15. PUBLIC INFORMATION AND CONSULTATION EXERCISE

Given the complexity and sensitivity associated with quarrying on the Island and the fact that a new mineral strategy will impact on the lives of Islanders for many years to come, the Planning and Environment Committee attached great importance to informing the public and providing an opportunity for public involvement. As a consequence, in July 1999, information leaflets were distributed to all households in the Island, which summarised the findings of the Arup study and invited written comments from those members of the public who were sufficiently motivated to make their views known.

In the event, the Committee received comments from 250 individual members of the public, with differing experiences, knowledge and concerns. Clearly, this represents a tiny proportion of all households and the findings cannot be regarded as statistically meaningful, or an accurate account of public opinion. Nevertheless, the responses have proved extremely valuable in flushing out/confirming the whole spectrum of issues involved and in identifying outstanding concerns.

The leaflet stimulated many ideas and suggestions in support of the various options under consideration. In addition, and not unexpectedly, a wide range of arguements have been put forward both in favour and against the continuation of existing operations and the development of alternative sources of supply. A report summarising the findings of the public consultation exercise is available for viewing at the Department of Planning and Building Services, South Hill, St. Helier.

Many of the views expressed by respondents were commonly held and perhaps the clearest messages to emerge from the comments received, relate to the level of support given for :

• more importation of materials

a very high proportion of the respondents (62%) indicated support for promoting more importation of materials, either immediately, or at some point in the future;

Arup's preferred strategy

by far the highest proportion of respondents who expressed a preference (51%) opted for Arup's Preferred Strategy.

• creating a new port at Ronez

Other than the Preferred Strategy, the only other option with a significant amount of support (22%) is Scenario 4. Both options involve creating a new port at Ronez, albeit in different time frames;

• more recycling

there was also significant support for placing more emphasis on recycling materials and using secondary aggregates.

Two broad areas of concern about the Arup study have also emerged from the responses to the consultation exercise, as follows:

• estimates of future demand for minerals

a significant number of respondents (21) called into question the accuracy of the estimated potential future demand for aggregates, bearing in mind that the boom in office and luxury home development appears to be over and that States policies are geared towards restricting population growth, limiting the size of the workforce, reducing activity in the building industry, dampening the economy and promoting higher levels of sustainability.

• information available to evaluate options

there were concerns among some respondents, backed up by those of the 'Jersey Construction Forum' and the 'Jersey Chamber of Commerce', that insufficient information (notably in relation to environmental impacts and capital and revenue costs) was provided in the Arup study to allow for a rational evaluation of the options.

The first of these concerns regarding likely levels of aggregate minerals demand is addressed earlier in this report. In response to the second matter, Arup has emphasised that it was employed to undertake a *strategic* level review of mineral demand and supply and to present *strategic options* for future planning purposes. The study was required primarily in order to facilitate the Planning and Environment Committee's objective of setting a minerals planning policy framework for the development of detailed proposals and the determination of individual applications.

When the Consultation Report was published, the Planning and Environment Committee was of the opinion that it considered environmental and socio-economic factors in sufficient depth to enable a choice to be made regarding the options being put forward and to generally inform future policy deliberations. The report had already been substantially amended to reflect the results of extensive consultations with operators and study consultees. However, following the consultation exercise, the Committee recognised there would be benefit in undertaking some additional feasibility work, notably in relation to future importation of aggregates and the options for the provision of necessary port facilities. It also wished to take advantage of the information which was available from related studies, including the Solid Waste Management Strategy.

Of course, in a perfect world, one might expect to study in intricate detail every single aspect relating to the mineral study. In reality this is neither practical, nor prudent. The Committee takes the view that in most instances, expensive and detailed additional feasibility studies, financial appraisals and environmental impact assessments are best left to follow on once a strategy is adopted. Some of these studies would, in any event, be more meaningful, if they are carried out at a future date in the light of the conditions prevailing at the time. Other detailed studies, such as environmental impact assessments can be addressed in association with future applications to develop existing quarries. It is perhaps worth emphasising here that if an operator / developer fails to provide enough information to complete the necessary environmental impact assessment, the application can be determined only by a refusal.

There will be further opportunities for the public to express their views and ideas in relation to minerals planning, when the Minerals Strategy is lodged for States debate later this year, when the Draft Island Plan is published early in 2001 and when specific planning applications are submitted by individual mineral operators.

16. REVISITING THE OPTIONS FOR IMPORTATION

It is clear that there remains some merit in the Island continuing to exploit local resources to meet the Island's aggregates and building material requirements, where the intrinsic

environmental effects are determined to be acceptable. This has the advantages of avoiding unnecessary importation of bulky materials, whilst maintaining indigenous business and a significant amount of employment for local residents. However, the Arup study and the findings of the public consultation exercise, both serve to highlight the advantages of, and support for, a future minerals strategy which works towards a greater reliance on importation. Such a scenario requires the development of suitable port facilities with adequate areas for materials storage and handling. There are only a few options which might be worthy of consideration for achieving this end and these are discussed below.

