MINERALS WORKING PARTY

30 March 1987

SHARP SAND AND GRAVEL

Report by the Director of Planning and Property Services

Introduction

1. A report on the possible pattern of future working of sharp sand and gravel was considered by the Working Party in June last year, when preliminary recommendations were made on the location of future working in Oxfordshire. A schedule of the preliminary recommendations (Working Party minute 11/1986) is attached as Annex A. The Working Party also recommended that boreholes should be put down in the possible "new" areas of working (west and south-west of Wallingford and north-east of Gosford near Islip) to test the quality and quantity of the deposits. The Environmental Committee noted the Working Party's preliminary recommendations, and authorised the borehole trials. This report looks again at the future amount and location of working in the county in the light of the findings of the boreholes.

Results of the boreholes

2. The results of the boreholes show that the only area with a potentially suitable deposit is immediately north-west of the Cholsey-Wallingford Road. In the areas west of Wallingford north of Hithercroft Road (Annex A paragraph 11 (i)) and north-east of Gosford near Islip (Annex A paragraph 4 (iii)), the deposits are too thin and/or inconsistent to be likely to be commercially viable, and therefore do not merit designation as "areas of least objection". The preliminary recommendations in Annex A should be amended accordingly.

3. In the area between Cholsey and Wallingford (Annex A paragraph 11 (ii)), the boreholes showed no substantial deposits north-west of the railway line, but a good depth between the railway and the Wallingford-Cholsey road, an area of some 50-60 hectares, which could theoretically yield 3 million tonnes. The sand and gravel appears to be a similar quality to that found in Stanton Harcourt, but not as good as that at Sutton Courtenay. The quality and quantity of gravel here makes it suitable to be considered as a potential area of least objection.

Review of how much sand and gravel should be dug

4. At the Working Party meeting last May, officers estimated that production of sharp sand and gravel in Oxfordshire may

a) rise to 2.5 million tonnes a year between now and 1991 because of the major road construction projects planned;

b) return to current levels of 2 million tonnes a year between 1991 and 1990; and

c) fall to 1.5 million tonnes a year by 2001 as the growth in new households in the south east declines.
However, there is likely to be pressure on Oxfordshire, from the
minerals industry and other counties in the south east, to maintain at
the very least, the existing production of 2 million tonnes a year to
the end of the century. As an illustration of this the minerals
industry appears to be saying that the south east region cannot continue
to rely on increasing imports of crushed rock and sea dredged material
to make up the shortfall of land won material. In their view those
counties in the south east with larger reserves (such as Oxfordshire)
must accept an increasing role in supplying the needs of the
region. If this view gains general acceptance, then Oxfordshire may be
under pressure to find greater quantities of sharp sand and gravel.

6. Gravel extraction has serious environmental effects and therefore the
Council should not commit itself to accepting the need for an increase
in gravel production in the long term. I suggest that the Council
should identify sufficient land to maintain production as set out in the
preliminary estimates in paragraph 3 above. Rather than having specific
figures for demand or a specific figure for a land bank in the minerals
policies, the Council could adopt a policy to "identify sufficient land
to maintain a 10 year land bank". This approach would follow DoE advice
in circular 21/82, and be similar to other counties in the south east.

Land already "available" or identified for working

7. Annex B sets out the current position on land already earmarked
including:
   a) planning permissions;
   b) land identified in the Interim Minerals Policies;
   c) other land which the Working Party have indicated may be suitable,
      including land at Ewelme and Caversham. (See Annex A -
      paragraphs 12, 15 (ii) and 15 (iii)).

8. Annex C shows how working through the Minerals Structure Plan period
   (1986-2001) may be split between the south and west of the County based
on the demand estimates proposed in paragraph 4 above. It assumes that
land without planning permission in the Cassington-Yarnton area is not
worked in the plan period.

