



# Shetland Islands Council

## Summary

### Scord Quarry Extension and A970 Re-alignment

Nov 2025

## CONTENTS

1 Introduction	
1.1 Proposal	3
1.2 Environmental Report	4
1.3 Planning Context	4
1.4 Sources of Information	4
2 Outcomes from Review Process	5
3 Current Quarry Activities	5
4 Planned Extension	7
5 Phasing of Operations	8
6 Further Quarry and Construction Operations	
6.1 Reinstatement	8
6.2 Access	9
6.3 Employment	9
6.4 Working Hours	9
6.5 Traffic	9
6.6 Infrastructure	9
6.7 Waste	10
6.8 Drainage	10
6.9 Signing and Lighting	10
6.10 Environmental Management	10

# 1 Introduction

## **1.1 Proposals**

Shetland Islands Council (SIC) wishes to extend its current planning permission to quarry stone from Scord Quarry (National Grid Reference HU 412401). The Council's Roads Service is submitting a planning consent application to this effect to the Council's Planning Service. There is a requirement to extend the area of the current planning permission to enable a reliable supply of roadstone to be quarried. The proposed works consist of an extension of some 4.9 hectares (ha) into the southern end of Outnabreck Hill. The proposals are shown on the plans submitted with the application. The works are required as reserves within the existing quarry boundary are limited given current production rates. The quarry floor will remain in use for storage of crushed aggregates and the existing, static crushing, screening, mixing and bitumen storage plant will remain at their current locations throughout the period of the extension. There will be no requirements for static plant within the extension area. We do not anticipate a requirement for any additional plant at the quarry during the course of this extension.

Quarrying activities have been ongoing at Scord since 1932. As part of the proposals the Roads Service wishes to ensure that the future quarrying plans are developed to facilitate restoration of the whole site in the longer term that is within the existing quarry area and also within the extension area. It is intended that a final landform will be created which best fits with the surrounding natural environment. This aim was first proposed during the process of obtaining the NID for the previous extension.

At the end of the proposed extension period the need for stone from this source would again be reviewed and if a requirement is identified, a further planning application will be made. Alternatively, the quarry would be fully restored as mentioned above.

In addition, it is proposed that as part of the quarry plans the A970 would eventually be realigned to remove the existing hairpin bend as the road drops towards Scalloway close to the quarry (NGR HU 413397). This is not part of the current planning application. The delivery of the realignment of the A970 assumes that production from the quarry will continue to be required at current levels. Quarrying stone will deliver the eventual earthworks for the road. Therefore, the programming of the road construction is dependent on the quantity of roadstone produced. If there is a significant decline in the quantities of stone required the road realignment would not be achieved as proposed but would need to be reconsidered at the expiry of the planning permission. The existing line of the road would remain in place to facilitate local access and access to the viewpoint.

## **1.2 Environmental Report**

The Council's Planning Service has confirmed that a formal environmental impact assessment (EIA) under the provisions of "The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017" is not required. The Planning Service came to the same conclusion in May 2005 regarding the NID for the previous extension. However, at that time the Roads Service commissioned Natural Capital Ltd in association with landscape architects from Environmental Resources Management (ERM) to undertake an informal appraisal of the potential environmental impacts of the proposals (the quarry extension and the road alignment) to ensure that appropriate mitigation was identified for any potentially significant effects and that the final proposals were refined taking account of this mitigation. The proposed road re-alignment has not changed since the NID was approved in 2005 and the current proposal for the extension also implements the recommendations resulting from the appraisal in order to mitigate potential effects.

The appraisal included a restoration plan for when the quarry is no longer required. This plan is still relevant and will be followed when the quarry is at the end of its operational period.

An updated version of the original Environmental Report has been submitted as part of this planning application.

## **1.3 Planning Context**

The strategic and local planning context for the proposals is set out in the Shetland Local Development Plan (LDP) 2014. The proposals have been reviewed within the framework of these plans.

## **1.4 Sources of Information**

The following sources of information have been used in the appraisal:

- discussions with and information and inputs from the Quarry Manager and Team Leader - Maintenance;
- plans of the proposals and computer generated visualisations;
- published information including relevant planning documents, Local Biodiversity Action Plans, etc.;
- Ordnance Survey map tiles HU4139 and HU4140; and
- field visits undertaken by Natural Capital and ERM in May 2005 including a visit to the quarry.

