

PROJECT: MIDDLETON LODGE, NORTH YORKSHIRE

TECHNICAL NOTE NO. 01 (DRAFT FOR COMMENT) OBJECTIONS TO PROPOSED MINERAL WORKING

1.0 INTRODUCTION

- 1.1 Middleton Tyas Residents Association plc has appointed TTHC Ltd to review and comment on the Transport Assessment (TA) contained in the Environmental Statement (ES) prepared by Wardell Armstrong (WA) on behalf of James Allison and Sherburn Stone Co Ltd and submitted in support of a planning application for mineral working and restoration works at Middleton Lodge.
- 1.2 Middleton Lodge Estate is located to the north of Middleton Tyas, Richmondshire, North Yorkshire and comprises a country house set within landscaped grounds, including a Georgian walled kitchen garden, orchard, lime avenue, stable block and cricket ground, surrounded by approximately 77ha of agricultural land and woodland.
- 1.3 The development proposals at Middleton Lodge Estate consist of two components:
- 1) A quarry to extract limestone; and
 - 2) Enhancement and restoration of the Estate to create a tourist attraction.
- 1.4 It is proposed to extract approximately 2.07M tonnes of limestone from an area of approximately 13 ha of land within the Middleton Lodge Estate. The ES describes the proposed quarry as an extension to the nearby existing Barton Quarry and states that the purpose of the quarrying is to finance the restoration works of the Estate.
- 1.5 The proposals to convert the Estate into a tourist attraction include:
- The enhancement of the Estate Parkland and public access to part of the grounds of Middleton Lodge Estate;
 - The renovation and conversion of the Stable Block into a restaurant, function rooms and estate shop;

- The creation of a themed quarry garden with a 50m high fountain and water feature in a landform created by the mineral extraction area;
- The reconstruction and renovation of a Georgian walled garden into working kitchen gardens; and
- The renovation and conversion of the outbuildings on the walled garden into two holiday cottages (with the potential for a further two cottages to be developed).

1.6 This note considers the impact of both the proposed quarry and the proposed tourist attraction on the surrounding road network and comments on the following issues:

- Existing Traffic Conditions;
- Access by Non-Car Modes;
- Trip Generation (Proposed Quarry and Proposed Visitor Attraction);
- Trip Profile;
- Assessment Periods;
- Middleton Tyas CE Primary School Impacts;
- Trip Distribution and Assignment;
- Operational Impact Assessment;
- Site Access; and
- Parking.

2.0 EXISTING TRAFFIC CONDITIONS

2.1 The TA has taken the existing traffic conditions at the following junctions into account:

- A1(M) J55 – predicted traffic flows for 2010 and 2025 provided by the Highways Agency
- A1(M) J56 – predicted traffic flows for 2010 and 2025 provided by the Highways Agency
- Kneeton Lane / Silver Street – Manual Classified Turning Count undertaken on Thursday 13th July 2006.

2.2 The TA has not considered the existing traffic conditions at the Kneeton Lane / Five Hills Lane junction, located in the village of Middleton Tyas.

2.3 The traffic conditions that have been taken into consideration are for a weekday in July. July is predicted to have the greatest number of visitors to Middleton Lodge.

2.4 The TA acknowledges however, that the proposed development (the tourist attraction component) will generate a higher number of car trips on a weekend than on a weekday.

2.5 Given this, the existing weekend traffic conditions should also be assessed.

2.6 In summary, the assessments submitted with the planning application are insufficient for the full impacts of the proposal to be assessed.

3.0 ACCESS BY NON-CAR MODE

- 3.1 The ES acknowledges the Yorkshire and Humber Plan Policy T8, which relates to tourism-related transport measures and states:

'Initiatives should be promoted through development plans and local transport plans to maximise the use of public transport, cycling and walking in areas of high tourist demand (in addition to measures in Policies T6 and T7)....'

- 3.2 The TA acknowledges that public transport and pedestrian facilities in the area are limited, however it makes no attempt to promote the more sustainable modes of transport to the proposed development.
- 3.3 In addition, the TA does not provide any details of a Travel Plan. For a proposal such as this, a Travel Plan should be submitted.
- 3.3 In summary, the proposals are clearly contrary to Policy T8 as well as national guidance contained within PPG13.

4.0 TRIP GENERATION

- 4.1 The proposed development consists of a quarry, renovation of the existing Lodge to provide a tourist attraction, conference facilities and up to four holiday cottages to let.
- 4.2 Although the TA takes into account the trip generation from the tourist attraction, it completely ignores the trip generation resulting from the conference facilities, the holiday cottages and the quarry. These are discussed below.

