

12th December, 1966.

Director of Industry

Please refer to your letter minute dated 2nd December 1966 on the subject of the possible establishment of a cement industry at Xatt-Ahmar Gozo. In this connection you may have seen my letter minute of the 22nd November 1966 addressed to the Secretary, Ministry of Education, Culture and Tourism and copied to the hon. Minister of Trade, Industry and Agriculture.

2. That letter was written on the basis of assumptions I made myself, but since then I have received the formal application together with site plans, feasibility reports, etc; and I am therefore in a much better position to assess the problem.

3. This problem must be renewed from two separate but closely inter-related aspects: the economic justification or otherwise of the scheme; and the effect on the landscape which the plant and the quarries will undoubtedly have.

4. The study of the economics of the scheme is not really my concern and I am certain that in due time and in the right place full consideration will be given to this very important aspect of the project. All the same there are some factories on which I feel I should comment even at this stage.

5. The two major advantages advanced for this project are (i) the reduction in Malta's balance of payments to the tune of some £300,000 annually and (ii) the employment of 195 males (when the plant is fully operational) resulting in an annual wage bill in the region of £75,000. Both are sizeable contributions to the island's economy.

6. But these benefits are obtained at such a high price that the advantages derived become in effect very much smaller than apparent at first sight. The Government contribution in grant money is such that if invested at 6% interest it would yield annually a sum nearly equal to half the whole wage bill of £75,000 for the full 195 employment figure. And as I hope to show later on, the annual saving of £300,000 in Malta's payments abroad will probably be much more than counterbalanced by the loss of money brought into Gozo by tourists and foreign residents.

7. The estimated retail price of the local cement ex. Marfa is only 8/- per ton less than that of the imported cement ex. Valletta. As the foreign cement is subject to customs duty at the rate of 20/- per ton, the saving ex-wharf of 8/- per ton is achieved at the expense of customs duty of 20/- per ton which is lost to Government. The saving to the consumer is even less than 8/- per ton because Valletta is nearer to the sites of major consumption than Marfa and therefore internal transport charges would be greater for the local cement. It is, moreover, not beyond the bounds of impossibility that the price of the local product would go up once importation of foreign cement is banned.

8. Having premised this much of the direct economics

of the project, I now pass to the other highly important, and, as I will show, closely related facet of the proposal; the harm to the landscape and the effect this will have on the potential of Gozo for tourist development.

9. On the enclosed map of Gozo, I have shown the site of the cement factory as well as of the three quarry areas. I have also shown, the area of 1300 Tumoli of land at Ta Cenè for which a scheme of high class tourist development is being prepared; the land at Iz-Zewwieqa an area of 400 Tumoli, for which a letter of intent permitting residential and tourist development will be issued anyday now; and lastly Fort Chambrai which is the subject of serious study for conversion into a first-class hotel. The map also shows the only three areas on the whole of the Southern shore of Gozo where the coast is sufficiently shallow to allow bathing. Xatt l'Ahmar is at the moment little used because of a sewage outfall close by: but my department is already studying schemes for removing this source of nuisance.

10. A look at the map will show that the cement factory will occupy an area measuring 1200 feet by 1500 feet while the quarry next to it covers an area averaging 3300 feet long by 1500 feet width. This is a very large area indeed, roughly equivalent to the whole of Nadur, which will be made extremely unattractive both by the cement factory itself as well as by the enormous scar on the hillside created by the quarry.

11. In paragraph 8, of the supporting statement, the applicants had this to say about the choice of Xatt l'Ahmar:- "Apart from being remote from any major towns it is also far removed from present tourist development and those known to be under contemplation in the future. The site has the advantage of being secluded from view from almost any other point in Gozo, being surrounded on three sides by hills and on one side by the sea." The obvious implied admission of this statement is that the works and the quarry are unsightly and harmful to other interests.

12. But Xatt l'Ahmar is situated where every visitor to Gozo cannot help but see it and so close to the three zones of tourist development referred to in paragraph 9, namely Ta' Cenè, Fort Chambrai and Zewwieqa that the setting up of the proposed works will completely spoil the first two developments and will seriously harm the third. I am quite certain too that the sea for a considerable area around would be made very dirty by the quarry fines, which are bound to find their way into the sea.

13. When in 1956 the Standard Oil Company wanted to put an oil storage installation at Mistra I strenuously fought against the project; I was finally overruled by the Government of the day which decided that beauty must give way to economy. But that decision was taken long before the image of Malta as a tourist centre had even dawned: that decision today is regretted by one and all. Yet the tank installation at Mistra is very much cleaner, more orderly, smaller and far less unattractive than the cement factory and the quarry could ever be.