(i) the creation of a new port with breakwater at Ronez (Arup's Scenario 4)

It would appear from the public consultation exercise, that this option might draw a degree of public support. However, Arup has already considered the feasibility of both conventional and submerged breakwaters among a range of technical solutions to the problem of importing aggregates at Ronez..

In a separate submission to the Planning and Environment Committee, Arup concluded that a large scale bulk-importing option at Ronez, is unlikely to be operationally feasible whilst the quarry remains operational.

They also point to the prohibitive costs associated with providing a breakwater which can overcome maritime operational constraints and accept vessels in most weather conditions. Any breakwater would be in deep water and would have to be of massive bulk. Arup conservatively estimated the costs of such a structure to be in the region of £25 million (@April 1998). Furthermore, there could be environmental implications associated with the construction works and/or in the event of a grounding.

(ii) The construction of a protected harbour in Ronez Quarry (Arup's Preferred Option)

This option was originally suggested by Ronez themselves and is incorporated in Arup's recommended supply strategy. It would involve excavating and shaping the quarry into the optimum shape and depth for a protected harbour basin over a 20-30 year period, which could then be flooded and provided with a safely navigable entrance. The responses to the public consultation exercise suggest that this option might expect considerable support.

Arup considers that this is the only option for providing a new port at Ronez, which may be regarded as worthy of further investigation. It was recognised that, before any decision is taken to proceed with flooding the basin and creating a port, it would be necessary to establish operational feasibility. It was also envisaged that there would be a need to undertake a proper hydrographic and navigational feasibility study (covering the wave regime and tidal currents), a detailed cost-benefit analysis and an environmental impact study.

The public consultation exercise also threw up a number of other outstanding questions regarding this option, which are difficult to answer at this time, including:

- what infrastructure will be necessary to service the port, both on-site and off-site?
- what would be the development costs?
- who will finance the construction?
- what other 'hidden' costs would be associated with the new port?
- how much taxpayer's money would be involved?
- what would be the environmental impact of developing and operating a new port?

- once built, who would own, control and maintain the new harbour?
- what benefits will accrue to Ronez Ltd and to the States?

Following concerns raised during the public consultation exercise, it was considered there would be merit in canvassing the views of local pilots and ex-pilots on the operational feasibility of such a port., especially given their knowledge of local tidal conditions and their experience of working the former Ronez jetty. At a subsequent meeting with pilots and ex-pilots in December 1999, it was generally concluded that the harbour option at Ronez would not be practical and that St. Helier Harbour offers the best option for a new importation facility. The problems cited in relation to the Ronez option were:

- the exposed and inhospitable location;
- tidal conditions;
- the enormous ground swells prevalent in the area;
- the difficulties of safely accommodating the size, length and draft of bulk carrying vessels;
- the problems in providing a safely navigable entrance to the proposed basin;
- the necessity of creating a prohibitively expensive breakwater to avoid swell going directly into the basin mouth.

(iii) the creation of a new port south of La Collette.

This emerged as a suggestion from the public consultation exercise. At first sight, it appears to have numerous attractions. However, in May 1994 the Harbours and Airport Committee commissioned Coode Blizard Ltd. to undertake navigational and wave disturbance studies, with a view to assessing the feasibility of two proposed extensions to the harbour at La Collette, south of the fuel berth.*² In the event, the study concluded that any such proposals are unfeasible, because they would either result in unacceptable levels of wave activity for berthed ships, or they would fail to provide satisfactory conditions for the manoeuvring of ships.

(iv) imports through St. Helier Harbour (Arup's Scenario 2)

The Arup study identified two major constraints on importing significant additional volumes of aggregate through St. Helier harbour, as follows:

- it would require special handling facilities and storage space in a port where space is already at a premium;
- the present level of port dues and stevedoring charges militate against importing (as outlined earlier).

Furthermore, it pointed to potential problems associated with additional lorry traffic in the port area and on town roads, and with potential dust-blow.

As previously discussed, the responses to the public consultation exercise revealed little preference for this option. The reasons given by respondents generally reflected the above mentioned constraints, although a major reason was clearly the preference for an alternative importing option at Ronez.

² 'St. Helier - La Collette Proposals for Commercial Traffic, Navigation and Wave Disturbance Studies', Coode Blizard Ltd., May 1994.