Proposed Quarry

- 4.3 The proposed quarry is described as an extension to the existing nearby Barton Quarry, with limestone extracted from Middleton Lodge transported to Barton Quarry via a conveyor belt under Kneeton Lane. Middleton Lodge is thus not expected to generate any quarry-related trips.
- 4.4 The TA makes no assessment of the HGV movements or the impact from HGVs that would result at Barton Quarry as a consequence of the new activity at Middleton Lodge.
- 4.5 The TA does however state that *'over a period of approximately 15 years, limestone quarried from the deposits available within the Middleton Lodge Estate would reduce and then replace the need for imported limestone from external sources and the quarry would no longer export sandstone, thus reducing the overall road trips associated with the quarrying operations at Barton Quarry'*.
- 4.6 The TA argues that by extracting limestone from Middleton Lodge the number of HGVs from Barton Quarry will be reduced by 176,340 HGVs between 2007 and 2042.
- 4.7 It is considered that the existing and proposed quarrying activity at Barton Quarry has been significantly oversimplified (Appendix 10.11 of the ES).
- 4.8 The exclusion of any assessment of quarry traffic arising from the quarrying activity at Middleton Lodge is predicted on the need to import limestone to Barton Quarry – a site which has significant limestone reserves. Clearly this oversimplification needs to be addressed.

Proposed Tourist Attraction

- 4.9 The visitor forecast numbers do not take into account conference attendees or those visiting the holiday cottages.
- 4.10 It should be noted that the TA states that the conference season has been assumed to take place between January-February, May-June and September-October and as a result no conference-related trips have been taken into consideration for the assessment of the Friday in July. This is incorrect – conference facilities generate activity all year round and full details of the trip-generating activity for this component should be included and assessed.
- 4.11 An assessment undertaken by RHA Tourism (advisors to the Middleton Tyas Residents Association) has found that the visitor forecast used in the ES, and consequently the TA, has been greatly underestimated.
- 4.12 The ES has estimated a visitor forecast of 80,000 pa to the visitor attraction. RHA Tourism has estimated this number to be 257,715 visitors pa (i.e. more than three times that which has been assessed). It should be noted that this number does not include the trips generated by the conference facilities, restaurant, café, shop and holiday cottages.
- 4.13 In summary, the trip generation assessments submitted with the planning application are inaccurate and insufficient for the full impacts of the proposal to be assessed.

5.0 TRIP PROFILE

- 5.1 The daily trip profile contained in the TA (Table 10.3) is assumed, rather than based on an existing, similar development.
- 5.2 The assumed trip profile shows that no arrivals are expected after 11am for the visitor attraction and that visitors to the attraction will depart between 1800-2000. This arrival and departure behaviour is not representative of the type of development proposed.
- 5.3 The assumed profile shows that no arrivals or departures are expected to occur between 1500-1600 for any of the components (visitor attraction, restaurant, café, conference and functions) of the proposed development. Again, this is not considered to be representative of the type of development proposed.
- 5.4 In order to validate the trip profile, the TA has compared the assumed trip profile to that of a site contained in the TRICS database (a Wetland Site in Washington). The daily trip profile of this comparison site shows arrivals and departures throughout the day rather than arrivals and departures being confined to a few hours at the start and end of each day as assumed for the proposed development.
- 5.5 For comparison, TTHC has also examined two further sites contained in the TRICS database, which are considered to be more comparable to the proposed development than the Wetland Site. The two sites – Harewood House and Lotherton Hall – are both located in West Yorkshire. The trip profiles for these two sites are attached as **Appendix A**.
- 5.6 As with the Wetland Site, both sites show arrivals and departures throughout the day, with peak arrivals occurring between 1000-1100 and peak departures between 1500-1700.
- 5.7 The daily vehicle movements associated with Harewood House and Lotherton Hall are 660 (330in/330out) and 1010 (505in/505out) respectively. These figures are significantly higher than those predicted at Middleton Lodge (165in/165out).

- 5.8 The assumed trip profile does not appear to take staff arrivals into consideration – 44 arrivals are predicted between 0800-0900, of which 38 are associated with the visitor attraction and 6 with functions.
- 5.9 Staff parking will have an impact on the proposed car parking provision (see Section 11).
- 5.10 In summary, the temporal distribution of trips assessed and submitted with the planning application are inaccurate and insufficient for the full impacts of the proposal to be assessed.

6.0 ASSESSMENT PERIODS

- 6.1 The TA states that it has been agreed with North Yorkshire County Council (NYCC) that only Friday assessments are required.
- 6.2 However, the survey at the Kneeton Lane / Silver Street junction was undertaken on a Thursday.
- 6.3 Combining Thursday base traffic conditions with Friday trip generations is not representative or appropriate as Fridays, particularly in locations such as the application site, will have different traffic characteristics.
- 6.4 As stated earlier in this note, the TA acknowledges that the weekend is predicted to generate a higher number of trips than the weekday. Based on this it is considered that the impact of the proposed development on a weekend should also be assessed.
- 6.5 In summary, the assessment periods assumed within the planning application submission are inaccurate and insufficient for the full impacts of the proposal to be assessed.