9. In the 1980 draft Cassington-Yarnton local plan the Council undertook to
   limit the maximum output from the area to 450,000 tonnes a year.
   This could be met from production at Worton Rectory Farm. If the other
   land in the Cassington-Yarnton area is not permitted before Worton
   Rectory Farm is worked out, then the Council would have to find land for
   two new pits. However, if a second pit in the Cassington-Yarnton area
   were permitted in the late 1990's, then the Council would only need to
   find land for one new pit. Therefore, I suggest that, in the current
   policy review, the Council seeks to identify land for one additional
   major production unit in addition to land already earmarked.

Options for the location of the additional land to be identified

10. Of the sites whose feasibility has been investigated following the
    Working Party's recommendations in June (Annex A), the only area which
    appears to contain a workable reserve is immediately north-west of the
    Cholsey-Wallingford Road. The advantages and disadvantages of working
    here are set out in Annex D. At the June meeting members also decided
To hold the area south of Yelford in reserve in case land elsewhere was not suitable. The advantages and disadvantages of this area are set out in Annex F. These sites are discussed in more detail below.

11. Because of the potential problems of working south west of Wallingford and south of Yelford, officers have looked at other areas which may be suitable. As members have expressed concern at the increasing concentration of production in West Oxfordshire, officers have looked carefully at land south of Oxford. Of the areas where members have chosen to resist working, Appleford is the most vulnerable as ARC are likely to want to work this area to give continuity to the supply of high quality gravels when their reserves at Sutton Courtenay run out. The advantages and disadvantages of working here are set out in Annex F.

Appleford

12. The advantages of working the area east of Appleford are that it has good quality gravel and, if processed through the plant at Sutton Courtenay, would have direct access onto the Didcot Northern Perimeter road, and from there to the major road network. It may be possible to negotiate a contract for London refuse, so the area could be filled. If it could be restored to agriculture the Ministry of Agriculture may not object to working.

13. However, the effect on Appleford village would be very severe. Waste disposal is likely to continue for a further 8 years to the west at the Sutton Courtenay pit and the village looks out over the site in question. Although a hedge has been planted near the village, it would not adequately protect the houses, particularly those in the south of the village. A substantial part of the area contains an ancient monument and before the land could be developed an application would have to be made to the Historic Buildings and Monuments Commission for permission to disturb the area. Although it is not possible to say what the outcome would be, given the Council's policy to protect archaeological sites, it would be inconsistent to propose an area containing an ancient monument as being potentially suitable for gravel extraction.

14. Virtually the whole area north of the B4016 (see plan in Annex F) is constrained by the 350 metre buffer zone to the village and the ancient monument. To the south of the road the constraints are less, but the gravel is almost certainly not as good as to the north; it is only about 35 hectares and would not provide sufficient gravel to last to the end of the plan period. Working here may jeopardise land to the north and would spread the disturbance east of the railway which at present provides a clear boundary to gravel extraction.

15. The industry are likely to make a case that the extraction of the better quality gravels should continue, and from our knowledge of the deposit this could only be at Dorchester or Appleford. Much of the Sutton Courtenay gravel is at present used for projects which do not require a high quality gravel. Therefore, I could not support an argument which said the need to supply the high quality material should override the major constraints to working it. The industry should be able to find alternative means of producing structural concrete, for example, by importing high quality stone.
South-west of Wallingford

16. The advantages of working south west of Wallingford are that the site is unlikely to contain valuable archaeological remains and it is not directly overlooked by either Wallingford or Cholsey. Once the bypass is built this will act as a buffer between the workings and Wallingford, and will provide good local access. There is a case for the development to contribute towards the construction of the bypass.

17. The Ministry of Agriculture have indicated they are likely to object to extraction from this area because of the good quality of the land. A detailed survey of the area has shown that most of the land is grade 2 or 3A. The considered views of the Ministry of Agriculture will be reported orally at the meeting; if they maintain their objection this could be a major obstacle to extraction. Another disadvantage is that it would spread working into an entirely new area.

18. There may be difficulties with restoration. Geologically the area is very unlikely to be suitable for filling with domestic refuse. Because the area is under the flight path to Benson airfield care would have to be taken not to provide large open water areas that are attractive to gulls. This could mean either 7-8 separate lakes or small lakes linked together. They could not be used for sailing or windsurfing, but they could be used for fishing, informal boating, picnicking and nature conservation.