14. Two other quarry areas are projected one at Ta' Nuffara and another near Ghasri: both are very conspicuous with the former also covering an extremely large area, (equal to the whole of Qala) at the head of the attractive valley leading to Ramla Bay.

15. The gross error which was made in the case of the tank installation at Mistra must not be allowed to happen in Gozo. It is, of course, extremely difficult to evaluate harm done to the landscape in terms of money; but some assessment can be made.

16. The two developments at Ta' Conċ and at Iż-Żewwieġa above provide for a resident population of 8500 which, it is safe to assume, would all be foreigners. Government is doing its best to attract foreigners with incomes exceeding £800 per annum to settle in Malta and Gozo. If the proposed factory discourages only 5% of the foreigners who could come to the two areas of Ta' Conċ and Żewwieġa this would mean the loss of a £320,000 per annum in money brought from abroad and very much more if the foreign residents, as is more than likely, bring in with them incomes in excess of the £800 per annum assumed in my assessment. As I said in paragraph 6 this loss would completely neutralise the saving in foreign currency expected from the cement factory.

17. I understand plans are already under active study for the conversion of Fort Chambrai into a first class hotel complex. But with the cement factory sited virtually under the bastion walls I cannot see this for being turned into a hotel. The consequent loss in revenue from tourists could well be of the order of £250,000 a year.

18. The harmful impact of the cement factory and of the quarries on the rest of Gozo is less easy to assess but harm would be caused beyond the shadow of a doubt, with the result that Gozo would suffer loss in one of its best selling points; the unspoilt beauty of the countryside and the excellent possibilities that this beauty offers for attracting tourists.

19. I am aware that there is an employment problem in Gozo, and, therefore, the prospects of an industry offering employment to 195 males is bound to appear very attractive and is bound to cloud the judgement and the unbiased assessment of all aspects of the project. What we must guard against is decisions which do not reflect a time evaluation of all the factors for and against, which do not take into consideration the long term effect of the project and which may be dictated very largely by the deep wish of providing employment prospects with the least possible delay.

20. I agree that there is need to increase employment outlets in Gozo but I submit that this can be achieved more quickly and in larger numbers by the development of the Island for tourist purposes. Ta' Conċ and Iż-Żewwieġa on their own should provide employment for many more than 195 prospected for the cement factory and there is every probability that these two developments, especially the former, will get off the ground much earlier than the cement factory. On the contrary, the cement project, if approved, might well mean the postponement or at least the considerable curtailment of both schemes and would of course be a death blow to the development of Fort Chambrai.

21. For these several reasons, I submit that the project should be rejected. There is very little direct immediate economic benefit resulting from it, and if the long term and the wider view is taken the net result would be a very considerable loss in the revenue which Gozo would make out of the tourist industry and out of foreign settlers.

(S.J. Mangion)
Director of Public Works

copied to:- Hon. Minister of Public Building and Works
Hon. Minister of Trade, Industry and Agriculture.
Hon. Minister of Education, Culture and Tourism.

22nd November, 1966.

Secretary,
Ministry of Education, Culture and Tourism

Please refer to your letter-minute dated 17th November, 1966 on the subject of the setting up of a cement factory in Gozo.

In this connection it is worth noting what I said almost a year ago to the day to the Secretary of the Ministry of Industrial Development and Tourism as per copy of letter-minute P.W. 98/65 enclosed herewith. What I wrote then applies equally or with greater force to-day because, if what I hear is right, the proposal is to excavate the clay in the Port Chambray area. If this is true, or if the proposed clay quarry is in an equally conspicuous position, I consider that the setting up of a cement factory in Gozo would cause irreparable harm to the landscape and would definitely jeopardise the chances of turning Gozo into a tourist Centre of the first magnitude.

Even assuming a yearly production of 60,000 tons of cement this means at least 45,000 cubic yards of clay excavated annually so that in ten years a hole having a volume of 450,000 cubic yards would be produced. This means a scar measuring say 300 yds. x 100 yds. x 15 yds. deep which is not only large but would be impossible to hide especially in Gozo which is more hilly than Malta and where, therefore, the quarry must be sited on the face of some cliff or other.

Thus for a possible employment of 200 persons and a problematic slight reduction in the price of cement, there would be most certainly a considerable diminution of Gozo's prospects of a good tourist development, a devaluation of property and a reduction in the employment which tourists would provide which would far outweigh the employment that the cement factory could possibly promote.