Notwithstanding the above, the Harbour Master had indicated to Arup that there were possible options for creating suitable berth facilities at the harbour for much larger volumes of construction material imports at perhaps one tenth of the cost of providing a new port at Ronez. Furthermore, the public consultation exercise also highlighted a significant number of advantages for importing aggregates at St. Helier Harbour, as follows:

- it is a fairly sheltered coastline, which does not suffer the strong tides and large ground swells prevalent on the exposed north coast;
- aggregates would be imported close to the main source of most future building activity (unlike Ronez), thus reducing the extent of road transportation and avoiding the alternative of heavy traffic moving across the Island from Ronez;
- plans for the future use of most of the reclamation site area have yet to be finalised;
- there is sufficient room at the new reclamation site to service the importing, storage, processing and distribution of aggregates;
- the area is already used for industrial activity;
- there are opportunities to screen the site and this, together with good working practices, could reduce the impact of noise and dust and thus avoid undue nuisance to nearby residents;
- there might be a less detrimental impact on the Island's coastline environment;
- it could be constructed and operational well before a new port basin would be available at Ronez, which would reduce the scale of future extraction from Island quarries;
- it would avoid the need to extend Ronez laterally towards an area of international geological interest, in order to allow for the excavation of a port basin;
- it would avoid the harmful effect of increased heavy vehicle movements on inadequate roads to and from a new port at Ronez;
- it might provide more favourable conditions for the disposal of the Island's inert waste, once the reclamation scheme is full, through landfill at existing quarries;
- it might provide better and more timely opportunities for the location of plant for processing of construction and demolition waste materials, either on-site or at La Gigoulande;
- it would avoid the possibility of a monopoly situation arising in the medium and longer term after La Gigoulande is exhausted and before a port is available at Ronez;
- it would avoid difficulties associated with perceived Alkali-Silica Reactivity problems during that same period;

In view of the above advantages and the concerns and outstanding queries raised by survey respondents in relation to the port option at Ronez, the Planning and Environment Committee recognised the need to ensure that all the options for importing aggregates in and around St. Helier Harbour were properly explored. Only then, could the mineral strategy be finalised.

In November 1999, following discussions with the Harbour Office, it was agreed that a feasibility study would be undertaken by WSP International Ltd. (formerly Coode Blizard Ltd.) as part of the 20 Year Port Masterplan study. The final stages in developing the Mineral Strategy were consequently held in abeyance pending the findings of the study. The feasibility study was completed in March 2000* from which the following conclusions can be drawn:

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³ Jersey Harbours Masterplan Study - Development of Aggregate and Sand Importation Facilities at St. Helier Harbour, WSP International Ltd., March 2000.

- it would not be practical to handle large volumes of aggregate at the New North Quay (contrary to Arup's suggestion that the existing arrangements would allow for the annual importation of 60,000 tonnes of sand);
- large aggregate import volumes (i.e. up to the 200,000 tonnes per annum suggested in Arup's second option Imports Through St. Helier) will require a separate wharf and dedicated storage yard facilities;
- the water area most feasible for the berthing of ships would be the La Collette Oil Jetty Basin;
- a new berth at La Collette Harbour Wall (i.e. formed by the rubble bank opposite the existing Oil Jetty) would allow relatively unimpeded berthing and cope with annual imports of 200,000 tonnes.⁴ The scheme would benefit from the berth foundation pads which already exist, and with the dredging of the berth sump to -5.5m CD (i.e. original design depth), would allow for individual consignment size of 2000 tonnes using ships of 5m maximum draft and 80m length. The estimated budget cost is £5.84 million;⁵
- the maximum consignment possible for aggregate importation without the construction of a new deep-water harbour facility is 2000 tonnes;
- the optimum site for new aggregate handling facilities would be in the north-west corner of La Collette Phase II Reclamation Area, immediately behind the Oil Jetty. This site would have direct road access to the La Collette wharf and would be well away from offices and workshops which might otherwise be unduly affected by dust and noise;
- the land area required for handling a maximum annual throughput of 200,000 tonnes is approximately 17,000 m2, which equates to a plan dimension of 75m x 220m (see Figure 14);
- there would be advantages in expanding the aggregate storage yard to include silos for the storage / distribution of cement and a ready mixed concrete plant. This would require an estimated additional land area of 3,000 m2.

Figure 14: Aggregate Storage Yard Area Requirement - for Annual Throughput of 200,000 tonnes

Method of Shipment	Consignment Size (Tonnes)	Estimated Area (Sq. Metres) *1	Approximate Plan Dimensions (Metres)
"Jumbo" bags			
• for temporary holding facility in the port	2,000	3,600	45 x 80
 for storage and Island distribution facility within the port 	800 or 2,000	11,500	45 x 250
Loose Bulk *2	800 or 1,500	17,000	75 x 220

⁴ This was one of three conceptual schemes for an aggregate berth within La Collette basin, which were prepared and evaluated by WSP International Ltd.

⁵ The estimated cost is solely for creating the wharf, including dredging the berth sump. It does not include handling plant, or paving to the aggregates yard, or dredging of the whole basin.

- *1 assumed that storage will be needed equivalent to one month importation value (e.g. 16,500 tonnes)
- *2 dependent upon the mechanical handling equipment and permitted height of stockpiles.

Source: Jersey Harbours Masterplan Study, Development of Aggregate and Sand Importation Facilities at St. Helier Harbour, WSP International Ltd, March 2000. The draft 20 Year Masterplan for St. Helier Harbour, which was presented to the Harbours and Airport Committee in April 2000, is currently undergoing consultation with port users and interested parties. The plan includes proposals for a new dedicated aggregate handling berth and storage yard, in accordance with the findings of the above feasibility study. It sets aside an area of approximately 20,000 m2 (4.9 acres) for an aggregates yard and a ready mix plant and cement storage area/distribution facility in the north-west corner of the La Collette Phase II Reclamation Area. This size of area allows for storage of aggregates equivalent to one month importation value. It does not allow for processing operations, which currently occupy an area of approximately 35,000 m2 (almost 9 acres) at Granite Products.