19. Although the Wallingford bypass would overcome most local access problems the impact of gravel lorries on routes radiating from Wallingford remains a concern. The nearest major roads are the A34 and M40; the A423/A4074 being an Inter-Town route between Oxford and Reading only (see Diagram 1). Eastwards towards M40 and London the direct routes are B4009 through Wallington and Benson; A329 through Warborough, Stadhampton and Little Milton and A423 through Henley. It may be possible by routeing agreements to discourage many of the gravel lorries from using B4009 and A329 to reach M40. In addition, although some traffic is likely to want to go southwards via A423 through Henley and A4074 through Reading, this may not result in significant increases over current gravel lorry movements at Henley and over the Thames at Reading since the Maidenhead area beyond Henley has a good supply of gravels, and increases at Reading due to a Wallingford pit could be compensated by reductions to one of the pits in Caversham going out of production by 1992. It is possible therefore, that there would not be a significant increase in gravel lorries crossing the river at Reading, although there could be an increase through parts of Caversham. Concerns about extra lorries westwards could be largely overcome following completion of the Didcot Northern Perimeter Road and improvements (funded by the developers) along A4130 Wallingford - Didcot Road.

20. In sum, therefore, the Wallingford Bypass is likely to overcome local access problems although there remains a concern about the consequences for radiating roads. There may be scope to reduce the threat of
additional lorries in the most sensitive locations on those roads by routing agreements and improvements but the risk remains that there could be some additional heavy lorries affecting minor roads and attractive settlements.

South of Yelford

21. The advantages of gravel extraction in this area are that the Ministry of Agriculture are unlikely to object, and if the archaeological remains near Brighthampton are protected, there would be no archaeological objection. The disadvantages are that the area immediately to the west does not contain any gravel, and IGS boreholes to the north west indicate a thin and sandy deposit. If this area were to be included as an area of least objection boreholes should be carried out to test the quality and quantity of the material. Working from this area would further concentrate production of sand and gravel into West Oxfordshire and is almost certain to meet with strong local objection. The landscape in the Yelford area is attractive and although in the Stanton Harcourt Mineral Local Plan area, is unspoilt by mineral working.

22. In the Stanton Harcourt area, when the land identified in the Interim Minerals Policies is approved for working, the focus of production will move northwest into the Windrush Valley and southwest to the area north of Newbridge. This is likely to put more gravel traffic onto the A415 Witney-Kingston Bagpuize road. It is expected that much of the traffic will originate from the Windrush Valley north of Hardwick and will use the Ducklington bypass to gain access to the A40. From the Newbridge area it is expected that the majority of traffic will go southwards over Newbridge and through Kingston Bagpuize. If the area south of Yelford were worked in addition to these, then there would be a tendency for more gravel lorries to use the A415 southwards also affecting Standlake. It may be possible to negotiate a gravel haul route, beside the Standlake Sands and Gravels pit, to prevent more gravel lorries adding to the existing problem through Standlake.

23. There are no present proposals for the relief of Newbridge, and although the main part of Kingston Bagpuize should be bypassed by the time extraction started, the short section of A415 at the eastern end of the village would not be relieved. There could also be some effect on the route further east, at Marcham for example, although this is likely to be very small. A Standlake bypass is in the Council's list of retained major highway schemes to be funded by developers. There are no other schemes for A415, indeed the relief of Newbridge would be both expensive and environmentally sensitive. A supplement to the Kingston Bagpuize bypass, to relieve the eastern end of the village has been promoted previously, but was rejected by the DTP. The scale of new land releases under consideration are not likely to be sufficient to fund these "improvements". Therefore, although some protection for Standlake should be considered a prerequisite of development, it would need to be accepted that little can be done elsewhere, and the consequence would be increased pressure for County Council funding of measures at Newbridge and Kingston Bagpuize, and possibly also at Marcham. The way Standlake village could be protected and the implications for funding measures on A415 will be described at the meeting.
Conclusions

There is no easy option, and there are serious difficulties to working all three sites. The disadvantages can be summarised as:

Appleford - the effects on the village of Appleford, the destruction of an ancient monument and the precedent for further working downstream;
South West of Wallingford - it spreads disturbance to a new area, the likely agricultural objection, effects on roads radiating from Wallingford and potential problems of restoration;
South of Yelford - the effects on the A415, the concentration of working into West Oxfordshire, disturbing the unspoilt landscape in the Yelford area and the uncertain quality and quantity of the gravel deposit.