At the moment, the consumption of cement in Malta and Gozo is something like 60,000 tons a year. This must be the lowest limit at which a cement factory could operate economically. Even assuming that the consumption of cement would double within the next ten years - this is doubtful - I do not think that a cement factory of this output would really employ more than 100 to 150 persons. If the machinery is to be efficient and competitive it cannot possibly employ much labour, it would be uneconomical if it did.

I am sure that we can discount any consideration of exporting our cement. The only "export" would be in Malta which, of course, adds to the cost of cement delivered in Malta where the bulk of the cement would be used.

For these several reasons, I am strongly against the setting up of a cement factory in Gozo.

sd.(S.J. Mangion)
Director of Public Works

cc: Hon. Minister of Public Building and Works.
Hon. Minister of Trade, Industry and Agriculture.
Hon. Minister of Education, Culture and Tourism.

29th November, 1965.

Secretary,
Ministry of Industrial Development and Tourism

Please refer to your letter AIB 153 of the 8th October, 1965.

2. Sites for the establishment of a cement factory are rather difficult to find. Those sites which are considered ideal for this purpose have also great tourist potential and are already earmarked for such development.

3. Good clay together with globigerina limestones are to be found in the areas north of Dingli especially in Gnejna and Ghajn Tuffieha Bays. Clay is also found at L-Ingiebah to the north of Solomon Palace but this does not appear to be as good as that of Gnejna. I do not know of any other likely areas in Malta. But this area will yield very much more financially if developed for this tourist potential.

4. One may suggest Gozo. Clay can be found almost anywhere there. Gharb and Ta' Pinu areas have very good possibilities provided the clay is good for cement making. But here again Gozo's greatest asset is its attractiveness and, up to now, its unspoilt beauty and nothing should be allowed to mar such beauty. Assuming for the moment that a site for the cement works could be found sufficiently far from areas capable of development, it is not unlikely that such an area would have or could have facilities for direct loading of cement from kiln to ship.

5. Land transport would be certainly required from the kiln to Mgarr Harbour and then sea transport to Malta. By the time all these extra costs are added on, it is highly probable that the price differential between the local and the imported cement would be very small and certainly not enough to risk in any way damaging Gozo's possibilities for a better and much more lucrative development which is also much more labour intensive.

6. Considering that all countries around us produce their own cement, the prospects of exporting cement from Malta are practically nil.

ed. (S.J. Mangion)
Director of Public Works

INDUSTRIAL DEVELOPMENT BOARD FOR MALTA

MALTA HOUSE, LONDON

ESTABLISHMENT OF A CEMENT INDUSTRY

January, 1967

L-ARKIVJI NAZZJONALI TA' MALTA

P-E CONSULTING GROUP LIMITED

Management Consultants

Marketing and Commercial
Planning Division

12 Grosvenor Place
London SW 1
Telephone BELGRAVIA 3311
Telegraphic PRODEM
LONDON SW 1

Industrial Development Board for Malta

Malta House, London

Establishment of a Cement Industry

Introduction

This brief report reviews the applications, so far as the data in them allows, by Vickers/Memo and the Malta Cement Co. Ltd. (Applications Nos. 304 and 314) for grants towards the establishment of a cement industry in Malta. It has been prepared with the assistance, which is gratefully acknowledged, of Mr. Farmer and Mr. MacGillivray of CDFC.

1. Technical

1.1. Vickers/Memo

This proposal envisages the establishment of a complete plant to utilise local raw materials, with the exception of a small amount of gypsum to be imported from Libya. The annual output would be 60,000 tons initially, rising to 67,500 tons when in full production.

The plant proposed is a conventional dry process unit with one novel feature. This is the 'horizontal array pre-heater', a new type of unit not yet apparently constructed by Vickers which would replace the more usual Klockner vertical type. It is understood from Mr. Holman of Henry Pooley, Vickers' consultants, that one of the advantages of the project to Vickers would be the opportunity to gain experience with this new type of pre-heater.

Apart from this one exception the plant proposed appears to be completely conventional and capital and running costs conform with accepted practice. The labour requirements could almost certainly be significantly reduced but Mr. Holman stated that a balance between capital cost and labour had been aimed for.

1.2. Malta Cement Co. Ltd.

This project envisages the import of cement clinker from Sicily, the only manufacturing process to be undertaken in Malta being the final grinding and packing. Insufficient detail is given in the application to assess the appropriateness of the plant proposed. There is, however, some doubt whether the grinding mill to be used is secondhand or existing but unused.