A similar sized area is included in The Development Framework for La Collette II, which was approved by the States on 11th July 2000, includes a similar aggregate storage site to that shown in the draft port masterplan. However, the area boundaries have been modified to allow for superfilling and the provision of public open space inside the site wall (see Figure 15)⁶. The Public Services Department has suggested that the filling of this area is not expected to be commenced until 2008 - 2009.

It is not inconceivable that St. Helier Harbour could in future be planned to be physically capable of handling the importation of more than 200,000 tonnes of aggregates per annum and possibly all of the Island's future requirements. A further feasibility study could be commissioned to determine the practicality and implications of such a proposition. However, the Planning and Environment Committee consider the importation of 200,000 tonnes to be a reasonable target, which will help ensure:

- •traffic levels and other environmental impacts in the Harbour area are restricted to more easily managed levels;
- •demand for valuable space at La Collette is not unduly excessive;
- •local supplies at Ronez Quarry are maximised where there will be relatively few intrinsic environmental effects;
- •a potential future monopoly situation in the supply of aggregates is avoided.

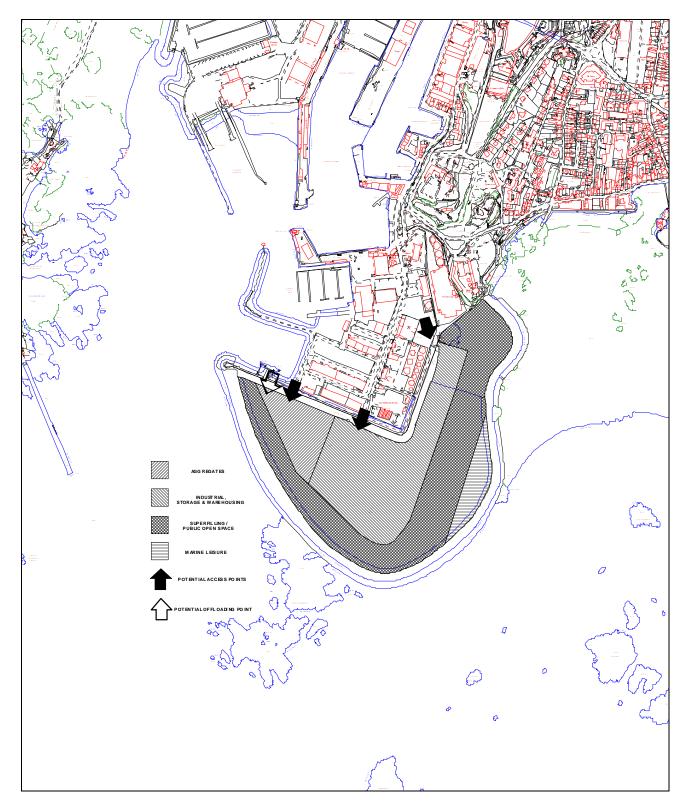
Clearly, the bulk importation of aggregates will have implications for traffic movement in and around the port area. This potential traffic impact issue and, in particular, the historic problems associated with the restricted road access running alongside Commercial Buildings was raised by a number of respondents to the public consultation exercise. It is assumed that the annual importation of 200,000 tonnes of aggregate will generate 40,000 x 10 tonne lorry movements to and from the harbour. This is the equivalent of 160 vehicle movements per working day (@ 250 working days per year), or 20 vehicle movements per hour on each working day.

⁷ If the new importing facility were to provide for processing operations equivalent to those existing at Granite Products, future vehicle movements would increase dramatically. In February 2000, for example, Granite Products Ltd. indicated that there were some 160,00 vehicle movements annually to and from their site. This equates to 80 movements per hour on each working day.

⁶ Work is currently underway to produce a more detailed masterplan for La Collette II, which will, inter alia, incorporate future off loading areas for sand and aggregates.

However, it is important to bear in mind that the bulk importation of aggregates would effectively coincide with the end of waste deliveries to La Collette and the re-location of the current recycling operation. Public Services Department records indicate waste deliveries accounted for 98,000 vehicle movements to and from La Collette during 1999 (i.e. the equivalent of 49 vehicles per hour on each working day). Furthermore, the recycling operation accounted for 2,900 loads out of La Collette last year and a significant number of additional incoming vehicle movements which were not delivering waste.

Figure 15: Development Framework for La Collette II



The Public Services Committee has indicated that the traffic implications of any proposal to import aggregates in bulk, will need to be considered, taking into account the implications of other proposals in the area (i.e. future development plans for the Harbour and the future use of La Collette II). They have suggested that these proposals will necessitate reconstruction / widening of roads, junction improvements and some traffic management measures. Clearly, it will be necessary to ensure the necessary work is properly planned and resourced to manage and mitigate the effects of overall increases in traffic movement. It is intended, therefore, that this be addressed as part of the Island Plan Review.