Recommendations

25. It is recommended that

(a) in the light of the results of the borehole trials, the areas specified in paragraphs 4 (iii) (north-east of Gosford) and 11 (i) (west of Wallingford north of Hitheroft Lane) of Annex A be excluded from consideration of possible future locations for sharp sand and gravel working;

(b) for the purpose of the production of the revised Minerals Structure Plan, the principle be agreed of a general policy to identify sufficient land to maintain a 10-year land bank;

(c) for the purpose of the preparation of the Minerals Local Plan,

(1) the inclusion of a draft consultative document of the gravel reserves identified in Annex B be agreed and;

(ii) it be affirmed that there is no objection in principle to a second production unit being permitted in the Cassington-Yarnton area towards the end of the 1990s.

DAVID YOUNG
Director of Planning and Property Services

23rd March 1987
Advantages

1. South of the branch railway line the IGs and OCC boreholes show a good depth of gravel. The area could yield 3 million tonnes.
2. Unlikely to contain valuable archaeological remains.
3. Good access once the Wallingford bypass is built, but see 8. The Council may be able to secure contributions towards the construction of the bypass, but negotiations could cause delay in the building programme.
4. Not in an area designated as high landscape value.
5. Not directly overlooked by Wallingford or Cholsey.

Disadvantages

6. The gravel is not capable of producing structural concrete without the addition of stone. It does not replace the higher quality gravels at Sutton Courtenay.
7. MAFF are likely to object to this area; approximately half is grade 2 and quarter is grade 3A.
8. Although the Wallingford bypass will overcome local traffic difficulties, there is still concern over the effect of lorries on radiating routes. Routing agreements may be necessary to stop gravel traffic using the A329 through Stanford and the B4009 through Wallingford to gain access to the M40. There may also be a tendency for lorries to use the A4074 to Reading. There could be problems with timing if the bypass is delayed.
9. The area is under the flightpath to Benson airfield. The HCA require water areas to be 5 ha or less. As the site is 50 ha, it could result in 7-8 small lakes. These could be used for fishing, informal boating, picnic areas, swimming and nature conservation, but they would be too small for sailing or wind-surfing.
Dear

I am writing on behalf of the Cholsey Parish Council to protest most strongly against the suggestion that the land south-west of Wallingford be a site for new gravel workings.

The major reasons for our concern are listed below (not necessarily in order of importance):

1. The extraction would represent an unsightly gravel working in a new and so far untouched area of South Oxfordshire, and sets a precedent for future development in the area and in particular in close proximity to the Thames.

2. The area in question is in the Parish of Cholsey and if developed would split the Parish in two as the Parish consists of Cholsey village and Winterbrook.

3. The report presented to the Minerals Working Party states that the site is not overlooked. This is not the case as it is overlooked by Cholsey (Winterbrook), an area of Wallingford (Brookmead Drive, NaHey Close), historic Cholsey Hill and areas of the Ridgeway. All the area around Cholsey and Wallingford is an Area of Outstanding Natural Beauty and is almost without exception higher than the area of proposed gravel working. This means that all visual benefits from the Area of Outstanding Natural Beauty would be spoilt for ever.

4. We do not believe the Wallingford By-Pass was intended to or should be used as an access for gravel lorries.
   
a) The Wallingford By-Pass will be only a single lane highway and slow moving, heavily laden lorries entering at Cholsey will be highly dangerous and seriously prohibit traffic flow.

b) The Wallingford By-Pass is needed to relieve traffic problems in Wallingford and to aid traffic flow from the surrounding areas, not least Didcot, which because of expansion is expected to produce a 50% increase in traffic in the next 10 years.
c) The By-Pass will feed into the following roads, all of which even now have major traffic problems and are all generally unsuitable for lorries.