1.3. General

It is generally accepted that the minimum economic production unit for a complete cement plant is 120,000 tons p.a. and practice appears to be moving towards 200,000 tons minimum size. It is, however, quite common for smaller units

to be established using imported clinker for final grinding; this has been done in several African countries. Therefore, doubt must be cast on the suitability of the Vickers/Mamo proposal for a complete process as against that of the Malta Cement Co. The first would only be economically viable within a totally protected market, as is proposed and with a very substantial grant.

2. Financial

2.1 Vickers/Mamo

Appendix I shows the salient financial features of this proposal. The main points arising are:-

- For a capital outlay of £200,000 Vickers/Mamo gain control, assuming that the grant allows, of an investment worth £1.5 million.
- The ratio of profit to total capital committed is an average of 5% over the first 6 years and 9.7% thereafter (less tax after 10 years).
- However, the ratio of profit to the capital invested by Vickers/Mamo is an average of 33% over the first 6 years and 63% thereafter.
- The Government is asked to provide grant aid of about £3,000 per employee.

2.2 Malta Cement Company

Incomplete financial information is provided in this application. Salient features, shown in Appendix II, are:-

- The proposed source of £81,622 of the total capital investment of £261,009 is unexplained.
- The final operating profit to the shareholders cannot be assessed from the information available.
- Grant aid of about £2,000 per employee is requested.

3. Economic

3.1 Vickers/Mamo

The application requests the total prohibition of imports of cement and cement clinker.

The plant would, however, yield a saving in foreign exchange; the amount cannot be assessed without detailed knowledge of present prices of imported cement but it might be of the order of £200,000 p.a.

3.2 Malta Cement Company

This application requests exemption from duties on imports of raw materials, mainly cement clinker. Thus, although the members of the Company currently account for nearly 70% of existing imports of

cement, the Maltese market would remain open to price competition which should be reflected in a reduction in building costs. At the same time the market for, or the profit on, the locally produced cement would be reduced though the proposed initial retail selling price of £6 10s. per ton compares favourably with the Vickers/Mamo price of £7 15s. per ton.

The savings in foreign exchange to the Maltese economy would, however, be very much less than in the case of the Vickers/Mamo project.

4. Conclusions

The application from the Malta Cement Company requires very much more detailed information on finance and further information about the proposed manufacturing plant.

In the case of Vickers/Mamo, further information on the proposed pre-heater unit is needed. In addition Vickers/Mamo should be asked to increase their financial risk, perhaps through the provision of a loan in lieu of part of the grant.

Substantial public finance for a cement industry in the Maltese Islands can be justified in the context of the long accepted obligations of the British Government to compensate for the decline in dockyard activity.

Industry is necessary to widen the opportunities for employment beyond the narrow range of skills provided by the tourist trade.

The only natural resources of Malta are the almost unlimited reserves of raw material for cement manufacture.

A full scale cement plant would provide regular and, for Malta, substantial male employment.

Out of a sum of £30m. available as aid for industry allocation in the region of £500,000 for a basic industry of this kind with safeguards, would seem to be in the best long term interests of Malta.

APPENDIX IVICKERS/MAMOEmployment Provided 195

<u>Total Assets</u>	<u>Source</u>		
	£	£	
Buildings	193,329	Share Capital	200,000
Installations	11,736	Bank Loan (6 yrs.)	496,230
Plant & Machinery	858,830	Grant	603,770
Furniture/Fittings	38,800		
	<u>£1,102,695</u>		<u>£1,300,000</u>

Reserves	60,000
Preliminary Costs	44,845
Working Capital	92,460
Total Investment	<u>£1,300,000</u>

	£	Depreciation £	Total Cash Flow £	Cumulative £
Profits after writing off formation costs/interest				
Yr. 1	(24,463)	52,170	27,707	27,707
2	34,957	104,341	139,298	167,005
3	60,874	104,341	165,215	332,220
4	74,177	104,341	178,518	510,738
5	125,325	104,341	229,666	740,404
6	125,325	104,341	229,666	970,070
	<u>£396,195</u>	<u>£573,875</u>	<u>£970,070</u>	<u>£970,070</u>

Annual Average

Profit to Shareholders	1st 6 years say £66,000 = 33% on Shareholders Investment
Initial Investment	Thereafter say £126,000 = 63% " "
Profit to Total Capital Committed	Annual Average 1st 6 yrs 5%
	Thereafter 9.7% (less tax after 10th yr.)