## 2 Outcomes from the Review Process

The proposed extension was identified following an internal review process within the Roads Service. It will meet the requirements of the Shetland community for coated roadstone (asphalt, bitmac) products for the next 15 years. It will involve a modest increase in the size of the quarry, restoration of the existing faces would be progressed as part of the extension and access to and from Scalloway would eventually be improved by realigning the A970 (subject to a later separate planning application). The reasons for this decision are summarised below:

- the Roads Service concluded that the preferred option would be to continue operations at the Scord beyond the current Council owned boundary. The quarry is a wholly owned Council asset then it is fully within the Council's remit to change anything at any time (within the permissions for the quarry). The proposed extension will guarantee the availability of roadstone and coated products for the next fifteen years at prices within the control of the Council. Making this supply available to all at the same prices will ensure that fair competition between contractors is maintained. The extension period proposed will also allow the Council to continue with its investments to improve the quarry thereby improving safety, reducing costs and reducing the quarry's carbon emissions.
- The bend on the A970 at Scord is very sharp as the road winds around Outnabreck Hill and turns through 90 degrees on a downhill section of road towards Scalloway. The realignment of the road would not be possible without undertaking a major rock cutting through Outnabreck Hill. Under normal circumstances the costs of this major cutting could not be justified. By designing the extension to the quarry to be sympathetic to the requirements of the road proposal the future improvement of the road's alignment becomes viable.
- Some concerns have been expressed by the community about the junctions of the A970 with the Tingwall valley and East Voe junctions. The Roads Service has taken these concerns into account and designed a new road alignment through the existing quarry that would also facilitate the eventual improvements to these junctions, should the Council prioritise them in the future.
- The planned extension permits the rounding of the existing hillside to provide a more natural reinstatement. The quarrying work will be phased to allow a top-down reinstatement in order to re-establish natural vegetation as early as possible.
- The Council is keen to promote recycling wherever possible and by retaining full control of the Scord operation it can actively encourage the reprocessing of materials, such as ditch excavations for verging topsoil, and minimise volumes sent to landfill.

## 3 Current Quarry Activities

Current production at the Scord Quarry is currently over 100,000 tonnes/year due to the high number of large construction projects currently underway in Shetland. This situation and level of production is likely to continue for a number of years due to proposals for further windfarms, hydrogen and ammonia production plants, etc. It is estimated that some six million tonnes of material have been quarried to date for use in road building and other construction works. The

majority of the stone is crushed for road aggregates, some of which is fed to the asphalt coating plant, using a primary and secondary crusher although some suitably sized stone is used for rock armour. The process is efficient and no materials are double handled unless it is essential. The existing processing machinery, which is well maintained, is well screened and sited in the base of the quarry which reduces dust nuisance and the noise from the plant at neighbouring properties. No new processing machinery would be installed in the quarry should the application be approved.

Blasting in the quarry is dependent on demand but on average there is one blast every three to four months. The Quarry Manager informs residents close to the quarry before the blast and the main blasts are monitored using a vibrograph. Readings are generally found to be low, not significant and within the agreed limits set by the relevant statutory bodies.

The quarried stone is fed to the primary crusher which is enclosed and the product from this process passed through primary screens which sort oversized material from material approximately 100mm in size which is fed into the secondary crushing station. The oversized by product is sold either as secondary armour stone or reprocessed through the primary crusher. The secondary crushing station, which includes three crushers has been enclosed to contain dust. The output from these crushers is small aggregate between 28mm and 6mm in diameter and is passed through secondary screens before the final screen which is used to grade the materials.

Some of the graded stone is used to feed the on-site asphalt plant. The quarry produces on average some 35-40,000 tonnes of coated product each year. Bitumen is delivered by road tanker, via the Northlink ferries, to Lerwick harbour, typically two loads for each delivery totalling 50 tonnes. There is a total of 450 tonnes storage capacity in the quarry's heated bitumen tanks. Once in storage the bitumen is allowed to solidify until it is needed at the plant. It is then heated by electric elements within the tanks and pumped into heated storage tanks which feed the coating plant. Some 200 tonnes of bitumen can be maintained at the necessary temperature for use in the coating plant. The quarry also has a bitumen emulsion manufacturing plant, developed in conjunction with the Council's partner in the process and bitumen supplier Nynas UK. The bitumen is processed through a mill after mixing with other chemicals to manufacture bituminous emulsion which is used in the surface dressing operation.