As alluded to earlier, the other major area of concern is the present level of port dues and stevedoring charges. This is being addressed by the Harbours and Airport Committee and it is not appropriate to pre-empt its findings. However, opportunities may exist to reduce these costs through greater economies of scale, through efficiencies in handling (e.g. use of self-discharging ships) and through careful evaluation of the alternative methods which might be available for funding the new berth (e.g. the use of private capital from its future users).

17. LINKS WITH SOLID WASTE MANAGEMENT STRATEGY

There are strong interrelationships between the requirements of mineral planning and solid waste management, which make it essential that any future mineral strategy is fully integrated with the Island's emerging solid waste management strategy. This requirement for integration is highlighted, in particular, by the opportunities:

- to recover waste materials through recycling;
- to use exhausted mineral sites for waste disposal and recycling activities.

It is clear that for the foreseeable future there will remain a significant volume of inert non-combustible waste produced on the Island which will require disposal. The majority of this waste comes from the refurbishment of buildings and new construction (92 %), with the remainder comprising incinerator ash and glass.

As previously indicated, this waste is presently disposed of in the reclamation site at La Collette II. The decision to reclaim additional land to the south of the original La Collette reclamation site was made by the States in the late 1980's, when the limits on the tipping capacity of the 'West of Albert' site became apparent. When the La Collette reclamation site started to receive waste in 1996, it was envisaged that it would take some 20 years to be filled to the level of the outer sea wall, at a rate of 170,000 m3 of infill per year. However, in the first 3 ½ years after opening, the site received on average approximately 200,000 m3 of material per annum.

In 1998 the Public Services Committee appointed the Carl Bro Group to help it review solid waste management operations in Jersey. The latest in a series of draft Solid Waste Management Strategy reports was produced in March 2000.* The report suggests that, at current rates of fill (250,000m3), the reclamation site will be filled to the height of the surrounding sea wall as early as 2009 and that the design life could be extended by 3 years by landforming above the sea wall. It suggests that this is a realistic scenario, given the anticipated high waste arisings from construction activity already in hand.

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⁸ States of Jersey Final Draft Solid Waste Management Strategy, Volume 1, Review of Strategy and Recommendations, March 2000.

In view of the finite void space currently available at La Collette, the report includes a review of the options for the future disposal of inert waste, in addition to superfill. These options are extremely limited and include:

- quarry restoration;
- further reclamation;
- export;
- sea disposal.

Quarry restoration is the preferred option and the draft strategy includes a recommendation that quarry restoration be sanctioned at La Gigoulande. The other options are not favoured for a variety of reasons. Further reclamation would be expensive to engineer and against current planning guidelines. Exporting waste would be expensive and "against the principles of proximity and sustainability". Disposal of waste at sea would be against the 'Convention on the Protection of the North Sea and North East Atlantic (OSPAR Convention).

Granite Products Ltd recognise the importance of considering the eventual end use of any quarry and has previously indicated that it would support in principle any suitable scheme which puts La Gigoulande to beneficial uses, once it is exhausted. Possible uses which have been mooted to date by the company representatives include landfill and waste recycling (which is best carried out within, or adjacent to a land fill operation), with potential end uses for agriculture, nature conservation, and/or public amenity. As stated earlier, if the quarry is expanded in accordance with the current planning application, it would have a life expectancy of 13-20 years depending on future rates of extraction. Given that the tipping capacity of La Collette II is likely to be met around 2012, there may be a necessity to begin landfill operations at La Gigoulande prior to the completion of quarrying. Although, at present, it would not be practicable to operate a rolling programme of progressive infill / restoration in a quarry of such small overall size, this should be possible in the required time-frame.

Granite Products Ltd has already excavated approximately 2,000,000 tonnes of rock from La Gigoulande and, if approved, the company's outstanding proposals would take the total excavation up to approximately 4,000,000 tonnes. This equates to approximately 1,600,000 m3 of land fill potential (@ 2.5 tonnes per m3), excluding recycled material. It is estimated, therefore, that the expanded quarry would have a landfill capacity of 6.5 to 8 years at current input rates (i.e. 200 - 250,000 m3), assuming perfect engineering conditions, which would allow for material to be filled to the same levels and slopes as the original landscape. In reality, the tipping capacity of the quarry might involve a somewhat shorter time-frame than that set out above.

The Planning and Environment Committee recognises the importance of securing high quality restoration at quarry sites and that this requires careful and informed forethought, together with skilled and effective implementation. The Committee would therefore expect any future development application for extending La Gigoulande to be followed up by detailed plans for restoration. Accordingly, if the current application is judged acceptable in principle, the subsequent consent will be conditional upon proposals for the restoration of the site to a condition suitable for an appropriate after-use.

