

CEMEX

COMMENTS ON EXA'S FIRST WRITTEN QUESTIONS

HIGHWAYS ENGLAND'S RESPONSE

1. EXAMINING AUTHORITY'S WRITTEN QUESTIONS AND REQUESTS FOR INFORMATION M4 JUNCTIONS 3 TO 12 SMART MOTORWAY

1.1 CEMEX UK Operations Ltd have written previously to indicate to the Inspectorate their proposed sand and gravel quarry at Riding Court Farm, Riding Court Road, Datchet, Slough is alongside the proposed M4 Smart Motorway works to Riding Court Road overbridge and Riding Court Road — application number 13/01667.

1.2 A decision notice was issued by Royal Borough of Windsor and Maidenhead on 21st August for this development (PP13/01667) and it is anticipated now that the quarry will commence extraction operations in April 2016. Therefore in response to Q2.3 of "The Examining Authority's first written questions and requests for information" — the impact of the proposed M4 Smart Motorway scheme on the operation and delivery of PP13/01667 needs to be assessed.

Highways England Comment

1.2.1 Highways England acknowledges that a decision notice in respect of planning permission PP13/01667 has been issued by the local planning authority, and notes that it is anticipated that extraction operations will commence in April 2016. The Transport Assessment ("TA"), from which the traffic flows shown in Table 4.1 (provided in paragraph 1.10 below) have been quoted, took account of the proposed quarry, and shows that during the operation of the quarry, the additional traffic flows (a maximum of 318 on a typical weekday during years 2-6 of operation) will constitute a minor increase of 0.4% in traffic flow on the M4 with no material effect on its operation.

1.2.2 On completion, the M4 J3-12 Smart Motorway scheme (the "Scheme") will provide an increase in capacity that will accommodate the traffic associated with the quarry and will provide benefits in terms of journey time reliability for its operations.

1.2.3 As Highways England proposes to construct the replacement Riding Court Road overbridge offline, there will be no impact on quarry operations except during the short periods (in the order of a few hours) when such works as are necessary to, for example, divert the carriageway on to the new bridge alignment. Section 4 of the outline Construction Environmental Management Plan (“CEMP”) (Appendix 4.2A of the ES) sets out how Highways England will prepare a community engagement strategy for the construction stage of the Scheme. The strategy will include methods for consulting with the project team regarding any issues relating to the construction works and the identification of how any issues identified have been incorporated in the evolution of the final CEMP.

1.3 *The planning permission 13/01667 is temporary - the lifetime of the quarry is 12 years, with 6 years extraction and a further 6 years of infilling. If the M4 Smart Motorway works are permitted it is likely that this will coincide with the lifetime of the quarry. The permitted route for traffic leaving the quarry is east along Riding Court Road, up to Ditton Road and then onto the A4 and similarly traffic must approach the quarry using this route. See Plans 5, M1/869/2 and M1/869/3 attached to this letter.*

1.4 *Table 4.1 (attached to this letter) is taken from the Transport Assessment for Riding Court Farm application documentation and shows that between Years 2-6 of the quarry operations, when the M4 Smart Motorway works to Riding Court Road Bridge are likely to take place, the quarry will be generating 318 movements per day along Riding Court Road, James Meadow Roundabout and Ditton Road, These movements will occur during the day time Monday to Friday 07.00 to 18.00 and Saturday 07.00 to 13.00. Any closure or serious disruption to the traffic flow along this route at this time will have a serious impact on CEMEX's business, aggregate supply and on the ability of CEMEX to work the quarry within the temporary planning permission granted. CEMEX has 6 years from the start of Phase 1 to extract the sand and gravel and 12 years to complete infilling. Any major disruption to production brought about by the M4 works and CEMEX's ability to use the permitted route would put delivery of this planning permission in jeopardy.*

Highways England Comment

1.4.1 In undertaking the works at Riding Court Road overbridge it is anticipated that the contractor will use the same route for access to the bridge site (i.e. via Riding Court Road / James Meadow Roundabout / Ditton Road). Highways England proposes to divert Riding Court Road to pass over the new bridge, tying into the

existing alignment approximately 30m to the east of the junction with Riding Court. On that basis, permanent highway works to Riding Court Road will end approximately 300m to the west of the Cemex site entrance. Highways England does not propose to undertake any work to either Riding Court Road or Ditton Road leading to the A4 beyond the tie in point.