All runoff from the quarry (rainfall, wastewater from dust suppression measures etc) is collected and drained to a settling tank where it is discharged to the East Voe of Scalloway after passing through an oil interceptor. Fines from the bottom of the settling tank are regularly dug out and disposed of to a suitably licensed waste facility.

The quarry is also used as a depot for other SIC roads operations including providing storage area for salt for winter maintenance and grit which is used for several winter gritting routes. These activities will continue through the life of the quarry.

Material excavated as part of roads repairs and ditch clearing elsewhere in Shetland are used wherever possible in reinstatement and landscaping of areas in the quarry. Lorries going to the quarry for materials can deliver unsuitable materials from elsewhere and so help in an ongoing restoration plan at the quarry. It is again intended that these activities will continue.

The quarry operates under a Part 'B' PPC Authorisation with a number of conditions attached to this. The quarry also holds a Consent to Discharge.

#### **4 Planned Extension**

The proposal is to create new quarry faces which will be 15m benches (not 20m as the existing faces) in the area shown on the attached drawing. As part of the proposal the quarry faces in the current site will be cut back and regraded and integrated with the new quarry works in the extension area. This will change the current skyline and create a deep notch through which it is proposed to site the realigned A 970. The "V" profile will be cut back as far as is feasible at its top to create a more natural slope gradient and the slopes worked to achieve an irregular profile which mimics that of surrounding hills. Particular attention will be paid to the integration of the top of the quarried slope with the natural hill profile, so that a sharp unnatural looking angle is not created.

It is proposed that when the current face is worked out the existing internal haul road is realigned towards the new face from its current position which will result in internal quarry traffic being further from the A970 and nearby properties. Eventually the new haul road would be incorporated into the realigned road works.

The new faces will be created by drill blasting, the same process currently used. The depth of boreholes will be reduced as the proposed hill profile is approached to ensure the final desired profile is achieved. As quarrying progresses there will eventually be three benches and haul roads along the benches will be 10m in width. After quarrying has been completed in any area the benches will be partially removed by further blasting to break up the regular horizontal lines along the hillside which are created by them and partially filled in with materials including wastes from other jobs and soils kept when the extension area is stripped. This cutting and filling will help achieve as natural a profile as possible in the final form of the restored quarry. Small irregular and naturalistic rock faces will be left to provide habitat (for nesting birds and for plants to grow where sheep cannot graze them) and visual diversity to the hillslope.

As part of the proposal the entrance to the quarry will be tidied up and old buildings removed if no longer in use or repurposed if still required.

SIC will liaise with SEPA to ensure all future operations meet the existing required conditions for the relevant permissions.

## 5 Phasing of Operations

Quarry activities in the proposed extension will begin from the top down with phased restoration to minimise the impacts of ongoing activities. It is proposed that activities will proceed as follows.

- the extension area boundary fenced off;
- the overburden will be removed and used as filling along the base of the existing quarry benches;
- the eastern extremity of the existing face will be reduced in height and rock quarried from the extension area;
- the regraded face and newly quarried area will be shaped to give as natural a profile as possible, particularly in grading the top of the slope into the existing hillside;
- the eastern faces will be further reduced in height and the hill shaped to a natural profile falling away behind the northern slopes of Bersa Hill (the hill to the south of the quarry) thus creating a deep notch on the skyline which is not there at present;
- quarry activities will be completed in the extension area always working towards a natural profile for the final faces. The blast programme will be designed to work towards this and to exploit and expose natural bedding planes and jointing in the rock as far as possible;
- restoration of the quarry faces will be ongoing as work is completed in any one location including the existing faces which have not yet been restored;
- the area south of the proposed realignment will be reshaped to integrate with the existing natural terrain and the redundant areas of the quarry filled in and man-made mounds and earthworks graded out;
- manmade debris in this area will be tidied up so that the land between the two roads flows cleanly between them and can be used for grazing;
- work will progress back into the existing quarry area to allow final trimming of the profile of the existing benches;
- the existing benches will be broken up by restorative blasting to remove their dominant linear form and the strong horizontal stripes which they create on the hillside when seen in views from the surrounding area;
- the work will be progressed to completion of restoration of the whole quarry site unless a further extension to the planning permission is sought; and
- subject to the outcome of a further planning application and the allocation of suitable funding the new road would be constructed. This activity will not be possible until the completion of quarrying works in the currently proposed extension.

