appropriate mitigation measures for pest control;	Project Manager, CnES	Ongoing
Asbestos abatement works	Principal Contractor	Complete, further management required

ENABLING INFRASTRUCTURE (PHASE 1)

4.1.2. The proposed activities for Phase 1 (Enabling Infrastructure) are summarised below

- Vehicle Turning Area, Storage and Parking - 855.6 m² for vehicle turning, equipment assembly, storage, and access to the equipment storage.
- Culvert Upgrade – the existing submerged culvert forming part of the causeway between ‘upper’ and ‘lower’ Loch Scolpaig will be replaced with a larger box culvert.
- Upgraded access track and associated laybys – upgrade and widening of the existing access road from the A865, including a visibility splay at the site entrance and four new laybys to include additional options for launch and emergency vehicle parking.
- New access track – approximately 102 m of new access track between the existing farm buildings, 3.7 m wide.
- Parking – additional car parking spaces, including accessible parking will be provided at the site entrance (10 spaces in total). These spaces will be available to the public when there are no launch restrictions. Additional car parking space for the launch operator will be provided at the hardstanding area adjacent to farm buildings.

4.1.3. Works to proceed in limited areas to enable appropriate mitigation controls to be implemented including silt protection and construction dewatering in line with environmental best practice, CAR Licence and Water Management Strategy.

SPACEPORT INFRASTRUCTURE (PHASE 2)

- Launch Pad – a 10.1 x 13.1 m² (132.3 m²) reinforced concrete pad incorporating an integrated sump with removable open grid cover, and perimeter drainage channel with removable bolted covers. The sump is fitted with shut off valve and has controllable drainage to the soakaway.
- Pad Loading Area – a 576 m² area of crushed rock hardstanding surrounding the launch pad for vehicle turning and tower installation.
- Tether Points – array of twelve concrete 1 m x 1 m x 0.75 m tether points with inset tie ring surrounding the launch pad for securing launch tower/ rail and will be set level with the adjoining ground level.
- Water Deluge System - pumped water supply to launch pad water spray system.
- Containment (Liquid Storage) Tank – galvanised steel sectional tank of 63,500 litre capacity with a galvanised steel cover with access hatch and vents, approximately 8.2 m x 11.4 m.
- Soakaway – below ground clean crushed rock soakaway approximately 10 m x 18 m x 1 m.
- Water storage – galvanised water storage tank of 58,100 litre capacity on block piers on concrete base 5.4 m x 5.4 m.
- Fencing – 1.1 m high rylock stock proof fencing surrounding farmstead hardstanding area and launch pad infrastructure, with two galvanised steel field gates, approximately 502 m in length.
- Upgraded byre – incorporating new access, windows, storage, workshop, communications room, water pump set, and 2.5 m VHF cable on gable end. Roof drainage discharges to a soakaway north of the water storage tank (1 m x 2 m x 0.3 m).

4.2. WORKING HOURS

- 4.2.1. All construction works associated with the development will be carried out in accordance with the planning conditions. Movement of HGVs will be restricted to 0700-2000 Monday to Friday and 0700 – 1800 on Saturdays. There will be no Sunday working.

4.3. LEGISLATIVE REQUIREMENTS

- 4.3.1. The appointed contractor will adhere to all legal responsibilities concerning pollution control (including air, water, and soil) as well as the relevant legislation and regulations related to waste management, wildlife protection, and environmental preservation, as outlined in the tender documentation received and in accordance with their ISO14001 (Environmental Management System (EMS) accreditation. This includes but is not limited to:
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) etc
 - The Waste Management Licensing (Scotland) Regulations 2011
 - The Environmental Protection (Duty of Care) (Scotland) Regulations 2014
 - The Waste (Scotland) Regulations 2012
 - Wildlife and Countryside Act 1981
 - Nature Conservation (Scotland) Act 2004
 - Wildlife and Natural Environment (Scotland) Act 2011
 - The Conservation (Natural Habitats Etc) Regulations 1994
 - The Control of Asbestos Regulations 2012.

5. CONSENTS AND PERMISSIONS REQUIRED

- Planning Consent - Consent under the Town and Country Planning (Scotland) Act 1997 (the 'Planning Act') and an Environmental Impact Assessment submitted under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations' was granted on 26 July 2024 (Planning Ref: 21/00646/PPD).
- CAR Licence - The project is anticipated to be delivered over two phases of works. Phase one requires the replacement of the existing culvert forming the causeway over Loch Scolpaig. The principle of culvert removal, culvert design and mitigation measures were set out in the above planning application. A CAR Licence for the culvert replacement was granted by the Scottish Environment Protection Agency (SEPA): CAR/S/5008643.
- European Protected Species (EPS) licenses - are not applicable for this project at this stage. Pre-construction otter surveys and bat surveys undertaken in 2024 have not identified any requirement for an EPS licence for Phase 1, the full construction programme is outwith the breeding bird season. No constraints have been identified for overwintering bird species. Preconstruction breeding bird surveys will commence ahead of the breeding season to relevant work areas for any construction activity (Phase 2) scheduled for spring / summer 2025).

6. PROJECT COMMITMENTS REGISTER

6.1.1. The appointed Construction Contractor is required to comply with the project commitments detailed in Table 2 which details the Construction Mitigation Register requirements, and Table 3 which sets out the wider commitments made as part of the EIA.

Table 2 Construction Mitigation Register

Planning Condition	Relevant Mitigation (Construction)	Construction Contractor Requirements
Condition 3: Development parameters (i) (construction)	COM02 Public access and users of limited mobility, HHG02 Flood Risk	Completion of construction in accordance with specific submitted details – to build into relevant site plans, construction plans and method statements (will require sign-off on completion). Condition of Contract.
Condition 5: Protection of Scolpaig Farm Features	ARC02 Evaluation, ARC03 Watching Brief, ARC04 Protection of historic features (construction), ARC05 Demarcation of Heritage Assets and Toolbox Talks	Demolition or alteration plans for Scolpaig Farm buildings in accordance with Approved Plans / conditions of planning permission (relates to other specific-action conditions 6, 7, 11 and 26).
Condition 7: Programme of works	ARC03 Watching Brief, ARC04 Protection of historic features (construction),	Protection of historic features and adherence to the Written Scheme of Investigation and identified Mitigation Measures (currently in development).
	ARC05 Demarcation of Heritage Assets and Toolbox Talks,	Demarcation of assets defined by Headland Archaeology. Toolbox talks led by Headland Archaeology
Condition 8: Notification of Comhairle Archaeologist	ARC03 Watching Brief, ARC04 Protection of historic features (construction)	Construction method statement/construction phase planning - Covered within Construction Management Plan/ Method Statement. (Notification of CnES Archaeologist in the event of unexpected finds during groundbreaking works). Procedure to stop works and secure the area.
Condition 10: Construction Traffic Management Plan	GM03 Site Access & Management and Safety (Construction.), GM09	Provision of plan, including site mapping, liaison with CnES Roads, community notification planning and

Planning Condition	Relevant Mitigation (Construction)	Construction Contractor Requirements
	Road Maintenance, COM06 Construction Traffic Convoy Management, HHG03 Rock Aggregate	alignment with construction phase planning. Details on sourcing and routing of aggregate (HHG03 of relevance).
Condition 12: Dust and Waste Management (Construction)	GM04 Site Access Management and Safety (Construction.)	<p>Development of Construction Method Statement in line with the commitments of the EIA, Planning Conditions and Construction Environmental Management Plan.</p> <p>Adherence to Conditions of Construction Contract, CDM 2015 and Health and Safety at Work Act (1974).</p> <p>Implement a site-specific dust management scheme and follow the Control of Substances Hazardous to Health (COSHH) Regulations to protect against hazardous construction dusts.</p> <p>Development of Site Waste Management Plan (SWMP) to track raw materials and waste throughout the construction phase³.</p> <ul style="list-style-type: none"> • Reduce: Prioritize waste minimization through procurement and efficient material use. • Reuse: Collect materials for re-use whenever possible. • Recycle: Segregate waste on-site and maximize recycling opportunities. • Disposal: Properly manage waste disposal following best practices.
Condition 13: Public Access Management (Construction) / Site Access Management and Safety	GM04 Site Access & Management and Safety (Construction), COM03 Phased Construction	<p>Provision of scheme for recreational and public access plans during construction, liaison with CnES Access Officer, in line with the commitments of the EIA, Planning Conditions and Construction Environmental Management Plan.</p> <p>Adherence to Conditions of Construction Contract, CDM 2015 and Health and Safety at Work Act (1974).</p>
Condition 14: Concrete batching / causeway design	HHG01 Water Management (Construction)	<p>Development of Construction Method Statement in line with the commitments of the EIA, Planning Conditions and Construction Environmental Management Plan.</p> <p>Implement site-specific plans and procedures for effective runoff management.</p> <p>Prepare pollution prevention plans to prevent water environment pollution (see WAT-SG-75 guidance).</p>

³ <https://www.zerowastescotland.org.uk/resources/improving-waste-management-construction-sites>

Planning Condition	Relevant Mitigation (Construction)	Construction Contractor Requirements
Condition 15: Construction hours	GM07 Construction operation hours	Development of Construction Method Statement in line with the commitments of the EIA, Planning Conditions and Construction Environmental Management Plan. Condition of Construction Contract.
Condition 16: Construction protective measures	HHG01 Water Management (Construction), ARC04 Protection of historic features (construction), ECO03 Ground reinstatement	Development of Construction Method Statement in line with the commitments of the EIA, Planning Conditions and Construction Environmental Management Plan.
Condition 17: Construction standards	Various	Conditions of Construction Contract, CDM 2015 and Health and Safety at Work Act (1974) The Building (Scotland) Regulations (2004) (https://www.gov.scot/collections/building-standards/) Adherence to the principles of Considerate Constructors Scheme best practice (https://ccsbestpractice.org.uk/what-is-ccs/)
Condition 18 and 19: Noise Monitoring Plan	No specific mitigation in place	Develop monitoring protocol in the event of a complaint as part of the Construction Environmental Management Plan, sign-off with CnES Environmental Health and Planning. Identify source, pathway(s) and develop mitigation (if required) in consultation with construction contractors. Adherence to Control of Noise Codes of Practice for Construction and Open Sites (Scotland)) Order 2002 (SSI 104) for minimising noise and vibration from construction and open sites.
Condition 20: Dust mitigation	No specific mitigation in place	Development of Construction Method Statement in line with the commitments of the EIA, Planning Conditions and Construction Environmental Management Plan. Implement a site-specific dust management scheme and follow the Control of Substances Hazardous to Health (COSHH) Regulations to protect against hazardous construction dusts. Monitor dust levels, weather conditions, and site performance.

Table 3 EIA / SIE Schedule of Mitigation (relevant to construction)

Ref	Title	Description	Planning Condition
GM02	Construction Mitigation Register & Construction Environmental Manager	A Construction Mitigation Register (CMR) will be collated detailing the mitigation commitments in the EIA and relevant planning conditions. A dedicated Construction Environmental Manager (CEM) will have responsibility for ensuring all measures in the register are delivered during the construction period. The CMR will outline all required mitigation commitments and relevant planning conditions for ornithological, ecological, cultural heritage and hydrological receptors, providing details of key sensitivities present and timings. The CEM will contract necessary survey expertise, advise on, and monitor the implementation and compliance	Condition 9, 12

		of works with construction phase environmental mitigation and good practice measures.	
GM03	Site Access Management and Safety (Operation)	<p>Where access restrictions are required for public safety during the operational phases of the Project, the public will be notified through appropriate signage and markers. These physical demarcations may include:</p> <ul style="list-style-type: none"> Operational launch site mobilisation and demobilisation: signage will be provided for the public while temporary fencing or marking of areas will be required for security purposes. Launch events: flags, temporary fencing or tape, and signage will be provided to the public and monitored or enforced by security personnel for safety purposes. There will be a minor rerouting of the existing footpath (contributing to the wider path network) through the Project site to between the Scolpaig farmhouse and planned vehicle turning area. 	Condition 23, 24, 31
GM04	Site Access Management and Safety (Construction)	<p>Provision of appropriate signage, notices during construction period and information on operational launch activities.</p> <p>Best practice construction traffic measures to minimise material/dust on public roads i.e. All HGVs to be sheeted to reduce dust and stop spillage on public roads; and wheel cleaning arrangements in place, where necessary.</p>	Condition 12, 13, 10
GM07	Construction Hours	Movement of HGVs will be restricted to 0700-2000 Monday to Friday and 0700 – 1800 on Saturdays. There will be no Sunday working.	Condition 15
GM09	Road Maintenance	The Developer commits to undertaking a pre-construction and post-construction survey of the public road routes used by construction traffic. Should any damage occur as a result of HGV activity the Developer will contribute to relevant repairs.	Condition 10
GM11	Operational traffic – toolbox talk	All site users will be briefed on layby use and passing protocols when using the site, including delivery of equipment and materials, to ensure safe access and to avoid congestion along the access track, including use of laybys and vehicle turning areas.	Condition 29
COM02	Public access and users of limited mobility	Pedestrian access to the area will be enhanced through the upgrading and widening of the existing access road from the A865 to Scolpaig Farm and additional layby adjacent to Loch Scolpaig. An additional 10 parking spaces will be installed which will be available to the public, including one accessible space and two extended spaces for larger vehicles. The existing 'kissing gate' will be replaced by standard pedestrian access to facilitate access for users of limited mobility.	Condition 3, 23
COM03	Phased Construction	Site access during construction will be phased to enable recreational access following construction of the site access track / culvert upgrade over Loch Scolpaig.	Condition 13
COM06	Construction Traffic Convoy Management	The construction contractor will be required, under the terms of the Contract, to have a minimum time of 15 minutes between heavy goods vehicle deliveries to the site and 15 minutes between heavy goods vehicles leaving the site. This restriction will limit the risk of large vehicles causing disruption on the single-track A865.	Condition 10

		The upgraded Scolpaig track junction from the A865 has been designed to allow articulated heavy good vehicles to access the site from either the east or west. Heavy goods articulated vehicles will be required to leave the site in a westerly direction only. This restriction will be part of the Contract specification during the construction work.	
ARC03	Watching Brief	An archaeological watching brief will be carried out during specified ground-breaking works on the site. If discovered, any cultural heritage remains will be preserved in-situ through avoidance of direct effects. Where this is not possible, preservation through record, using some or all of the following methods: archaeological survey, building recording, evaluation, excavation, post-excavation analyses and publication, should be achieved following consultation with the WICAS in accordance with SPP and PAN 2/2011.	Condition 6, 8
ARC04	Protection of historic features (construction)	Parts of the enclosure (CHS 30) are directly impacted by the construction of the access track and may be also impacted by the construction of the launch pad soakaway. Clean sand excavated from the construction works will be used to build up ground levels along the route of the launch pad access road. An initial sand protection layer of minimum 200 mm will be laid over the existing land to provide protection to any archaeology which may exist. The stone dyke (CHS 31) is currently partially buried with windblown sand. This feature will be excavated and recorded prior to lowering a section of wall to allow the access road to be constructed. When the sand layer has been brought to the appropriate level it will be overlaid with a geotextile membrane and the crushed stone access track and wearing surface. All exposed sand will be overlaid with turfs excavated during the construction works. Necessary protection for farm buildings within and adjacent to the project site will be agreed with WICAS to prevent accidental damage to the fabric of the buildings.	Condition 5, 6, 7, 8, 11, 16
ARC05	Demarcation of Heritage Assets and Toolbox Talk	All heritage assets within the Project Site and immediately adjacent will be demarcated with temporary fencing to protect these assets from accidental damage during construction, and a toolbox talk highlighting their presence will be given to contractors prior to work commencing.	Condition 7
ORN01	Breeding Bird Protection Plan (BBPP) (Construction)	A Breeding Bird Protection Plan will be developed and submitted to CnES and NatureScot for approval for implementation during the construction period. The BBPP will include measures to avoid disturbance and damage to nests. Measures will include, but are not restricted to the following: <ul style="list-style-type: none"> • If construction works must occur during the breeding season (April – August), bird surveys will be undertaken by a suitably qualified surveyor prior to commencement of works, to locate active nests and to inform how works can best be programmed to avoid disturbance. • Any active nests will be cordoned off to a suitable distance (agreed in consultation with NatureScot) and construction activities delayed within the cordon until the young have fledged (or breeding attempt has failed). 	Condition 9

ORN02	Pre-Construction/ Construction vegetation management – Corncrake and other Breeding Birds	<p>If construction is scheduled to occur during the breeding season (April – August), in advance of the breeding season, the following measures are proposed:</p> <ul style="list-style-type: none"> • Vegetation along the area proposed for access track widening and verges (i.e., the areas where vegetation would be stripped at the start of the construction period) will be maintained at a short height (<10cm) by regular mowing, and unattractive for breeding birds. • Mowing will be initiated prior to the breeding season, (the end of March / early April) and onwards through the breeding season as appropriate. • Bird scarers will also be installed in a buffer area up to 25 m from the access track construction footprint. • The 'corncrake disturbance prevention zone' (ORN04) will also be created prior to the also breeding period to deter nesting and breeding activities. 	Condition 9
ORN05	Nest boxes for nesting starlings displaced from buildings	The conversion of the existing outbuilding for use by the Project will prevent the few pairs of starlings that currently nest there from using them in the future. Where appropriate, nest boxes will be provided for these birds to ensure they continue to have somewhere to nest.	Condition 9, 23
ORN06	Speed limit and signage	<p>A 10-mph speed limit on the site access track will be implemented to reduce disturbance effects and reduce potential for wildlife collisions, (namely otter and bird species).</p> <p>Appropriate signage within the site will be used to alert site personnel and visitors to the presence of wildlife (breeding birds and otter) and may be installed at specific areas or during seasons to avoid disturbance where appropriate.</p>	No specific/ prescribed condition; however, Condition 23 relevant
ECO01	Pre-construction Otter Survey	Pre-construction surveys for otter, will be undertaken to provide up-to-date information about the distribution and abundance of otter prior to construction work. The results of the surveys will inform the development of an Otter Protection and Monitoring Plan (OPMP), and associated mitigation and licensing requirements for construction and operation of the site, all of which will be developed in line with NatureScot guidance.	Condition 9
ECO03	Ground Reinstatement	To facilitate site restoration, reinstatement of vegetation will be focused on natural regeneration utilising vegetated turves or soils stripped and stored with their intrinsic seed bank. To encourage stabilisation and early establishment of vegetation cover, where available, topsoil and vegetation turves in keeping with the surrounding vegetation type will be used to provide a dressing for the final surface.	Condition 16
HHG01	Water Management (Construction)	<ul style="list-style-type: none"> • Construction mitigation for culvert installation, including the installation of coffer dams, dewatering and sediment management strategy. • Sectioning and shuttering concrete pouring works will avoid the potential for slumping and reduces likelihood of concrete spillages and infiltration into surrounding machair. All concrete pouring works will be undertaken under appropriate dry weather conditions required for curing. • Materials storage will be in line with the requirements of legislation and good practice with materials safety data sheets. Emergency procedures and spill kits (including hydrocarbon sorbents, pads, and booms) will be retained 	Condition 9, 14, 16 CAR License and Water Management Strategy

		on site and spill kits will be on standby adjacent to operations.	
HHG03	Rock Aggregate	Preference will be to source aggregate from local quarries, if this is not possible, rock of a similar type and composition will be sourced from off-island locations if possible.	Condition 10 Market Stance Quarry, Benbecula

6.2. PROJECT ENVIRONMENTAL MANAGEMENT

6.2.1. Environmental Personnel:

- **Construction Contractor** will be responsible for delivering the works in line with the construction Contract, including the implementation of a Construction Mitigation Register (CMR) ensuring compliance with the proposed mitigations and other conditions arising from the determination process and compliance to the Construction Environmental Management Plan. The **Construction Contractor Environmental Manager (CCEM)** from the appointed Construction Contractor will be onsite for 1 day per month and will be in control of all environmental aspects for the project.
- **Construction Environmental Manager / Environmental Clerk of Works** (Developer Appointed: Atlantic58) will have a presence onsite of up to 3 days per week and responsible for onsite implementation, recording, and compliance with environmental or ecological commitments, planning and licence conditions during the construction phase.
- **Archaeologist** - (Developer Appointed: Headland Archaeology) will be onsite prior to the commencement of Phase 1 to undertake Advance Excavation and during the early stages of construction to undertake Construction Integrated Recording for key sensitivities.

6.3. PROJECT TEAM STRUCTURE

6.3.1. The contact details of pertinent members of the project team, Principal Designer and client representatives are provided in Table 4 below.

Table 4 Spaceport1 (Phase 1) Construction Project Team

Role	Name	Contact Number
Client Representative	Alison MacCorquodale, CnES	07717 685610
Principal Designer	Robert Fraser, Fraser Architects LLP	07780 630926
Contractor Site Agent	Donald John Macaulay, Macaulay Askernish	07789 984367
Principal Contractor	Angus McDowell, Macaulay Askernish	07917 468148
Health, Safety and Environmental Manager	Andrew MacLeod, Macaulay Askernish	07723 079300
Archaeologist	Kate Bain, Headland Archaeology	07974 913179
Construction Environmental Manager (EnvCow)	Gareth Gentles, Atlantic 58	07542 502682

6.4. ROLES AND RESPONSIBILITIES

6.4.1. Roles and responsibilities for delivery of the CEM are listed in Table 5 and described in further detail below. Acronyms are as follows:

- Construction Contractor Environmental Manager (CCEM),
- Construction Environmental Manager/EnvCow (EnvCow),
- Archaeologist (ARC)

- Environmental Project Team (EPT)
- All (ALL)

Table 5 Environmental Roles and Responsibilities

Task / Function	
Production of site-specific Contractor CEMP	CCEM
Project team taking a proactive response to environmental management of the site	ALL
Environmental reporting, inclusive of environmental incident reporting	ALL
Closing out any environmental actions and non-compliance from audits/inspections	ALL
Development of any environmental lessons learnt	CCEM / EnvCoW
Roll out of environmental lessons learnt to site teams (toolbox talks)	EnvCow
Implement and monitor project compliance with all environmental and ecological mitigation requirements and agreed methodologies identified within the CEMP, appointed construction contractors Environmental Management Systems and construction permits	EnvCow
Engage and manage specialist subcontractors to fulfil the requirements of consents, licenses, contract and CEMP	EnvCow
Attendance at site/project meetings where necessary	All
Ensure all contractor site staff are aware of the project specific environmental constraints through site noticeboards and up to date inductions	CCEM & EnvCoW
Liaise with CnES in relation to any project specific environmental management issues and take responsibility for finding solutions	CCEM & EnvCoW
Review and provide environmental input into construction method statements and risk assessments	CCEM & EnvCoW
Apply for environmental licenses or consents defined within the contractor's responsibilities and ensure adherence to all conditions and mitigations	CCEM
Undertake site inspections and audits. Communicate findings as corrective actions or examples of best practice or non-conformance and lead on close out of corrective actions	CCEM & EnvCoW
Review the CEMP throughout all work phases to ensure compliance to all consents, licenses, CEMP, CMR and site activities.	CCEM & EnvCoW
Provide a monthly compliance report to CnES Planning Department, CnES Economic Development and Construction Contractors Construction Contractors nominated personnel. For high-risk activities this frequency will be increased to bimonthly (culvert installation).	EnvCoW
Provide training, inductions and toolbox talks to ensure works are undertaken in compliance with environmental requirements defined in all consents, licenses and CMEP	CCEM & EnvCoW
Site Archaeologist to undertake advance excavation and CIR in parallel with the removal of key archaeological features.	ARC

CONSTRUCTION CONTRACTOR ENVIRONMENTAL MANAGER (CCEM)

6.4.2. The requirements in Table 5 may be delegated by the Construction Contractor Environmental Manager by other members of the construction contractor management team on a daily basis or as required. This process when it takes place will be managed at all times by the Construction Contractor and the personnel involved should be adequately trained and competent to undertake the task.

- 6.4.3. The appointed Construction Contractor and their project dedicated environmental management team assess at all aspects of the project as it proceeds to ensure that all opportunities to innovate and improves environmental sustainability across the project are implemented as far reasonably practicable.

CONSTRUCTION ENVIRONMENTAL MANAGER/ENVCOW

- 6.4.4. The client appointed Construction Environmental Manager / EnvCoW project requirements are listed as requirements for delivery by CnES Economic Development and Planning Department:

- 6.4.5. The duties of the CEM / EnvCoW are:

- **CEMP** – production and updating the CEMP, as informed by the Construction Mitigation Register, and ensuring its delivery during both phases of construction. The Construction Mitigation Register shall detail mitigation commitments and identify the measures proposed for ornithological, ecological, cultural heritage and hydrological receptors, provide details of key sensitivities present, and the schedule of works and responsibilities for ensuring that these commitments are fully met.
- **Compliance Monitoring** - attending the site at a frequency (up to 2-3 days / week) depending on construction phase and nature of the activities. The frequency of visits will be agreed in advance with the Planning Authority, the construction project manager, and the developer, in light of a programme of construction activities prepared by the developer. Compliance monitoring involves assessing and monitoring the Phase 1 and Phase 2 construction works on-site, compliance with planning conditions and the implementation of environmental and ecological commitments and mitigation made in the EIA and SEI report, and if considered necessary in the professional opinion of the Construction Environmental Manager, recommending stopping the job where potential breaches have been identified. The CEM audits compliance of the mitigation commitments identified in the EIA and Supplementary Environmental Information (SEI) (also contained within the CEMP) in relation to ornithological, ecological, cultural heritage and hydrological receptors, to identify any areas of non-compliance and to enable the identified mitigation measures to be implemented.
- **Reporting** - Gathering data to enable simultaneous written reporting on construction progress and environmental compliance during the phase 1 and phase 2 construction period, to the Comhairle as Planning Authority, nominated construction project manager and the developer, in accordance with the schedule as agreed with the Planning Authority, other statutory bodies as required (e.g. SEPA in discharging the provisions for a CAR Licence), the developer and the construction project manager. It is anticipated that reporting to the Planning Authority and the Project Manager will occur at least once per-month, but more frequently during high-risk activities. It is anticipated that the written report of the appointed Construction Environmental Manager will be published by the Planning Authority. Reporting simultaneously to the nominated construction project manager, developer, and Planning Authority any incidences of non-compliance. If non-compliance is reported, providing clear and specific advice to enable action to be taken by the construction project manager in a timely manner to limit any potential impacts.
- **Contractor Liaison** - Ongoing liaison with subcontractors (including Archaeologists, Ecologists and Ornithologists) to ensure that issues are identified at an early stage.
- **Site Responsibilities** - power to stop the job / activities being undertaken within the Site when a breach or potential breach of environmental legislation occurs to allow for a briefing of the concern to the Appropriate Contractors nominated construction project manager and Environmental Manager.
- **CAR Licence** - The CEM/EnvCoW will carry out regular inspection of watercourses to ensure compliance with CAR licence (CAR/S/5008643). Key conditions in the CAR are set out in Section 13. The CEM / EnvCoW will carry a handheld turbidity and pH meter to enable rapid testing onsite. Site based equipment will be calibrated though baseline sampling sent to a

UKAS accredited lab for suspended solids analysis. Baseline water sampling records are provided in Appendix H.

6.5. CONSENTS AND ENVIRONMENTAL PROGRAMME

- 6.5.1. The CCEM and CEM / EnvCoW will review all aspects of the project programme and requirements that appropriate consents and surveys have been completed to ensure all requirements and mitigations can be implemented prior to the works proceeding.

7. ENVIRONMENTAL POLICES AND PROCEDURES

7.1. GENERAL

- 7.1.1. The appointed Construction Contractor is aware of and will comply with all legal obligations with respect to the control of pollution (including but not limited to noise, air, water and ground) as well as the legislation and all regulations relating to waste and the protection of wildlife and the environment. The Construction Contractor Environmental Policy is included as Appendix C:

Keep a tidy site

- Maintain a clean, tidy and secure site.
- Minimise and segregate waste for re-use and recycling.
- Reinstate groundwork areas promptly.

Prevent silty run-off

- Keep clean and silty water separate.
- Settle all silty water before leaving site.
- Ensure all site drainage is properly designed and maintained with silt traps where required.

Contain oil and fuel

- Store fuel and oil in bunded containers and away from watercourses.
- Ensure spill kits are available.
- Use plant nappies on mobile plant when not in use.

Cultural heritage

- Be aware of cultural heritage features on the site.
- Adhere to exclusion zones and mitigation buffers.

Respect wildlife

- Be aware of local wildlife.
- Adhere to exclusion zones.

Assess environmental risks

- Assess the environmental risk of all activities.
- If in doubt, ask.

Report incidents

- Report ALL environmental incidents and near misses.
- Pass on learning for future works.

7.2. ENVIRONMENTAL TRAINING

- 7.2.1. All appropriate Construction Contractor personnel are trained in the use of spill kits, how to assess spills and enact a pollution prevention plan.
- 7.2.2. A minimum of one environmental aspect specific toolbox talk should be delivered on a weekly basis to all site staff, these will be documented and chosen for their relevance to site works ongoing or in the near future, topics to include (but not limited to):
- Spill Response
 - Water management
 - Breeding Birds
 - Archaeology/cultural heritage (designated/undesigned features and the importance in the Outer Hebrides)
 - European Protected Species
 - Habitat management / Soils management
 - Waste management
 - Working on or near watercourses.
- 7.2.3. Project environmental requirements should be included within the site daily briefing. Any other environmental training will be delivered as required with any specific aspects identified as part of the ongoing works relevant to the current phase and project requirements if applicable.

8. ENVIRONMENTAL AUDITING AND MONITORING PLAN

8.1. ROLES AND RESPONSIBILITIES

- 8.1.1. The CCEM will be onsite at least one day per month and will undertake a minimum of one audit per month and will be contactable by email or telephone throughout the project whilst site works are ongoing to respond to queries and provide advice and guidance on all environmental matters.
- 8.1.2. All audits and site monitoring paperwork should be made available to the winter project team with actions documented and discharged within appropriate timescales. The appointed Construction Contractor should have sufficient resources to ensure environmental compliance and maintain a suitable system of record keeping to ensure successful environmental delivery of the project to ensure compliance, complete monitoring (surface water, construction discharge, waste and noise and air pollution).
- 8.1.3. The CCEM and CEM/EnvCoW will be made aware of and their requirements to comply with all legal obligations with regard to control of pollution (including but not limited to noise, air, water and ground) as well as the legislation and all regulations relating to waste and the protection of wildlife and the environment.
- 8.1.4. The CCEM and EnvCoW / CEM will have the power to “**Stop the Works**” should they deem a situation in breach of environmental legislation or have the potential for a negative effect on the environment.