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⁹ In supporting this proposal, the Public Services Committee has flagged up the necessity for careful planning to coordinate the timing of the completion of La Collette reclamation site, the need to start to use La Gigoulande and the completion of extraction at La Gigoulande. It has also highlighted that traffic implications on St. Peter's Valley will need careful consideration.

As previously stated, Granite Products Ltd is part of the Brett Group. This group of companies has an enviable record for restoration and conservation, based on its commitment to protecting the countryside and the environment throughout all its activities. The Brett Group has won more than 25 restoration and environmental awards. Furthermore, it has gained more awards for outstanding restoration of sites under the Sand and Gravel Association's Restoration Award Scheme, than all but one of the association's 90 producer member companies.

A particularly good example of a current restoration scheme undertaken by the Brett Group, is the 'Shelford Landfill Site' at Canterbury. Sand has been excavated from the site since the 1940's and since 1976, the site has been infilled with domestic waste as an agreed means of restoration. In addition, the site features a materials recycling facility. The quarry is being progressively worked and restored in a phased manner, which has been devised to minimise the operational area open at any one time. Ultimately, the site will provide a combination of agricultural, woodland and public amenity uses and a programme for the long term management and aftercare of the restored site is kept under review through a liaison committee.



Shelford Landfill Site

18. VISIT TO MINERAL AND RECYCLING OPERATIONS IN THE UK

On 17th March 2000, a group of States members representing the Planning and Environment, Public Services and Policy and Resources Committees, together with relevant officers, visited various mineral related operations in Kent, including:

- Shelford Landfill;
- Materials Recovery Facility, Hersden;
- Whitstable Harbour;
- Charing Quarry.

The trip was planned so that group members could see, at first hand, examples of various operations in aggregates production, importation, quarry restoration, land filling and recycling. The delegation was briefed at each site by managers from the Brett Group on the nature of the operation, the procedures and practices employed and any related issues. As a consequence, the trip helped foster a greater understanding of the potential for producing an integrated approach to mineral planning and waste management in Jersey. Furthermore, it helped to achieve a degree of consensus between group members as to the best way forward.

19. PROPOSAL FOR REVISED MINERAL STRATEGY

There are a number of key requirements for an acceptable future mineral strategy, which can be identified by reference to :

- the options analysis undertaken by Arup;
- the response to the subsequent consultation exercise; and
- the findings of emerging studies in relation to the 'Solid Waste Management Strategy, the St. Helier Harbour Masterplan and development planning for La Collette II.

Drawing on the above, it is considered that any new strategy must:

- take on board the relevant strategic policy objectives of the States;
- be fully integrated with the requirements of the emerging 'Solid Waste Management Strategy' and the 'St. Helier Harbour Masterplan';
- be capable of supplying the construction industry with adequate mineral resources of the required quality (i.e. 450,000 tonnes of aggregate per annum);
- encourage the efficient use of aggregates;
- maximise local supplies, where this will have relatively few intrinsic environmental effects;
- ensure operations are managed to a high standard during extraction;
- maximise the level of environmental protection and enhancement in mineral working;
- ensure that land worked for minerals is restored and given a beneficial after-use at the earliest opportunity;
- prevent mineral resources from being sterilised by other forms of development;
- move towards increased importation of materials;
- place significant emphasis on recycling materials and producing secondary aggregates, where practicable;

- recognise the potential problems and prohibitive costs associated with the provision of a new port at Ronez;
- acknowledge the opportunities for the creation of new berth and handling facilities at St. Helier harbour for large scale importation of aggregates;
- take into account the Island's future requirements in relation to the disposal of inert waste and waste recycling, and the future opportunities presented by La Gigoulande Quarry;
- recognise the desire to conserve the dune ecology of St. Ouen's Bay as an intrinsic environmental asset and to avoid sand extraction as a permanent feature;
- acknowledge that continuing concerns about using Ronez aggregate for some concreting end uses, due to the risk of alkali-silica reactivity, will not be resolved in the short term;
- avoid the price of sand and aggregates rising, as a result of imports facing high port charges, or through lack of competition / monopoly control of all supply sources by one operator.

The above considerations have led to the development of a modified preferred mineral strategy, which is significantly different to that recommended by Arup. The components of the preferred strategy are set out below:

PREFERRED MINERAL STRATEGY

involves:

- continuing production at Ronez into the longer term;
- continuing production at La Gigoulande for 13-20 years, depending on extraction rates;
- winding down Simon by 2014 and progressive restoration of the site;
- creating a new berth and handling area at St. Helier Harbour for importing all the Island's future sand requirements and a large proportion of its future aggregate requirements;
- using La Gigoulande for land fill with inert waste and for secondary aggregate production, when La Collette II has been filled;
- restoration of La Gigoulande for a suitable end use;

The preferred strategy has many advantages and generally meets all the requirements set out earlier. However, there are no perfect solutions and in the words of Concern, "the present situation has in-built dynamics that will take some time to change". Consequently, the preferred strategy also has some disadvantages, in that:

• it requires the extension of La Gigoulande in order to secure immediate and medium term supply requirements; 10

¹⁰ The environmental issues associated with this proposal will be addressed through the Environmental Impact Assessment process.