## 6 Further Quarry and Construction Activities

### 6.1 Reinstatement

Soils from any new work areas will be carefully stripped and stored in low uncompacted bunds to be used for restoration purposes at an appropriate time. Vehicles will not be allowed to track

over the soil mounds. If bunds are to be left for long periods of time (over a year) they will be seeded so as to prevent their erosion and degradation.

The major profiling works for the future road realignment will be undertaken as part of the quarrying activities. The construction compound and storage areas for the road finishing works would be within the quarry. Other road works would include placing the road layers, constructing the road drainage and surfacing the road. Final landscape works would be undertaken once quarry activities in the immediate vicinity of the road have been completed. All activities would be undertaken in accordance with best practice.

### **6.2 Access**

Access to the quarry and to the road works would continue to be via the existing quarry access off the A970.

### **6.3 Employment**

Some 8 people are employed in the quarry and this is anticipated to continue in the future. There are also indirect benefits to the local community from the working quarry. The final construction of the A970 realignment would be tendered with the work undertaken by a civil engineering contractor, most likely locally based in Shetland.

### **6.4 Working Hours**

Current working hours at the quarry are Monday to Saturday 07.00-19.00 (or occasionally longer when demand is high). It is anticipated that a similar pattern will continue for the working life of the quarry extension. Any amendments will be agreed in advance with the Council's Environmental Services.

Any requirement in the future for night-time working will be agreed in advance with SIC Environmental Services and account taken of the potential for disturbance at nearby properties. Measures will be implemented to ensure any potential impacts are mitigated.

### **6.5 Traffic**

Vehicle movements to and from the quarry are expected to remain at current levels although at any one time this depends on the activities which the quarry is servicing. In addition to HGV's hauling materials from and to the quarry there are staff car movements plus other traffic movements associated with visitors, delivery and maintenance. Typical average figures are 50 vehicle movements for any working day.

### **6.6 Infrastructure**

The quarry extension will be serviced by existing utilities (power, water etc.) and no new services are required. The extension will not affect any existing utilities. The future road realignment works would be planned to take account of utilities and all necessary diversions would be completed as part of the civil works. The SSE power lines would need to be repositioned to

facilitate the new road alignment and there may be a need to move telecom cables. It is thought the existing water main would not be affected.

### **6.7 Waste**

Waste management (disposal of materials from the settling tank and interceptor, redundant machinery etc.) will continue as at present with all wastes to be managed in accordance with best environmental practice and disposed of to suitably licensed facilities.

### **6.8 Drainage**

All drainage water from rainfall and quarry activities will continue to be collected and passed through the settlement tank and oil interceptor before discharge, with monitoring undertaken by SEPA, as at present.

### **6.9 Signing and Lighting**

At present there are flood lights in the quarry to allow safe working when dark and security lights in operation each night. The quarry activities will continue to be lit as at present but no additional fixed lighting would be required for working at the quarry face. The A970 when complete will not be lit but all necessary road signs (direction and warning) will be provided.

### **6.10 Environmental Management**

The Quarry Manager and the Roads Service are committed to a proactive approach to environmental management of activities in the quarry. This will continue if the extension is granted. Examples of measures which are implemented at present include:

- all old machinery is carefully drained of oil before disposal and the oil collected and disposed of at a suitably licensed facility;
- all waste materials are disposed of to suitably licensed facilities;
- haul roads are regularly watered by a bowser to reduce dust in dry weather;
- nearby residents are informed before blasting takes place;
- all runoff from the quarry is collected and discharged through a settlement tank and oil interceptor before discharge;
- measures are implemented to contain dust and reduce noise (e.g. housing the crushing plant and boxing in conveyors);
- all procedures documented and checked regularly for effectiveness;
- minimising operational impacts on local biodiversity through progressive restoration;
- the maintenance of emergency responses and spill procedures; and
- commitment to effective liaison with local communities and provision of information about key activities.

The quarry is operated under a Part 'B' PPC and as part of this process all potentially polluting activities are carefully regulated.