8.2. PROJECT ENVIRONMENTAL AUDITING AND MONITORING REQUIREMENTS

- 8.2.1. Any other monitoring which is identified as a project requirement will be communicated at the earliest practicable opportunity via the project programme and/or pre-construction site surveys and implemented as a matter of course through the project deliverables integrating any required

mitigation or control measures and the implementation managed by the Construction Contractor Environmental Manager and CEM / EnvCoW.

8.3. AUDIT AND MONITORING REPORTING PROCEDURE

- 8.3.1. Actions arising from audits undertaken by either CCEM or CEM / EnvCoW will be discussed with the site manager and construction team before leaving site with agreed timescales for discharging the non-conformance or areas of additional required mitigation detailed within the audit report.
- 8.3.2. Agreement will also be reached to notify/identify the most appropriate person(s) to be nominated to carry out action(s) within the agreed timescales as potential resolution can vary dependent upon the action(s) raised. A summary of auditing finding and environmental performance will be issued by the CCEM or CEM / EnvCoW by providing a monthly compliance report to CnES Planning Department, CnES Economic Development and Construction Contractors nominated personnel. For high-risk activities this frequency will be increased to bimonthly upon agreement with all parties.

8.4. NON-COMPLIANCE PROCEDURE

- 8.4.1. Reports of non-compliance and corrective actions shall be reported to the Environmental Project Team within 24 hours and non-compliances and/or corrective actions shall be addressed by the Construction Contractor within 48 hours or as otherwise agreed by the project environmental team in writing.
- 8.4.2. Timing for the closing out of any identified corrective actions will also be agreed at this time, if its subsequently found that it is not possible to discharge within the agreed timescale this will be reported, and a new timescale agreed and communicated in writing by all parties.
- 8.4.3. All relevant documentation, e.g. method statements and CEMP will be reviewed and updated and communicated as necessary as a minimum every 3 months.
- 8.4.4. Outstanding and discharged actions will form part the environmental compliance reporting requirements with all audit reports kept on site and available for review at any time.

8.5. AUDIT AND MONITORING PLAN

- 8.5.1. The Audit and Monitoring Plan outline can be found in Table 6 below.

Table 6 Audit and Monitoring Plan

Activity	Responsible Person	Frequency
Completion of environmental compliance checks in line with project requirements	CEM / EnvCow	Daily (during site visits)
Completion of formal compliance audits and reporting in line with consented requirements	CEM / EnvCow	Minimum of one per month. Bi-monthly for high-risk works
Completion of environmental compliance checks in line with project and contract requirements	CCEM	Monthly

9. EMERGENCY RESPONSE

9.1. ROLES AND RESPONSIBILITIES

- 9.1.1. Overall responsibility for the implementation of the emergency response plan sites with the construction contractors site team and their site staff. All staff are expected to be trained on the requirements and the issue of appropriate equipment and control measures. The provision of appropriate equipment and control measures is the responsibility of the site management and Construction Contractor Environmental Manager.

9.2. TYPES OF HAZARDS AND CONTROL MEASURES

FUEL STORAGE AND REFUELLING

- 9.2.1. The Construction Contractor staff will be trained in the use of spill kits and the assessment of any spills, and the implementation of a pollution prevention plan and kit required to contain and clean up the incident. Regular training is expected to be undertaken and competence levels suitable for the project requirements.
- 9.2.2. Demarcated areas should be identified for the storage of oil and fuel as part of the site establishment process and located within the site compound away from watercourses. Volumes should be limited as far as reasonably practicable through efficient management of delivery, plant and planning of works. Refuelling of equipment should only occur within the site compound. Fuel will be stored in accordance with GPP2 (SEPA Guidance for Pollution Prevention: Above ground oil storage) in bunded fuel cubes located within the site compound located at least 50 m from any watercourse with plant nappies and spill kits in place.
- 9.2.3. All refuelling activities (including AdBlue) will be supervised and undertaken in line with the construction contractors RAMS and in accordance with GPP2 and PPG7 (Planning Policy Guidance and General Binding Rules 26, 27 and 28).
- 9.2.4. Plant nappies will be placed (and secured) under all items of plant when not in use. All plant is expected to always contain a spill kit. Minimum quantities of oil will be stored within site compounds and located on drip trays in a suitably locked storage area with appropriate spill kits available.
- 9.2.5. Spill kits will be available at all storage and refuelling area and in all plant (mobile and static) and vehicles onsite. These should be of an appropriate size for the plant and equipment onsite. Used spill kits should be disposed of in line with Special Waste Requirements
- 9.2.6. Any hazardous materials will be stored in a secure labelled COSHH cabinet, and a register kept on site. The storage of such materials and the refuelling of vehicles (including AdBlue) will be undertaken a minimum of 50 m away from watercourses and outwith flood risk zones.

PRIVATE WATER SUPPLIES

- 9.2.7. One well was identified north of lower Loch Scolpaig on OS maps (72900,875000). Consultation with the CnES Environmental Health within the EIA process indicated that although this may have been used in the past, there were no records of this supply as a formal Private Water Supply, and the condition of the well indicated it was not suitable for as a potable water supply and not at risk from construction activities.

OIL/GAS PIPELINE CROSSINGS

- 9.2.8. No oil or gas services have been identified within the project boundary.

WATER CROSSING / CULVERT REPLACEMENT

9.2.9. Engineering works and any associated construction works and/or temporary structures, in or in the vicinity of, inland water or wetlands i.e. Loch Scolpaig, must only be undertaken where it is impracticable to complete the work otherwise and are subject to the controls as set out in CAR licence CAR/S/5008643 issued by SEPA. Conditions of the CAR Licence are set out below:

Culverts

- The total culvert length must be no more than 10 metres.
- Must not create a step in the bed.
- Any works in the wetted part of the channel, must not be undertaken during the period in which fish are likely to be spawning in the watercourse nor in the period between such spawning and the subsequent emergence of juvenile fish.

Bank Reinforcement

- The total length of the bank affected must be no more than 46 metres.
- Any works in the wetted part of inland water, must not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such spawning and the subsequent

Bed Reinforcement

- The total area of bed reinforcement must be no more than 71 square metres.
- The total length of bed reinforcement as measured parallel to the bank, must be no more than 46 metres.
- Must not create a step in the bed.
- Any works in the wetted part of inland water, must not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such spawning and the subsequent emergence of juvenile fish.

Removal of existing 5m culvert

- Any works in the wetted part of inland water, must not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such spawning and the subsequent emergence of juvenile fish.

9.2.10. The engineering works, and any associated construction works and the installation and/or removal of temporary structures, must not:

- cause significant erosion of the bed or bank of the water environment
- cause harm to freshwater pearl mussels
- cause harm to fish
- cause the spread of invasive non-native species within the water environment
- prevent the passage of migratory fish, or
- have a significant adverse impact on private drinking water supplies
- have a significant impact on the water environment as a result of
 - a) iridescence / sheen
 - b) discolouration
 - c) deposition of solids
 - d) increased foaming

- 9.2.11. Temporary structures on the bed and banks of the inland waters associated with engineering works must be removed as soon as reasonably practicable after the completion of the associated engineering works.

Restoration

- 9.2.12. Where any channel, bed or banks immediately adjacent to the engineering works have been adversely impacted by those engineering works, or associated construction works and/or temporary structures, they must be restored to at least their previous condition as soon as reasonably practicable.

9.3. SCOTTISH WATER SERVICES

- 9.3.1. Scottish Water has no records of mains water located within the construction areas. A redundant watermain is located to the northern edge of the existing access track discovered during the WSI - Trial Trench Evaluation.

9.4. BRITISH TELECOMS

- 9.4.1. The North Uist main telecommunication cable is located within the vicinity of the bell mouth running in parallel to the A865. Openreach are due to install a fibre cable connection to the Spaceport as part of a later phase of works.

9.5. ECOLOGY

OTTER

- 9.5.1. An otter survey undertaken in July 2024 (the third otter survey undertaken in the same area) concluded there are no active resting places within 200 m of the development footprint, and there is no requirement to secure an EPS licence, however, otter are present on site and Loch Scolpaig forms a key habitat / foraging resource (Appendix E). The survey identified potential resting place identified on the shore of Loch Scolpaig, approximately 50 m from the access track, which had evidence of a track network around the feature. This potential resting place should be visually monitored by a suitable qualified person in the lead up to construction works beginning to assess for fresh spraint.
- 9.5.2. Mitigation measures have been developed and form part of an Otter Protection and Monitoring Plan (Section 16 and Appendix E) covering the following actions:
- Traffic speed restrictions.
 - Management of water quality and pollution events.
 - Working hours.
 - Excavation management.
 - Commuting routes.
 - An emergency procedure must be initiated by ground crews if new previously unrecorded otter resting places are suspected.
- 9.5.3. Monitoring by the CEM / EnvCoW with supporting specialists as required will be undertaken throughout the construction phase to ensure compliance with all mitigation measures and environmental commitments.

BATS

- 9.5.4. Bats were not identified at the development and planning stages as potential impact; however, a Preliminary Roost Assessment was carried out in advance. No constraints for Phase 1 construction were identified and further surveys will be required in Summer 2025 to validate the presence / absence of bats in structures in advance of Phase 2 (Appendix E).

GROUNDWATER DEPENDENT TERRESTRIAL ECOSYSTEMS (GWDTE)

- 9.5.5. Potential GWDTE were identified on site through a National Vegetation Classification survey, however, these were not concluded to be groundwater fed. Impacts on GWDTE have been scoped out of the EIA assessment. During ground disturbance activities the vegetation and root structure will be retained as far as possible and used within reinstatement works. To facilitate site restoration, reinstatement of vegetation will be focused on natural regeneration utilising vegetated turves or soils stripped and stored with their intrinsic seed bank. To encourage stabilisation and early establishment of vegetation cover, where available, topsoil and vegetation turves in keeping with the surrounding vegetation type will be used to provide a dressing for the final surface. The extent of any excavations will be kept to a minimum during construction activities

9.6. SURFACE WATER ACCUMULATION

- 9.6.1. The Construction Contractor needs to be aware there a number of very wet areas along the upper section of the access road. All surface water within the construction area should be dewatered as far as practicable ensuring the water is settled prior to discharge. Water should not be allowed to accumulate within the construction areas during stages of the works. Industry best practise must be adhered to at all times with water settled prior to discharge. Silt fencing must be in place for any overland flows of surface water.

9.7. BIOSECURITY

- 9.7.1. There are no known biosecurity requirements located within the project boundary. Monitoring will continue throughout the project phases for the presence of birds affected by Avian Influenza, with toolbox talks delivered to all personnel to address appropriate actions should infected birds be observed or reported within the footprint of the site.

9.8. ASBESTOS

- 9.8.1. In compliance to Regulation 5 (The Duty to Locate) of the Control of Asbestos Regulations 2012 (CAR2012) an asbestos Refurbishment and Demolition Survey has been completed. Asbestos cement roofs (chrysolite) are identified to the Farmhouse Barn Extension and Byre number 1 and will remain in situ during the construction works. Residual asbestos cement roof remains underneath the cement capping to Byre number 3. Heras fencing with appropriate asbestos warning signs is to be installed around the identified buildings and in accordance with Regulation 4 of CAR2012 (The Duty to Manager) the remaining asbestos will be re inspected on an annual basis to identify any remedial actions required.
- 9.8.2. A programme of asbestos removal of the identified debris (see Appendix I Asbestos R&D Report) has been undertaken to remove the identified ground level contamination. During groundbreaking works in the vicinity of the farmhouse and byres there is a minor risk of further contamination arising from excavation activities. In the event of suspected material being identified during excavation works the activity should stop and CCEM and CEM / EnvCoW should be informed who will provide further guidance on how to safely proceed.

9.9. PEST CONTROL

- 9.9.1. Rentokil are currently undertaking a programme of knockdown or riddance treatments to control the brown rat infestation within the vicinity of existing structures. Bait boxes are in place and well signed these should not be removed or interfered with during the course of the construction works. All food waste from site welfare facilities should be removed on a daily basis.

9.10. INVASIVE SPECIES

9.10.1. The EIA process recorded no invasive plant species under Schedule 9 of the Wildlife and Countryside Act (1981). Where invasive species are identified within 10 m of works, appropriate measures will be taken to prevent further spread from activities relating to the Proposed Development.

10. EMERGENCY RESPONSE PLAN

10.1.1. The contractor Emergency Response Plan and Spill Response Plan is provided in Appendix B.

10.2. SPILL RESPONSE

10.2.1. All contractor staff should be trained in how to use a spill kit.

10.2.2. For plant/equipment leaks and spills:

- STOP WORK immediately
- Remove all sources of ignition (if substances are flammable)
- Put on appropriate PPE
- STOP the spill at source
- CONTAIN the spill using the spill kit
- PROTECT sensitive areas using spill kit booms – including water crossings and identified sensitive ecology.

10.2.3. Contact site supervision/management and advise to call their CCEM and CEM / EnvCoW contact details located in project contact details in Project Team Structure and should be displayed with site welfare facilities.

10.2.4. Clean up the spill and any affected ground using a spill kit and dispose of as special waste. Replenish any spill kit materials used.

10.2.5. The spill response procedure will be posted in staff welfare facilities and method statement and will form part of the site induction and toolbox talks.

10.3. OTHER ENVIRONMENTAL INCIDENTS

10.3.1. Site operatives will be given a toolbox talk and site-specific briefings with respect to possible environmental incidents that may arise during the works, these may include:

- Culvert removal and water quality management
- Flooding from extreme weather conditions
- Damage to habitats outside of construction areas and temporary access tracks
- Discovery of archaeological or historical remains outwith the Written Scheme of Investigation and Trial Trench Evaluation
- An environmental near miss that could have resulted in an incident
- Otter ecology.

11. HAZARD AND INCIDENT REPORTING PROCEDURE

11.1.1. Any environmental hazard and/or environmental incident will be dealt with in in line with the response plan and contractors specific site RAMS and environmental procedures. A full

investigation being completed by appropriate members of the project environmental team and reported as agreed in Roles and Responsibilities.

- 11.1.2. Any learning from incidents will be communicated to the entire project team in a pre-agreed format to ensure that lessons learnt are included in future training needs and further works within the project. The construction contractor environmental manager will be responsible for this. All relevant documentation will be reviewed, updated and communicated as necessary following any incident. Contact details for statutory bodies are set out in Table 7.

Table 7 Contact Details for Statutory Bodies

Regulator / Interested Party	Contact	Responsibility
SEPA's Pollution Hotline	0800 80 70 60 (24-hour service)	Environmental Regulator. Issue Waste Management Licenses and Exemptions from Waste Management Licensing, CAR Authorisations. Will employ enforcement measures to ensure compliance with their set conditions and all other relevant environmental regulation.
SEPA's Floodline service	0845 988 1188 (24-hour service)	As above
SEPA Western Isles Office (Stornoway)	01851 706477	Local office
NatureScot (Stornoway)	01463 701630	Issuing any protected species licenses required for the project.
Western Isle Council	01851 600501	Planning Consent and Conditions CnES Archaeology for Cultural Heritage

- 11.1.3. Statutory bodies will be contacted if required, this will be assessed on the incident severity and the potential of impacts. All calls will be made within 60 minutes of the incident.

11.2. SERIOUS INCIDENT REPORTING PROCEDURE

- 11.2.1. In the event of any breach of environmental obligations relating to the project during the construction period. The construction contractor will provide written notification to CnES Economic Development (Client) and CEM / EnvCoW.

- 11.2.2. The statutory bodies will be contacted if required, this will be assessed and agreed on the incident severity and potential for impacts with appropriate calls being made within 60 minutes of the incident. CnES Economic Development will in turn provide written notification to CnES Planning Department including confirmation of remedial measures taken or planned to rectify the breach within 24 hours of the incident occurring.

11.3. ENVIRONMENTAL EMERGENCY RESPONSE CONTRACTOR

- 11.3.1. Any environmental incident or hazard that occur which are too large or cannot be dealt with as part of the response plan will require the involvement of the nominated Emergency Response Contractor.

- 11.3.2. Adler & Allan Ltd 24-Hour Emergency Hotline: 0800 80 70 60

12. WASTE MANAGEMENT PLAN

- 12.1.1. A Site Waste Management Plan (SWMP) will be provided and implemented by the Construction Contractor and audited by the CCEM and CEM / EnvCoW (Appendix D).

12.2. PURPOSE OF THE PLAN

- 12.2.1. The SWMP provides details on how waste will be dealt with in the site, waste reduction and recycling implementation on the project and monitoring throughout the construction phase.

12.3. ROLES AND RESPONSIBILITIES

- 12.3.1. Overall responsibility of the implementation and development of the waste management plan sits with the site contractor team and all site personnel. Specific delivery requirements are the responsibility of Construction site manager and Construction Contractor Environmental Manager.

12.4. TYPES AND PREDICTED VOLUMES OF WASTE

- 12.4.1. The following types of waste are predicted to be produced in site:
- 12.4.2. Wood Pallets/Packaging, Cardboard packing, Co-mingled Dry Recyclables (cans, plastic), Liquid / Water (Toilet) Waste, Special Waste (asbestos tbc), Soil and General Waste.

12.5. HOW WILL WASTE BE MANAGED?

- 12.5.1. The waste hierarchy will be employed throughout the construction works:
- **Reduce:** Prioritize waste minimization through procurement and efficient material use.
 - **Reuse:** Collect materials for re-use whenever possible.
 - **Recycle:** Segregate waste on-site and maximize recycling opportunities.
 - **Disposal:** Properly manage waste disposal following best practices.
- 12.5.2. The Construction Contractor will engage a local waste contractor who is licensed and established for disposal of waste (solid and liquid) from the site at licensed and sustainable facilities. All waste will be recycled where possible.
- 12.5.3. The local waste contractor will provide suitable containers for segregation and storage of hazardous waste such as spill kits, oily rags, plant nappies, oils and used plant filters. This will include a suitably licenced local waste contractor to be employed for the disposal of wastewater from site welfare facilities.
- 12.5.4. A current licence is held by the company (Construction Contractor) to transport to final disposal or a recognised transfer location.
- Licence Number: SNO/038011.
- Expiry Date: 22 01 2027.

13. WATER MANAGEMENT POLLUTION PREVENTION PLAN

13.1. PURPOSE OF THE PLAN

- 13.1.1. The Water Management and Pollution Prevention Plan (Appendix F) provides details on how water will be managed on the site and or the protection of water resources and the implementation of mitigation measures. This includes details of monitoring though the construction phase and limits of consented levels during the removal and replacement of the culvert.

13.2. ROLES AND RESPONSIBILITIES

- 13.2.1. Overall responsibility for the implementation of the water management plan sits with the Construction Contractor project team and their site staff. Specific delivery and monitoring requirements are the responsibility of the Construction Contractor site manager, CCEM and the CEM / EnvCow.

13.3. METHODOLOGY

- 13.3.1. For the installation of a new culvert and modification of the existing causeway a temporary dam will be installed to stop the flow of water and allow for the dewatering of the works area. All works shall be completed in line with the CAR Permit with appropriate control measures in place to ensure the control of suspended solids. All plant within the works area will have food grade hydraulic oil and HVO fuel to protect the surrounding environment.
- 13.3.2. Dewatering of the dammed work area is via electric pumps powered via a generator located 50 m from the shore of Loch Scolpaig. The water within the dammed area shall be pumped to an area of natural attenuation and discharged through an appropriate filtration system to remove suspended solids. Silt extraction systems should be checked daily to ensure adequate performance of the filtration system.

COSHH CHEMICALS, OIL AND FUEL STORAGE

- 13.3.3. All COSHH Chemicals, Oil drums and containers and other potential contaminants stored within the site boundary must be controlled in accordance with GBR's 26, 27 & 28 contained in The Water Environment (Miscellaneous) (Scotland) Regulations 2017 and the Control of Substances Hazardous to Human Health Regulations (COSHH) (as amended) with a secure, lockable and labelled container. Items should be isolated, placed on drip trays or banded within the container so no oil or other contaminants are allowed to contaminate water receptors such as groundwater or watercourse. A list of substances will be kept on site. Appropriate spill kits (including hydrocarbon sorbents, pads, and booms) should be present and available within the vicinity of the COSHH store, within the vicinity of works and located with plant.
- 13.3.4. Storage of such materials and any refuelling activities will be located a minimum of 50 m away from any watercourses and outwith any flood zones. All static plant such as generators will have an integral bund or use plant nappies at all times.
- 13.3.5. Sectioning and shuttering concrete pouring works will avoid the potential for slumping and reduces likelihood of concrete spillages and infiltration into surrounding machair. All concrete pouring works will be undertaken under appropriate dry weather conditions required for curing or protected from environmental conditions.
- 13.3.6. Cement washings will be carried out in a dedicated area where a specialised unit will be in place to capture sediment from concrete delivery truck washout chutes and contain it within the unit, the washout water will then be treated with the PH level stabilised making the water safe to be released. Washing arisings will be collected for onsite treatment. The solids will be disposed of as solid waste.

WATER CROSSINGS / CULVERT REPLACEMENT

- 13.3.7. For the proposed work areas and access routes will be assessed and monitored by the CCEM and CEM / EnvCow. The removal and installation of structures will be reviewed by the Construction Contractors Environmental Manager and all required mitigation and protection measures will be planned or installed in line with conditions imposed by the planning authority.
- 13.3.8. No concrete batching proposed on site, with cement imported from local suppliers and pre-cast culvert installation for Scolpaig Loch crossing. Construction mitigation for culvert installation,

including the installation of coffer dams (or similar barrier), dewatering and sediment management strategy, outlined in detail in Appendix F.

WORK AREAS DRAINAGE AND SURFACE WATER MANAGEMENT

- 13.3.9. All work areas and agreed access routes will be assessed by the CCEM or CEM / EnvCoW with regards to the potential for surface water impacts and run off on a site-specific basis dependant on the current phase and location of works.
- 13.3.10. For the upgrading of the existing access track, the following measures will be implemented to protect surface waters and groundwater receptors:
- Temporary drainage routes will be provided while upgrading the existing access track
 - Silt traps/check dams will be used to capture suspended solids generated during construction and widening of the access track
 - Construction will be carried out in accordance with appropriate SEPA and Construction Industry Research and Information Association (CIRIA) guidance
- 13.3.11. Where potential impacts are identified, mitigation in the form of silt traps/bags or fencing will be implemented to safeguard watercourses and maintain water quality. All mitigation measures will be monitored by the construction contractors site personnel, CCEM and CEM / EnvCoW during the installation of the new access track to ensure suitability and effectiveness once the works are completed.

GROUNDWATER DEPENDANT TERRESTRIAL ECOSYSTEMS (GWDTE)

- 13.3.12. Potential GWDTE were identified on site via NVC survey, these were not concluded to be groundwater fed. Impacts on GWDTE have been scoped out of the EIA assessment. During ground disturbance activities the vegetation and root structure will be retained as far as possible and used within reinstatement works during the widening of the access road. To facilitate site restoration, reinstatement of vegetation will be focused on natural regeneration utilising vegetated turves or soils stripped and stored with their intrinsic seed bank. To encourage stabilisation and early establishment of vegetation cover, where available, topsoil and vegetation turves in keeping with the surrounding vegetation type will be used to provide a dressing for the final surface. The extent of any excavations will be kept to a minimum during construction activities.

COMPOUND DRAINAGE

- 13.3.13. Compound areas will have permeable hardstanding areas to allow for natural discharge. There is not a requirement for greywater discharge with the compound area. Key infrastructure (including the construction compound) has been located outwith a 50 m buffer of all surface watercourses and on land higher than 4.73 m AOD to avoid potential flooding impacts.

PRIVATE WATER SUPPLIES

- 13.3.14. One well was identified north of lower Loch Scolpaig on OS maps (729000, 875200). Consultation with the CnES Environmental Health within the EIA process indicated that although this may have been used in the past, there were no records of this supply as a formal Private Water Supply, and the condition of the well indicated it was not suitable for as a potable water supply. Therefore, there is no requirement for a private water supply management plan.

THE WATER ENVIRONMENT (CONTROLLED ACTIVITIES) (SCOTLAND) REGULATIONS 2011 (AS AMENDED)

- 13.3.15. Visual monitoring of watercourses in the area of works will be undertaken on a twice daily basis by site staff and recorded visually (by photograph) and in writing within a daily diary, should any issues or impacts be noted this will be reported immediately to the CCEM and CEM / EnvCoW mitigation will be installed to deal with cause of the impacts.
- 13.3.16. The CEM / EnvCow will have the capability to measure and record water quality metrics should a visual inspection of the water quality indicate a potential impact from the construction activity and provide guidance for appropriate mitigation and control measures.

14. SOIL MANAGEMENT PLAN

14.1. PURPOSE OF THE PLAN

- 14.1.1. The Soil Management Plan provides details on how soils will be dealt with on site, and how soil resources will be protected during excavation works. Including what mitigation measures are to be implemented onsite and how this will be monitored through the construction phase.

14.2. ROLES AND RESPONSIBILITIES

- 14.2.1. Overall responsibility for the implementation of the soil management plan sits with the Construction Contractors site team and their site staff. Specific delivery requirements are the responsibility of the Construction Contractors site manager, CCEM and CEM / EnvCoW.

14.3. METHODOLOGY

- 14.3.1. To facilitate site restoration, reinstatement of vegetation will be focused on natural regeneration utilising vegetated turves or soils stripped and stored with their intrinsic seed bank. To encourage stabilisation and early establishment of vegetation cover, where available, topsoil and vegetation turves in keeping with the surrounding vegetation type will be used to provide a dressing for the final surface. The extent of any excavations will be kept to a minimum during construction activities.
- 14.3.2. Should it be necessary to excavate soils to establish temporary access tracks or compounds, these materials will be carefully stockpiled adjacent to the working areas for re-use and reinstatement following temporary works. Localised measures, such as stockpile covers, silt fencing and filter strips will be used to manage runoff from stockpiles. The maximum permissible height from stockpiles will be 2 m with a flat top, located in an area that allows surface water to run past the stockpile and will not be stored within 10m of any watercourse.
- 14.3.3. Where this is not possible a risk assessment for impacts on the watercourse will be completed (new culvert installation) by the Construction Contractor Environmental Manager in line with permitted conditions with appropriate mitigation and conditions imposed by the planning process. These measures will ensure that any potential run off issues are controlled and dealt with in a suitable manner so that any potentially impacts are removed or at least minimised.

14.4. CONTAMINATED SOILS

- 14.4.1. During the WSI – Trial Trench Evaluation an area of buried animal remains has been identified to the rear of Byre number 1 (NF 72927 75383). Initial consultation with CnES EHO has been undertaken and the remains are not of concern to human health receptors. These remains may impede construction within the area for phase 2 works and further consultation with SEPA may be required. A localised ground investigation within the vicinity is planned to be undertaken within

phase one construction period to develop a strategy for later construction activities and consultation if required with SEPA.

- 14.4.2. In the event of further contamination, the CCEM and CEM / EnvCoW will be notified immediately, soils should be kept in situ and isolated until they can be isolated and dealt with in an appropriate manner. This may involve covering the area with a clean inert material such as locally sourced sand or a weighted tarpaulin with appropriate warning signs and barriers if required.
- 14.4.3. All personnel should be made aware of the soils and the associated requirements and appropriate waste management procedures will be applied to the disposal of the contaminated materials.

14.5. REINSTATEMENT

- 14.5.1. To facilitate site restoration, reinstatement of vegetation will be focused on natural regeneration utilising vegetated turves or soils stripped and stored with their intrinsic seed bank. To encourage stabilisation and early establishment of vegetation cover, where available, topsoil and vegetation turves in keeping with the surrounding vegetation type will be used to provide a dressing for the final surface. The extent of any excavations will be kept to a minimum during construction activities.
- 14.5.2. No areas of bare sand are to be left uncovered following groundbreaking works in order to prevent wind erosion.

15. CULTURAL HERITAGE MANAGEMENT PLAN

- 15.1.1. The approach to cultural heritage management has been defined by the following studies completed post submission of the planning application:
 - Historic Building Record (HBR) – January 2023
 - Written Scheme of Investigation (Evaluation) - July 2024
 - Archaeological Evaluation - October 2024
 - Written Scheme of Investigation (Advance Excavation / Construction Integrated Recording, CIR) - October 2024

15.2. PURPOSE OF THE PLAN

- 15.2.1. The Cultural Heritage Management Plan provides details on potential impacts to cultural heritage, and how they will be dealt with onsite and what mitigation measures are to be implemented.

15.3. ROLES AND RESPONSIBILITIES

- 15.3.1. Overall responsibility for the implementation of the cultural heritage management plan sits with the site team and all staff on site. Specific delivery requirements are the responsibility of the Construction Contractors Project Manager and Environmental Manager through the Project Archaeologist.

15.4. METHODOLOGY

- 15.4.1. Four archaeological features which could potentially be impacted by the works have been identified. A scope of works for Advance Excavation and Construction Integrated Recording (CIR) has been defined to ensure that archaeological sensitivities are fully recorded before removal /modification.
- 15.4.2. The location and extent of archaeological sites to be removed, in addition to recorded archaeological features have been agreed with the CnES archaeologist via a Written Scheme of Investigation (WSI, November 2024). The general details, requirements, and outcomes within the

WSI are presented below for further information please refer to the WSI documentation as approved.

- 15.4.3. In the event that the Construction Contractor or CEM / EnvCoW be made aware of any previously unidentified features during the works, a risk assessment of potential impacts will be undertaken, and appropriate mitigation put in place to protect the feature(s) at all times.
- 15.4.4. Should it be necessary, surveys or assessments will be completed in line with legal and best practice requirements, a risk assessment of potential impacts will be undertaken and appropriate mitigation (avoidance, watching brief, investigation etc) put in place to protect the feature(s) at all times.

15.5. DEMARCATION

- 15.5.1. For the duration of the groundworks, cultural heritage assets identified as being in the immediate vicinity of the groundworks will be fenced off from construction activity using temporary heras-type fencing maintained until the end of the construction programme. Standing assets, which require protection for the duration of construction have been identified as the standing structures, Byres 1, 2 and 3 associated with the 'Tack Farm', and the parts of the boundary wall where it intersects with the new access track. A minimum of a 0.5m standoff will be required between standing assets and temporary fencing. A plan of the proposed fencing scheme is provided in Appendix J.
- 15.5.2. Heras type temporary fencing will also be erected at excavation Areas 2 & 3 and around the structure adjacent to Area 2, until all archaeological works have been completed. The excavation area at Area 1 may not be suitable for Heras fencing, this being the case, during the programme of archaeological works, a temporary visual barrier will be erected, comprising a combination of plastic fence pins and traffic cones and rope- removed once the archaeological works have been completed.
- 15.5.3. A toolbox talk shall also be given in order to highlight the potential significance of these demarcated sites.