APPENDIX II

MALTA CEMENT COMPANY

Employment Provided 30

<u>Total Assets</u>		<u>Source</u>	
	£		£
Buildings	60,057	Share Capital	30,000
Installations	9,770	Bank Loan	90,000
Plant & Machinery	79,828	Grant	59,387
Secondhand	24,770	?	81,622
Furniture/Fittings	3,735		
	<u>£178,160</u>		<u>£261,009</u>

Preliminary Costs	11,494
Working Capital	<u>71,355</u>
Total Investment	<u>£261,009</u>

At 60,000 tons p.a.	Sales Value	£389,655
Bagged Production Cost	(98,875 sh)	<u>296,625</u>
		<u>£ 93,030</u>

AIDS TO INDUSTRIES SCHEME

Departmental Report on the Cement Projects with special reference to:-

- Appl. 305 - Vickers Ltd. and Mamo Bros (1939) Ltd, and
Appl. 314 - Cement Industries Ltd, a company in formation

During the last 4 years the Malta Government received five applications for assistance in connection with the establishment of a cement industry in these Islands. The first application received was by a Greek entrepreneur - Mr. Othon C. Lefas Tetenes - who opted only for a site near Gnejna Bay. Owing to the possible tourist development in the area and its natural landscape the project did not materialize. An application was received from a Maltese company - the Malta Cement Co. Ltd. (eventually to be styled 'The Cement Industries Ltd') which comprises the main cement importers in the Island - who are seeking assistance for the establishment of a cement industry which follows the process of the grinding of clinker with other components. The expertise in this case comes from the Cementerie di Augusta S.p.a. of Sicily. A third application came through a joint effort by Vickers Ltd. of London and Mamo Bros. of Msida. This project envisages the manufacture of the whole cycle of cement by the 'dry process' method, on the South-Western part of the Island of Gozo at Ix-Xatt l-Ahmar. A fourth application came from BIRLA A.G. of Switzerland who wanted to produce cement but the promoter have failed so far to produce a viability report because of difficulties of permission by the Indian Government to release a qualified engineer for the purpose. A fifth attempt was made by SAVAS Cementerie of Syracuse, Sicily. This firm pin-pointed Gnejna Bay as a possible site for their project. These latter promoters were recently informed that unless another suitable site was chosen no further consideration could be given to their request. In the circumstances the present report is concerned only with applications 305 and 314, in respect of which full details, feasibility studies, etc., have been duly received.

2. Objections to both projects were received as follows:-

Application No. 305 - Vickers/Mamo

- i) The Malta Cement Co. Limited
- ii) Mr. J. B. Sorotto (the local representative for the Greek promoter Othon C. Lefas Tetenes)
- iii) Messrs A. V. Bartoli & Sons
- iv) Din l-Art Helwa
- v) An official report by the Director of Public Works.

Application No. 314 - Malta Cement Co. Ltd.

- i) Vickers Limited
- ii) Mr. J. B. Sorotto
- iii) Messrs A. V. Bartoli & Sons

iv) Din l-art Helwa

3. A feasibility study by Henry Pooley Consulting Engineers (Overseas) Limited, a memorandum on the economics of the supply and manufacture of cement in Malta, prepared by the Malta Cement Co. Ltd and a copy of a lengthy letter by the Malta Cement Co. Ltd to the Minister of Trade, Industry and Agriculture have already been circulated to Board members.

4. Capital Requirements

<u>305</u>		<u>314</u>	
<u>Fixed</u>		<u>Fixed</u>	
i) Buildings	£309,910	i) Buildings	£69,827
ii) Plant & Machinery & Preliminary Contingencies	£897,630	ii) Plant & Machinery	£83,563
	£1,207,540	iii) Removal Expenses	£153,390
Working (3 months)	£92,460	iv) Instruction and qualification costs of Personnel	£24,770
	£1,300,000	Working (3 months)	£11,494
			£71,355
			<u>£261,009</u>
<u>Financing</u>		<u>Financing</u>	
i) Shares:		i) Shares	£60,000
Vickers £100,000		ii) Contribution in kind by Cementerie Aug.	£36,264
Mamo Bros. £100,000	£200,000	iii) Loans	£105,358
ii) Private Loans	£496,230	iv) Govt. grant 33 1/3%	£59,387
iii) Govt. grant 50%	£603,770		<u>£261,009</u>
	£1,300,000		

5. Ratios

Grant/Employment:

(Appl. 305 - £3096.2
(Appl. 314 - £1979.66. Employment

Appl. 305 - 195 males

Appl. 314 - 30 males

7. Assistance SoughtAppl. 305Appl. 314

i) Income tax relief;	i) Income tax relief
ii) Capital grant of 50%;	ii) Capital grant of 33 1/3%
iii) Customs duty exemption on machinery and equipment;	iii) Customs duty exemption on machinery and equipment; and
iv) Customs duty exemption on materials; and	

- v) Prohibition of the importation and manufacture of the proposed products.
- iv) Customs duty exemptions on materials.