- it will not prevent further expansion of Ronez, in order to secure longer term supply requirements;¹¹
- it will result in continued traffic movement to and from Ronez and La Gigoulande quarries;
- it leaves Jersey Harbours with a monopoly situation over imported materials.

Given that this strategy places increased reliance on the importation of minerals, it is absolutely critical that Jersey Harbours are able to make suitable adjustments in order to secure acceptable port charges at St. Helier harbour. Indications of how this might be achieved have been alluded to earlier.

The supply structure for the preferred strategy over the next twenty years is set out in Figure 16 below. This is based on Arup's minimum demand scenario for aggregates of 385,000 tonnes per annum and the revised likely maximum demand estimate of 450,000 tonnes per annum (see Section 6).

As inferred earlier, it is difficult to accurately predict the level of demand which will exist in 15 to 20 years from now. However, if future demand were to reduce significantly in line with Arup's minimum scenario, importation could account for a considerably larger proportion of the Island's requirements and the degree of reliance on local extraction could be reduced accordingly.

Figure 16: Supply Structure: Preferred Strategy

Producer	Short-Medium Term (0-10 years)	Medium - Longer Term (10-15 years)		Longer Term (15-20 years)					
	tonnes	ton	nes	ton	nes				
		Minimum	Maximum	Minimum	Maximum				
Ronez	180,000	154,000	180,000	127,000	175,000				
Granite Products	135,000	115,000	135,000	-	-				
Simon	62,500	-	-	-	-				
Imports									
• sand	5,000								
 all aggregates 		58,000	67,000	200,000	200,000				
Moon	10,000	-	-	-	-				
Recycled	53,000	54,000	63,000	54,000	70,000				
La Saline	4,500	4,000	4,500	4,000	4,500				
TOTAL	450,000	385,000	450,000	385,000	450,000				

• Figure 17 shows the approximate time-frame for each component of the preferred strategy and serves to demonstrate the integrated nature of the proposals. It is the intention that each major component of the strategy will be subject to an

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¹¹ It should be borne in mind that the environmental impacts of this are relatively few, given its remote location, its coastal aspect which screens it from virtually all land-based visual effects and its situation outside the Island's water catchment area.

Figure 17: Programme for Preferred Strategy

20	000		2	005		20	010		20	15		20	020		202
Local Stone Quarrying															
• Ronez															
La Gigoulande															_
La Saline															
Local Sand Extraction															
• Simon															
• Moon															
Local Recycling Site															
La Collette II															彐
La Gigoulande															\exists
Importation through St. Helier Harbour															
Current sand consignment															\exists
All Sand Requirements															
Bulk Aggregates															
Local Inert Waste Disposal															
La Collette II															
La Gigoulande															
• Ronez															
Provision of harbour facilities															_
New handling berth - La Collette Oil Jetty Basin															
New aggregate storage area - La Collette															
Local Quarry Restoration															\exists
La Gigoulande															
• Ronez															
• Simon															

Definite

Possible

Environmental Impact Assessment, which provides sufficient information to allow a proper assessment to be made of its environmental effects. These assessments will add technical depth to the environmental investigations already addressed at a strategic level throughout the mineral study process and will provide opportunities to mitigate environmental impacts as far as possible.

20. MINERAL PLANNING POLICY PROPOSALS

If approved by the States of Jersey, the Strategy outlined in this report will be incorporated into the new Island Plan and set the framework for the future provision of aggregates. This will render it subject to the 'sustainability assessment' and 'monitoring' procedures to be included in making the plan and in subsequent reviews of policy performance. It is currently recommended that as part of the intended policy framework, the Planning and Environment Committee:

- does not seek to promote any new inland mineral workings;
- agrees in principle to the proposed expansion of La Gigoulande quarry as part of a medium term supply strategy;
- establishes a programme for the filling of La Gigoulande with inert waste, when La Collette II is full, as part of a restoration scheme which allows for a suitable end use: 12
- considers the most environmentally and operationally feasible approach to the further development of Ronez quarry as part of a longer term supply strategy; 13
- establishes a programme for the progressive winding down and restoration of sand and gravel operations in the Island;
- approves the development of a new berth and handling area at St. Helier Harbour for bulk importation of sand and aggregate, as part of a medium to long term supply strategy;
- initiates discussions with the Harbours and Airport Committee in relation to its ongoing investigation of port dues, so that they are adjusted to a level which will permit the economic importing of large volumes of sand and aggregate; 14
- invites a marine dredged aggregate operator to survey the potential for supplying the longer term aggregate needs of the Channel Islands market and determine the likely environmental impacts;

¹² Given the critical time scales, the current application for La Gigoulande will need to be approved, subject to a condition requiring a scheme of restoration to be submitted within 12 months, to allow sufficient time to prepare, submit and approve the required restoration scheme.