15.6. ARCHAEOLOGICAL MONITORING

- 15.6.1. In response to the recommendations of the Evaluation (October 2024), 'targeted' or 'advance' evaluation will be undertaken followed by CIR by a suitably qualified archaeologist (Appendix J).

TARGETED / ADVANCE EXCAVATION

- 15.6.2. One structure identified in Trench 11, which measures approximately 5m by 13m, consisting of upstanding stone walls approximately 0.5m high. Topsoil and deposits of modern make-up across the interior of the structure and around the structure will be excavated by machine under direct archaeological supervision in controlled spits to expose the extent of the structure and any features within it or within its immediate vicinity.
- 15.6.3. Area 2 targets an area between two extant structures which was targeted by Trench 05. An area 5m by 6m adjacent to the northwestern end of the larger structure (byre) will be stripped of topsoil and deposits of modern make-up to expose any surviving wall remnants and the full extent of the stone floor identified in Trench 03.
- 15.6.4. Area 3 targets a wall identified in Trench 03. This area extends 2.5m either side of the wall and for 5m along its length where the access track is due to run (total area 5m x 5m). Topsoil and any modern make-up will be removed by machine to foundation depth (or 0.75m below ground level, whichever is encountered soonest). The wall will be cleaned and recorded along the length it is exposed.

- 15.6.5. Once the walls and any archaeological features have been exposed by mechanical stripping, they will be cleaned, excavated and recorded. Where appropriate, excavations will be mechanically backfilled using the arisings from the excavation.

CONSTRUCTION INTEGRATED RECORDING

- 15.6.6. The Construction Integrated Recording phase will be undertaken during the construction process at the three areas illustrated in Appendix J. An archaeologist will monitor the machine excavation/removal of the structures recorded in the mitigation phase and any below ground removal of currently extant structures. If any archaeological features are identified as a result of these activities, machine excavation will stop and sufficient time will be allowed for the monitoring archaeologist to undertake excavation and recording of those features. In the case that remains are significant, discussion with key stakeholders will be held in order to establish scope and timescales required. Once the archaeological excavation and recording is complete machine excavation will be allowed to continue.
- 15.6.7. All machine excavation at the targeted areas during the mitigation and CIR phases will be undertaken by a tracked mechanical excavator fitted with a flat bladed ditching bucket for removal of all soft deposits. Machine excavation will terminate at the top of the natural geology or the first significant archaeological horizon, whichever is encountered first. Wall foundations may be removed in courses / layers using a mechanical excavator under close archaeological supervision. Spoil will be stored in designated areas near the excavation area, where possible large stones / construction materials will be stored separately to other arisings.
- 15.6.8. The written record of all archaeological features, deposits and finds uncovered during the watching brief will be by means of conventional pro-forma sheets. Scaled hand-drawn plans will also be made at 1:20 and sections at 1:10. High resolution digital images will be taken. All archaeological finds will be dealt with by the on-site archaeologists. The general practice will be to bulk recover artefacts by context which date from the nineteenth or twentieth century.
- 15.6.9. Should significant finds be encountered from earlier occupation phases of the site there may be the requirement for three-dimensionally recording prior to up-lifting. Finds which are of particular sensitivity or importance may require specialist conservation assessment. All archaeologically significant excavated feature fills and deposits will be sampled for artefactual and paleo-environmental evidence. Where appropriate this will also include micromorphological sampling in order to address key issues relating to soil development at the site.
- 15.6.10. Where particularly extensive, numerous or complex archaeological deposits or features are proven to be present the developer and the planning authority will be informed and discussions, including a site meeting if deemed necessary and appropriate, will be held between all relevant parties to agree the most appropriate strategy.
- 15.6.11. Where preservation in situ is not feasible this will generally comprise a need to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites to ensure preservation through record. Comhairle nan Eilean Siar Archaeology Service will be the final judge of significance in any case and may require full excavation of features to be destroyed by the proposals.

15.7. GENERAL REQUIREMENTS OF ARCHAEOLOGICAL WORK

- 15.7.1. The following requirements apply to all archaeological work being carried out on site during the project:
- Sufficient and appropriate resources (staff, equipment, accommodation, etc) must be used to enable the project to achieve its aims, the desired quality and timetable, and comply with all statutory requirements. It is the responsibility of the archaeologist undertaking the work to define appropriate staff levels

- All staff, including subcontractors, must be suitably qualified and experienced for their project roles. The site director and/or manager should preferably be an accredited member of ClfA
- All staff, including subcontractors, must be fully briefed and aware of the work required under the WSI, and must understand the aims and methodologies of the project
- All equipment must be suitable for the purpose and in sound condition and comply with Health and Safety Executive regulations and recommendations
- Digital records created as part of the project should comply with specified data standards. An archaeologist must ensure that digital information, paper, and photographic records should be stored in a secure and appropriate environment, and be regularly copied or backed up, and copies stored in a separate location
- Artefact and environmental data collection and discard policies, strategies and techniques must be fit for the defined purpose and understood by all staff and subcontractors (see also the ClfA Standard and guidance for the collection, documentation, conservation, and research of archaeological materials)
- Health and Safety regulations and requirements cannot be ignored no matter how imperative the need to record archaeological information; hence Health and Safety will take priority over archaeological matters. All archaeologists undertaking fieldwork must do so under a defined Health and Safety policy. Archaeologists undertaking fieldwork must observe safe working practices; the Health and Safety arrangements must be agreed and understood by all relevant parties before work commences. Risk assessments must be carried out and documented for every field project, in accordance with the Management of Health and Safety at Work Regulations. In addition, they must liaise closely with the Construction Contractor and comply with specified site rules. Archaeologists are advised to note the specific duties of the various roles defined by the CDM regulations and should not undertake roles for which they are not appropriately qualified and resourced
- Where the archaeologist has by instruction or agreement the power to suspend development work, he or she shall, in exercising such power, follow procedures previously agreed with the other contractors on the site. Within the constraints of the nature of the archaeological resource, the archaeologist shall not cause unreasonable disruption to the maintenance of the work schedules of other contractors
- An archaeologist should keep a record of the date, time and duration of all visits, the number of staff concerned, and any actions taken.

15.8. HUMAN REMAINS

- 15.8.1. Should human remains be encountered the local police, Comhairle nan Eilean Siar Archaeology Service will be notified immediately and, thereafter, prescribed procedure for their treatment will be followed, in accordance with legal requirements.

15.9. PROJECT MONITORING

- 15.9.1. The CnES Archaeologist is informed of works commencing in under Planning Condition 8. In addition, the CnES Archaeology Service and the Construction Contractor will be notified immediately of any unexpectedly significant or complex discoveries, or other unexpected occurrences which might significantly affect the archaeological work and/or the proposed development. In that event, all finds and features will be left in situ until arrangements have been agreed for safeguarding or recording them. The project archaeologist (as detailed within the WSI) will be the first point of contact for any project-related liaison including all formal logistical, administrative, and financial aspects of the project.

15.10.REPORTING, ARCHIVE & SMALL FINDS ARRANGEMENTS

REPORTING

- 15.10.1. Following completion of the watching briefs, a report will be prepared outlining the main results and incorporating, where appropriate, lists of all features, finds, samples, photographs, and drawings. The report will be produced as an electronic report (and a desk-top published document where this is required). This report will be prepared and submitted for comment within 1 month of the on-site work finishing and the contents and format will be in line with ClfA Standards and guidance for archaeological watching brief. If required the report will also include recommendations for further mitigation measures appropriate to the remains encountered. Implementation of any recommendations would, however, only follow consultation with the local authority archaeologist.
- 15.10.2. The methodology to be employed during any further work will be detailed in project designs/mitigation plans produced as addendums to this WSI to be agreed with Comhairle nan Eilean Siar Archaeology Service. The reports will be prepared, in structural and textual content terms, to the standard of the traditional Data Structure Report (DSR).
- 15.10.3. The DSR's will be illustrated with drawings and photographs including grid references where appropriate. As a minimum the DSR will include:
- A location map
 - Abstract/non-technical summary
 - Introduction
 - A description of the site and its location
 - Archaeological and Historical background
 - Aims
 - Methods
 - Results
 - Discussion
 - Recommendations
 - Appendices (tables of contexts, finds, samples, photographs, and drawings as appropriate).
- 15.10.4. Copies of the DSR will be provided to the client organisations, Comhairle nan Eilean Siar Archaeology Service and to the National Record of the Historic Environment. Further copies can be distributed to other recipients if requested and specified.

ARCHIVING

- 15.10.5. A project archive adhering to ClfA's standards & guidance (2014, updated 2020) will be prepared and made ready for submission within six months of the completion of all fieldwork or post-excavation work (as appropriate).
- 15.10.6. The resultant site archive will be deposited with the National Record of the Historic Environment.
- 15.10.7. A short report detailing the results will also be submitted for publication in Discovery and Excavation in Scotland and to OASIS (The online system for reporting investigations into the historic environment and linking research outputs and archives).

FINDS

- 15.10.8. The laws relating to Treasure Trove and Bona Vacantia in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit.
- 15.10.9. In the event of the discovery of small finds during the evaluation or any subsequent stages of work, a filled-out copy of the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent Data Structure Report will be submitted to the Panel at the conclusion of the fieldwork.
- 15.10.10. The Panel will then be responsible for recommending to the King's and Lord Treasurer's Remembrancer (KLTR) which museum should be allocated the finds. All artefacts will be stored temporarily by Headland Archaeology until a decision has been made by the Panel regarding the museum which will be allocated the finds for permanent curation.
- 15.10.11. All finds will be transferred to the appropriate museum within six months of completion of the fieldwork, if no post excavation work is required, or at the end of the latest finishing post-excavation programme. In the event that unallocated finds recovered from the excavation, or any later stages of work require to be removed from Scotland, for the purposes of post-excavation analysis, there is a legal requirement to obtain the consent of the KLTR, in the form of a loan agreement.

POST-EXCAVATION ANALYSIS AND PUBLICATION

- 15.10.12. The results of the Stage 1 work will inform the need for further (Stage 2) fieldwork and/or (Stage 3) analysis of materials/generation of a report for publication. Where appropriate, and on request, any DSR produced as part of Stage 1 or Stage 2 fieldwork will be followed by the production of a costed Post-excavation Research Design (PERD) specifying any work deemed necessary in order to complete the project.
- 15.10.13. Publication, where required, would normally be sought in a suitable academic journal. The post-excavation process is essential to bring a piece of archaeological work to completion.

16. OTTER PROTECTION AND MANAGEMENT PLAN (OPMP)

- 16.1.1. The OPMP provides details on how potential impacts on ecological receptors will be identified and dealt with onsite and what mitigation measures are to be implemented for the project.
- 16.1.2. Mitigation measures have been developed and form part of an Otter Protection Plan covering the following actions:
- Traffic speed restrictions.
 - Management of water quality and pollution events.
 - Working hours.
 - Excavation management.
 - Commuting routes.
- 16.1.3. An emergency procedure must be initiated by ground crews if new previously unrecorded otter resting places are suspected.

16.2. ROLES AND RESPONSIBILITIES

- 16.2.1. Overall responsibility for the implementation of the management plan sits with the site team and all staff on site, the delivery requirements are the responsibility, of the construction manager, construction contractor CCEM and CEM / EnvCow.

16.3. METHODOLOGY

- 16.3.1. All relevant mitigation measures as detailed with the EIA and planning conditions will be implemented through the Construction Contractors method statements (RAMS). Environmental monitoring and pre-construction surveys will be undertaken by the CEM and supporting personnel in line with the planning conditions and schedule of EIA mitigation. The CEM and Construction Contractor Environmental Manager will monitor and audit compliance and implement further mitigation measures as required to ensure compliance with all applicable EIA mitigation measures, planning conditions, environmental commitments and other legal and regulatory requirements. Any additional requirements which are identified will be included as an updated to this plan.

16.4. GENERAL MITIGATION

- 16.4.1. Works are limited to daytime periods therefore reducing the potential impacts of disturbance on nocturnal and crepuscular species.
- 16.4.2. All structures with the potential for bat roosts will be marked prior to works commencing and avoided during construction activities. Further surveys (Emergence) may be required during the summer months prior to any works being undertaken to existing structures.
- 16.4.3. A 10-mph speed limit on the site access track will be implemented to reduce disturbance effects and reduce potential for wildlife collisions, (namely otter and bird species). Appropriate signage within the site will be used to alert site personnel and visitors to the presence of wildlife (breeding birds and otter) and may be installed at specific areas or during seasons to avoid disturbance where appropriate.
- 16.4.4. Any excavations left open overnight will be left with ramps of gently sloping faces to allow for safe access and egress for any mammal species that may become trapped. In the event of any significant signs of mammal activity outwith the findings of the pre-construction surveys works are to cease immediately within this area and advise sought from the Construction Contractors Environmental Manager and CEM and if necessary the local NatureScot office.
- 16.4.5. An Otter Protection and Monitoring Plan is available which describes the legal protections afforded Otter in Scotland and the measures to be implemented to provide mitigation against disturbance to Otter, as a result of the construction works, which include:
- Pre-construction surveys.
 - Exclusion zones
 - Traffic speed restrictions.
 - Management of water quality and pollution events.
 - Working hours.
 - Excavation management.
 - Commuting routes.
 - An emergency procedure must be initiated by ground crews if new previously unrecorded otter resting places are suspected.

17. BREEDING BIRDS

- 17.1.1. The CCEM / EnvCow and supporting personnel will be updated to include a breeding bird protection plan. If construction takes place during the breeding bird season (March to August inclusive) a pre-construction breeding bird survey shall be carried out to inform the works in order to develop appropriate mitigation measures.
- 17.1.2. Phase one construction is currently programmed to commence in October with completion anticipated in February 2025 outwith the breeding bird season. If construction is scheduled to occur during the breeding season (April – August), in advance of the breeding season, the following measures are proposed:
- Vegetation along the area proposed for access track widening and verges (i.e., the areas where vegetation would be stripped at the start of the construction period) will be maintained at a short height (<10cm) by regular mowing, and unattractive for breeding birds
 - Mowing will be initiated prior to the breeding season, (the end of March / early April) and onwards through the breeding season as appropriate
 - Bird scarers will also be installed in a buffer area up to 25 m from the access track construction footprint
 - The 'corncrake disturbance prevention zone' will also be created prior to construction activities and breeding period to deter nesting and breeding activities.
- 17.1.3. Preconstruction bird surveys will be completed ahead of phase two construction works and in the event of phase 1 works progressing into the breeding bird season, including the development of the breeding bird protection plan should this phase of works be undertaken within the nesting season. A separate corncrake management plan is in place to discourage nesting within certain areas linked to the construction works and later operational requirements. Appendix A sets out the process for encountering nesting birds.
- 17.1.4. No construction works will take place within the vicinity of a known nest site during the breeding bird season (March to August inclusive) unless:
- It has been possible to discourage bird nesting
 - It has been demonstrated via a risk assessment that no impacts will be seen (monitoring may be required to confirm this)
 - Where pre-construction surveys have indicated that no birds are nesting. The CCEM (or nominated representative) or CEM / EnvCow will undertake pre commencement checks 48 hours before the works start as nests can quickly become established.
- 17.1.5. Should any nesting or lekking bird behaviour be identified during the pre-construction surveys, pre commencement checks or after construction works have begun, the nesting site will be protected by marking of an appropriate buffer zone as detailed within the Breeding Birds Protection Plan and agreement with the CCEM and CEM / EnvCow.
- 17.1.6. Travelling of vehicles across the site in the vicinity of known constraints will be limited as far as reasonably possible and monitored where required.
- 17.1.7. All site staff will be briefed on procedures to be implemented if any nesting birds are found within the construction area and works will stop in the area until the CCEM and CEM / EnvCoW have been consulted. Further input maybe required by a qualified Ornithologist.

18. EUROPEAN PROTECTED SPECIES

- 18.1.1. In the event of pre-construction surveys for future phases of works or during pre-works walkovers ahead of construction activities it is identified that have the potential to impact on EPS or other protected species a further survey will be completed to fully assess the area and develop

appropriate mitigation measures in line with guidance and legislation. Further consultation where applicable will be sought for the relevant statutory body.

19. BIOSECURITY

- 19.1.1. There are no known biosecurity issues within the boundary of the site, therefore no specific biosecurity plan is required for implementation. This, however, will be reviewed periodically should local issues or lockdowns arise.
- 19.1.2. In the event of a biosecurity issue the risk will be identified and fully assessed and the following procedure will be implemented:
 - The area will be avoided where possible
 - Where not possible to avoid, a site specific mitigation plan will be produced for approval
 - Once approved, the plan will be implemented and all parties will ensure compliance at all times. The sites compliance to the Biosecurity mitigation plan will be monitored by the CCEM and the CEM / EnvCow.
- 19.1.3. All plant that has operating in impacted area will be cleaned in line with site specific mitigation plan and inspected by the CEM / EnvCow prior to moving into clean areas of the project.
- 19.1.4. All plant that has operated outside of the Outer Hebrides will be cleaned prior to transportation in accordance with industry best practices to ensure no contaminated soils or invasive species are brought in. In line with the project requirements this process will be documented (photographs) and available to audit by the environmental team.

20. INVASIVE SPECIES

- 20.1.1. The EIA process recorded no invasive plant species under Schedule 9 of the Wildlife and Countryside Act (1981). Where invasive species are identified within 10 m of works, appropriate measures will be taken to prevent further spread from activities relating to the Proposed Development.
- 20.1.2. Invasive non-native species on Schedule 9 of the Wildlife and Countryside Act (1981). Where invasive non-native species are identified, the following procedures will be implemented:
 - Invasive species will be identified and quantified (location etc)
 - Area will be avoided where possible
 - Where not possible to avoid, a site-specific invasive species mitigation plan will be produced for approval. This may require consultation with an invasive non-native species specialist (INNS).
- 20.1.3. Once approved, the plan will be implemented, and all parties will ensure compliance at all times. The sites compliance to the invasive species mitigation plan will be monitored by the CCEM and the CEM / EnvCow.
- 20.1.4. Where invasive species are present with 10 m of works, appropriate measure will be taken to prevent further spread from construction activities relating to the proposed development.
- 20.1.5. In the event of nonnative flora or fauna is identified during construction works the contractor will inform the CCEM and CEM / EnvCoW within one day an employ the appropriate risk mitigation as detailed within this process.

21. VALUABLE HABITAT

- 21.1.1. Where, during pre-construction surveys and walkovers, it is identified that works have the potential to impact on valuable habitats, further survey will be completed if required to fully assess

the area and appropriate mitigation measures (avoidance, marking out, buffer zones etc) in line with guidance will be implemented prior to works taking place. Where valuable habitat is identified, the following procedure will be implemented:

- Valuable Habitats will be identified, demarcated and quantified
- Areas will be avoided where possible
- Where not possible to avoid, a site-specific mitigation plan will be produced for approval.

21.1.2. Once approved, the plan will be implemented, and all parties will ensure compliance at all times. The sites compliance to the valuable habitat mitigation plan will be monitored by the CCEM and the CEM / EnvCow.

22. NOISE AND AIR QUALITY MANAGEMENT PLAN

22.1. PURPOSE OF THE PLAN

22.1.1. The Noise and Air Quality Management Plan provides details on how potential for impacts on noise and air quality will be dealt with on site and what mitigation measures are to be implemented for the construction works. Noise and air quality management plans generated by the Principal Contractor are captured in Appendix D.

22.2. ROLES AND RESPONSIBILITIES

22.2.1. Overall responsibility for the implementation of the management plan sits with the contractors site team. Specific delivery requirements are the responsibility of the CCEM and Environmental Manager and the CEM / EnvCow.

22.3. METHODOLOGY

22.3.1. All works shall be completed in accordance with the requirements of the Planning Conditions. All construction work associated with the development must be carried out within the agreed timeframe for operation activities and all audible must be limited to permitted construction hours restricted to 0700-2000 Monday to Friday and 0700 – 1800 on Saturdays. There will be no Sunday working. This includes the movement of HGV's.

22.3.2. Outwith these periods the only works permitted on site shall be limited to emergency works and dust suppression activities unless otherwise approved by the CnES Planning Authority. In the event of emergency works occurring, the local authority must be informed within 2 working days of the occurrence with justification for the activity.

22.3.3. Construction noise and vibration will be managed primarily through best practice onsite and the use of suitably and well-maintained equipment. A monitoring protocol shall be developed in the event of a complaint, sign-off with CnES Environmental Health. The protocol shall Identify source, pathway(s) and develop mitigation (if required) in consultation with Construction Contractors and EHO.

22.3.4. To ensure that construction activities do not cause nuisance to local residents the construction contractor will follow at all times construction best practice standards (outlined within BS 5228: 2009) and industry best practice programmes for example the Considerate Contractor Scheme and the Traffic Management Plan for the project where appropriate. All changes to the Traffic Management Plan must be agreed in writing with CnES planning department.

22.3.5. The construction contractor will employ the following control measures to prevent the generation of dust:

- Site speed limits will be set at 10 mph

- Provide adequate protection for fine or dry materials from wind exposure by a suitable cover for transportation and storage of materials on site
 - No burning of waste on site
 - Compliance with all relevant Standards for Vehicle Emissions and Plant.
- 22.3.6. All vehicle drivers and plant drivers are required to switch off their vehicle engines when stationary to reduce exhaust emissions. All engines are expected to be adequately maintained and where installed catalyts and particulate filters should be working efficiently serviced and maintained.
- 22.3.7. The Construction Contractor will be required, under the terms of the Contract, to have a minimum time of 15 minutes between heavy goods vehicle deliveries to the site and 15 minutes between heavy goods vehicles leaving the site. This restriction will limit the risk of large vehicles causing disruption on the single-track A 865.
- 22.3.8. The upgraded Scolpaig track junction from the A865 has been designed to allow articulated heavy good vehicles to access the site from either the east or west. Heavy goods articulated vehicles will be required to leave the site in a westerly direction only. This restriction will be part of the Contract specification during the construction work.
- 22.3.9. Best practice construction traffic measures to minimise material/dust on public roads i.e. All HGVs to be sheeted to reduce dust and stop spillage on public roads and wheel cleaning arrangements in place, where necessary.

23. OUTDOOR ACCESS PLAN

23.1. PURPOSE OF THE PLAN

- 23.1.1. The Outdoor Access Plan provides information on the potential impacts of the construction works on members of the public accessing the wider path network and ensuring safety requirements are implemented in line with Part 1 of the Land Reform (Scotland) Act 2003 and Part 3 of the Countryside (Scotland) Act 1967. Site health and safety should be in accordance with HSG:151 Protecting the Public.

23.2. ROLES AND RESPONSIBILITIES

- 23.2.1. Overall responsibility for the implementation of the management plan sits with the contractors site team. Specific delivery requirements are the responsibility of the Construction Contractors site manager and Environmental Manager and the CEM / EnvCow.

23.3. GENERAL

- 23.3.1. Where possible, no public rights of way or core paths as part of the wider path network will be blocked as part of the proposed works. Pedestrian access to the area will be enhanced through the upgrading and widening of the existing access road from the A865 to Scolpaig Farm and additional layby adjacent to Loch Scolpaig. Site access during construction will be phased to enable recreational access following construction of the site access track / culvert upgrade over Loch Scolpaig.
- 23.3.2. Where this is not possible appropriate effort will be made to provide a suitable signed and managed diversion with warning of used to the dangers of construction works well in advance to adequality warn users. Recreation access will only be prohibited temporary when there is a risk of construction works activity being undertaken prohibits the use of the wider path network through the site. This will be communicated directly or via appropriate stakeholders to those affected.
- 23.3.3. There will be a minor rerouting of the existing footpath (contributing to the wider path network) through the project site to between the Scolpaig farmhouse and planned vehicle turning area

within phase 1 of the construction. This will be in accordance with the Land Reform (Scotland) Act 2003, the Scottish Outdoor Access and in accordance with HSG:151 Protecting the Public.

24. SITE CARBON REDUCTION PLAN

24.1. PURPOSE OF THE PLAN

- 24.1.1. The Site Carbon Reduction Plan provides details on the actions of the Construction Contractors intent to reduce carbon emissions associated with site activities, materials used and where applicable the operating performance of site welfare and project buildings.

24.2. ROLES AND RESPONSIBILITIES

- 24.2.1. Overall responsibility for the implementation of the Site Carbon Reduction plan sits with the contractors site team. Specific delivery requirements are the responsibility of the CCEM and Environmental Manager and the CEM / EnvCow

24.3. GENERAL

- 24.3.1. The Construction Contractor will use energy efficient and well maintained static and mobile plant, ensuring all ignitions are turned off when the plant is not in use. Machinery will not be left idling unless there is a specific operational requirement.
- 24.3.2. Fuel use for the project should be monitored during works and vehicle sharing should be utilised wherever practicable to and from the site. Wherever possible online meeting should be promoted to reduce the number of vehicles attending the site and total number of journeys required.
- 24.3.3. Wherever possible materials should be recycled and sources of recycled aggregate for the scheme should be considered. Vegetation clearance will be kept to a minimum to aid regeneration following the completion of the works.
- 24.3.4. The Construction Contractor will review the Site Carbon Reduction Plan with a view to detailing the expected reduction in carbon emissions in tonnes of carbon dioxide equivalent (tCO₂e) for each applicable action, however, this may not be possible to represent and demonstrate the savings.

APPENDIX A ENCOUNTERING NESTING BIRDS

There are over 250 species of wild bird that are either resident in Britain or regularly visit our shores as part of their migration.

How are they protected?

All wild birds in the UK are protected under the Wildlife and Countryside Act 1981 (WCA). Even common species like starlings, hooded crows are protected. Some rarer species, or those that are vulnerable to disturbance or persecution receive further protection.

Offence

Under the WCA it is an offence to:

- Kill or injure any wild bird
- Capture or keep (alive or dead) any wild bird
- Destroy or take the egg of any wild bird
- Sell or advertise for sale any wild bird or its eggs
- Destroy, damage, interfere with, take, or obstruct the use of the nest of any wild bird while it is in use or being built.

There is also further protection for rare breeding birds listed under Schedule 1 of the WCA. This makes it an offence to:

- Disturb any specially protected bird while it is building its nest
- Disturb any specially protected bird while it is in or near a nest containing eggs or young
- Disturb the young of any of these birds before they are wholly independent.

This legislation means that birds are fully protected in Scotland, and that any planned activity, which may affect them, requires prior consultation with the appropriate statutory nature conservation organisation (NatureScot).

Protection Plan

Should a bird nest be identified during the works, the following emergency procedure should be followed:

- Stop the activity being undertaken immediately (ensuring any nest is not removed / destroyed)
- Immediately inform the site supervisor, the Construction Contractor Environmental Manager and CEM / EnvCow
- Construction Contractor Environmental Manager or CEM / EnvCow to confirm the presence of the nest and consult specialist (Ornithologist) and if necessary NatureScot over appropriate mitigation
- The activity should not resume until written approval, detailing any appropriate mitigation has been received by either the Construction Environmental Manager or CEM / EnvCow.

The following provides mitigation options to cover bird species that are not specifically protected by Schedule 1:

- Where work is being undertaken during the breeding bird season (March to September) the area must be checked for nesting birds by a suitably qualified Ornithologist/Ecologist
- If nesting birds are found the areas to vicinity of the nest should be protected from disturbance via the use of an appropriate set back buffer (NatureScot guidance) and work avoided in the area until the young have left the nest.

APPENDIX B ENVIRONMENTAL INCIDENT RESPONSE PLAN AND SPILL RESPONSE PLAN

Spill Response Plan

All site staff will be trained in how to use a spill kit.

For plant/equipment leaks and spills:

- STOP WORK immediately
- Remove all sources of ignition (if substance is flammable)
- Put on appropriate PPE
- STOP the spill at source
- CONTAIN the spill using spill kit
- PROTECT sensitive areas using spill kit booms – including water courses and identified sensitive ecology
- Contact the site supervisor, Construction Contractor Environmental Manager and CEM / EnvCoW and advise of action taken
- Clean up the spill and any affected ground using spill kit
- Replenish any spill materials utilised
- Dispose of waste appropriately (segregate for disposal as Special Waste)

This spill response procedure will be posted in site welfare facilities and offices.

Other Environmental Incidents

All site operatives will be given a toolbox talk with respect to possible environmental incidents that have the potential to occur during the works, these may include:

- Flooding
- Generation of excessive levels of dust or noise resulting in nuisance issues and possible 3rd party complaints
- Damage to habitat outside of agreed access and construction phase areas
- Discovery of archaeological or historic remains
- A near miss that could have resulted in an incident.