8. The establishment of the cement industry in these Islands has engaged the minds of several Governments during the past 15 years. The perennial question has been the economic rather than the physical feasibility of the project, keeping in mind that Government has an assured amount of revenue through the large amounts of import duties leviable on such an important building material.

9. The two projects present completely different ways of approach for the establishment of the industry. While application 305 envisages the production of cement through the whole process from the raw material up to the finished product, application 314 covers the production of cement from semi-manufactured imported clinker which will be ground in Malta together with other components. The former proposes to employ 195 men and to locate their factory in Gozo while the latter proposes to employ 30 men and to locate their factory in Malta.

10. It is well known that public opinion in the Island has been aroused by the announcement that Vickers intended to set-up a factory in Gozo. Long polemics have been taking place in the local press and it is worthwhile to put in the balance various views put forward.

11. The question of the effect of the factory on the Gozo landscape has been very much to the fore. It is known that the proposed site at Xatt l-Ahmar is earmarked as the centre of two projected residential areas - one at Ta' Ċené and the other one at Iż-Żewwiega. Besides there is talk of the building of a luxury hotel at Fort Chambray. In this connection it must be stated that last November the hotel entrepreneur of this tourist project informed the Government Tourist Board that "the development of Fort Chambray would be absolutely ruled out if the cement factory had to be sited as mentioned. A cement factory influences adversely not only the lands and the localities immediately adjacent but also property included in a considerable area from the site of the factory. Thus, for example, all plans to develop Mgarr harbour as a haven for pleasure craft would likewise have to be abandoned. ...in the circumstances we would have to await further development before incurring in other disbursements." In a letter accompanying their application, the promoters of application 305 did their utmost to prove that the presence of a cement factory should not be either near any major towns or in the heart of tourist development. So much so that they stated categorically that "the site has the advantage of being secluded from view from almost any other point in Gozo it being surrounded on three sides by hills and on the fourth side by the sea." Such an admission is proof enough that the proposed works together with the ensuing scar of the quarry supplying the basic clay are (a) unsightly, and (b) harmful to other interests.

12. Mr. Debeaufort, a UNESCO specialist engineer from the Dutch firm of NEDECO, visited Gozo in December and the following morning expressed his strong opinion that a plan for the industrial development of Gozo should be prepared and a cement factory erected within such an industrial centre. He added, however, that even if the cement factory were to be the only industry in Gozo, he was

of the unchangeable opinion that it should not be erected on the site proposed by Messrs. Vickers Mamo. The south of Gozo should be kept free from similar incumbrances. For one thing all the south of Gozo was the first sight that tourists going to Gozo would have and secondly the proposed tourist development of the sister Island has so far been concentrated on this southern coast. Mr. Debeaufort was most categorical in saying that he was not aware of any cement factory that was smokeless, dustless and noiseless, but even assuming that such a factory could be erected he would still be of the strong opinion expressed above. The view of the Minister of Education, Culture and Tourism, is that "we should be careful not to do anything to impair in any way the unsophisticated beauty of the sister island". The view of the Minister of Public Building and works is "I agree that Gozo should not be spoilt by the erection of such a factory".

13. It has been stated that in view of recent technological reasons a cement factory can be said not to exhume dust and fumes. It is known that cement industries abroad are generally situated in "no man's land". It is considered that in Malta where we have a comparatively dry climate it is essential to have such an industry so situated. Cement and stone dust are reported to be harmful to the lungs and it is not therefore congenial to have such an industry immediately adjoining residential areas.

14. For a comparison exercise it may be said that from figures given for a typical cement plant in India with an output of 200,000 tons of cement clinker, given at the 1964 U.N. Seminar in Denmark, the rents and taxes amount to 4s. 6d. per ton while royalties are 1s. 6d. per ton of cement. Applicants 305 propose a royalty of -/2 per long ton.

15. Of course, the location of a cement industry in Gozo entails several expenses, all of which would no doubt have their effect on the selling price of the product in Malta:-

- a) transport from the site to Mgarr Harbour;
- b) loading on ship;
- c) transport by sea from Gozo to Malta;
- d) unloading at a point in Malta;
- e) unloading on trucks.