A329......via Streatley and Pangbourne.......narrow, limited
overtaking spots, weight limit at Streatley.
A4074......via Cane End and the 'Bends of Death'.
A423......via Nettlebed and Henley with very narrow bends
and difficult roundabouts.
B4009.....only a 'B' road and already used by a high
volume of traffic trying to use M40. Watlington represents
a major hazard for lorries and other parts of the route
are very dangerous.
A329......to Stadhampton, again narrow, dangerous roads.
A423......very busy road to Oxford with dangerous sections.
Shillingford and Nuneham Courtenay are problem spots.
A4130......narrow road to Didcot which is already busy but
will be highly congested when the By-Pass opens and Didcot
expands.

5 A weighbridge would be required and this would attract even
more lorries to the area making use of it.

6 The Future

If the extractions were allowed to proceed what would happen
to the disused workings?

a) Cannot be re-instated as agricultural land (see report).
b) Cannot be filled with refuse as this would attract birds
which would be dangerous to aircraft using Benson Airfield.
c) Cannot be landscaped as a large lake, suitable for sailing,
water skiing etc. As restriction of size of water on
approach to Benson Airfield is contrary to the Ministry
of Defence directive.
d) Only alternative....7-8 ponds of little or no use. A
nature reserve, mentioned in the report prepared
for the Working Party would require permanent attention
(Cholsey School already have one which requires constant
supervision). Boating would be very restricted due to the
size and the Thames which is within easy walking
distance, already provides facilities for boating and
fishing.

I trust you will consider the points raised in this letter very
carefully and will reject the Cholsey site for the reasons given.

Yours sincerely

Mrs Jan Morgan
Chairman, Cholsey Parish Council
PROPOSED AREA FOR MINERAL EXTRACTION

SOUTH-WEST OF WALLINGFORD

Gravel extraction at the proposed site at Wallingford/Cholsey would breach every one of the criteria laid down at the meeting of the Minerals Working Party of the Environmental Committee held on 23rd January 1987. These criteria, and the relevant arguments relating to the proposed site are set out below:

Quality of Agricultural land - the land is grade 2 or 3A, of a quality which Ministry of Agriculture has indicated should not be destroyed for gravel extraction. It is not rough farmland but good meadow and pastureland, well farmed and responsibly managed.

Areas of outstanding natural beauty - the proposed site, and the town of Wallingford on which it abuts, is entirely surrounded by a designated area of outstanding natural beauty. It is a lowlying site overlooked by many vantage and viewpoints. Views over the valley from any of this area would include a view of the site with its ugly moonscape and heavy machinery, its dust and its noise.

Special landscape areas - the proposed site has been cultivated but undeveloped for more than a thousand years. It is surrounded by, and contains, several miles of ancient hedges containing many species, which, even in the worst days when hedges were being scrubbed up, were responsibly maintained by the farmer. The area contains small streams, ponds and bog/marsh land, all features which are rapidly vanishing from the English landscape. A well used public footpath runs across the site.

Archaeology - the proposed site contains two known archaeological features (ring ditches) - a third (double concentric) circle being already destined for destruction by the by-pass. Ian Burrow, the Director of the Oxford Archaeological Unit has written to the Mayor of Wallingford:-

"The area has never been examined in detail... In view of the presence of the ring ditches, which are the ditches surrounding ploughed down Bronze Age burial mounds, it is likely that there are other archaeological features associated".

Nature conservation - the several miles of ancient hedgerow which cross and surround the site constitute nesting, breeding and feeding sites for a multitude of species, and the field edges and verges contain many species of wild flowers. The large stand of willows provides nesting sites for species which could not otherwise find congenial sites in the area. The waterlands are a breeding site for frogs which every year cross the road at a point immediately on the Wallingford side of the edge of Cholsey to breed on the site.