All environmental incidents (and near misses) will also be reported to the Construction Contractor Environmental Manager and CEM / EnvCow



MAL-HSE-023 Spill Response Plan

Site/Project	Spaceport 1 Enabling Works	Plan Number	1
Location	Scolpaig Farm, Isle of North Uist	Date	31/10/2024
Client	CNES		

SITE ADDRESS	Scolpaig Farm Isle of North Uist, HS6 5DH
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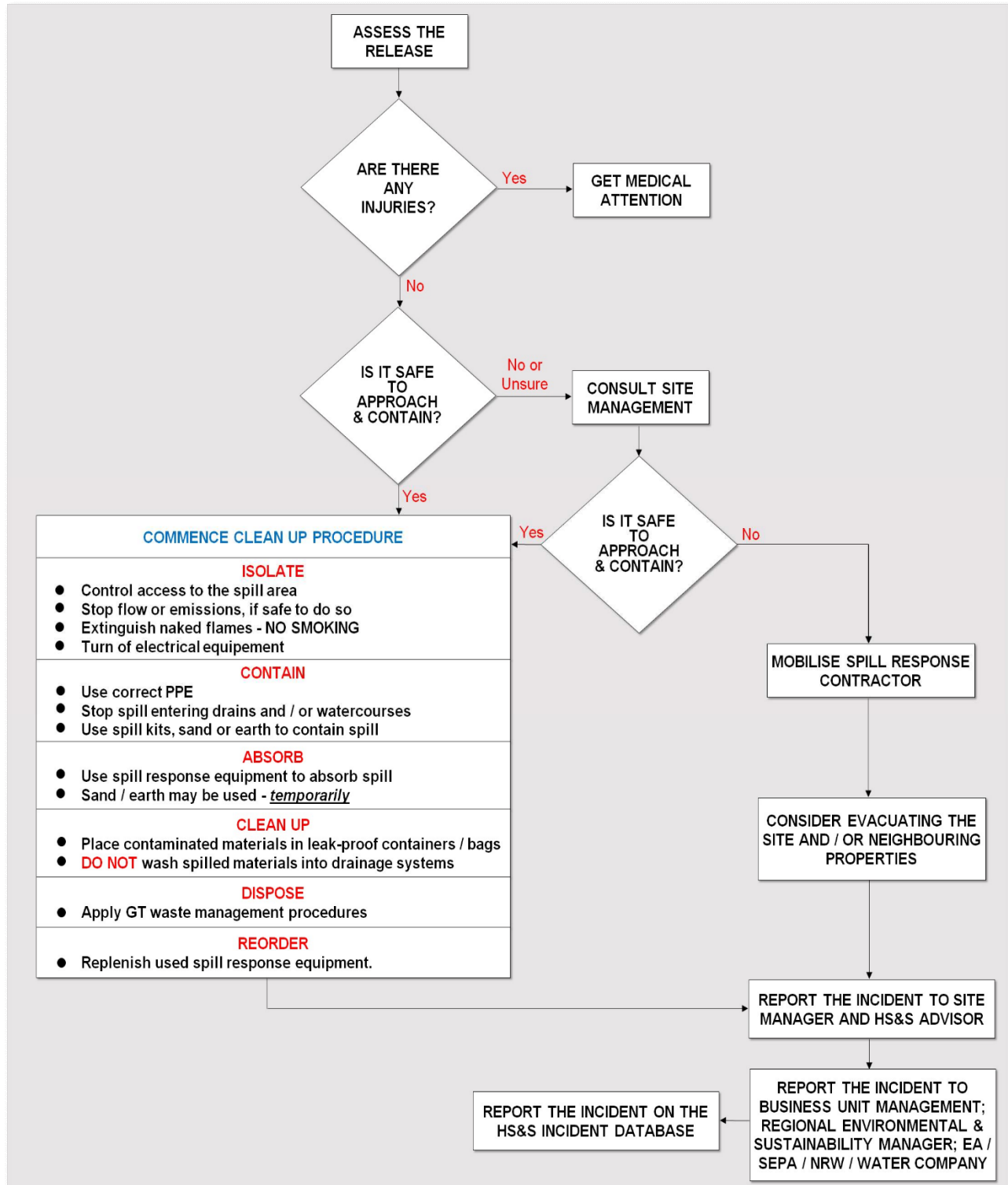
LOCATION(S) OF SPILL RESPONSE EQUIPMENT	
Welfare Compound	Beside all Fuel Bowsers
At Turning Area on Site	Beside Culvert are

SPILL RESPONSE EQUIPMENT TRAINED / COMPETENT PERSON(S)	
Donald J MacAulay	Stuart Lindsay

FREQUENCY OF SPILL TESTS:	Monthly	ISSUE DATE:	31/10/2024
COMPLETED BY:	A Macleod	POSITION:	SHEQ Manager
CLIENT / LANDOWNER	CNES		
SPILL RESPONSE CONTRACTOR	0800-592-827 <i>(Adler & Allan Ltd.)</i>	Membership Number: GAL014	
EA / NRW / SEPA	0800 80 70 60 (24 hr Emergency Hotline)		
LOCAL EA / NRW / SEPA OFFICE	01786 457700– SEPA Stornoway		
LOCAL AUTHORITY	CNES		
ADDITIONAL CONTACT(S)	MAL- Hillside Office - 01878700278		
	MAL SHEQ-Manger Andrew Macleod - 07723079300		

MAL CONTACTS	
SITE MANAGER	Donald J MacAulay
REGIONAL OFFICE	Stornoway
SHEQ Manager	Andrew Macleod - 07723079300
REGIONAL ENVIRONMENT & SUSTAINABILITY MANAGER	Andrew MacLeod (SHEQ), Manager

Appendix 1 – Spill Response Process



IF IN DOUBT OR YOU REQUIRE ASSISTANCE CONTACT YOUR HS&S ADVISOR OR REGIONAL ENVIRONMENTAL & SUSTAINABILITY MANAGER.

Assess Release: Determine the size of the spill and whether there are any injuries to any person(s) involved.

- If there are injuries medical attention should be sought and the most senior person on site informed
- If there are no injuries, an assessment should be made as to whether the spillage is safe to approach and contain. If there is doubt, the most senior person on site should be consulted.
- Consideration should be given of the need to evacuate the site and / or neighboring buildings. If necessary, the police and / or fire service should be contacted.
- If the competent or trained person cannot handle the hazardous material spill then the Company's spill response contractor should be contacted.
- **Isolate**
 - Control access to spill
 - Do not allow Unauthorised access to spillage area.
 - Identify the source of pollution and stop the flow or emissions as quickly as possible, if it does not endanger the health and safety of people.
 - Switch off or suppress any potential sources of ignition.
 - Extinguish naked flames and ensure there is no smoking.
 - Turn off electrical equipment.
- **Contain**
 - Ensure the correct PPE is used.
 - If the incident involves liquids, steps should be taken to stop it spreading, using earth, sand, or impervious material such as polythene.
 - If the incident involves liquids, the flow should be diverted from drains and / or watercourses.
 - Consideration should be given to the use of absorbent materials and / or booms, as a precaution, in environmentally sensitive locations
 - Use absorbent materials (sand or earth, as an alternative) to assist spill containment.
- **Absorb**
 - Spill response pads, sheets, booms and granules should be used to absorb the spilt material.
 - Sand and earth may be used, as a temporary alternative.
- **Clean Up**
 - Contaminated sand, earth or absorbent materials should be placed into sacks or leak-proof containers, as appropriate.
 - Spilled materials should **not** be washed into the drainage system.
- **Dispose**
 - Waste contaminated materials should be disposed of appropriately, refer to Waste Management Plan 19-12
 - All used absorbent materials are classified as hazardous waste.
- **Reorder**
 - Replace used spill response equipment supplies.

Client specific spill response procedures should be adhered to when working on client site(s) or when stipulated in the contract.

APPENDIX C

CONSTRUCTION CONTRACTOR
ENVIRONMENTAL POLICY



MACAULAY ASKERNISH LTD

malcivils.co.uk

MacAulay Askernish LTD

Environmental Policy Statement

Statement

It is the intention of Macaulay Askernish Ltd to remain committed to putting in place a framework for setting objectives to reducing damage to and protecting the environment. Utilising policies and procedures developed for the Company's Health and Safety management system, environmental impacts are managed using such measures as risk assessments, written method statements and adherence to legislation and regulation. A sample list of such legislation and regulations are referred to in this document.

The Company is committed to protect the environment by maintaining and improving its environmental performance and preventing pollution. To ensure this it will commit adequate resources as required.

To prevent and minimise environmental impacts and manage any unplanned emissions, the following practices are employed:

Vehicles

All road going vehicles are regularly serviced and maintained within the prescribed limits issued by the manufacturer or supplier. Written maintenance records for each vehicle are kept and updated as necessary.

All road going vehicles are inspected and MOT'd, including relevant emissions checks as required and written records kept and updated as necessary.

Plant and Equipment

All plant and equipment including power tools, vehicles, dumpers, extendable forklifts and similar are regularly serviced and maintained within the recommended limits issued by the manufacturer or supplier.

Oils and Lubricants

All oils and lubricants are obtained in minimum quantities and are stored in robust containers.

All oils, fuels and lubricants are stored in designated areas within the business.

No storage of oils and lubricants is undertaken at client locations.

Spill control materials are retained to restrict oil or lubricant spillage to a minimum.

All spillages are minimised using spillage control techniques and necessary the client or other interested party such as the Local Authority or SEPA are informed as soon as practical.

Disposal of Waste Oil

Waste oils from vehicles and plant are handled according to our safe system of work, are containerised, and disposed of to the Local Authority Waste Oil recycling facility.

Water Emissions

All waste liquid emissions are to Local Authority foul sewers where permitted.

No Special or other liquid waste discharges outside the recognised consents or allowances are made.

The office and workshop premises at Lochboisdale are not adjacent to any recognised watercourse or controlled waters. There are no unlicensed discharges from any construction site under our control.

Waste Management

All waste from construction sites is disposed of to a licensed landfill site or recycling plant operated by the Local Authority.

A current licence is held by the company to transport to final disposal or a recognised transfer location.

Licence Number: SNO/038011

Expiry Date: 22 01 2027

Energy Management and Carbon Footprint Reduction

The company is committed to ensuring that all types of energy consumed in the business are used as efficiently and as economically as possible. We recognise that the earth has finite hydrocarbon resources and where possible we purchase the most energy efficient plant and equipment. We plan our work to avoid unnecessary journeys which together with the foregoing allow us to contribute to the reduction of the Western Industrial Sector carbon footprint.

A recognised contractor is used to transport and dispose of special wastes where necessary. No waste is burned, and no other unapproved methods of disposal are utilised.

Identified Relevant Legislation and Regulation

The Health and Safety at Work Act 1974
The Control of Substances Hazardous to Health Regulations 2002 (COSHH)
The Management of Health and Safety Regulations 1999
The Construction (Design and Management) Regulations 2015 (CDM)
The Carriage of Dangerous Goods by Road Regulations (CDG)
The Environmental Protection Act
The Environment Act
The Special Waste Regulations
The Duty of Care Regulations
The Control of Pollution Act
The Sewerage (Scotland) Act
The Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations

Signed A handwritten signature in black ink, appearing to read 'S. MacAulay', written over a dotted line.

Stephen MacAulay
Director

Date: 10/01/2024

APPENDIX D SITE ENVIRONMENTAL MANAGEMENT PLAN



Project Environmental Plan

SPACEPORT 1
CNES

Audit Programme

Where audits identify areas of improvement, appropriate steps will be taken to implement these. Improvements requiring immediate action will be immediately raised with the MAL SHEQ Manager, to allow for actions to be arranged. If immediate action is not required, then the audit report will be submitted within 24 hours of the audit, to the site manager, and actions agreed at the next site management meeting.

In addition to identifying areas for improvement, areas of good practice will be highlighted and fed back to allow appropriate recognition to be given.

Audit forms including checklists will be utilised for each audit type to ensure that all items are appropriately checked and that audits are recorded in a systematic manner.

General Requirements

In addition to topic specific requirements and task specific requirements detailed below, all equipment and machinery will be appropriately maintained to minimise pollution risks in terms of noise, greenhouse gas emissions and loss of containment (fuels and hydraulic fluids). Good housekeeping practices and considerate construction techniques will be employed throughout, with particular regard to users of the existing facilities, local residents and businesses.

Works will be conducted primarily between 7am to 8pm Monday to Friday, with Saturday work generally finish earlier.

Site Emergency Response

Introduction

Pollution prevention measures have been developed to minimise the risk of an environmental incident occurring during works. These measures combine both the current UK best practice and guidance. However, in the unlikely event of an environmental incident occurring, it is important to have a comprehensive emergency response plan in place in order to minimise the potential impacts.

Spill Equipment

During the project, MAL will be trialling HVO fuel (where possible) in its machinery and vehicles on site. While HVO is bio-degradable and safer for the environment in the case of any spillages, spill kits will be made available close to the working areas with equipment suitable for the types of materials being utilised, this will vary depending on the work being undertaken at the time but will include as a minimum:

- A universal spill kit adjacent to the COSHH store capable of containing material from the largest container stored.
- A mobile oil spill kit capable of containing 100L of oil stored adjacent to the refuelling bowser.
- A universal spill kit adjacent to existing pier.
- Oil absorbent booms at the pier.

Outline of Procedures

All personnel will be briefed on **MAL-HSE-023 Spill Response Plan**. This emergency response plan follows the 'Source – Pathway – Receptor' model as described in PPG1 (NIEA *et al.*, 2013) and the

pollution prevention hierarchy. In the event of an environmental incident the following will be prioritised:

- Stop the source of the pollution.
- Interrupt any pathways to the environment.
- Report the incident in as much detail as possible to site management.
- Clean the contaminated area and recover pollutants.
- Analyse the event to prevent further incidents.

The site manager will ensure all site personnel are trained in the ERP through regular toolbox talks, drills, and safety briefs.

References

NIEA, SEPA, & Environment Agency. (2013). Pollution Prevention Guidelines: PPG1 – Understanding your Environmental Responsibilities - Good Environmental Practices. In (pp. 1-10): NIEA, SEPA and Environment Agency.

Site Waste Management Plan

Introduction

MacAulay Askernish Ltd, (*MAL*), Depot is a Scottish Environmental Protection Agency, (*SEPA*), registered Waste Management Licence No: WML/N/220030 holder & Waste Carrier No: SNO/038011, therefore, our Business & Commercial Policies & Procedures encompasses the legislation (as amended).

All waste/refuse transported from the Site will be recorded in the appropriate Duty of Care – Waste Transfer Register, SNO/333932 to the designated, Licenced Waste Facility for the purposes of re-cycling or further disposal/onward disposal.

MacAulay Askernish Ltd strive to minimise our construction activities with a positive view to reducing the work-related impact on the environment & waste accumulation/disposal, thus protecting natural resources & ensuring that they are passed onto the next generations, in good order, for their enjoyment.

Wastes arising during construction will include but not be limited to, soil, and packaging materials associated with both construction works and the welfare facilities.

The waste hierarchy will be employed throughout the construction works.

Waste Hierarchy Implementation

Reducing Waste

Where practicable, steps will be taken to avoid the production of waste. For example, the use of reusable water bottles, crockery and cutlery in the welfare facilities will prevent the need for single use plastics.

The bulk of material will be delivered in HGVs without packaging and, where practical, requests should be made to suppliers to minimise packaging.

Similarly, ordering the correct quantity and types of materials will prevent unused excess materials being disposed of as waste.

MAL also utilise a paperless system for all site documentation. All relevant documentation will be accessible through mobile devices within a project specific SharePoint, access will be controlled by senior management with only selected project personnel granted access. All personnel will complete daily documentation relevant to their tasks e.g., Daily plant check sheets, Permits, daily briefings, site diary, cleaning register etc. The information will then be instantly accessible by management and stored as per MAL procedures. Using this process, MAL's site paper usage is eliminated.

Reuse

Where possible, materials can be reutilised. For example, excavated materials can be reused in re-instatement.

Recycle

Recycling will be facilitated by the segregation of wastes. Clearly marked and labelled waste receptacles will be provided in designated areas. Wastes suitable for recycling are likely to include wood, metals, glass, paper, plastics and oils. Where possible materials will be recycled.

Dispose

Solid waste not suitable for recycling will be sent to landfill as waste, or special waste, depending on its constitution.

Litter

Prior to construction works on site commencing, a litter sweep will be conducted to prevent the escape of existing litter on site into the marine environment.

All personnel working on the project will undertake site induction. This will include a section on waste management and the use of the waste receptacles provided. It will be made clear that littering will not be tolerated. Construction staff will be encouraged to collect any litter they see in the construction areas and, if deemed necessary, litter sweeps will be carried out.

Waste Management

Waste receptacles (bins and skips) will incorporate lids or covers to protect against vermin gaining access and wind blowing wastes out of skips, giving rise to litter.

MAL will put in place procedures for ensuring that appropriate records are kept for all waste arisings including volumes, categories and waste carriers used, and that waste transfer notes are retained.

Monitoring

MAL site management and SHEQ team will carry out regular site inspections which will cover and review details of waste arisings to identify areas for opportunity to reduce or recycle more wastes.

Material Management Plan

Introduction

The works will utilise a variety of materials such as rockfill, concrete and fuel. Some of the material pose an environmental risk if a loss of containment occurs, hence, it is essential that they are appropriately managed as detailed in this section.

General Management

To minimise overordering of materials, potentially leading to increased waste and construction cost, material requirements should be identified accurately.

Delivery of material to site should be 'just in time' for it to be utilised for its use as soon as possible, reducing the requirement of storage for extended periods.

The selection of material sourcing should take account of the intrinsic and transport carbon cost without jeopardising the materials quality to meet the require engineering standard.

Excavated Spoil/Peat & Mineral Working Materials is to be kept in separate stockpiles in temporary Lay Down Areas for use at a later stage. Any area with the potential of spoil slippage will be stabilised using appropriately sized Mineral Working Materials to prevent seepage/slipping occurring.

All surrounding watercourses will have silt netting placed at regular intervals to catch any sediment/waste washed out from site during construction and will be checked/emptied regularly. NO fuel storage or fuel driven equipment eg pumps, generators must be kept a minimum of 50m away from any watercourses/bodies.

Fuel Storage

Where fuel is stored, and plant is refuelled the following will apply:

- A suitable double skinned bowser or tank (or bunded tank) will be utilised for fuel storage.
- The bowser or tank will be stored at least 50m from the loch or nearest drain and protected from collision risks.
- The distribution hose will be fitted with a shut off type filling nozzle.
- The filling nozzle will be fitted with a security lock to prevent unauthorised use.
- A drip tray will be provided below the distribution hose and nozzle when not in use.
- A fuel accountancy system will be employed.
- All refuelling will be carried out in accordance with site procedures by trained personnel in a designated area.

Hazardous Material Storage

All oils and chemicals will be subject to Control of Substances Hazardous to Health (COSHH) assessments including a section on the environment to highlight any precaution or mitigation requirements. Appropriately bunded oil and chemical storage cabinets will be provided on site. These will be kept locked, with the key under management control to ensure appropriate use and accountability.

Appropriate spill plans aligned to the pollution control hierarchy and spill kits will be in place with construction operatives being trained in the plans and in the use of spill kits. The protocol to deal with spills is detailed in the **Site Emergency Response**.

Where practicable bio-degradable hydraulic fluids will be utilised in machinery.

Dusty Material Storage

Material won on site should be processed and utilised at the earliest opportunity, to minimise the need for storage.

All dusty material on site will be appropriately stored, managed and monitored to prevent the generation of dust as discussed in the Dust Management Plan below.

In-Air Acoustics

Introduction

It is anticipated that temporary adverse construction noise effects are anticipated during construction works in the immediate vicinity of the site. These mitigations are based on typical equipment utilised for the planned construction activities.

Noise Effects

There are multiple construction activities that could give rise to noise, some of which will be carried out concurrently. The location of the works also determines the level or effect on receptors.

Mitigation

Works will be carried out primarily during daytime hours as defined by BS5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites. In line with the aforementioned guidance, the noise levels during daytime will be $\leq 70\text{dB } L_{Aeq,t}$ at noise sensitive properties. Any works out with daytime hours will only be completed with authorisation from the client and if the appropriate noise limits are not exceeded at any noise sensitive locations.

For each stage of the works, a review of plant requirements will be made against those assumed from pre-construction information. If the actual plant requirements are significantly different and could give rise to greater noise emissions to those predicted, the noise assessment will be reviewed and updated to identify any particular issues and associated requirements for mitigation.

General Mitigation

The following mitigation will be employed throughout the construction works as applicable in line with good practice to minimise noise effects:

- Haulage vehicles will not arrive at or leave the site between 18.00 and 08.00 hours.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and 'smart' reversing alarms and will be subject to programmed maintenance.
- Inherently quiet plant will be selected where available - all major compressors, pumps and generators will be 'sound reduced' models fitted with properly lined and sealed acoustic covers, which will be kept closed whenever the machines are in use.
- All ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.
- Machine operator will be instructed to shut down machines between work periods or throttled down to a minimum.
- Equipment used on site will be regularly maintained, including maintenance related to noise emissions.
- Vehicles will be loaded carefully to ensure minimal drop heights so as to minimise noise generation; and
- The positioning of ancillary plant such as generators and pumps will take into account of receptor location so as to minimum noise disturbance and if necessary, temporary acoustic screens or enclosures will be provided.

Dust Management Plan

Introduction

The works associated with the project have the potential to give rise to dust, which can become a nuisance and potentially a health hazard, especially in dry and windy conditions. Steps to be taken to minimise and monitor dust effects are detailed within this Dust Management Plan.

Dust Prevention

Infill material stored on site will be minimised where practicable by utilising a 'just in time' delivery system. The movement of dusty material, such as infill, will be appropriately planned to minimise the number of times dust emitting material is moved. Any infill materials with the potential to give rise to dust will be kept moist, to avoid dust arisings until they have been covered by surfacing.

Waste arising from construction works with potential to give rise to dust will be covered when stored on site and removed from site promptly.

Good housekeeping will be employed across the site to prevent dust emissions.

Minimising Spread and Track-Out

All delivery vehicles entering and leaving the site will be covered to prevent escape of materials and giving rise to dust on the public roads. Delivery vehicles will also follow the designated route, avoiding unsurfaced roads. All HGV Vehicles leaving site will have their wheels checked for stuck debris prior to leaving site.

Excavator mounted brushes will be utilised periodically to sweep the road and bell mouth during the construction phase to ensure any trackout from the site will be mitigated.

Dust Monitoring

Qualitative monitoring surveys of visible dust emissions and surface soiling will be conducted once each working day within the vicinity of the site boundary (internal and external) with the result of the inspection being recorded.

Site audits will be undertaken with the audit including material storage status; inspection of the access road and local roads; and looking for signs of surface soiling on surfaces around the site. Frequency of audits in periods of dry weather will increase.

APPENDIX E ECOLOGY

Preconstruction Otter Survey

Bat Preliminary Roost Assessment

Otter Protection and Monitoring Plan



SPACEPORT1 PRE-CONSTRUCTION OTTER SURVEY REPORT

For Comhairle nan Eilean Siar

09/10/2024

Spaceport 1 Pre-construction Otter Survey Report

for Comhairle nan Eilean Siar

October 2024

Ver 0.1

PROJECT INFORMATION:

PROJECT CODE	58
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PROJECT TEAM:

PROJECT MANAGER	Gareth Gentles
AUTHOR	Angus Maclean / Laura Carse
SITE VISIT	Angus Maclean
GRAPHICS	Angus Maclean
APPROVED BY	Ruth Jeavons, Gareth Gentles
VERSION COMMENTS	Final Version

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1. INTRODUCTION

- 1.1.1. Atlantic58 were commissioned by Comhairle nan Eilean Siar to undertake an otter survey as part of pre-construction works (Construction Environment Management Plan, CEMP) for the development of a Spaceport in Scolpaig in North Uist, Western Isles (central grid reference NF 73027 76225).
- 1.1.2. The following report presents the results of an otter survey carried out across Monday 22nd and Tuesday 23rd of July 2024. This report is the third of three otter surveys undertaken in the same area¹, the previous two otter surveys were completed to support the Spaceport1 Environmental Impact Assessment (EIA) process. This report (third report) fulfils the commitments to mitigation set out in the EIA, subsequently converted into a planning condition to satisfy the requirement for an Otter Protection Plan during the construction period (Condition 9²).
- 1.1.3. This report is supported by the following:
 - Appendix 1 – Maps: general overview maps of the survey area, and general frequency, distribution, and abundance of otter signs at full survey area scale.
 - Appendix 2 – Target Notes: photographs of the resting places found during the surveys.

2. PERSONNEL

- 2.1.1. This survey was carried out by Angus Maclean, with report collation by Laura Carse. Survey personnel are experienced in coordinating and conducting otter surveys across Scotland for a range of developments including community access upgrades, harbour upgrades, wind farms, utilities upgrades and rocket launching facilities. Further details on personnel are provided below.
- 2.1.2. Laura Carse CEnv MIEMA is a Chartered Environmentalist and Environmental Consultant with a wide range of general environmental and ecological consultancy experience over 20 years. Laura holds a BSc in Tropical Environmental Science and an MSc in Marine Resource Development and Protection. She is trained in a range of ecological survey techniques, including otter survey, and is experienced in undertaking otter surveys in the Hebrides, completing European Protected Species (EPS) licence applications, in addition to supporting the collation of wider terrestrial ecology assessments for EIA.
- 2.1.3. Angus Maclean is an Ecological Consultant experienced in carrying out protected species surveys, including otter surveys in the Hebrides. He is also experienced and trained in GIS to professionally produce quality mapping and accurate locations of ecological signs. Angus holds a BSc (Hons) in Environmental Resource Management.
- 2.1.4. The report was reviewed by Dr Ruth Jeavons, an experienced ecological surveyor, with specialist experience in the ecology of the Hebrides, who has undertaken and coordinated large scale ornithological surveys and protected species surveys across the Isle of Lewis. She has secured European Protected Species (EPS) licenses and undertaken Species Protection Plans, in addition to delivering training in otter ecology and surveying for a large conservation organisation.

¹ Completed under Western Isles Marine and Environment Ltd, now Atlantic58.

² 21/00646

3. METHODOLOGY

3.1. TERMINOLOGY

3.1.1. The protection given to otter as a European Protected Species (EPS) under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) includes the protection of all otter breeding sites and resting places (in addition to other regulations and protection measures). Legal protection is given to 'active' resting places under these Regulations, and in line with the Regulations, active resting places are distinguished from potential resting places within this report as follows:

- **Active resting place** – where signs of very recent / current use of the couch or holt have been found, these include the presence of spraint, freshly smoothed substrate, pawprints, or other otter signs.
- **Potential resting place** – where the couch or holt has clearly been used by otter, with the presence of otter signs such as paths to the resting place, or old spraint, but without evidence for current or very recent use.
- **Active natal holt** – active natal holts have the same legal protection as active resting places but with more extensive regulations around disturbance. A natal holt is a resting place found to have signs of breeding within the vicinity (milk-based spraint, evidence of the presence of cubs – pawprints).
- **Potential natal holt** – in this report, a potential natal holt is an active resting place that has the potential to be a breeding site, but without definite evidence to confirm breeding status. This status may be given if the resting place is in high quality breeding habitat. The potential natal holt would therefore be protected under an active resting place status.

3.1.2. In addition, this report refers to '**key areas for otter**'; an evaluation of key areas of use by otter within the survey area has been made by assessing the otter signs and use of space, in conjunction with the habitat available, to identify specific areas of potential sensitivity.

3.2. OTTER SURVEY METHODOLOGY

3.2.1. The survey area is based on a defined 'survey area' which formed the basis of the original surveys undertaken in previous surveys for consistency, illustrated on Figure 1.

3.2.2. The survey was undertaken on the Monday 22nd and Tuesday 23rd of July by surveyor, Angus Maclean. Training was provided prior to survey initiation to ensure methodology consolidation, recording and data consistency. Surveyor was issued a survey handbook to ensure consistency in sign identification and code assignment.

3.2.3. A systematic search for signs and evidence of otter activity was made. The key references for defining otter survey methodology and sign identification are described in more detail in the following guidance:

- NatureScot (accessed 2023) Standing advice for planning consultations – Otter.
- Chanin (2003) Monitoring the Otter (*Lutra lutra*). Conserving Natura 2000 Rivers Monitoring Series No 10. English Nature. Peterburgh

3.2.4. The key signs for determining the presence of otter are as follows:

- **Holts** – underground resting places for otter, often tunnels within banksides, underneath the root plates of trees or in boulder piles. Otter may also use existing peat features such as peat hang overhangs. Otter generally rest and breed in holts.
- **Couches** – generally 'uncovered' potential resting sites located above ground, usually in thick cover. Couches can be difficult to identify and can include small patches of flattened grass to fallen trees, or boulders.

- **Prey remains** – notable prey items e.g., frogs, fishes, crustaceans, or sea urchins particularly on pathways or by potential resting places. The prey remains of otter can be distinguished from the prey remains of other predators. For example, mammalian predators will leave clumps of feathers instead of plucking, and crustaceans are usually crushed when eaten by mammals, whereas birds will peck into shells, leaving them partially intact.
- **Pawprints** - otter have distinctive prints which can be distinguished in soft peat, mud, or sand and may be able to support identification between adult and young otter.
- **Spraint / castlings** - otter faeces are used to mark territories, often in visible locations on boulders at strategic points e.g., a river confluence, bridge, or loch discharge point. Spraints have a distinctive smell and often have evidence of fish bones. Castlings are built up piles of grass, soil or other substrate which may also be used as a spraint location. Spraint with a milky appearance may also indicate the presence of cubs.
- **Paths** - terrestrial routes otter use to move between sites, typically of 6 inches width, which may be used in preference to swimming during periods of high flow. Due to potential confusion with paths created by other species such as sheep and rabbits, terrestrial paths may also require confirmation by spraint, prey, slides, or prints.
- **Slides** - flattened area adjacent to water features where the otter has entered a water body The presence of slides – usually associated with a pathway - can be a useful confirmation of otter presence on a pathway which may be used by other species.

3.2.5. Survey data collected to inform the report was collected in July 2024, in line with NatureScot guidance (NatureScot 2023). Otter survey data to inform planning applications and EPS licences expire after 2 years, thus, data collected to inform the survey is valid until July 2026.

3.3. HABITAT EVALUATION

3.3.1. Habitat quality was assessed, where relevant, for the survey area, focusing on the following features:

- **Prey** - likelihood of availability, abundance, and diversity of potential prey items. Water and habitat quality e.g., evidence of pollution may also impact prey availability, seasonality, and diversity.
- **Disturbance** - proximity to anthropogenic activities (although not necessarily prohibitive of otter presence). Disturbance is a particularly important consideration for breeding otter and the location of natal holts.
- **Freshwater sources** - coastal otter require fresh water to remove salt from fur and facilitate grooming. Fresh water is a feature of particular importance at coastal sites. Information was gathered on the presence, quality, and nature of any freshwater sources.
- **Cover** - opportunities for cover, including long grass, overhangs, burrows, and crevices which may be used for resting and breeding.

3.3.2. In section 7 of this report (Habitat Evaluation Results), a ranking system will be used for prescribing a score (low, medium or high) to each of the 4 habitat features listed above. The ranking of habitat evaluation is based on professional judgement, considering the criteria listed in the bullet points above.

4. SURVEY LIMITATIONS

4.1.1. Throughout the survey area there were instances of inaccessible survey locations, mainly regarding health and safety in coastal areas and around waterbodies, broadly summarised below (Table 1). Other survey limitations including weather and identification are highlighted.

Table 1 Survey limitations.

Type of limitation	Description of main or most frequent limitations	Mitigation
Access	There were sections of the survey area that were physically inaccessible for surveyors or unsafe to survey e.g., steep coastal cliffs, rocky areas too close to the ocean.	In instances where it was safe and/or appropriate to do so binoculars were used from a distance to survey for signs.
Weather	Rainfall and extreme weather events can prohibit the viability of other surveys as signs of otter can be washed away by rainfall or raised water levels.	Surveys were carried out on days which had dry weather conditions for a minimum of 24 - 48 hours beforehand.
Identification (trampling & grazing)	Throughout the area of search there were varying degrees of herbivore pressure observed. In areas where herbivore pressure is high, it can be difficult to distinguish some ecological features as being specifically attributed to otter e.g., heavily used deer or sheep path that could share simultaneous use with otter.	Other signs of otter were sought to confirm presence, however commuting routes represented by paths and slides are not always marked by spraint. Otter signs found either side of an area of high herbivore pressure likely indicates otter using the same route.