7.0 MIDDLETON TYAS CE PRIMARY SCHOOL IMPACTS

7.1 The TA states that there is congestion on the local roads during school arrival (0800-0900) and departure (1500-1600) times but that there is no conflict between the peak hours of the proposed development (including the conference-generated trips) and the school.

Conflict between School and Visitor Attraction

7.2 The assumed profile indicates that 26% of visitors to Middleton Lodge will arrive between 0800-0900, which is clearly in conflict with school arrival times.

7.3 The assumed profile indicates that there will be no departures from the Site between 1500-1600, which is unreasonable when compared to similar sites.

7.4 The above assumptions do not include the conference attendees as the profile is for a Friday in July (no conferences are expected during this time).

Conflict between School and Conference Attendees

7.5 The conference season has been assumed to take place during school months, with the arrival period between 0800-1000 and the departure period between 1600-1800.

7.6 The TA states that there will be no conflict between the school and conference departure times, but makes no reference to the conflict between school and conference arrival times.

7.7 With regard to the departure times, there is the potential for conflict as it cannot be guaranteed that conference departure times will not coincide with school closure times.

7.8 As can be seen, there will also be conflict between school and conference arrival times.

- 7.9 Given the above, and the comments made earlier in the note regarding the assumed profile, it is expected that there will be conflict between the school, conference and visitor attraction departure and arrival times.
- 7.10 In summary, the assessments submitted with the planning application submission are inaccurate and insufficient for the full impacts of the proposal to be assessed.

8.0 TRIP DISTRIBUTION AND ASSIGNMENT

- 8.1 The TA has assigned 70.8% of the traffic to the Site from the north and 29.2% from the south, which appears reasonable. However, the routing to and from the south appears biased towards Barton Interchange (J56), with more than half of the traffic from the south using J56 rather than J55.
- 8.2 Although the route through Middleton Tyas is described as 'tortuous', visitors to the Site not familiar with the area (and perhaps relying on a map) may leave the A1(M) at Scotch Corner and travel through Middleton Tyas.
- 8.3 It is unclear how the 5.1% of traffic assigned to the B6275 at J56 has been calculated. An exercise undertaken by TTHC has resulted in no traffic being assigned to the B6275 - 56.8% of traffic enters J57 from the north.
- 8.4 In summary, given the uncertainty regarding trip assignment, it is suggested that a sensitivity test is undertaken before the full impacts of the proposals can be fully assessed.

9.0 OPERATIONAL IMPACT ASSESSMENT

A1(M) J56 Barton Interchange

- 9.1 In order to assess the impact on the trunk road network 15 years after opening, the 2025 traffic flows provided by the HA for J56 appear to have been converted to 2027 traffic flows. It is unclear from the figures provided in the TA how this exercise was undertaken.
- 9.2 For example, it appears that there has been no growth of HGVs between 2025 and 2027 and there is no explanation relating to this.
- 9.3 The operational assessment of J56 takes into account traffic attracted by the proposed Motorway Service Area (MSA). The traffic flows provided by the HA do not include the trip attraction of the MSA but WA have attempted to take account of this. However, it is unclear from the TA how the MSA trip attraction was calculated.
- 9.4 From experience, the predicted trip attraction for the MSA appears to be very low.

Kneeton Lane / Silver Street

- 9.5 Kneeton Lane / Silver Street junction has been assessed at 2022, 10 years from the opening of the proposed development.
- 9.6 Buses and coaches have not been included in the HGV count at this location.

A1(M) J55 and Kneeton Lane / Five Hills Lane

- 9.7 The TA has not assessed the operation of J55 and Kneeton Lane / Five Hills Lane as it considers the impact from the proposed development at these junctions to be insignificant.
- 9.8 This low impact is considered to be the result of the assignment of a significant majority of development traffic through J56 and of the low trip generation which has been assumed (as highlighted earlier).

9.9 Given the points made earlier regarding routeing and traffic generation, the operation of J55 and Kneeton Lane / Five Hills Lane should be assessed. This point also applies to J56 and Kneeton Lane / Silver Street.

A1(M) J57

9.10 The TA has assigned 50.3% of the traffic generated by the proposed development accessing or going through the A1(M) J57, yet has not assessed the operational impact of the additional traffic on this junction.

9.11 Based on this, and the above points regarding routeing and trip generation, this junction should be assessed.

Barton Village

9.12 The TA states that the proposed development will have minimal impact on Barton Village, however, for the reasons already discussed, the actual trip generation will be higher than that stated in the TA.

9.13 In addition, rather than being confined to the peak hours, the trip profiles for similar sites indicate a constant stream of traffic arriving and departing throughout the day.