The same document states that in areas of greatest objection - of which this proposed site must be one, since gravel extraction would
breach every one of the County criteria - mineral working will be strongly opposed unless it can be shown 1) that mineral deposits outside these areas are not suitable or available for development, and 2) that working would not damage the special qualities of the area.

1. There are other sites available, where mineral deposits are suitable and available for development.

2. The area has special qualities in addition to those contained in the County criterion of local and national importance which are threatened by the proposal.

A. The proposed site abuts the South and West edges of Wallingford

(i) Wallingford is one of the "60 historic towns" highlighted by the Department of the Environment as meritng special environmental consideration. Its town centre is at present receiving continuous damage from heavy traffic, and its plight is so severe that the "Wallingford By-pass" was proposed to alleviate the environmental hazard. The by-pass was designed in 1937 to carry the volume of traffic then known or anticipated. Already by the time the by-pass is built Didcot will be producing a 30% increase in traffic. The gravel working can be expected to produce a further 200 lorry movements daily and in addition to discourage ordinary traffic from using stretches of the by-pass because of the difficulty and unpleasantness of driving between gravel-carrying lorries - so ordinary traffic will probably be attracted back to the 'short cut' through the town centre. The by-pass would thus be predominantly serving the gravel extractors and not producing the benefit for which Wallingford will have waited 60 years.

(ii) The proposed works would be very close to large areas of residential properties, which would be adversely affected by noise, vibration, dust and smell. The prevailing wind blows from the proposed site towards the town. This cannot be dismissed as a factor affecting only part of the town: Wallingford is an extremely compact town, densely populated and almost entirely residential in character. The works would be visible from the whole western half of the town.

(iii) The Cholsey-Wallingford road is barely wide enough for two cars to pass, it has soft verges and floods in patches throughout the winter months. It is heavily used by commuter traffic in the morning and in the evening. The road fogs badly even when surrounding areas are clear - accumulated pools of water would increase what is already a dangerous hazard.

(iv) Planning permission for private gravel extraction was refused for the adjoining land east of the Wallingford/Reading road. If the proposed site is accepted there will be no good grounds for refusing any renewed application. In addition, the entire town is built on and surrounded by gravel - to begin extraction
in this area is to open up the possibility of extension all round the town.

(v) Over the last twelve years Wallingford, largely through the medium of local investment and enterprise, has developed into a thriving tourist centre. Local effort and generosity has provided it with a theatre/cinema, an antique arcade, a museum, a sports/social centre and a large park area with a scheduled ancient monument. It has attracted new shops, selling to visitors and drawing trade from a wide local area. A gravel extraction site, which will clearly be visible not only from the town Fir Tree and Winterbrook estates and the Wantage Road, but also by potential visitors approaching from the south, will be a major disincentive to those who would otherwise be tempted to visit and explore the town. Its attraction lies in its history, its visual appeal, and the rural character of its setting, which is a very important factor for a small compact town.

Local investment and effort from many individuals and from the Town Council has also re-created the Wallingford/Cholsey railway which runs along the western boundary of the proposed site. Thousands of pounds and uncountable hours of hard work have gone into re-opening the line and providing rolling stock and buildings. The whole purpose of this enterprise is to run trains between Cholsey and Wallingford as a major attraction, thus bringing trade and visitors to Wallingford. No-one is going to be interested in a train ride along the edge of noisy, dusty gravel works and all that effort, enthusiasm and investment will be virtually wasted, and a major community enterprise destroyed.

(vi) The "Wallingford By-pass", designed to draw traffic away from the town centre, will in fact, along the southern edge of town, come within yards of existing homes and gardens. It will not be a major trafficway, but a small scale two lane road, geared to existing demand. Its use by gravel lorries will generate dust and disruption right on the edge of the town. The by-pass should not be seen as a "cordon sanitaire" - it will not be that, because of its close proximity to the town. It has been designed and planned to serve the town and protect the town environment - if it is used for gravel lorries it will actually bring pollution nearer to the town and exacerbate one aspect of the problem it was designed to solve - to see the by-pass as opening up possibilities for gravel extraction is to grossly misuse and abuse the planning decision which lead to its creation.