5. CONTEXT

5.1. DESIGNATED SITES

5.1.1. Spaceport 1 lies within, and may have the potential to interact with, several European and designated sites summarised in Table 2 below.

Table 2 Designated Areas (Natural Heritage, excluding ornithological designations)

Site	Designation	Feature of interest	Distance from survey area (km)
Vallay	Special Site of Scientific Interest	<ul style="list-style-type: none"> • Machair • Saltmarsh • Sand dunes • Breeding bird assemblage • Greenland barnacle goose (non-breeding) 	2.8 km (northeast)
North Uist Machair	Special Area of Conservation	<ul style="list-style-type: none"> • Annual vegetation of drift lines • Atlantic salt meadows • Dune grassland • Humid dune slacks • Machair 	2.8 km (northeast) 3.9 km (southwest)

	<ul style="list-style-type: none"> • Naturally nutrient-rich lakes or lochs which are often dominated by pondweed • Shifted dunes • Shifting dunes with marram • Slender naiad (<i>Najas flexilis</i>) 	
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5.1.2. There are no designations that feature otter in close proximity to the development.

5.1.3. A short-duration tenancy agreement was initiated 2022. The tenancy agreement was developed in conjunction with the RSPB and is focused on providing wader habitat, corncrake habitat and species rich grasslands.

5.2. PREVIOUS SURVEYS

5.2.1. An otter survey was carried out within 300 m of the proposed development in August 2019 and repeated in September 2021, following the same methodologies and approach. The surveys involved systematically searching for field signs within suitable habitats within the survey area, with a focus on coastal areas and freshwater bodies. Typical otter field signs, as described in Chanin (2003), which included spraints, footprints, holts, couches and slides were recorded as target notes and a GPS location.

5.2.2. Both surveys found extensive evidence of otter, although some evidence of change in distribution / use of the site was observed in the 2021 survey, thought to be related to greater public and recreational use of the site following the transition of the site from private to Comhairle ownership. Key areas of habitat use were concentrated around Loch Scolpaig, Scolpaig Bay over both surveys, as was evidence of a clear commuting / washpool route from the centre of the site to the north of the survey area. Observations of breeding otter and an active resting place (holt) were made in 2019, however the same resting place was inactive in 2021. Potential resting places were observed in an area of gorse to the south of the Scolpaig Loch and a rock pile to the east of the existing access track.

6. PROPOSED DEVELOPMENT

6.1.1. The otter survey cover both stages of construction (subject to timescales of delivery of the Phase 2 construction, a further survey may be necessary). The Phase 1 'enabling works'; comprise:

- Vehicle Turning Area, Storage and Parking - 855.6 m² for vehicle turning, equipment assembly, storage, and access to the equipment storage
- Culvert Upgrade – the existing submerged culvert forming part of the causeway between 'upper' and 'lower' Loch Scolpaig will be replaced with a larger box culvert
- Upgraded access track and associated laybys – upgrade and widening of the existing access road from the A865, including a visibility splay at the site entrance and four new laybys to include additional options for launch and emergency vehicle parking
- New access track – approximately 102 m of new access track between the existing farm buildings, 3.7 m wide
- Parking – additional car parking spaces, including accessible parking will be provided at the site entrance (10 spaces in total). These spaces will be available to the public when there are no launch restrictions. Additional car parking space for the launch operator will be provided at the hardstanding area adjacent to farm buildings.

6.1.2. Phase 2 Spaceport Infrastructure comprise:

- Launch Pad – a 10.1 x 13.1 m² (132.3 m²) reinforced concrete pad incorporating an integrated sump with removable open grid cover, and perimeter drainage channel with removable bolted covers. The sump is fitted with shut off valve, and has controllable drainage to the soakaway
- Pad Loading Area – a 576 m² area of crushed rock hardstanding surrounding the launch pad for vehicle turning and tower installation
- Tether Points – array of twelve concrete 1 m x 1 m x 0.75 m tether points with inset tie ring surrounding the launch pad for securing launch tower/ rail and will be set level with the adjoining ground level
- Water Deluge System - pumped water supply to launch pad water spray system
- Containment (Liquid Storage) Tank – galvanised steel sectional tank of 63,500 litre capacity with a galvanised steel cover with access hatch and vents, approximately 8.2 m x 11.4 m
- Soakaway – below ground clean crushed rock soakaway approximately 10 m x 18 m x 1 m
- Water storage – galvanised water storage tank of 58,100 litre capacity on block piers on concrete base 5.4 m x 5.4 m
- Fencing – 1.1 m high rylock stock proof fencing surrounding farmstead hardstanding area and launch pad infrastructure, with two galvanised steel field gates, approximately 502 m in length
- Upgraded byre – incorporating new access, windows, storage, workshop, communications room, water pump set, and 2.5 m VHF cable on gable end. Roof drainage discharges to a soakaway north of the water storage tank (1 m x 2 m x 0.3 m)

7. HABITAT EVALUATION RESULTS

7.1. PREY AVAILABILITY

- 7.1.1. The site was determined as a diverse, high-quality habitat for otters, with a range of foraging opportunities across both the marine and terrestrial environment. The coastline is frequently indented with narrow inlets with plentiful habitat supporting typical marine fish prey items (e.g., pollock and saithe), bays (e.g., flounder), and rock pools with potential to support prey items (crustaceans, butterfish). Loch Scolpaig is fished recreationally for trout and is known for the quality and size of the fish (Macdougall-Davis, 2011). The surrounding environment also includes peatland, blanket bog and machair which can provide diverse opportunities for a range of other prey items (birds, invertebrates, frogs)

7.2. DISTURBANCE

- 7.2.1. During the survey, there were several different groups of members of the public witnessed accessing the site for amenity purposes. Most of the site visitors came to observe Scolpaig Tower, viewing from the southern side of Loch Scolpaig. However, there were several groups of visitors who visited the beach, partaking in ball sports and swimming. Additionally, upon first arrival on site, there were 4x4 vehicle tracks along the length of the beach.
- 7.2.2. Evidence of well-developed man-made pathways was observed, notably from the existing vehicle access track to Dun Scolpaig. This path was located in close proximity to the stand of gorse observed south of Loch Scolpaig, which provides good cover for otter, with evidence of numerous pathways and spraint. At the time of the survey, this area had a lot of disturbance caused by sheep, with lots of sheep trampling and dung in this area, and lots of sheep fleece within the gorse, assumed to be evidence of the sheep using this area for cover.

- 7.2.3. In addition, the site is actively crofted under a short-duration tenancy agreement, and work relating to the development activities associated with the Spaceport, e.g. archaeological evaluation, building surveys and asbestos removal are ongoing at the site.

7.3. FRESHWATER SOURCES

- 7.3.1. Loch Scolpaig provides a substantial and reasonably high quality freshwater resource for otter. In addition, small freshwater pools, ranging from 10 cm diameter to several metres in diameter, are frequently found around the margins of Beinn Scolpaig. Small drainage channels are located in close proximity to the coast, providing further opportunities for foraging (e.g., invertebrates) in addition to essential opportunities for pelt washing.

7.4. COVER

- 7.4.1. The site featured occasional grassy overhangs and overhangs within the dune systems of the beach which could provide shelter and opportunity for burrowing. There was a large and dense stand of gorse on the eastern shore of Loch Scolpaig which could provide seasonal cover for resting or breeding. There are areas on the coast to the northwest of Loch Scolpaig where large boulders could provide cover opportunities, as well as the rocky foreshore. Extensive boulder fields, occasional grassland overhangs, and a stand of gorse provide sheltering opportunities for resting and breeding.

7.5. OTHER OBSERVATIONS

- 7.5.1. Mink scats were observed north and east of the survey site in 2021 and reported to NatureScot. No further mink scat or other observations were identified during the 2024 survey.

8. OTTER SIGN RESULTS

8.1. ACTIVE RESTING PLACES

- 8.1.1. No active resting places were observed during the survey (holt or couch). This includes a check of the active resting place previously identified in the 2019 survey (supplemented by observations of breeding otter).

8.2. POTENTIAL RESTING PLACES

- 8.2.1. One potential resting place was identified, in the form of a couch (TN07), on the southern shore of Loch Scolpaig on the eastern side of the access track, approximately 50 m from the nearest edge of the access track.
- 8.2.2. Two potential resting places identified during earlier surveys were also checked (the gorse stand south of Loch Scolpaig and the rock pile east of the existing access track). The gorse stand to the south of Loch Scolpaig was inundated with evidence of sheep trampling, dung and fleece, and one otter sign was identified in this area, in the form of a sprainting rock with several spraints of varying degrees of freshness (TN06). At the time of survey there were no otter signs found by the rock pile to the east of the access track.

8.3. OTHER SIGNS

- 8.3.1. Spraint and paths were limited to the riparian margins of Loch Scolpaig, with greater activity on the western loch and drainage channels.

9. DISCUSSION

- 9.1.1. A systematic search for otter signs within Scolpaig Farm was carried out in July 2024 to determine the presence and distribution of otter to inform the need for pre-construction requirements to protect otter as a European Protected Species (EPS).
- 9.1.2. Overall, there was a distinct change in the distribution of otter compared to previous surveys. The key area of use for otter is centred around the Loch Scolpaig and Loch Scolpaig drainage channel complex. Despite the concentration of spraint, the survey did not identify any active resting places within the survey area.
- 9.1.3. Evidence of otter remained around Scolpaig Bay and Loch Scolpaig, however evidence of the northly orientated path / washpool commuting route and spraint towards the north of the site was not observed, possibly due to the high presence of sheep in the area. A potential resting place was identified on the bank of Loch Scolpaig, approximately 50 m from the access track.
- 9.1.4. As concluded in previous surveys, the range of habitats across the site, with the rich and diverse nature of foraging opportunities, suggest that the area remains a relatively high-quality for otter with potential to support otter throughout the year, with one significant change – the amount of disturbance. The 2024 survey suggests an increased level of disturbance compared to those described in 2019 / 2021, likely arising from higher intensity grazing regime, higher concentration of livestock presence observed, development activities of the Spaceport and a more diverse / increase in recreational use of the survey area by people.
- 9.1.5. The weather conditions in the lead up to and during the survey were in line with guidance, with no known rainfall within 48 hours of the survey start time.

9.2. KEY AREAS OF OTTER USE

- 9.2.1. In 2019, and again in 2021, well established path and wash pool complexes were identified, running to the north of the development, with high concentrations of spraint signs associated pathways. The pool complexes were concluded to represent important potential play resource and washing areas for otter³.
- 9.2.2. However, there was no evidence of use of this area from the 2024 survey. It is possible that these areas may have formed a commuter route to active resting places on the north coast previously, with this holt now out of use there may be limited requirement for otter to commute to this location.
- 9.2.3. Loch Scolpaig was a key area of otter use in 2019, 2021 and 2024 with extensive evidence of signs including fresh spraint, associated with the margins of the loch.

9.3. IMPORTANCE OF SITE

- 9.3.1. The site remains as a diverse, high-quality habitat for otter with a range of foraging opportunities across the marine and terrestrial environment. However, changes were observed to have taken place within the habitat since the 2019 / 2021 surveys, comprising a change to livestock presence, land use, increased recreational use of the area and development activities associated with the Spaceport. Dun Scolpaig is now specifically referenced on Visit Hebrides website as a tourism venue⁴.

³ Washing is of particular importance to coastal otters, as salt from sea water must be cleaned from the coat after each foray into the ocean (Chanin, 2013).

⁴ <https://www.visitouterhebrides.co.uk/see-and-do/scolpaig-p523391>

9.3.2. Otter are still clearly present at the site, however there has been a marked shift in terms of distribution of activity. The distribution of spraints was not matched by identifiable otter paths connecting them due to the high concentration of sheep disturbance.

9.4. BREEDING POTENTIAL

9.4.1. Breeding otter and associated active natal resting place (holt) have previously been observed at the site to the far north of the development (2019). This location is over 1 km from the proposed construction and has not been resurveyed. This historical evidence of breeding otter nearby suggests the site does have the potential to support breeding otter.

9.5. RECOMMENDATIONS

9.5.1. No active resting places were identified within the survey area in 2024, and there is no requirement to secure an EPS licence, however, otter are present on site and Loch Scolpaig forms a key habitat / foraging resource.

9.5.2. The potential resting place identified on the shore of Loch Scolpaig, approximately 50 m from the access track, appeared to have regular use, with a several spraints present, each of varying degrees of freshness. This potential resting place should be visually monitored by a suitable qualified person in the lead up to construction works beginning to assess for fresh spraint.

9.5.3. Mitigation has been developed and forms part of a separate submission of an Otter Protection Plan covering the following actions:

- Traffic speed restrictions.
- Management of water quality and pollution events.
- Working hours.
- Excavation management.
- Commuting routes.
- An emergency procedure must be initiated by ground crews if new previously unrecorded otter resting places are suspected.

10. REFERENCES

Chanin P. (2003) Monitoring the Otter. *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. English Nature. Peterborough

NatureScot (accessed 2024) Guidance on Planning and Protected Animals: Protected Species Advice for Developers: Otter. [online] Available at: <https://www.nature.scot/sites/default/files/2018-09/Species%20Planning%20Advice%20-%20otter.pdf> [Accessed: 04/10/2024]

NatureScot (accessed 2024) Standing advice for planning consultations - Otters [online]. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-otters> [Accessed:04/10/2024]

NatureScot (2024) Vallay SSSI. [online]. Available from: <https://sitelink.nature.scot/site/1587> [Accessed: 04/10/2024]

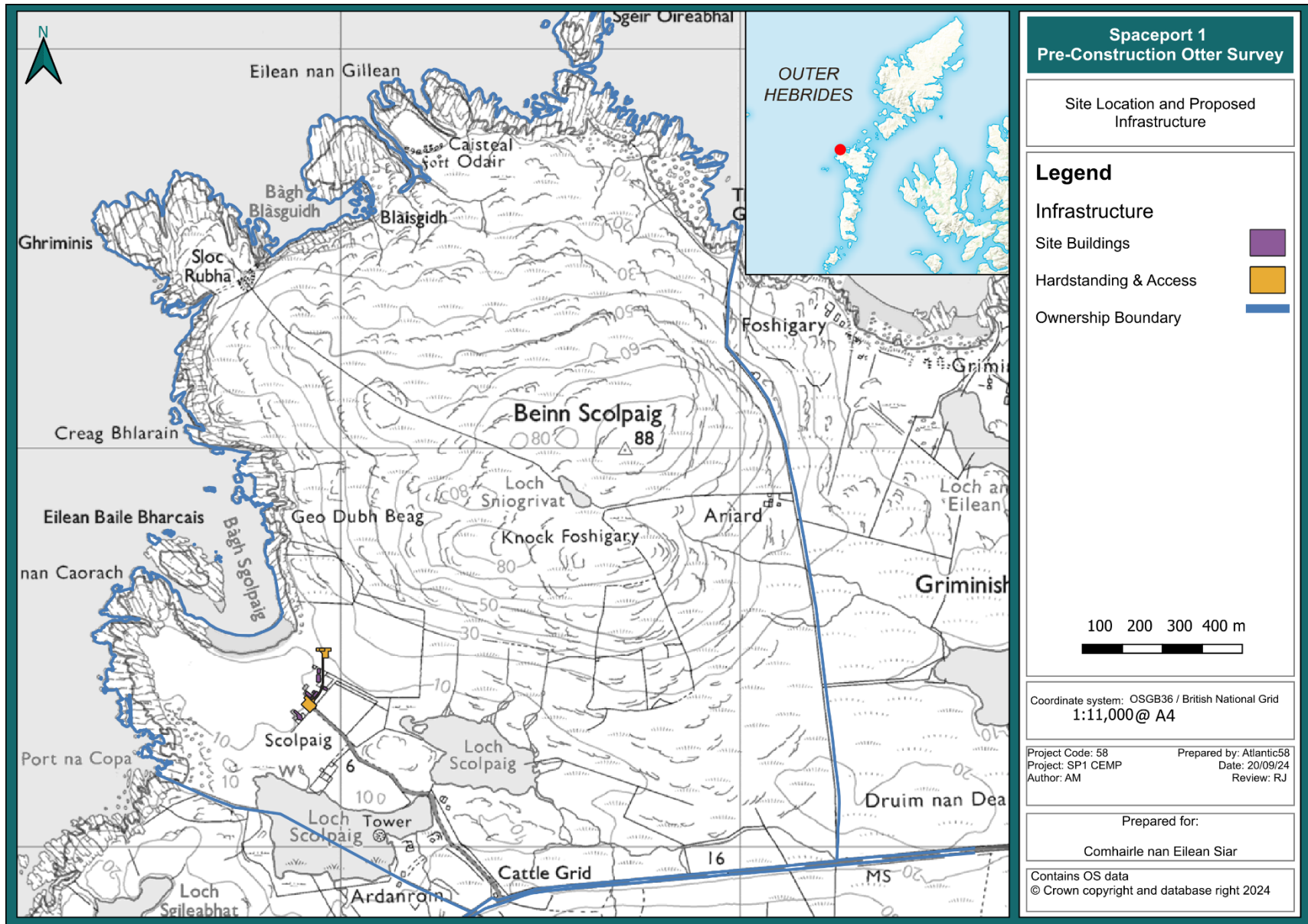
NatureScot (2024) North Uist Machair SAC [online]. Available from: <https://sitelink.nature.scot/site/8342> [Accessed: 04/10/2024]

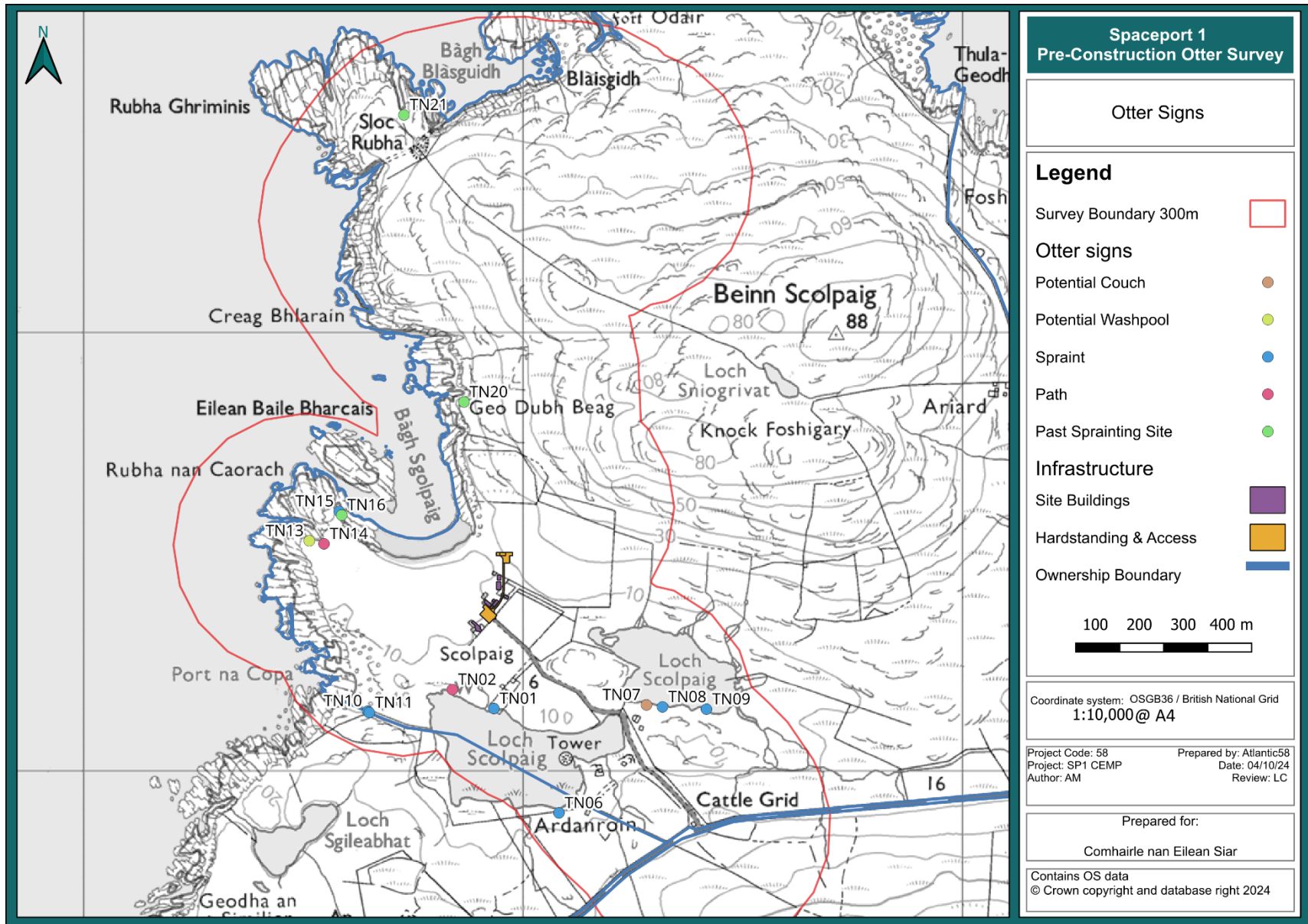
NatureScot (2024) North Uist Machair and Islands SPA [online]. Available from: <https://sitelink.nature.scot/site/8560> [Accessed: 04/10/2024]

NatureScot (2024) North Uist Machair and Islands RAMSAR [online]. Available from: <https://sitelink.nature.scot/site/8449> [Accessed: 04/10/2024]

NBN Atlas (2024) *Lutra lutra* (Eurasian Otter). [online]. Available at: https://records.nbnatlas.org/occurrences/search?q=lsid:NBNSYS0000005133&fq=occurrence_status:present&nbn_loading=true#tab_mapView [Accessed: 01/10/2024]

APPENDIX 1 - MAPS





APPENDIX 2 - TARGET NOTES

Title	Sign Type (priority)	Sign types (all)	Description	Northing	Easting
TN01	Spraint	SP	SP Sprainting rocks w remnants of several spraints.	875142.3587	72934.39343
TN02	Path	PA	PA Path network around Loch. Example picture.	875185.6383	72839.85259
TN06	Spraint	SP	SP Sprainting rock on lochs edge. Several spraints varying in freshness.	874904.4401	73082.51471
TN07	Couch (potential)	pCO + SP + PA	pCO + SP + PA Varying freshness spraints on flat smooth patch of nutrient enriched grass overlooking loch. Path network around but heavy use of area by sheep.	875150.5147	73281.71532
TN08	Spraint	SP + PA	SP + PA Sprainting mound on lochs edge. Semi-fresh spraint atop. Path continues around east on shore.	875146.0047	73318.17789
TN09	Spraint	SP	SP Old sprainting mound. Remnants of very old spraints and small bones etc but no fresh spraints.	875140.9624	73418.21608
TN10	Spraint	SP	SP Spraint on rock above culvert where stream feeds in toward shore.	875136.3591	72647.50175
TN11	Spraint	SP	SP Spraint rock by stream.	875133.1313	72650.59123
TN12	Habitat Note	Habitat	Good foraging - rockpool systems.	875322.1362	72517.12
TN13	Washpool (potential)	pWP	pWP Likely brackish so potential. Near main coastal otter path.	875524.589	72514.22095
TN14	Path	PA	PA Main path, shared with sheep.	875517.6727	72547.71244
TN15	Spraint	SP	SP Old spraint mound. Dried remains.	875591.5366	72582.50072
TN16	Spraint Mound (past)	pSP	pSP Historic spraint mound, no signs of use.	875583.1212	72587.99136

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SCOLPAIG FARM - SPACEPORT1

Preliminary Roost Assessment Report

For Comhairle nan Eilean Siar

08/11/2024

Spaceport1 Preliminary Roost Assessment Report

for Comhairle nan Eilean Siar

November 2024

Ver 1.1

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PROJECT TEAM:

PROJECT MANAGER	Laura Carse
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GRAPHICS	Angus Maclean
APPROVED BY	Laura Carse
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Appendix 1 - PRA Notes

Appendix 2 – Risk Assessment

1. INTRODUCTION

- 1.1.1. Atlantic58 was contracted by Comhairle nan Eilean Siar to carry out a Preliminary Roost Assessment survey of the Scolpaig Farmhouse and other associated farm buildings at Scolpaig Farm in North Uist in the Western Isles, northwest Scotland (see Figure 1).
- 1.1.2. The proposed development includes works that will comprise the repurposing of the farm buildings on the site, involving works to make the buildings watertight and structurally stable, which triggered the requirement for a Preliminary Roost Assessment to be carried out.

2. LEGISLATION

- 2.1.1. All bat species, their breeding sites and their resting places are afforded full protection in Scotland under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). For any wild bat species (and note where applicable, references to 'a bat' in the singular), it is an offence in Scotland to deliberately or recklessly:
 - capture, injure or kill a bat;
 - harass a bat or group of bats;
 - disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
 - disturb a bat while it is rearing or otherwise caring for its young;
 - obstruct access to a breeding site or resting place of a bat or otherwise deny an animal use of the breeding site or resting place;
 - disturb a bat in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
 - disturb a bat in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young; or
 - disturb a bat while it is migrating or hibernating
- 2.1.2. It is also an offence to;
 - damage or destroy a breeding site or resting place of such an animal (whether or not deliberately or recklessly);
 - keep, transport, sell or exchange, or offer for sale or exchange any wild bat (or any part or derivative of one) obtained after 10 June 1994; or
 - for any person on or after 1 May 2007 to possess, control, or transport a live, or dead wild bat or any part of a wild bat
- 2.1.3. Building work can result in the total loss of bat roosts and disturbance to or death of bats. Much of this damage can be avoided if operations are correctly timed and planned. As the statutory nature conservation body for Scotland, NatureScot is responsible for issuing licenses to permit development, including major works and minor home repairs, that might affect bats or their roosts.

3. PRELIMINARY ECOLOGICAL APPRAISAL

3.1. DESK STUDY

- 3.1.1. A Preliminary Roost Assessment (PRA) is usually preceded by a preliminary ecological appraisal, which typically consists of a desk study and a daytime walkover. Atlantic58 has been managing

and undertaking ecological and environmental works at Scolpaig since 2019 and has extensive knowledge relating to the habitats and activities on site including vegetation data (National Vegetation Classification). For this reason, a specific daytime walkover to cover a 2 km radius was not deemed necessary as data collected from previous surveys can be used instead. The surveyors completed a more limited walkover of the surrounding area close to the farmhouse and associated farm buildings.

- 3.1.2. A desk study was carried out to review existing information relating to the site and its surroundings, in reference to bats. The geographical extent of this study was a radius of 2 km from the farm buildings (see Figure 2).
- 3.1.3. The NBN Atlas (Scotland) was accessed for any local bat records within 2 km. There were no bat records with this radius and no recent records for North Uist.
- 3.1.4. No local records exist for bats in the vicinity of the site. The lack of records, however, does not necessarily mean a lack of bats. CIEEM (2017) states that the availability of records of protected or priority species will vary in any location, as it may be dependent on the presence of local experts. The remote nature of this site, its low population density and subsequent lack of development, likely all contribute to the lack of official bat records.
- 3.1.5. The Outer Hebrides Bat Group was formed in 2024 and at the time of writing had not yet published any data on bat populations in the Uists. Upon consultation, the Outer Hebrides Bat Group confirmed there were no official records in North Uist but stated that there were three separate reports from local amateur naturalists of bats witnessed around the sea caves in the Scolpaig area.
- 3.1.6. The NatureScot Sitelink¹ website was accessed to determine if there are sites with statutory nature conservation designations within the 2 km radius of the surveyed buildings. The West Coast of the Outer Hebrides SPA (NatureScot, 2024) is within the 2 km radius and includes the full west coast on North Uist. The site is designated on ornithological grounds and has no bat interests.
- 3.1.7. Records from Western Isles Historic Environment² were accessed to review details about the farm buildings. Scolpaig Farm is a rare example of a *Tack Farm*, from the Victorian period of agricultural improvements in North Uist. It has been unoccupied since 1990's and has fallen into a state of disrepair. Several of the associated outbuildings are in various states of repair. Several archaeological and structural surveys have also been undertaken relating to the farm buildings.

3.2. HABITAT CONDITION

- 3.2.1. Scolpaig Farm is situated approximately 120 m to from the west coast of North Uist and exhibits several classic coastal habitat features such as dune systems, dune grassland and coastal heathland. Loch Scolpaig lies to the southeast of the farm buildings and is split by the main access track from the main road. The loch is shallow in depth, with areas of swamp in the west and marshy grassland to the east. Much of the wider site to the north constitutes blanket bog, wet heath and marshy grassland.
- 3.2.2. The site is agriculturally managed, with fields planted with arable crops and livestock (sheep) grazing at certain times of the year. The farm is managed to create suitable habitat for corncrake, providing a wide variety of wildflower species in the early to late summer months.
- 3.2.3. There are few linear features on site and very few trees. This is relevant as it lowers the suitability of the site for commuting bats, who use features in the landscape to navigate. Trees also provide roosting opportunities, and often attract a variety of insects.

¹ NatureScot Sitelink - <https://sitelink.nature.scot>

² Western Isles Historic Environment - <https://her.cne.siar.gov.uk>

- 3.2.4. Prey availability is likely to be high through the summer months due to the diversity of crops and wildflowers on site. There is a relatively broad assemblage of invertebrate species, largely comprising common and widespread species, including thirteen butterfly and moth species, six species of bee and six species of dragonfly and damselfly. There is likely to be a high presence of midges throughout the summer, an important food source for foraging bats.
- 3.2.5. Disturbance to the site is limited to recreational and agricultural use. The site is open to the public and is used by tourists, dog walkers and hikers. The site is subject to very little light pollution, with very few properties within proximity to the site and no large settlements nearby.
- 3.2.6. In summary, the site is of (high medium low?) habitat for prey, cover, foraging, light.