9.14 The trip generation will be even higher on the weekends.

9.15 In summary, it is considered that operational assessments for the five junctions discussed in this section should be undertaken for the weekend in addition to weekday assessments as the weekend trip generation is higher and could be more critical.

10.0 SITE ACCESS

- 10.1 It is proposed that vehicles access the Site from the northern access and leave the Site via the southern access.
- 10.2 The TA acknowledges that there is an issue with traffic turning left out of the southern access due to limited visibility to the left and recognises the safety implications which would arise from implementing a left turn ban.
- 10.3 However, the TA has continued to assess traffic turning left out of the Site in both assignment cases (in Case 1, local traffic and in Case 2, both local and regional traffic), resulting in a conflicting message.
- 10.4 The assessments undertaken in this regard demonstrate the uncertainty relating to the trip assignment of the proposals.

11.0 PARKING

- 11.1 The TA proposes a permanent car park of 95 spaces and an overflow area providing approximately 250 spaces.
- 11.2 Tourism UK has estimated a maximum parking requirement of 205 parking spaces on a Saturday, which is considerably higher than the proposed 'permanent' provision.
- 11.3 The assumed daily trip profile shows 132 arrivals between 0800-1300 and no departures during this time period. Based on this profile, the permanent car park would be at capacity before 1100 on a daily basis.
- 11.4 This does not take into consideration that the visitor forecast numbers have been underestimated. With the higher visitor numbers, combined with the assumed trip profile, a significantly higher parking provision would be required.
- 11.5 In addition, given that non-car access to the Site is limited, it is anticipated that the 40 staff would drive to the Site. This also has implications on the parking provision, which has not been assessed.
- 11.6 In summary, the assumptions relating to car park size and use which have been submitted with the planning application are inaccurate and insufficient for the full impact of the proposals to be assessed.

APPENDIX A

TTHC Ltd Oxford Street Manchester

Licence No: 734101

Site reference: WY-10-A-02 Survey date: 23/05/05 Day of week: Monday

Survey type: Manual Count
 AM weather: Mild & Cloudy
 PM weather: Mild & Cloudy

Initial car park occupancy: 0 Final car park occupancy: 0

BRACKETED ACCUMULATION FIGURES ARE NOT ABSOLUTE

Data proportions in %

Motor cars	88	Motor cycles	0	Public service	2
Light goods	7	OGV (1)	2	OGV (2)	1
				Taxis	0

Taxis are included as cars in this survey

Time	Arrivals 330	Departures 330	Totals	Parking Accum
00:00-01:00				
01:00-02:00				
02:00-03:00				
03:00-04:00				
04:00-05:00				
05:00-06:00				
06:00-07:00				
07:00-08:00				
08:00-09:00	10	5	15	5
09:00-10:00	51	5	56	51
10:00-11:00	83	10	93	124
11:00-12:00	42	27	69	139
12:00-13:00	33	43	76	129
13:00-14:00	31	33	64	127
14:00-15:00	32	41	73	118
15:00-16:00	31	57	88	92
16:00-17:00	13	65	78	40
17:00-18:00	4	44	48	0
18:00-19:00	0	0	0	0
19:00-20:00	0	0	0	0
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Comments

No cycles or taxis entered or exited the site during this survey.
 OGV's park in general areas within the site, as there are no specific OGV parking spaces/loading bays available.

Site reference: WY-10-A-01 Survey date: 12/05/05 Day of week: Thursday

Survey type: Manual Count

AM weather: Hot & Clear

PM weather: Hot & Clear

Initial car park occupancy: 0 Final car park occupancy: 0

BRACKETED ACCUMULATION FIGURES ARE NOT ABSOLUTE

Data proportions in %

Motor cars	88	Motor cycles	0	Public service	1
Light goods	6	OGV (1)	4	OGV (2)	1
				Taxis	0

Taxis are included as cars in this survey

Time	Arrivals 505	Departures 505	Totals	Parking Accum
00:00-01:00				
01:00-02:00				
02:00-03:00				
03:00-04:00				
04:00-05:00				
05:00-06:00				
06:00-07:00				
07:00-08:00				
08:00-09:00	23	9	32	14
09:00-10:00	25	8	33	31
10:00-11:00	53	17	70	67
11:00-12:00	58	41	99	84
12:00-13:00	45	33	78	96
13:00-14:00	65	43	108	118
14:00-15:00	58	61	119	115
15:00-16:00	55	59	114	111
16:00-17:00	31	81	112	61
17:00-18:00	33	66	99	28
18:00-19:00	30	34	64	24
19:00-20:00	29	53	82	0
20:00-21:00	0	0	0	0
21:00-22:00				
22:00-23:00				
23:00-24:00				

Comments

No taxis entered or exited the site during this survey.