16. It has been stated that owing to the present building boom in Malta and Gozo the demand for cement is bound to increase considerably and both applicants are basing their projects on a production capacity of 70,000 tons. While it is admitted that the building boom may last for another 5 to 10 years it is not anticipated that it will continue to increase at the rate as it has done during the last 2 years or so. The question of the possibility of exporting the cement produced in Malta now comes to the fore. Indeed the prospects of this possibility are rather bleak when a look is given to the Mediterranean basin where all the countries bordering this sea are already producing or will very shortly be producing their own cement. Starting from Italy where the Taranto factory already has a surplus production, we go to Greece where the Campagnie Generale de Ciments has been exporting to Libya at reduced freight rates. Onwards to Cyprus, Lebanon and Egypt and then across the North African coast in Libya, Algiers and Tunis finishing up at Morocco. All these countries are

catering for their own requirements of cement. The projected development of a Free Port, an Airport, possibly another harbour and the extension of the Docks are major works which occur only once.

17. Apart from the question of landscape there is the other fact that this industry is very highly geared. The capital/grant ratio in the case of application 305 reaches the high figure of over £3,000 per capital. Added to this there is the factor of the lease of such a valuable plot of land - which is very amenable to tourist development - for 100 years at a nominal rent. Applicants moreover request a virtual monopoly in that they insist on a total prohibition of imports.

18. Application 314 presents difficulties not altogether of the same nature as does Application 305. It must be considered that the proposed project will will likewise be depriving the Government of a very substantial sum via loss of revenue from import duties. Besides, in this case, we have an increase in Malta's abnormally high import bill. As most of the materials which are proposed to be ground here would have to come from overseas, the proposed employment of 30 does not help Malta's unemployment problem in any appreciable way. Again, in this case, there are site difficulties. The factory is being proposed to be constructed at Marsa - very near a winery and only a few hundred yards away from the Frosted Fish, Fruit and Foods Federation. It will be readily agreed that the presence of cement dust is not very welcome to either of these two industries.

19. The Malta Government's main aim in launching the Aids to Industries Scheme was and still is the promotion of export activity. The idea was to gear Malta and the Maltese to think in terms of what industrial activity entails. A local industrial climate ensures the earning of foreign exchange to which no country can ever turn a cold shoulder. With an increase in the production of more and more products the import bill - which is a headache to many a larger country than Malta - is bound to decrease. It is that imbalance that every Government wishes to rectify.

20. The Board is requested to consider the two applications, and to tender its advice.

(W. Podesta')
Director of Industry

February 18, 1967.

MALTA CEMENT PROJECT

57,750 Tons of Clinker Per Annum Plant
(60,000 Tons of Cement)

COST OF PRODUCTION

		<u>Cost Per</u> <u>Ton of Clinker</u>
Limestone	incl. Wages (5480)	£0.359
Clay	" " (1315)	.0632
Gypsum & £3/10/ton	" "	0.140
<u>Kiln fuel</u>		
1050 k. cal./kg of 9775 kg. cal. oil		0.870
&£8.1/ton, say 10.75%		
(including clay drying)		
<u>Power</u>		
& 1.5d Unit, using 115 KWH ton Cement		0.720
<u>Water</u>		
2/10d. o/oo gals, max 50 ⁰⁰⁰ day		0.35
<u>Salaries and Wages</u>		
Management	£13,600	
Shift	26,990	
Packing Plant	3,440	
Despatches by sea	4,750	
General Charges	<u>5,480</u>	
	£59,260	
National Social Services	<u>975</u>	
	£60,235	1.042
<u>Repairs & Maintenance</u>		
Including spare Parts	£29,495	0.511
and wages	8,255	0.143
<u>Stores</u>		
Grinding Media	}	0.160
Refractories		
Lubricants		
General Stores		
<u>Land Rent and Insurance</u>		
		0.104
<u>Bags</u>		
		0.400
<u>Depreciation</u>	£104,341	<u>1.807</u>
<u>Cost per Ton of Clinker Produced</u>		6.354
Cost Per Ton of Cement incl. Gypsum (60,000 Tons per annum)		6.12

By slide rule.