4. METHODOLOGY

- 4.1.1. A Preliminary Roost Assessment (PRA) was carried out on the 25th of September 2024. The PRA was carried out by Karen Yearsley (BSc Hons, NS licence no. 259827) and Angus Maclean (BSc Hons), and assisted by Shona Morrison. The survey followed the recently updated BCT best practice survey techniques outlined in BCT good practice guidelines (4th Edition) (Collins, J., 2023), as well as guidance from The Bat workers manual, which covers safe systems of work (JNCC, 2012).
- 4.1.2. A PRA is required where a development proposal includes demolition of a structure or if a structure will be modified in such a way that bats or their roosts could be directly impacted if present. A PRA of a building includes a detailed inspection of both the interior and exterior of a building, the purpose of which is to gain information about potential and actual bat entry and exit points, bat roosting location and any evidence of bats found. This assessment then informs the future surveys which will be required.
- 4.1.3. For this PRA, surveyors were only able to access the outside of all the buildings. Health and Safety constraints (identified by structural and asbestos surveys) meant that no access was permitted inside any of the buildings. The surveyors were under strict instruction not to open any door or windows, which meant taking photographs of the interior of the buildings was not possible.
- 4.1.4. A systematic search of the exterior of the buildings was carried out to look for potential and actual bat access points and roosting places. All external walls, windowsills and door frames were inspected for signs of bats. This included: bat droppings, feeding remains, oil and urine stains, scratch marks, bat corpses and bats.
- 4.1.5. Ladders were used to access higher areas of the building, including the roof as far as was practicable and safe. An endoscope was used to investigate cracks, voids and gaps. Torches and telescopic mirrors were also used. Potential Roost Features (PRFs) were photographed, mapped and described, and this information is collated into a table and map form in Appendix 1.
- 4.1.6. Before any survey work was undertaken a full risk assessment was carried out by the surveyors (Appendix 2).
- 4.1.7. The farm buildings were each coded for ease of displaying and gathering information (shown in and in Figure 3).

Table 1. Codes and additional information aligning with Figure 3.

Building Codes	Colour Code	Accessibility for survey	Additional features
Main Farmhouse (MF + MF**)	Dark Green	No	The drystone wall encompassing the garden was also considered within the assessment for this building.

Farm Building 1 (FB1 + FB1**)	Purple	No	The associated drystone wall / building debris to the NW of the building were also considered within the assessment for this building.
Farm Building 2 (FB2)	Light Green	No	N/A
Farm Building 3 (FB3)	Orange	Yes	N/A
Farm Building 4 (FB4)	Blue	Yes	N/A

4.1.8. An assessment was then made upon the potential suitability of the proposed development site for roosting bats using the table below (Collins, J., 2023).

Table 2. Guidelines for assessing potential suitability of a proposed structure for bats, based on the presence of habitat features within the landscape

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels.	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats: however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats: however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).	Habitat that could be used by small numbers of bats as flight-paths such as gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to

	<p>larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.</p>	<p>be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
<p>a - Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute), but it is unlikely that they actually would (due to another attribute).</p> <p>b - For example, in terms of temperature, humidity, height above ground level, lights levels or levels of disturbance.</p> <p>c - Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.</p>		

4.2. CONSTRAINTS

- 4.2.1. In order to ascertain the optimal amount of information from a PRA survey, both the exterior and interior of a building would be assessed. A number of health and safety considerations prohibited entry to the building (presence of asbestos, structural instability and presence of vermin). Surveyors were restricted to assessing the building externally only. Farm buildings 3 and 4 were accessible as they had no roofs and posed no health and safety concerns. Farm building 2 had good visibility into the interior, although again, the surveyors were unable to enter.

5. FINDINGS

- 5.1.1. Five farm buildings in total were surveyed. For each structure, a plan was drawn up for each of the farm buildings, annotating the main features of interest, potential roost features (PRFs) and any other observed evidence of bats. The annotated building plans showing the PRFs, and their associated photographs are provided in Appendix 1. It should be noted that the map of the building is not drawn to scale. As indicated in Section 4.2, the interior of the building was not surveyed on health and safety grounds so the labels on the annotated figure refer to features or potential entrance points on the buildings' exterior only.
- 5.1.2. The relative locations of the farm buildings are outlined in Figure 3, with each building coded match the annotated building plans in Appendix 1.

5.2. MAIN FARMHOUSE

- 5.2.1. The main farmhouse has **high potential for roosting bats**, with many entry and exit points into the building. The thick stone walls have numerous cracks and crevices, some of which provide further entry points and some of which may lead into bigger voids within what is thought to be a cavity wall. These crevices and voids could potentially support multiple roosting bats.
- 5.2.2. Of particular note are the northwest facing gable end wall and the smaller west facing gable end wall, both of which have significant cracks leading both into the building and potentially into some large voids. The northwest facing gable end also has an open window below the apex which provides an additional entrance point to the interior. The farmhouse has a slate roof, with many loose, dislodged or missing slates, which provides further roosting opportunities.

- 5.2.3. The outhouse section of the farmhouse shares its southeast gable end wall. It also holds **high potential for roosting bats**, with many potential entry and exit points into the building, including open doors, open windows, and gaps under the corrugated roof. The roof itself does not have roosting potential, being of corrugated iron construction. The unpointed, thick stone walls (70-80cm) have multiple cracks and voids, which could support multiple roosting bats. Some of the cracks and voids provide access the building.

5.3. FARM BUILDING 1

- 5.3.1. Farm building 1 lies to the northeast of the farmhouse along with the other farm buildings. The structure has many entry and exit points into the building, including through the main door, through open windows and under the corrugated roof. The roof itself does not have roosting potential, being of corrugated iron construction. The unpointed, thick stone walls (70-80cm) have multiple cracks and voids, which could support multiple roosting bats. Some of the cracks and voids provide access to the inside of the building. It has a **high potential for roosting bats**.
- 5.3.2. There are also the ruins of a building, resembling a drystone wall, which provides a large number of cavities and voids that may be suitable for a transitional or day roost, however, its low height may be off-putting to bats.

5.4. FARM BUILDING 2

- 5.4.1. Farm building 2 is similar in construction to the other farm buildings but has had some renovations carried out. The walls are a mixture of pointed (some areas are better than others) and unpointed stonework. It has a corrugated roof, which look to be in a mostly good state of repair. The building is also in use / has been in recent use, for agricultural purposes. It has a **moderate potential for roosting bats**, which is likely limited to the northeast-facing gable end wall. The rest of the building has low potential for roosting bats.

5.5. FARM BUILDING 3

- 5.5.1. Farm building 3 is of a similar construction to farm building 2 but looks to have had its roof recently removed. The unpointed, thick stone walls (70-80cm) have multiple cracks and voids, which could support multiple roosting bats. It has a **moderate bat roost potential**.

5.6. FARM BUILDING 4

- 5.6.1. This structure is more of a ruin, with the walls lacking the structural integrity of the other farm buildings. There are cavities and voids in the walls which could provide roosting opportunities for individual bats, but they are sparse and quite exposed. The walls of the structure stand at no more than 3 to 4 feet, which makes is less appealing to bats, due to the increased risk of predation. Therefore, it has **negligible bat roost potential**.

5.7. HABITAT POTENTIAL

- 5.7.1. The landscape has a distinct lack of trees and therefore roosting opportunities are limited, and prey associated woodland is mostly absent. There are very few linear features in the vicinity to aid with commuting and foraging. Observations from surveyors on site in the summer months suggest that prey availability is likely to be high, with a variety of invertebrates present. Disturbance and light pollution is very limited on site, with low-impact recreational use and relatively small-scale agricultural activity.

5.8. SUMMARY OF FINDINGS

- 5.8.1. Observations made by Atlantic58 on previous surveys on site suggest reasonable numbers of invertebrates which would provide a suitable food source for bats. However, there is a distinct lack of suitable linear features and trees to aid commuting bats. Therefore, the **foraging potential** of the surrounding area is **low**.
- 5.8.2. The farm buildings provide a variety of potential roosting options, and due to the lack of trees and woodland in the wider area, roosting options may be limited to man-made structures in this vicinity.

6. RECOMMENDATIONS

6.1. EMERGENCE / ACTIVITY SURVEYS

- 6.1.1. Considering the findings of the PRA, emergence surveys will need to be carried out to establish the presence or likely absence of bats. The surveys will also provide information on:
- Location and access points of roosts.
 - Which bat species are using the buildings and their abundance.
 - Types of bat roosts present.
 - Potential flightlines of bats leaving the roost.
- 6.1.2. Table 5 below provides the number of surveys that will be required and Image 1 the rationale used to determine that number. Tables 3 and 4 provide the rationale for determining the number of surveys required and the required timing of the surveys.
- 6.1.3. The buildings vary between negligible and high potential for roosting, but the commuting and foraging potential is low. The low foraging and commuting potential lower the overall suitability ratings and therefore the number of surveys required. However, the BCT (2023) guidance states that 'if it has not been possible to access the structure internally, then an increased number of subsequent surveys may be necessary'.

Table 3. Recommended timings for presence / absence surveys to give confidence in a negative result for structures (also recommended for trees where other methods such as PRF inspection are not possible, but unlikely to give confidence in a negative result).

Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
May to August (structures) No further surveys required (trees)	May to September, with at least one of surveys between May and August	May to September, with at least two of surveys between May and August
<p>a - September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. September surveys are likely to miss maternity roosts due to dispersal before this time, but may pick up mating roosts.</p> <p>b - Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more. Survey timings should consider the prevailing conditions in the year of survey, which will vary geographically. In years with a cold spring, the surveys should not be started in early May or all completed in May. The surveys should maximise the possibility of detecting maternity roosts, which can switch roosts between pregnancy and lactation, and the optimum coverage includes the pre-parturition, post-parturition and mating periods.</p>		

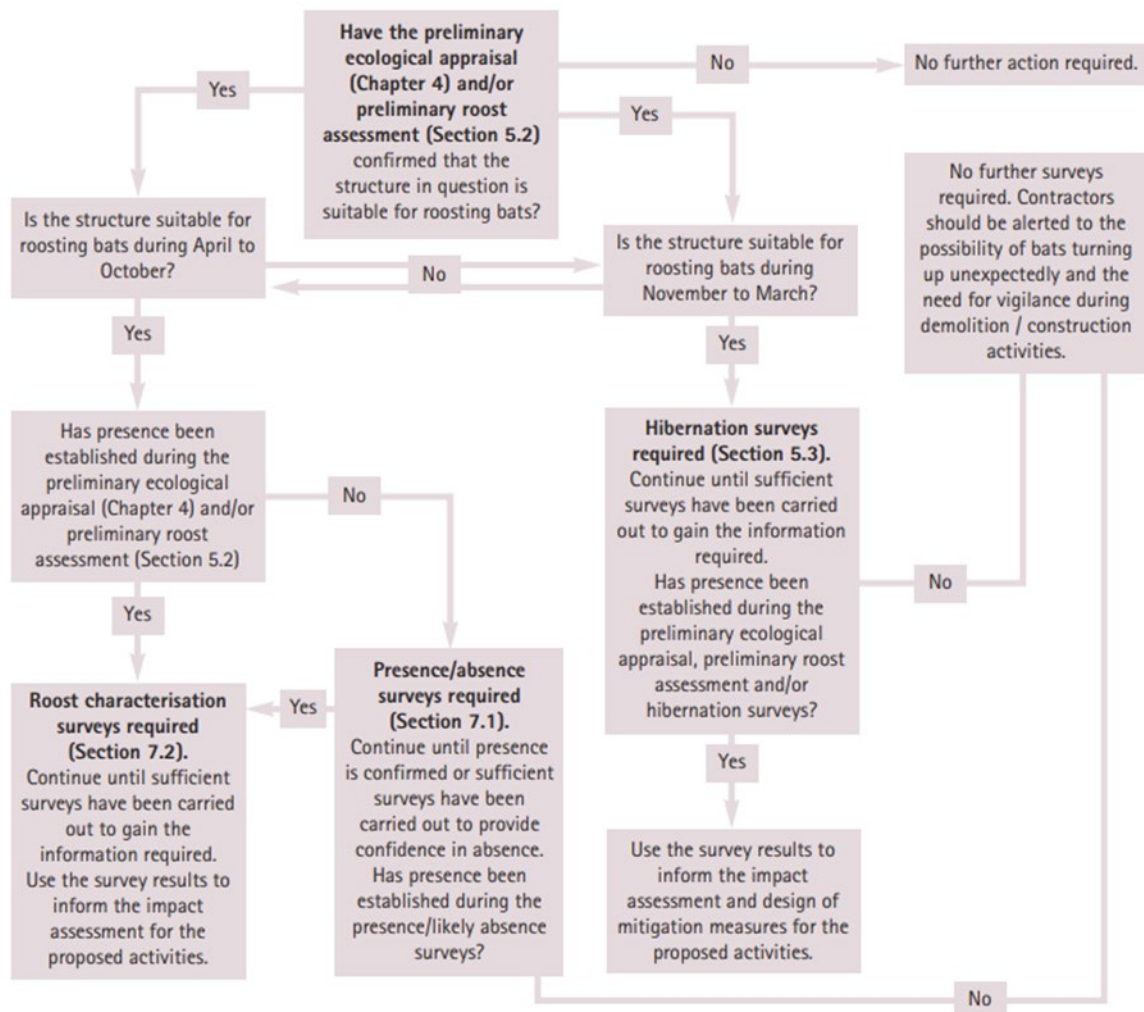
Table 4. Recommended minimum number of survey visit presence / absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
One survey visit. One dusk emergence survey ^a (structures). No further surveys required (trees).	Two separate dusk emergence survey visits ^b .	Three separate dusk emergence survey visits ^b .
<p>a - Structures that have been categorised as low potential can be problematic, and the number of surveys required should be judged on a case-by-case basis. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.</p> <p>b- Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 3) as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more.</p>		

Table 5. Number of required surveys for the Scolpaig Farm buildings

Farm Building	Number of required emergence surveys
Main Farmhouse (& associated drystone wall)	3
Farm building 1 (& associated building debris)	3
Farm building 2	2
Farm building 3	2
Farm building 4	0

- 6.1.4. The active bat season is generally accepted to be between April and October, but it is likely to be shorter in more northerly latitudes. Taking this into account, the 3 surveys should be carried out as follows (for the buildings requiring only 2 surveys, these will take place on 2 of these dates):
- Survey 1: Early - mid June
 - Survey 2: Mid - late July
 - Survey 3: Mid - late August
- 6.1.5. The surveys should be carried out using the updated best practice guidance outlined in the BCT Good Practice Guidelines (Collins 2023). Once the surveys have been carried out, the need for any further surveys and potential licencing and mitigation options will be assessed. This will be done following BCT survey guidelines (Collins 2023).
- 6.1.6. The flow chart (Image 1) illustrates the process used to establish which types of surveys are necessary for roosts in structures applied using professional judgement.
- 6.1.7. No construction works should be carried out upon the main farmhouse, farm building 1, 2 or 3, until the full suite of surveys shown in Table 5 have been completed and further recommendations have been provided based on the assessment made by the licenced bat ecologist.



Note on Figure 5.1: In some situations bats may use the same structure throughout the year and in these situations, both arms of the flow chart need to be fully considered.

Image 1. Flow chart for establishing which surveys are necessary for assessing roost potential in certain structures.

6.2. ASSESSMENT OF HIBERNATION POTENTIAL

- 6.2.1. The structures should be assessed for hibernation potential (see image 1 above). This could be achieved by the deployment of static bat detectors over the winter period to aid in determining the presence or likely absence of hibernating bats and establish the species present through sound-call analysis.
- 6.2.2. To aid in ascertaining hibernation potential, white sheets should be laid on the floors throughout the buildings. This would allow for easier collection of bat droppings should there be bats hibernating there over the winter, the white sheet will allow them to be more clearly seen and collected. This would also provide the potential option of sending droppings for DNA analysis to determine species present, should that not have been determined by sound-call analysis.

7. CONCLUSIONS

- 7.1.1. The Preliminary Roost Assessment (PRA) was supported by a desk assessment which returned no local records of bats in the area, however, anecdotal evidence from local naturalists suggests there are bats in the area.

- 7.1.2. The habitat available on site has few trees or linear features, limiting bat commuting options. Disturbance is minimal, with low-level seasonal tourism and no light pollution. Prey items in the form of a wide variety of invertebrates could support bat foraging in the summer months.
- 7.1.3. The assessment of the farm buildings at Scolpaig Farm found varied bat roosting potential. The main farmhouse has high bat roost potential, with several entrance points to the interior and many crevices in the walls and slate roof. Farm building 1 has high potential, with many cracks and voids in the thick stone walls offering access for roosting. Farm building 2 has moderate potential, especially in the northeast-facing gable wall. Farm building 3, lacking a roof, also has moderate potential due to its unpointed stone walls with cracks. Farm building 4 is a low, crumbling structure with negligible potential due to its height and exposure.
- 7.1.4. The buildings have been classified from negligible to high roosting potential, and therefore, emergence / activity surveys will be required for 4 of the 5 structures. The low overall foraging and commuting suitability reduces the survey count required; however, inaccessible structures require additional surveys as per BCT (2023) guidelines.
- 7.1.5. Survey requirements per building are:
- Main Farmhouse and associated structures: 3 surveys
 - Farm building 1 and associated debris: 3 surveys
 - Farm buildings 2 and 3: 2 surveys each
 - Farm building 4: 0 surveys
- 7.1.6. Surveys should occur during the active bat season (April–October), specifically:
- Survey 1: Early–mid June
 - Survey 2: Mid–late July
 - Survey 3: Mid–late August
- 7.1.7. Additional surveys, licensing, or mitigation may be recommended based on the findings of the emergence surveys. Construction works should not begin on the main farmhouse or farm buildings 1, 2, or 3 until all required surveys are complete and a licensed bat ecologist provides further guidance.

8. REFERENCES

Bat Conservation Trust. (2024) Bats in Buildings: What do bats look for in a home? [online] Available at: <https://www.bats.org.uk/our-work/buildings-planning-and-development/bats-in-buildings>

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition).

Joint Nature Conservation Committee. (2012) The Bat Workers' Manual. Pelagic Publishing, Exeter.

NatureScot (2024) West Coast of the Outer Hebrides SPA [online]. Available from: <https://sitelink.nature.scot/site/10484> [Accessed: 14/10/2024]

NBN Atlas (2024) Bats (*Vespertilionidae*). [online]. Available at: <https://species.nbnatlas.org/species/NBNSYS0000005133> [Accessed: 14/10/2024]

9. FIGURES

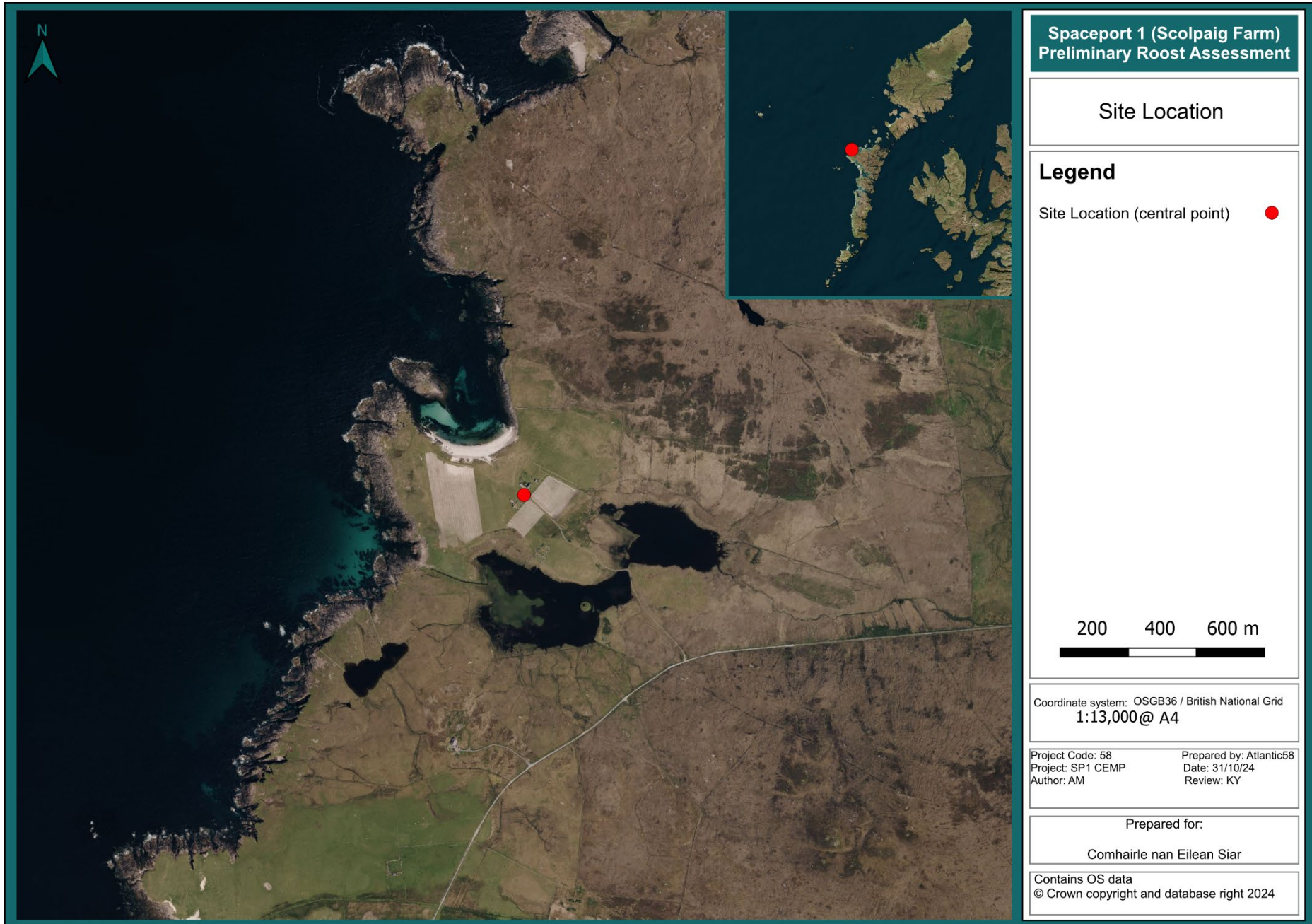


Figure 1. Site Location for the proposed development.

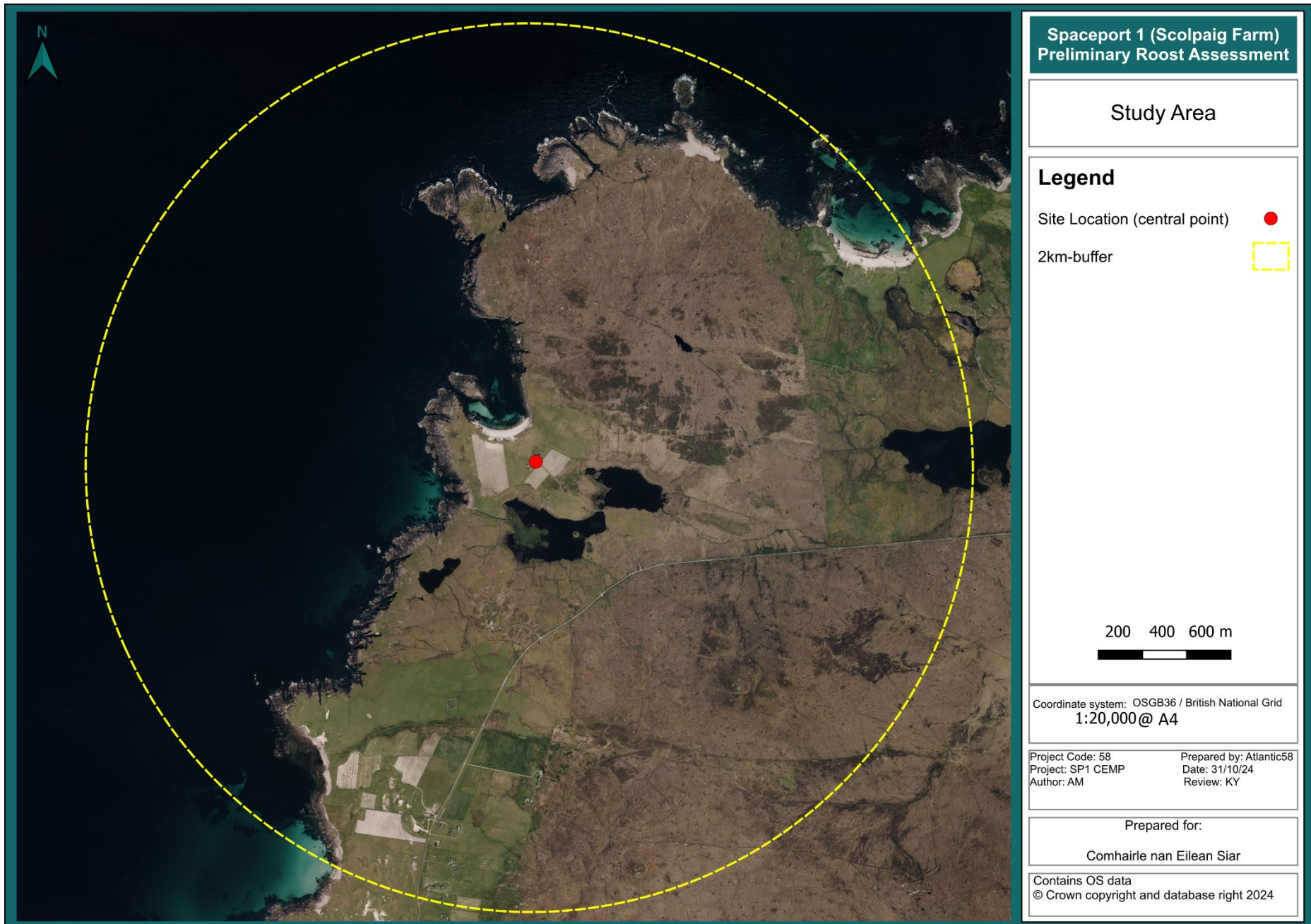


Figure 2. Study Area for the proposed Development.

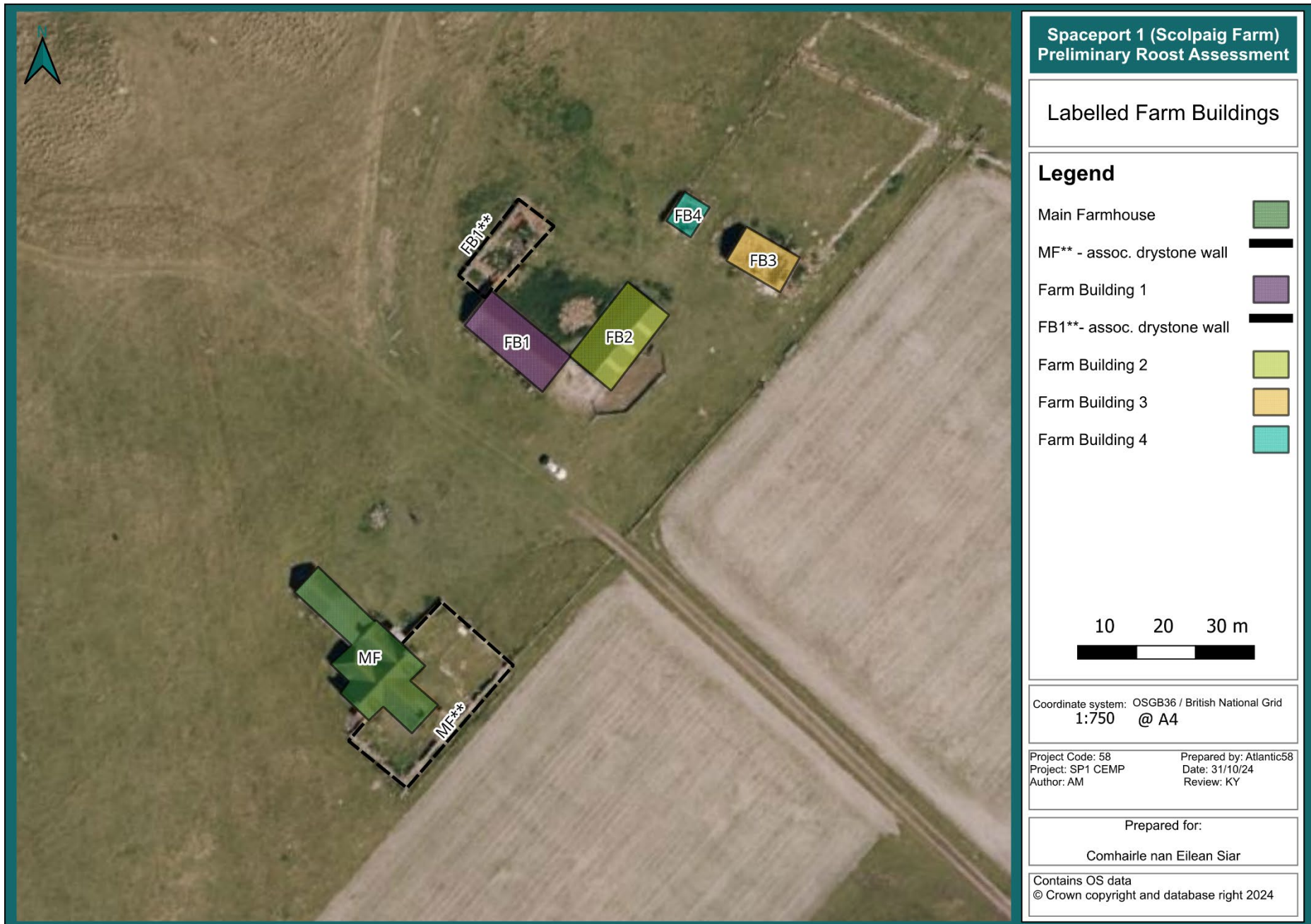


Figure 3. Labelled farm buildings (aligning with table 1).

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APPENDIX 1




Scolpaig Farm (Spaceport1)




PRA Notes
for PRELIMINARY ROOST ASSESSMENT



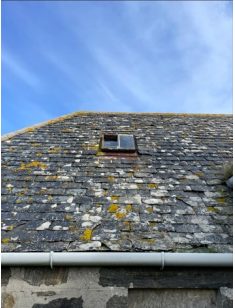
Appendix 1: PRA Notes




Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
Main Farmhouse				
1	1	1	Access point into void, with possible access into porch.	
1	2	2	Access point into porch.	




Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
1	3	3	Access point into main building.	
1	4	4	<p>Crevices / gaps in stonework leading to probable cavity wall / big open space.</p> <p>Likely access to main building and other smaller voids and crevices.</p>	
1	5	5	Gaps around window – access into void and main building.	



Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
1	6	6	<p>Various access points into farm building along the whole length of the farm building – between stone wall and corrugated roof. Various crevices and voids on unpointed stone wall.</p>	
1	7	7	<p>As per ref 8 and access point into farm building 1 via window.</p>	
1	8	8	<p>Access to Farm building via open window space. Multiple crevices and voids in unpointed stone wall, some of which also allow access into the building.</p>	

Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
1	9	9	Access to farm building above door. Crevices and voids in the unpointed stone wall.	
1	10	10	Access to the farm building between stone wall and corrugated roof. Access to the farm building on LHS of door and above door. Crevices and voids in the unpointed stone wall.	
1	11	11	Access to the farm building on either side of and above door. Crevices and voids in the unpointed stone wall.	

Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
1	12	12	<p>Access to farmhouse via cracks in gable end wall.</p> <p>Access to farmhouse (and possibly to farm building) above the corrugate roof of the farm building (farmhouse beams viewed through binoculars).</p>	
1	13	13	<p>Access to farmhouse / cavity wall between the top of the wall and roof.</p> <p>Lots of potential roosting spaces under tiles. This is the case on the whole of the farmhouse roof.</p>	
1	14	14	<p>Access to roof space / farmhouse via broken skylight window.</p>	

Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
Farm building 1				
2	1	1	Access to farm building via open window. Crevices and voids in the unpointed stone wall.	
2	2	2	Crevices and voids along the length of the unpointed stone wall.	
2	3	3	Access to the farm building via a large gap at the top of the gable wall. This gap also gives access to some voids in the stone wall.	

Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
2	4	4	Crevices and voids along the length of the unpointed gable end.	
2	5	5	Crevices and voids in ruins / drystone wall adjacent to farm building 1.	
2	6	6	Crevices and voids along the length of the unpointed stone wall. Access via open door.	

Map No	Map ref	Photo ref	Description of PRF / Access point	Photo
Farm building 2				
2	7	7	<p>The crevices and voids are fairly insignificant but could support a single, resting bat.</p> <p>Crevices and voids along the length of the unpointed gable end stone wall.</p>	
2	8	8	<p>Some crevices and voids on the RH side of the door. The wall has some mortar.</p>	



SPACEPORT 1 Otter Protection and Monitoring Plan

For Comhairle nan Eilean Siar

14/10/2024

SPACEPORT1
Otter Protection and Monitoring Plan
for Comhairle nan Eilean Siar

November 2024

Ver 1.0

PROJECT INFORMATION:

PROJECT CODE	58
NGR	NF 73027 876225
REGION	North Uist, Western Isles
LOCAL AUTHORITY	Comhairle nan Eilean Siar

PROJECT TEAM:

PROJECT MANAGER	Gareth Gentles
AUTHOR	Laura Carse
SITE VISIT	Angus Maclean
GRAPHICS	Angus Maclean
APPROVED BY	Ruth Jeavons
VERSION COMMENTS	V0.1 for comment

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GLOSSARY

Acronym	Definition
BBCPP	Breeding Bird and Corncrake Protection Plan
CEM	Construction Environmental Manager
CEMP	Construction Environmental Management Plan
CnES	Comhairle nan Eilean Siar
EclA	Environmental Impact Assessment
EnvCoW	Environmental Clerk of Works
EPS	European Protection Species
NS	NatureScot
NWCU	NatureScot's National Wildlife Crime Unit
OPMP	Otter Protection Management Plan
SEI	Supplementary Environmental Information
SEPA	Scottish Environment Protection Agency

1. INTRODUCTION

- 1.1.1. In December 2021, Comhairle nan Eilean Siar (the Comhairle) submitted a planning application under the Town and Country Planning (Scotland) Act 1997 (as amended) seeking permission to construct and operate 'Spaceport 1', a sub-orbital vertical launch spaceport, designed to provide generic infrastructure to meet the requirements of different operators of sub-orbital launch vehicles. The development site extends to 1.82 hectares of the 276 hectare Scolpaig Farm site on the Isle of North Uist (Planning Ref: 21/00646/PPD).
- 1.1.2. The planning application was informed by an Environmental Impact Assessment (EIA) and Supplementary Environmental Information (SEI). Planning permission was granted on 26 July 2023, subject to the development being undertaken in accordance with thirty five conditions and the environmental mitigation measures outlined in the SEI.
- 1.1.3. This Otter Protection Monitoring Plan (OPMP) supports the Comhairle deliver construction of 'enabling infrastructure' (phase 1 works) in advance of a private sector Operator to take forward the construction of the 'spaceport infrastructure' (Phase 2 works) and operate the Spaceport. It does not cover the operational phase of the site.
- 1.1.4. Pre-construction surveys for otter were undertaken to provide up-to-date information about the distribution and abundance of otter prior to construction work (22nd – 23rd July 2024). The results of the surveys inform the development of this OPMP, and associated mitigation and licensing requirements for construction, developed in line with NatureScot guidance.
- 1.1.5. Bird species will be covered separately in a Breeding Bird Protection Plan and Corncrake Protection Plan.

2. SCOPE OF PROJECT

2.1. WORKS DESCRIPTION

- 2.1.1. The otter survey and protection plan are anticipated to cover both stages of construction (subject to timescales of delivery of the Phase 2 construction, a further survey may be necessary). The Phase 1 'enabling works'; comprise:
 - Vehicle Turning Area, Storage and Parking - 855.6 m² for vehicle turning, equipment assembly, storage, and access to the equipment storage.
 - Culvert Upgrade – the existing submerged culvert forming part of the causeway between 'upper' and 'lower' Loch Scolpaig will be replaced with a larger box culvert.
 - Upgraded access track and associated laybys – upgrade and widening of the existing access road from the A865, including a visibility splay at the site entrance and four new laybys to include additional options for launch and emergency vehicle parking.
 - New access track – approximately 102 m of new access track between the existing farm buildings, 3.7 m wide.
 - Parking – additional car parking spaces, including accessible parking will be provided at the site entrance (10 spaces in total). These spaces will be available to the public when there are no launch restrictions. Additional car parking space for the launch operator will be provided at the hardstanding area adjacent to farm buildings.
- 2.1.2. Phase 2 Spaceport Infrastructure comprises
 - Launch Pad – a 10.1 x 13.1 m² (132.3m²) reinforced concrete pad incorporating an integrated sump with removable open grid cover, and perimeter drainage channel with removable bolted covers. The sump is fitted with shut off valve and has controllable drainage to the soakaway.

- Pad Loading Area – a 576 m² area of crushed rock hardstanding surrounding the launch pad for vehicle turning and tower installation.
- Tether Points – array of twelve concrete 1 m x 1 m x 0.75 m tether points with inset tie ring surrounding the launch pad for securing launch tower/ rail and will be set level with the adjoining ground level.
- Water Deluge System - pumped water supply to launch pad water spray system.
- Containment (Liquid Storage) Tank – galvanised steel sectional tank of 63,500 litre capacity with a galvanised steel cover with access hatch and vents, approximately 8.2 m x 11.4 m.
- Soakaway – below ground clean crushed rock soakaway approximately 10 m x 18 m x 1 m.
- Water storage – galvanised water storage tank of 58,100 litre capacity on block piers on concrete base 5.4 m x 5.4 m.
- Fencing – 1.1 m high rylock stock proof fencing surrounding farmstead hardstanding area and launch pad infrastructure, with two galvanised steel field gates, approximately 502 m in length.
- Upgraded byre – incorporating new access, windows, storage, workshop, communications room, water pump set, and 2.5 m VHF cable on gable end. Roof drainage discharges to a soakaway north of the water storage tank (1 m x 2 m x 0.3 m).

2.2. WORKS PROGRAMME

2.2.1. The works programme will take place over two stages:

- **Phase 1 Enabling works** – November 2024 – March 2025.
- **Phase 2 Spaceport Infrastructure construction** – TBC.

3. ECOLOGICAL SENSITIVITIES ON SITE

3.1. DESIGNATED SITES

3.1.1. There are no sites designated with otter as a qualifying feature or conservation objective of the designation in close vicinity of the development.

3.2. SURVEY EFFORT

3.2.1. An otter survey was carried out within 300 m of the proposed development in August 2019 with reference to appropriate NatureScot guidance (2019), and Chanin (2003). However, to ensure baseline data was up-to-date and suitable to inform the EIA, this survey was repeated in September 2021, following the same methodologies and approach. The surveys involved systematically searching for field signs within suitable habitats within the survey area, with a focus on coastal areas and freshwater bodies. Typical otter field signs, as described in Chanin (2003), which included spraints, footprints, holts, couches and slides were recorded as target notes and GPS, can be found in the Pre-Construction Otter Survey Report.

3.2.2. Both surveys found extensive evidence of otter, although some evidence of change in distribution / use of the site was observed in the 2021 survey, thought to be related to greater public and recreational use of the site following the transition of the site from private to council ownership.

3.3. PRE-CONSTRUCTION SURVEYS

3.3.1. A pre-construction otter survey was undertaken in July 2024. The survey identified extensive signs of otter, notably around the margins of Loch Scolpaig and the bay area to the north,

however no active resting places (holt or couch) were identified within the survey area (see Pre-Construction Otter Survey Report).

4. MITIGATION MEASURES

4.1.1. This section details species-specific mitigation measures, and project wide mitigations and procedures that relate to ecological sensitivities.

4.2. LEGAL PROTECTION

4.2.1. Otter are protected in Scotland by the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) and are a European Protected Species (EPS). This protection makes it an offence to:

- capture, injure or kill an otter,
- harass an otter or group of otters,
- disturb an otter in a holt or any other structure or place it uses for shelter or protection,
- disturb an otter while it is rearing or otherwise caring for its young,
- obstruct access to a holt or other structure or place otters use for shelter or protection, or otherwise deny the animal use of that place,
- disturb an otter in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species,
- disturb an otter in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young,
- or to deliberately or recklessly damage or destroy a breeding site or resting place of an otter.

4.3. OTTER SIGNS

4.3.1. Otter signs were located throughout the survey area, however no active resting places were identified within the survey area. One potential rest site was identified (Table 1).

4.3.2. Key areas of habitat – Loch Scolpaig represents the key habitat area which may be impacted by the development. A designated work zones has been specified and will be coordinated by the CEM/EnvCow (Construction Environmental Manager, Environmental Clerk of Works)¹ for the replacement of the culvert at Loch Scolpaig. The CEM/EnvCoW should be present on site for work in areas of high otter .

Table 1. Potential otter resting places identified during pre-construction surveys.

<i>Location</i>	<i>Feature (holt, natal holt, or couch)</i>	<i>Status at time of survey (active or potential)</i>	<i>Distance from nearest work zone</i>	<i>6-fig-GR (100m)</i>
Loch Scolpaig	Couch	Potential	50 m (access track)	NF732751

¹ CEM / EnvCoW is the terminology for the designated representative from Atlantic58.

4.4. OTTER PROTECTION AND MONITORING PLAN (CONSTRUCTION)

- **Pre-construction surveys** to assess all suitable otter habitat within 200 m from the proposed work zones to check known holts and resting places as well as habitat suitable for hosting new resting places.
- **Exclusion zones** to be marked around any otter holts and resting places. Buffer distances as follows: for resting places **where otter breeding has been confirmed** the zone will be at least 200 m. For **non-breeding holts and resting places**, the exclusion zone will be a minimum of 30 m, and minimum of 100 m when activity will cause disturbance by loud noises. The definition of what is considered loud will be made by the Construction Environmental Manager and take landscape, wider otter territory, and duration of noise into consideration.
- **EPS Licence (if required)** - where exclusion zones of the required size are not possible, works will require an EPS licence from NatureScot before they can proceed.
- **Avoid otter habitat** - avoid working in the vicinity of suitable otter habitat during hours of darkness and within two hours before sunrise and two hours after sunset. This can be reduced to one hour between November and February (inclusive) due to the limited daylight.
- **Emergency Procedure** - an emergency procedure must be initiated by ground crews if new previously unrecorded otter resting places are suspected, if an inactive resting place becomes active, or otter are seen in the vicinity of works. Initiating an emergency procedure involves all works ceasing immediately when safe to do so, until the project Construction Environmental Manager can attend site, assess the situation and recommend an appropriate course of mitigation.
- **Excavation management** - all excavations will be back filled at the end of each day, covered or an exit ramp created in exposed trenches or holes to prevent otters and other animals becoming trapped.
- **Commuting routes** - cut vegetation or construction materials should not be left in a position that may obstruct otter resting places or paths.
- **Traffic speed restrictions** - traffic speed will be restricted to 10 mph and associated signage will be installed to limit traffic.
- **Pollution events** - Loch Scolpaig and its fishery resource comprise a key habitat for otter. A dedicated water management plan for the installation of the culvert has been developed, including the installation of a pre-cast concrete culvert to avoid the need for concrete pouring adjacent to the waterbody. A CAR Licence for the culvert replacement is currently under determination and will set water quality parameters that will be met as part of a Construction Environment Manager scope of work. Breaches of the CAR licence will result in SEPA intervention.
- **Pollution events** - the temporary construction compound will include a designated fuel storage area which will also be used to ensure any pollutants do not contaminate otter habitats in proximity to the development.
- **Pollution events** - the Construction Environmental Manager will be appointed during the construction phase to advise on and monitor the implementation of environmental mitigation and good practice and compliance of works with the Mitigation Register.

4.5. PROVISION OF CONSTRUCTION ENVIRONMENTAL MANAGER (ENVCOW) TO OVERSEE WORKS

- 4.5.1. The CEM/EnvCow will audit and monitoring the phase 1 and phase 2 construction works on-site, compliance with planning conditions and the implementation of environmental and ecological commitments and mitigation made in the EIA&SEI report, and if considered necessary in the

professional opinion of the CEM/EnvCow, recommending stopping the job where potential breaches have been identified.

4.6. DESIGNATION OF CLEAR ROLES AND RESPONSIBILITIES

- 4.6.1. It is the responsibility of the Principal Contractor to understand and implement measures contained within this OPMP, and for all site operatives to follow it. Specific site toolbox talks should be undertaken to ensure all contractors site personnel are adequately briefed.
- 4.6.2. It is the CEM/ EnvCoW's responsibility to monitor compliance with the OPMP during the construction phase and report any opportunities for improvement or breaches to the Principal Designer.
- 4.6.3. The CEM/ EnvCoW's should be afforded the authority to prescribe that works should be halted with immediate effect if non-compliance with the OPMP is likely to result in a wildlife offence.
- 4.6.4. The Principal Contractor and crews shall be given reasonable notice to react to CEM instruction except in the case of emergencies.

Table 2. Roles and responsibilities for implementing the OPMP.

Role	Responsibility
All Site Personnel	Adhere to the measures contained within this OPMP.
Construction Contractor Environmental Manager (CCEM)	<p>Construction representative (Principal Contractor)</p> <ul style="list-style-type: none"> • Improve environmental awareness of all site personnel. • Audit adherence to the measures contained within this OPMP • Consult CEM/EnvCoW for any encounters or anticipated encounters with protected species during the works.
Construction Environmental Manager/ Environmental Clerk of Works (CEM /EnvCoW)	<p>Appointed contractor (Atlantic58)</p> <p>Responsible for onsite implementation, recording and compliance with environmental and ecological commitments.</p>
All Site Personnel	On-going awareness and due diligence for potential encounters with protected species, their resting places.

4.7. IMPROVE ENVIRONMENTAL AWARENESS AMONGST CONSTRUCTION CREW

- 4.7.1. All personnel on site are to understand the protection afforded to otter and acknowledge the reporting process should a new shelter be discovered. This is addressed within the environmental section of the project induction.
- 4.7.2. The Principal Contractor should be provided with a brief by the CEM/ EnvCow (or nominated representative) on the legal status of otter and site constraints.
- 4.7.3. The OPMP should be explained in detail during the formal induction given to all site personnel prior to commencing work.

- 4.7.4. The project induction should be updated to reflect the confirmation of new constraints (such as the presence of a newly discovered otter holt or water vole burrows) if and when they are first observed.
- 4.7.5. In addition to the CEM/ EnvCow should meet relevant sub-contractors before any on-site work commences to inform them of the presence of any site-specific constraints as well as areas of the development where extra measures are required.
- 4.7.6. Any individual found to be disregarding working practices designed to mitigate negative impacts upon protected species will be deemed unfit to continue working until such as point when environmental awareness training can be reaffirmed and recorded as understood.
- 4.7.7. Wildlife crimes, either intentional or reckless, will be reported to NatureScot's National Wildlife Crime Unit (NWCU).

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APPENDIX F WATER MANAGEMENT PROCESS AND LICENCE

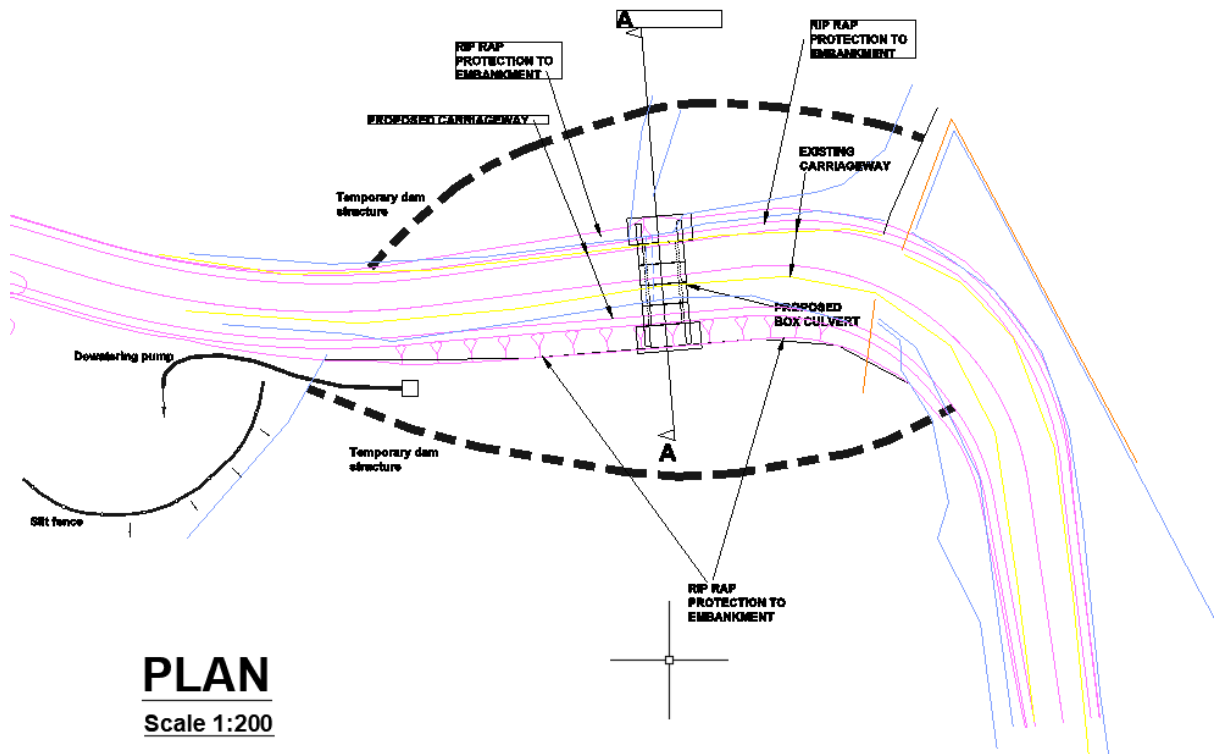
Water Management Process

CAR Licence

Scolpaig Farm Access Road – Causeway Improvement



Location of Works



Temporary dam structure:

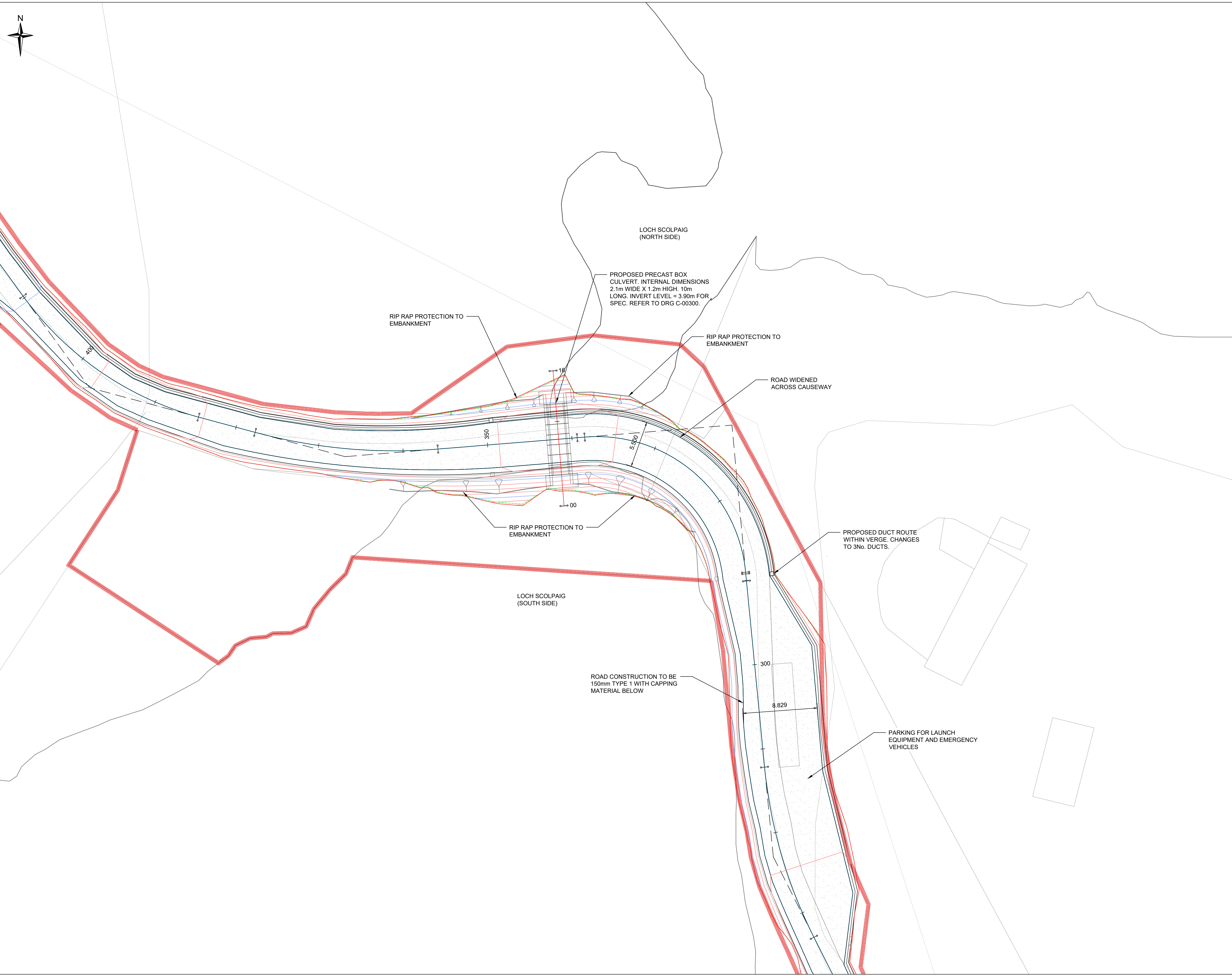
Required to enable dewatering of the working area prior to commencing construction of the box culvert. Choice of system – guided by water depth and environmental impacts. This location has quite shallow water depths, therefore there may be suitable off the shelf proprietary systems available (such as <https://onsite.co.uk/capability/cofferdams/>) that could be relatively easily deployed. Equally a combination of sand bags and impermeable liners could be used to create an effective dam structure with minimal environmental impacts on the Loch. Construction, maintenance and removal of the structure would be in accordance with “Engineering in the Water Environment Good Practice Guide: Temporary Construction Methods”.

Dealing With Water:

Initial and ongoing dewatering of the working area will be necessary. This will likely involve using sump pumps to discharge the water to an appropriate area of the downstream side shoreline that has been contained with silt fencing. This method would ensure that any suspended sediment within the discharged water is filtered out by the existing vegetation and the silt fence, thus minimising impacts on the water environment. Further pumping would also be required to control the level of water held back in the upper loch. Assuming the intake of this pump could be kept away from the bed sediment it could be discharged directly in to the lower loch otherwise it would have to be discharged in to the silt fenced area.

Construction of Culvert and Causeway:

Once the working area has been dewatered the existing causeway can be excavated, box culvert installed and new widened causeway constructed with minimal impact on the water environment. Pumping to the silt fenced area will continue as necessary throughout. On completion of the works the dam structures and silt fencing will be removed.



NOTES:

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT AND ENGINEER DRAWINGS AND SPECIFICATION NOTES.

DO NOT SCALE FROM THIS DRAWING. FIGURED DIMENSIONS ONLY TO BE USED. HARLEY HADDOW DRAWINGS ARE FOR STRUCTURAL INFORMATION ONLY. FOR ALL SETTING OUT DIMENSIONS AND DETAILS REFER TO ARCHITECTS DRAWINGS.

UNDER THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015, HARLEY HADDOW ARE NOT ACTING AS THE PRINCIPLE DESIGNER, BUT HAVE DUTIES AS A PRINCIPLE DESIGNER, BUT HAVE DUTIES AS A DESIGNER. THE DESIGN PROPOSED DOES NOT HAVE ANY SPECIFIC RISKS THAT A COMPETENT CONTRACTOR WOULD NOT HAVE ALREADY COGNISANCE OF. IF THE CONTRACTOR REQUIRES ANY SPECIFIC GUIDANCE THEN THEY SHOULD CONTACT HARLEY HADDOW PRIOR TO UNDERTAKING THE ELEMENT OF WORK.

T01	TENDER ISSUE	CB	CB	14.06.2024
P01	PRELIMINARY DRAWING ISSUE	CB	CB	31.05.2024
REV	DESCRIPTION	BY	ENCL	DATE

Project Status: **TENDER**

ENGINEERING POWERED BY THE PAST
BUILDING THE FUTURE

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Project: 313159

**SPACEPORT 1
ENABLING WORKS
COMHAIRLE NAN EILEAN SIAR**

Drawing Title:
**PROPOSED ROAD
HORIZONTAL ALIGNMENT
SHEET 3**

Scale at A1:	Date:	Technician:	Engineer:
1:200	MAY 2024	CB	CB
Drawing No.	Revision		
313159-HAH-XX-XX-D-C-00100	T01		

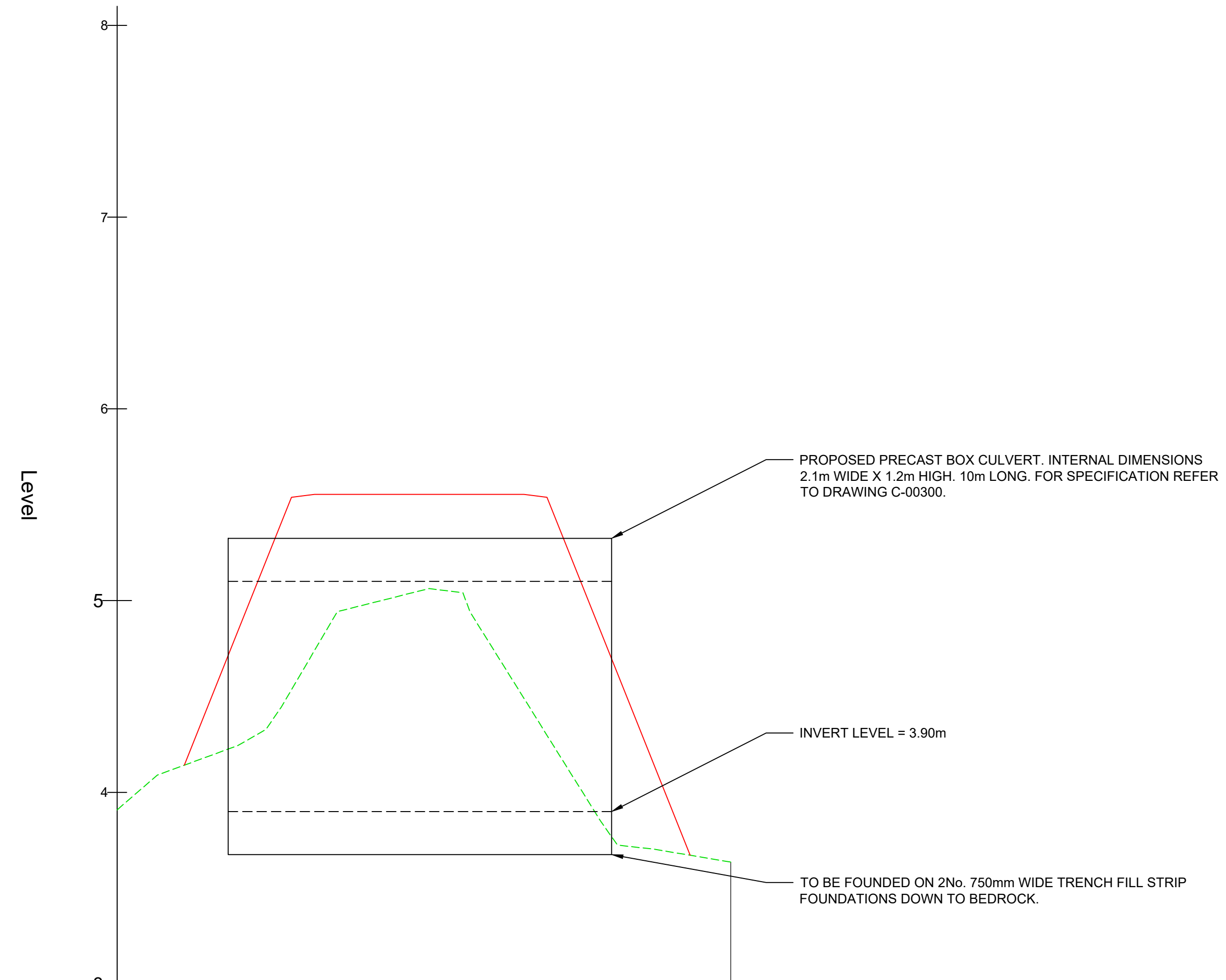
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ALIGNMENT - SECTION THROUGH CULVERT - LONGSECTION
SCALE: H 1:200, V 1:40. DATUM: 3.000



Chainage	0.000	10.000	16.000
Existing Levels		5.554	
Proposed Levels		5.554	
Horizontal Geometry	L = 16.000		

T01 TENDER ISSUE	CB	CB	14.06.2024
P01 PRELIMINARY DRAWING ISSUE	CB	CB	31.05.2024
REV	DESCRIPTION	BY	ENCL
			DATE

Project Status: **TENDER**

ENGINEERING POWERED BY THE PAST
 BUILDING THE FUTURE

h
HARLEY HADDOW

124-125 Princes Street
 Edinburgh
 EH2 4AD
 T 44 (0) 131 226 3331
 www.harleyhaddow.com

Project: 313159
SPACEPORT 1
ENABLING WORKS
COMHAIRLE NAN EILEAN SIAR

Drawing Title:
PROPOSED CROSS SECTIONS
SECTION THROUGH CULVERT

Scale at A1:	Date:	Technician:	Engineer:
1:100	MAY 2024	CB	CB
Drawing No.	Revision		
313159-HAH-XX-XX-D-C-00115	T01		

Engineering in Lochs Permit

Scolpaig, North Uist

CAR/S/5008643

For information on accessing this document in an alternative format or language please contact SEPA by email at equalities@sepa.org.uk

If you are a user of British Sign Language (BSL) the Contact Scotland BSL service gives you access to an online interpreter enabling you to communicate with us using sign language: <http://contactscotland-bsl.org/>

Introduction

This introduction is not part of the authorisation.