¹³ It is probable that part of any future restoration scheme for Ronez Quarry will include some infill with inert waste and this is generally accepted by Ronez Ltd. However, the company still considers that some sort of unloading dock or lock might be a possibility when all quarrying has ceased. Alternatively, there may be merit in looking at some of the suggestions made by others, including a yacht marina and a port to serve the fishing fleet. Notwithstanding the know constraints, should Ronez Ltd wish to submit proposals for such end uses in association with any proposals to enlarge the quarry, they will need to be supported by hydrographic and navigational feasibility reports, an Environmental Impact Assessment and any other necessary supporting information.

¹⁴ Harbour dues are set by the Harbours and Airport Committee on a commercial basis. It is possible that more economic and competitive dues might be achieved as a result of economies of scale, more efficient handling techniques and careful consideration of alternative methods of funding.

 encourages the continued use of secondary and recycled aggregates by ensuring that a suitable site is always available for processing construction and demolition waste materials.

In addition to these framework proposals, it is recommended that the new Island Plan includes a detailed set of development control criteria against which to judge future applications from mineral operators. The 'Jersey Mineral Study - Consultation Report', March 1999, sets out a series of draft policies for inclusion in the Island Plan, which are repeated, with some minor modifications, below:

New or extended mineral workings

Proposals for new or extended mineral workings will require the submission of an Environmental Impact Assessment and will only be permitted where :

- there is a demonstrated need for the resource to be worked in terms of its geological characteristics and properties, the gross net and saleable reserves and the market that the proposal is intended to serve;
- supply cannot be reasonably met from existing mineral extraction areas on Jersey or from other sources elsewhere;
- the proposal will retain existing employment opportunities;
- areas of important and sensitive countryside character, Sites of Special Interest and heritage designations relating to the built environment are not adversely affected by the proposal;
- satisfactory access to a highway is available or can be provided, and where the traffic generated can be safely accommodated on the road network without materially harming the environment;
- after consultation with the relevant water authorities it is considered that the proposal will not damage a source of public water supply or other water resources;
- the proposal does not damage a geological, archaeological or other historical factor important to the setting of the Island;
- rights of way are judged not to be materially affected by the proposal or are capable of being diverted;
- other environmental factors are judged satisfactory, e.g. the trans-boundary affects of the proposal;
- there is sufficient information provided in the Environmental Impact Assessment to allow a proper assessment of the environmental effects and ensure that any significant impacts predicted can be avoided or mitigated.

The use of planning conditions

If a proposal for mineral workings is judged acceptable in principle, the following detailed considerations will, where appropriate, be the subject of conditions on any planning permission granted:

- a satisfactory programme setting out the method and phasing of working;
- landscaping proposals and any other provisions as are required to protect the amenity of the area during and after working;

- proposals for restoration of the land to a condition suitable for an appropriate afteruse, such as agriculture, forestry, recycling, recreation, nature conservation, or development as part of future infrastructure requirements of the Island;
- a programme for the after-care of the land to a standard necessary for subsequent agriculture, forestry or amenity use (normally for a period of five years following the initial completion);
- where necessary to safeguard the amenity of adjoining residential areas, by use of:
 - -effective screening of the mineral workings;
 - -effective noise reduction measures;
 - limitation on working hours to normally exclude weekends;
- imposition of a limit on maximum annual output where justified by market and/or environmental considerations.

The use of legal agreements

Before determining applications for new or extended mineral workings the Planning and Environment Committee may seek to conclude with the mineral operator a legal agreement/s under which there would be restrictions upon or measures taken in connection with the working of the mineral, where such measures lie outside the normal scope of conditions which could properly be attached to the planning permission and where such measures are essential for the proper planning of the area, e.g. arrangements for the routeing of traffic to and from the site to avoid problems of residential amenity or highway safety.

Secondary Aggregates

Proposals for the production of secondary aggregates, such as crushed, demolished concrete, will be permitted in suitable locations, such as industrial areas, on demolition sites or within active mineral or landfill sites, only where it can be proven that:

- where relevant, the proposal does not unduly prolong the restoration and aftercare of a mineral workings site;
- the visual implications of the proposal are acceptable or can be satisfactorily be screened;
- the noise and dust impacts can be satisfactorily mitigated;
- the increase in vehicular traffic can be safely accommodated on the road network without material harm to the environment.

New off-loading facilities

Proposals for the development of new off-loading facilities for marine dredged and/or imported aggregates, will require the submission of an Environmental Impact Assessment and will only be permitted where:

• the proposal is demonstrated to be feasible in operational terms; supply security can be demonstrated either by the ability for year round working or by acceptable arrangements for stockpiling and the long term operation of such a venture in terms of running costs and potential revenue;

- the proposal does not adversely affect any conservation or built environment designations;
- the proposal does not adversely affect any local or related marine ecosystem;
- the visual, noise and vehicular implications can be satisfactorily accommodated without harming residential amenity;
- there is sufficient information provided in the Environmental Impact Assessment to allow a proper assessment of the environmental effects and ensure that any significant impacts predicted can be avoided or mitigated.