<u>Plant, Machinery and Equipment</u>	<u>£</u>
Limestone and Clay Quarry Plant	66,100
Limestone and Clay Crushing Plant	39,200
Raw Material Drying and Grinding Plant	85,500
Raw Material Blending and Storage Plants	81,000
Rotary Kiln Plant	176,000
Oil Storage and Firing Plant	5,900
Clinker Handling Plant	4,890
Gypsum Crushing and Handling Plant	7,900
Open Circuit Clinker Grinding Plant	45,000
Cement Transfer and Storage Plant	19,200
Cement Packing Plant	17,600
Miscellaneous	1,600
Workshop Equipment	27,500
Laboratory Equipment	11,300
Weighbridge	2,200
Refractory Linings	11,700
Electrical Equipment	87,000
Freight and Insurance	50,000
Site Transport	14,000
Erection and Commissioning	90,000
Barge	11,360
Two Cranes	18,000
Chaseside Shovel	3,620
1 Truck for Cement	4,200
Additional Cost by Difference of 3 Trucks	1,600
4 Dust Containers & £200 each	800
32 Bagged Dust Containers	5,760
Insulation to Cyclones etc	7,500
See Freight on 4 Trucks and Cranes	1,200
	<hr/>
Total	897,630
	<hr/>

APPENDIX VIII

HENRY POOLBY (Consulting Engineers)
Lyon House,
Wandsworth High Street,
London, S.W. 18.

October 7, 1956

Messrs Mamo Brothers (1939) Ltd.,
MSIDA,
MALTA, G.C. and,

Messrs Vickers Limited
Vickers House,
Millbank,
LONDON, S.W.1

Dear Sirs,

MALTA PORTLAND CEMENT PROJECT
Comments and Verification of the Project
by the Consulting Engineers

We have made an extensive study of the feasibility of constructing a cement manufactory on the islands of Malta or Gozo as the result of which we recommend the most suitable site to be on the island of Gozo where, in our opinion, it will be quite unobtrusive and will in no way interfere with the general amenities nor spoil the view.

Gozo is also chosen because of the greater volume of clay reserves readily available.

Investigation of the limestone and clay at the site has been carried out and many samples brought to the United Kingdom for analyses from which we have calculated a number of mix proportions, using the several limestones available. The resultant cement complies in all respects with the requirements of BSS 12, 1958 for Portland Cement.

Furthermore, we have no hesitation in stating that the reserves of limestone and clay on the island of Gozo are more than adequate and are of suitable quality.

Three borholes have already been sunk to an average depth of 73 ft., and the results of the analyses are awaited. These holes are in the globigerina rock, and the results will merely emphasise the proportion of this rock to be used to that of coralline limestone and clay, and will make it possible to define the working quarry area more exactly. The results will in no way affect the feasibility of cement manufacture.

We have calculated the total cost of establishing the factory complex and also the cost of production, including depreciation at rates generally accepted in the industry, and find this cost to be sufficiently below the current retail selling price of cement as to leave a reasonable margin of profit on the assumption that the quota of "Grant-in-Aid" is sufficient to reduce the capital cost to the applicant near-to that which would pertain to a larger standard size plant.

Yours faithfully,

per pro: HENRY POOLBY (CONSULTING ENGINEERS)

(H. HOLMAN)
PRINCIPAL

APPENDIX IX

EXPORT MARKET

One of the important principles of the proposed cement company would be to develop an export market in the Mediterranean area. Export of cement, however small, would bolster the balance of trade.

The factors controlling the exportation of cement are in favour of a plant built in Malta. Price and transportation costs are the two important aspects which control the choice of cements by potential markets and these are much in favour of the Malta Plant. The guarantee of high quality to British Standards is an added factor in this plant's favour.

The location of Malta is such that particular emphasis will be given to the potential market of Libya. The demand for cement in Libya is at present 150,000 tons per annum in the Tripoli area and about 135,000 tons per annum in the Benghazi area. At the moment there is a plant of 100,000 tons per annum being built near Tripoli and one of the same capacity is to be built for Benghazi. This therefore leaves a demand still to be satisfied of 85,000 tons per annum. Much of this demand is at present met by imports of cement into Libya from Europe. Due to the rate of development in Libya it can be conservatively estimated that Libya's demand for cement will double in the next three years and there will remain an unsatisfied cement requirement for many years. The Malta plant can expect to secure several thousand tons of this unsatisfied demand if for no other reason than that transport costs for shipping cement from Malta to Libya must make Malta's cement more competitive.

In order to secure the Libyan market use can be made of a bi-lateral trade agreement whereby Malta purchases gypsum at present extensively quarried in Libya in exchange for purchases of Malta's cement.

APPENDIX X

ACTIVITIES OF HANO BROTHERS (1939) LTD.

The Hano group of companies cover the following fields:

General Contracting,
Mechanical and Electrical Engineering,
Concrete Products Manufacture,
Automotive Distributors, and
Retail Marketing Outlets,

and have been established for over 40 years on the Island
of Malta.