Authorisations

Who we are: The Scottish Environment Protection Agency (SEPA) is a non-departmental public body of the Scottish Government. Our purpose is to deliver environmental protection and improvement in ways that, as far as possible, also create health and wellbeing benefits and sustainable economic growth.

Why we issue authorisations: We are responsible for preventing or controlling pollution and improving the environment. One of the tools available to us is the authorisation of activities that present environmental risk. Authorisations give permission for these activities to occur and set conditions that the activities must comply with.

When we issue authorisations: We will issue an authorisation following our determination of an application, when satisfied that the authorised person has put in place measures to protect the environment and is capable of carrying out activities in line with the conditions of an authorisation.

Changes to authorisations: We can amend, suspend or revoke an authorisation in response to changes in legislation, the activities undertaken or authorisation holder performance.

Compliance and enforcement: SEPA Officers may undertake monitoring and inspections to assess compliance with authorisation conditions. All authorisations and inspection reports are publicly available. If an authorised person fails to comply with an authorisation, we may take enforcement action in line with our enforcement policy and guidance.

General information:

Address:	Loch Scolpaig Scolpaig North Uist HS6 5DH
Description of authorised activities:	The carrying out of engineering works and any associated construction works and/or temporary structures.
Environmental risks SEPA has regulatory powers to control:	Protecting the water environment from any significant impact from engineering activities.

Authorisation Number: CAR/S/5008643

Notice: Grant of Authorisation

This authorisation has been granted by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under:

The Water Environment (Controlled Activities) (Scotland) Regulations 2011.

Authorisation Number:	CAR/S/5008643
Authorised Person:	Comhairle nan Eilean Siar Council Offices Sandwick Road Stornoway HS1 2BW
Date of Authorisation:	22/10/2024
Authorised Activities:	The carrying out of engineering works and any associated construction works and/or temporary structures, in or in the vicinity of inland water or wetlands.
Authorised Place:	Loch Scolpaig, Scolpaig, North Uist, HS6 5DH as further detailed in this authorisation.
Conditions applicable to this authorisation:	The conditions contained in the schedules of this authorisation. Terms used in this authorisation are, unless otherwise specified, defined in the Interpretation of Terms schedule.

Authorisation Number: CAR/S/5008643

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Authorisation Number: CAR/S/5008643

Schedule 1: The Authorised Person and Activities

Purpose: This schedule places responsibility on the authorised person to ensure compliance with the conditions of this authorisation and details the activities that can be carried out.

1.1 Duty of Authorised Person

1.1.1 The authorised person must ensure compliance with the conditions of this authorisation.

1.2 Authorised Activities

1.2.1 The authorised activities are the carrying out of engineering works and any associated construction works and/or temporary structures, in or in the vicinity of, inland water or wetlands.

Authorisation Number: CAR/S/5008643

Schedule 2: Engineering Works

Purpose: This schedule limits the scale, location and impact of licence level engineering works. Licence level engineering works pose a higher risk to the water environment than lower level authorisations (General Binding Rules and Registrations) and are controlled using permit conditions.

2.1 Engineering Works

2.1.1 The engineering works in Table 1 must only be carried out:

- a) at the corresponding location(s); and
- b) subject to the corresponding controls;

specified in **Table 1**.

Table 1 Engineering Works

Engineering Works	Location	Controls
Culvert	Loch Scolpaig NF 7322 7513	The total culvert length must be no more than 10 metres. Must not create a step in the bed. Any works in the wetted part of the channel, must not be undertaken during the period in which fish are likely to be spawning in the watercourse nor in the period between such spawning and the subsequent emergence of juvenile fish.
Bank Reinforcement	Loch Scolpaig NF 7322 7513	The total length of the bank affected must be no more than 46 metres. Any works in the wetted part of inland water, must not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such

Authorisation Number: CAR/S/5008643

Engineering Works	Location	Controls
		<p>spawning and the subsequent emergence of juvenile fish.</p>
<p>Bed Reinforcement</p>	<p>Loch Scolpaig NF 7322 7513</p>	<p>The total area of bed reinforcement must be no more than 71 square metres.</p> <p>The total length of bed reinforcement as measured parallel to the bank, must be no more than 46 metres.</p> <p>Must not create a step in the bed.</p> <p>Any works in the wetted part of inland water, must not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such spawning and the subsequent emergence of juvenile fish.</p>
<p>Removal of existing 5m culvert</p>	<p>Loch Scolpaig NF 7322 7513</p>	<p>Any works in the wetted part of inland water, must not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such spawning and the subsequent emergence of juvenile fish.</p>

Authorisation Number: CAR/S/5008643

- 2.1.2 The engineering works, and any associated construction works and the installation and/or removal of temporary structures, in **Table 1** must not:
- cause significant erosion of the bed or bank of the water environment;
 - cause harm to freshwater pearl mussels;
 - cause harm to fish;
 - cause the spread of invasive non-native species within the water environment;
 - prevent the passage of migratory fish; or
 - have a significant adverse impact on private drinking water supplies.
- 2.1.3 Construction works and the installation and/or removal of temporary structures in the wetted part of inland waters associated with those engineering works in **Table 1** must:
- only be undertaken where it is impracticable to complete the works otherwise; and
 - not be undertaken during the period in which fish are likely to be spawning in the affected inland water nor in the period between such spawning and the subsequent emergence of juvenile fish.
- 2.1.4 Temporary structures on the bed and banks of the inland waters associated with those engineering works in **Table 1**, must be removed as soon as reasonably practicable after the completion of the associated engineering works.
- 2.1.5 The engineering works, and any associated construction works and the installation and/or removal of temporary structures, in **Table 1** must not have a significant impact on the water environment as a result of:
- iridescence / sheen;
 - discolouration;
 - deposition of solids;
 - increased foaming.

Authorisation Number: CAR/S/5008643

2.2 Restoration

- 2.2.1 Where any channel, bed or banks immediately adjacent to the engineering works in **Table 1** have been adversely impacted by those engineering works, they must be restored to at least their previous condition as soon as reasonably practicable.
- 2.2.2 Where any channel, bed or banks have been adversely impacted by any associated construction works and/or temporary structures, they must be restored to at least their previous condition as soon as reasonably practicable.

Authorisation Number: CAR/S/5008643

Schedule 3: Environmental Events

Purpose: This schedule requires actions to be taken in response to any event that has caused or could cause environmental harm.

3.1 Notification of SEPA

3.1.1 SEPA must be notified via its pollution hotline contact telephone number as soon as reasonably practicable, and in any case within 24 hours of identification of an event, of any of the following:

- a) An event that has caused or could cause adverse impact to the environment or harm to human health;
- b) An event that results, or could result, in an emission to the environment that is not authorised;
- c) An event that has caused a breach of a condition of this authorisation.

In this condition, the meaning of 'event' is as defined in the Interpretation of Terms in schedule 5 of this authorisation.

3.2 Management of the Event

3.2.1 All measures that are reasonably practicable must be taken to stop an event and to minimise its effect on the environment.

3.3 Reporting of the Event

3.3.1 Within 14 days of an event a report must be submitted to SEPA detailing:

- a) The reason(s) for the event;
- b) The action(s) taken to stop the event and minimise the impacts; and
- c) The action(s) taken to prevent the event from recurring.

Authorisation Number: CAR/S/5008643

Schedule 4: Record Keeping

Purpose: This schedule requires the authorised person to keep records of specific activities carried out and to provide SEPA with specified information at regular intervals.

4.1 Record Keeping

4.1.1 All information recorded, kept or submitted to SEPA in accordance with a condition of this authorisation must be:

- a) True and accurate;
- b) Kept for a minimum of six years; and
- c) Provided to SEPA upon request.

Authorisation Number: CAR/S/5008643

Schedule 5: Interpretation of Terms

For the purposes of this authorisation, and unless the context requires otherwise, the following definitions apply.

Term	Definition
authorisation	The Water Use Licence granted by SEPA under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 .
authorised activities	The activities which may be carried on under this authorisation.
authorised person	The holder of this authorisation and person responsible for securing compliance with the conditions of it.
authorised place	The geographic location or locations at which the authorised activities may be carried on.
bank toe	The lowest point on the bank of any body of inland water where the bank meets the bed of the body of inland surface water.
bank top	The first major break in the slope of the bank of any body of inland water, beyond which cultivation or development would be possible.
bed level	The level of the base of the body of inland water relative to a specific point.
channel	The bankfull cross-section that any inland water occupies, including any exposed bars and vegetated islands.
channel width	The straight line distance that is between opposite bank tops of inland water and which spans the bed and bank face of inland water, including any exposed bars and vegetated islands.
construction works	The carrying out of any building, civil engineering or engineering construction works, including the clearance or preparation of the site.

Authorisation Number: CAR/S/5008643

Term	Definition
environmental harm	<p>(a) Harm to the health of human beings or living organisms,</p> <p>(b) Harm to the quality of the water environment, including:</p> <p>(i) harm to the quality of the water environment taken as a whole,</p> <p>(ii) other impairment of, or interference with, the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems,</p> <p>(c) Offence to the sense of human beings,</p> <p>(d) Damage to property, or</p> <p>(e) Impairment of, or any interference with, amenities or other legitimate uses of the water environment.</p>
event	<ul style="list-style-type: none"> • Any accident which has caused or could cause environmental harm; or • Any malfunction, breakdown or failure of plant, infrastructure or techniques which has caused or could cause environmental harm; or • Force majeure or action taken to save human life or limb.
existing bank height	The height of the bank of any inland water measured vertically from the bank toe to the bank top, including any artificial heightening of the bank (e.g. embankments, retaining walls).
existing bed width	The straight line distance as measured across the bed of the inland water, between the toe of one bank and the toe of the opposite bank.
existing channel width	The straight line distance that is between opposite bank tops of inland water and which spans the bed and bank face of inland water, including any exposed bars and vegetated islands.
green bank reinforcement	Soft bank reinforcement. Includes the use of vegetation and biodegradable geotextiles. Also includes the use of rip-rap and log/timber restricted to the bank toe.

Authorisation Number: CAR/S/5008643

Term	Definition
inland water	All standing or flowing water on the surface of the land (other than transitional water) within the landward limits of coastal water.
invasive non-native species	All species that have been released either deliberately or accidentally outside of their natural range, where they have become established and cause adverse ecological, environmental or economic impacts.
left bank	Left bank of a watercourse when facing downstream.
right bank	Right bank of a watercourse when facing downstream.
SEPA	Scottish Environment Protection Agency.
surface water	Inland water (other than groundwater), transitional water and coastal water.
water environment	All surface water, groundwater and wetlands.
watercourse	Includes all rivers, streams, ditches, drains, cuts, culverts, dykes, sluices and passages through which water flows and includes artificial watercourses and underground watercourses.
wetland	An area of ground the ecological, chemical and hydrological characteristics of which are attributed to frequent inundation or saturation by water and which is directly dependent, with regard to its water needs, on a body of groundwater or a body of surface water

Except where specified otherwise, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of the authorisation) and to any other enactment, which may after the date of the authorisation replace or amend it.

APPENDIX G PHASE 1 CONSTRUCTION INFRASTRUCTURE PLAN



APPENDIX H BASELINE WATER QUALITY SAMPLING RESULTS

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/07518
Issue Number: 1
Date: 05 August, 2024

Client: Atlantic58 Ltd.
UHI Stornoway
Stonroway
Outer Hebridies
HS2 0XR

Project Manager: Gareth Gentles
Project Name: Spaceport One Project
Project Ref: N/A
Order No: n/a
Date Samples Received: 23/07/24
Date Instructions Received: 01/08/24
Date Analysis Completed: 02/08/24

Approved by:

A handwritten signature in black ink, appearing to read "Richard Wong".

Richard Wong
Client Manager

Envirolab Job Number: 24/07518

Client Project Name: Spaceport One Project

Client Project Ref: N/A

Lab Sample ID	24/07518/1	24/07518/2						Units	Limit of Detection	Method ref
Client Sample No	South Loch	North Loch								
Client Sample ID	BWQ1	BWQ2								
Depth to Top	0.20	0.15								
Depth To Bottom										
Date Sampled	16-Jul-24	16-Jul-24								
Sample Type	WATER - EW	WATER - EW								
Sample Matrix Code	N/A	N/A								
Total Suspended Solids (w) [#]	<10	32					mg/l			

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “A”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Atlantic58 Ltd. , UHI Stornoway, Stonroway , Outer Hebridies, HS2 0XR

Project No: 24/07518

Date Received: 01/08/2024 (am)

Project: Spaceport One Project

Cool Box Temperatures (°C): 16.7

Clients Project No: N/A

Lab Sample ID	24/07518/1	24/07518/2
Client Sample No		
Client Sample ID/Depth	BWQ1 0.20m	BWQ2 0.15m
Date Sampled	16/07/24	16/07/24
Deviation Code		
F	✓	✓

Key

F Maximum holding time exceeded between sampling date and analysis for analytes listed below

HOLDING TIME EXCEEDANCES

Lab Sample ID	24/07518/1	24/07518/2
Client Sample No		
Client Sample ID/Depth	BWQ1 0.20m	BWQ2 0.15m
Date Sampled	16/07/24	16/07/24
Total Suspended Solids (w)	✓	✓

Note: If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3 (for water samples $5 \pm 3^\circ\text{C}$), ISO 18400-105:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/07518/1	24/07518/2
Client Sample No		
Client Sample ID/Depth	BWQ1 0.20m	BWQ2 0.15m
Date Sampled	16/07/24	16/07/24
A-T-036w	02/08/2024	02/08/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

APPENDIX I ASBESTOS R&D SURVEY

ASBESTOS REFURBISHMENT / DEMOLITION REPORT

Scolpaig Farmhouse and Outbuildings Balemartin Isle of North Uist HS6 5DH



Farmhouse



Byre 1, SW elevation



Farmhouse barn extension, NE elevation



Byre 3, NE elevation

Campbell Construction Services Ltd
29 Goathill Road
Stornoway
Isle of Lewis
HS1 2NL

Tel: 01851 705573
Mob: 07900 911608
e-mail: johncampbell5573@aol.com

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Test Report 09/04/2024 from Tersus Consultancy Ltd	Appendix A 13

General Advice

The Control of Asbestos Regulations 2012 requires the person who has the duty (i.e. the "dutyholder") to manage asbestos in non-domestic premises. The duty to manage is directed at those who manage non-domestic premises: the people with responsibility for protecting others who work in such premises, or use them in other ways, from the risks to ill health that exposure to asbestos causes.

The refurbishment / demolition survey is required where the premises, or part of it, need upgrading, refurbishment or demolition. The survey does not require a record of the condition of asbestos-containing materials (ACM).

A Refurbishment / demolition survey aims to ensure that:

1. nobody will be harmed by work on ACM in the premises or equipment;
2. such work will be done by the right contractor in the right way

The survey must locate and identify all ACM before any structural work begins at a stated location or on stated equipment at the premises. It involves destructive inspection and asbestos disturbance. The report should state the location, presence and extent of asbestos-containing materials and debris. It does not assess the asbestos condition but the surveyor should mention any that is in a dangerous state.

The purpose of this Report is to provide the 'dutyholder' for the relevant premises with an assessment of the location and extent of asbestos containing material in and around the premises. The production of this report does not constitute a warranty of future result nor should it be read to imply that the dutyholder has no further responsibility with regard to asbestos. Sampling has been carried out for the production of this Report. The Report represents only the best judgement of the consultant involved in its preparation at the time of the assessment and is based on a visual inspection of the premises and the test information received. No liability whatsoever is accepted for the accuracy of such information.

Campbell Construction Services Ltd
29 Goathill Road
Stornoway
Isle of Lewis
HS1 2NL

Surveyor (print).....John Campbell.....

Surveyor (signature)..... *John Campbell*.....

Date..... 10 April 2024

The scope of work;

The scope of the work was to carry out an asbestos survey with a view to providing an Asbestos Refurbishment / Demolition Report for Scolpaig Farmhouse and Outbuildings, Balemartin, Isle of North Uist. A visual survey and assessment was initially carried out internally and externally followed by on-site sampling. Nineteen samples were taken and subsequently tested.

The survey and sampling was carried out on Thursday 28th March 2024. Sampling was carried out in accordance with the guidance issued by the Health & Safety Executive HSG 264: Asbestos the Survey Guide. Testing of the samples was carried out in accordance with HSG 248: The analyst's guide for sampling, analysis and clearance procedures, by Tersus Consultancy Ltd, Sheffield, England, a UKAS accredited body.

General site and survey information;

The site is Scolpaig Farmhouse and Outbuildings, Balemartin, Isle of North Uist, OS Grid Reference NF729753. The survey, commissioned by Robert Fraser, Director, Fraser Architecture LLP, on behalf of Alison MacCorquodale, Comhairle nan Eilean Siar, Balivanich was carried out by John Campbell and Kenny Campbell of Campbell Construction Services Ltd, 29 Goathill Road, Stornoway.

The Farmhouse consist of a one-and-a-half--storey building with a barn extension to the rear. The general construction details of the Farmhouse are masonry walls, natural slate on close boarded timber, plastic gutters and downpipes, mix of plaster and timber linings to walls and ceilings, timber floors, lead dormer haffits. The Barn extension and Byres 1 and 3 are of masonry construction with corrugated asbestos sheet roofing. Byre 2 is also of masonry construction but with a plastic-coated profiled metal sheet roof.

Executive summary;

Of the nineteen samples taken, ten were confirmed as containing **Chrysotile** (white asbestos). The ten samples containing **Chrysotile** (white asbestos) were from corrugated cement roofing sheets and similar debris.

Additional comment;

No asbestos containing material (ACM) was detected in the Farmhouse and there was no material with the potential to contain asbestos in Byre 2. All the ACM is either on Barn and Byre roofs or broken up and on the ground. Much of the ACM identified on the ground consists of small broken pieces of debris, and potentially loose fibre-containing dust. This situation would strongly suggest gross contamination on the ground, particularly within Byre 3 and the debris piles.

We would also raise awareness that, while inside the Farmhouse, we very quickly became aware of the extremely poor condition of the inside of the building. On the first floor in particular we remained close to the stairwell area as we had serious concerns about the stability of the first floor in areas up to the perimeter walls. We also noted the quite extensive amount of what we believe to be rat droppings in the building, some looking quite fresh, and there is also very likely to be rat urine present. There was strong visible evidence of rat damage.

While on site we gained entry into the middle section of the Farmhouse Barn extension. The middle section is partially filled with full plastic bags, covered with rotted timber sections. Some of the bags nearest the door contain old newspapers or similar. We made no attempt to check the contents of the bags. There was a distinct unrecognised smell in that section.

**Summary Sheet - Asbestos sampling locations and results Scolpaig Farmhouse and Outbuildings
Samples taken 28th March 2024**

Sample Reference No.	Room	Location in Room	Material Description	Asbestos Type
1	Farmhouse main entrance	Floor	Lino	Non detected
2	Farmhouse main entrance	Floor	Lino	Non detected
3	Farmhouse back porch inner door	Internal door soffit	Board	Non detected
4	Farmhouse rear living room	Wall	Plaster	Non detected
5	Farmhouse ground floor toilet	Toilet seat	Composite	Non detected
6	External pile of natural slate	Cement debris in pile	Cement board debris	Non detected
7	Farmhouse barn extension roof	South West elevation corrugated sheeting	Older corrugated cement sheeting	Chrysotile
8	Farmhouse barn extension roof	South West elevation corrugated sheeting	Newer corrugated cement sheeting	Non detected
9	Farmhouse barn extension gable	Corrugated cement debris pile	Corrugated cement debris	Chrysotile
10	Farmhouse barn extension gable	Corrugated cement debris pile	Corrugated cement debris	Chrysotile
11	Farmhouse barn extension roof	North East elevation corrugated sheeting	Older corrugated cement sheeting	Chrysotile
12	Farmhouse barn extension roof	North East elevation corrugated sheeting	Newer corrugated cement sheeting	Non detected
13	Byre 1 external	South West elevation corrugated sheeting	Older corrugated cement sheeting	Chrysotile
14	Byre 1 external	South West elevation corrugated sheeting	Newer corrugated cement sheeting	Non detected
15	Byre 1 external	South West elevation on the ground	Corrugated cement debris	Chrysotile
16	Stone structure next to Byre 1	On the ground	Corrugated cement debris	Chrysotile
17	Byre 3 internal	Collapsed roof sheeting	Corrugated cement debris	Chrysotile
18	Byre 3 surrounding area	North east scattered debris	Corrugated cement debris	Chrysotile
19	Byre 3 surrounding area	South West scattered debris	Corrugated cement debris	Chrysotile

Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Farmhouse Barn extension roof	Sample No.	7
Location	South West elevation corrugated sheeting	Survey Type	Refurbishment / Demolition Survey
Material Description	Older corrugated cement sheeting	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Farmhouse Barn extension gable	Sample No.	9
Location	Corrugated cement debris pile	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Farmhouse Barn extension gable	Sample No.	10
Location	Corrugated cement debris pile	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Farmhouse Barn extension roof	Sample No.	11
Location	North East elevation corrugated sheeting	Survey Type	Refurbishment / Demolition Survey
Material Description	Older corrugated cement sheeting	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Byre 1 external	Sample No.	13
Location	South West elevation corrugated sheeting	Survey Type	Refurbishment / Demolition Survey
Material Description	Older corrugated cement sheeting	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Byre 1 external	Sample No.	15
Location	South West elevation on the ground	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Stone structure next to Byre 1	Sample No.	16
Location	On the ground	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Byre 3 internal	Sample No.	17
Location	Collapsed roof sheeting	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Byre 3 surrounding area	Sample No.	18
Location	North east scattered debris	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Asbestos Survey / Sampling Record Sheet

Samples containing Asbestos

General Information			
Site Address	Scolpaig Farmhouse and Outbuildings	Inspection Date	28 March 2024
Room	Byre 3 surrounding area	Sample No.	19
Location	South West scattered debris	Survey Type	Refurbishment / Demolition Survey
Material Description	Corrugated cement debris	Asbestos Type	Chrysotile (white asbestos)



Materials sampled and no asbestos detected



Sample 1



Sample 4



Sample 2



Sample 5



Sample 3



Sample 6

Materials sampled and no asbestos detected



Sample 8



Sample 14



Sample 12



For the attention of John Campbell

Client Address:

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REPORT OF ANALYTICAL EXAMINATION FOR ASBESTOS IN BULK SAMPLE(S)

Job number	J1001966
Number of samples	19
Date sampled / received	04/04/2024
Date analysed / issued	09/04/2024
Analyst	Kay Michie
Sampled By	(S) Client Supplied Sample
Site address	Scolpaig Farmhouse & Outbuildings, Balemartin, Isle of North Uist, .
Client order number	N/A

METHOD OF ANALYSIS

The sample(s) were analysed using Polarised Light Microscopy by the method given in HSG248, Appendix 2 and will be retained for at least six months. This is an accredited test method under ISO 17025. We disclaim responsibility for the accuracy of information provided by and sampling undertaken by the client. "Trace" is reported as defined in HSG248 where applicable. All opinions and descriptions ie. non asbestos fibre types and material types in this report fall outside the scope of our accreditation. Reports are retained for at least six years.

Sample ref. no.	Customer ref. no.	Building	Floor level	Room	Position	Item	Material	Result
BS1217370	1	Main	Not supplied	Farhouse main entrance	Floor	Lino	Bitumen Products	No Asbestos Detected
BS1217371	2	Main	Not supplied	Farhouse main entrance	Floor	Lino	Vinyl floor tiles	No Asbestos Detected
BS1217372	3	Main	Not supplied	Farmhouse back porch	Internal door soffit	Board	Insulating Board	No Asbestos Detected

Sample ref. no.	Customer ref. no.	Building	Floor level	Room	Position	Item	Material	Result
BS1217373	4	Main	Not supplied	Farmhouse rear living room	Wall	Plaster	Plaster	No Asbestos Detected
BS1217374	5	Main. Ground	Farmhouse toiler		Toilet seat	Composite	Reinforced Composite	No Asbestos Detected
BS1217375	6	Main	External	External	In pile	Cement debris	Cement	No Asbestos Detected
BS1217376	7	Main	Not supplied	Farmhouse barn extension roof	South west elevation sheeting	Older corrugated cement sheets	Asbestos Cement	Chrysotile
BS1217377	8	Main	Not supplied	Farmhouse barn extension roof	South west elevation sheeting	Newer corrugated cement sheets	Cement	No Asbestos Detected
BS1217378	9	Main	Not supplied	Farmhouse barn extension gable	Debris pile	Cement debris	Asbestos Cement	Chrysotile
BS1217379	10	Main	Not supplied	Farmhouse barn extension gable	Debris pile	Cement debris	Asbestos Cement	Chrysotile
BS1217380	11	Main	Not supplied	Farmhouse barn extension roof	North east elevation sheeting	Older corrugated cement sheets	Asbestos Cement	Chrysotile
BS1217381	12	Main	Not supplied	Farmhouse barn extension roof	North east elevation sheeting	Newer corrugated cement sheets	Cement	No Asbestos Detected
BS1217382	13	Main	Not supplied	Byre 1 external	South west elevation sheeting	Older corrugated cement sheets	Asbestos Cement	Chrysotile
BS1217383	14	Main	Not supplied	Byre 1 external	South west elevation sheeting	Newer corrugated cement sheets	Cement	No Asbestos Detected

Sample ref. no.	Customer ref. no.	Building	Floor level	Room	Position	Item	Material	Result
BS1217384	15	Main	Not supplied	Byre 1 external	South west elevation on the ground	Cement debris	Asbestos Cement	Chrysotile
BS1217385	16	Main	Not supplied	Stone structure to Byre 1	On the ground	Cement debris	Asbestos Cement	Chrysotile
BS1217386	17	Main	Not supplied	Byre 3 internal	Collapsed roof sheeting	Cement debris	Asbestos Cement	Chrysotile
BS1217387	18	Main	Not supplied	Byre 3 surrounding area	North east scattered debris	Cement debris	Asbestos Cement	Chrysotile
BS1217388	19	Main	Not supplied	Byre 3 surrounding area	South west scattered debris	Cement debris	Asbestos Cement	Chrysotile

Authorised Signatures:

Kay Michie

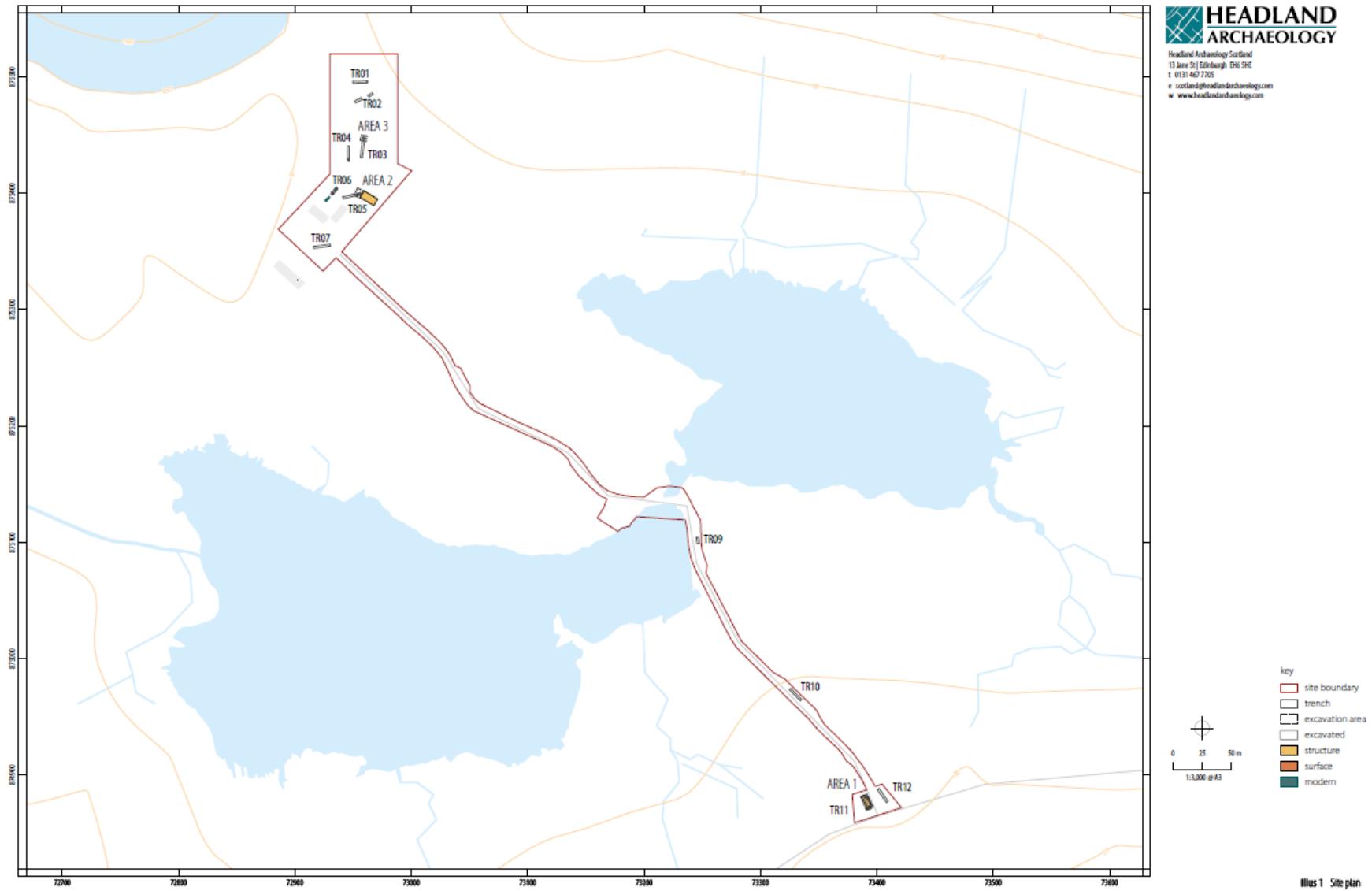


Kay Michie



APPENDIX J CULTURAL HERITAGE

Advance Excavation and Construction Integrated Recording (CIR) Areas



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