1.4.2 On that basis, and on the basis of the published location of the proposed quarry entrance being approximately 350m east of the entrance to Riding Court House off Riding Court Road, Highways England does not expect CEMEX to experience any disruption to the access route to the proposed quarry

1.5 *It is understood by CEMEX that the DCO application by Highways England is to reconstruct the Riding Court Road bridge over the M4 offline, which should ensure less disruption to traffic flows along Riding Court Road. CEMEX UK Operations Ltd is supportive of this offline construction. Lands Plans Sheet 24-31 Drawing TR010019 -2. indicates this offline construction.*

Highways England Comment

1.5.1 Highways England confirms that the proposed works at Riding Court Road overbridge are to provide an offline replacement structure to the north-west side of the existing bridge. This will enable access across the M4 to be maintained throughout the construction period.

1.6 *In response to Question 9.24 CEMEX has provided two plans, M/869/2 and M/869/3 showing the application site permitted by PP13/01667, the permitted access route for PP13/01667 and the proposed red line boundary - the Order Limit - for Highways England's application for the M4 Smart Motorways Work taken from the application drawings. I also attach CEMEX's plans P1/869/6A v13 and L1/869/3C which show the overall layout and phasing of the quarry site and tree protection measures and position of bunding respectively.*

1.7 *The plans show that in terms of the extraction area there is no overlap between the two schemes, but the red line for the Order Limit - Work No 22a does enter the application site and coincide with land where CEMEX would have tree protection and soil storage and amenity protection bunding. The Order Limit for Highways England's application also covers Riding Court Road, CEMEX's access onto Riding Court Road, the James Meadow Roundabout and the lower end of Ditton Road. At this stage from Highways England's application documents and EIA it is unclear why this land is included within the M4 scheme*

and what disruption there may be along this route, when the works to Riding Court Road overbridge and between Junctions 6 and 5 take place It is unclear what impact these works will have on CEMEX's business in terms of its ability to use Riding Court Road, the James Meadow Roundabout and Ditton Road. The Development Control Order seeks "temporary use" of these roads". However, it is not clear what the temporary use of this land will be and whether there will need to be realignment works along this stretch of road to accommodate works to the M4.

Highways England Comment

1.7.1 Highways England has reviewed the drawings which CEMEX has provided in response to the Examining Authority's first written questions (Question 9.24) and note that there are three areas where the Order Limits for the Scheme coincide with the site of PP13/01667.

- i. To the northwest of the existing Riding Court Road overbridge. This area is indicated by a blue line on CEMEX drawing M/869/2 and overlaps with plot numbers 24-27, 24-28 and 24-29 (refer to sheet 24 of the Land Plans (Application Document Reference 2-2)). Plots 24-27 and 24-28 are required permanently to enable the offline construction of Riding Court Road overbridge and the realignment of Riding Court Road, and plot 24-29 is required temporarily for access and working space. Highways England has already noted that CEMEX is supportive of the offline reconstruction.
- ii. To the northeast of the existing Riding Court Road overbridge. This is the area where the pink "permitted boundary" shown on CEMEX drawing M/8692/2 overlaps with plot 24-32, which is required temporarily for access and working space (refer to sheet 24 of the Land Plans). CEMEX intend that this land is used for hedging and bunding while Highways England require temporary acquisition to create working space for the realignment of Riding Court Road to suit offline reconstruction of the overbridge This plot will not be required for the entire duration of the Scheme construction, rather it would be required during the construction of the new bridge and highway tie-in works (estimated to be approximately 16 months). Highways England's detailed design and construction teams propose to consult

CEMEX to develop a programme and methodology of work to enable both parties to achieve their desired outcomes. This is set out in section 3.5 of the Construction Environmental Management Plan (“CEMP”), which details the collaboration and coordination across concurrent schemes with the aim of avoiding potential conflict in arrangements and minimising disruption to road users. An outline CEMP was included in the Application, at Appendix 4.2A of the Environmental Statement (“ES”) (Application Document Reference 6-3). The CEMP is secured by Requirement 8, Schedule 2 of the Draft DCO (Application Document Reference 3-1).

- iii. Riding Court Road including CEMEX's proposed site access point. This is the existing Riding Court Road from Riding Court to James Meadow roundabout and Ditton Road near junction 5 (plot numbers 24-34a, 24-36, 24-34, 24-40, 25-01 to 25-06 and 25-09 - sheets 24 and 25 of the Land Plans). Highways England does not propose any permanent works in these plots but requires temporary acquisition to allow for any traffic management that may be required on Riding Court Road to enable safe construction of the adjacent works including four gantries in work number 1a and work associated with the extension of Ashleys Arch culvert in work numbers 23a and 23b (see sheet 24 of the Works Plans (Application Document Reference 2-3). Highways England's detailed design and construction teams will consult with CEMEX to develop a programme and methodology of work to minimise any impact on the CEMEX site access (as explained in ii above).

1.8 *There is little detail in the CEMP APP-293 as to how construction works will be managed within the Order boundaries and there appears considerable scope at this time for the constructors/undertakers to vary what eventually is proposed. This could have significant ramifications for the operation of the local road network and business which rely on using them. (Q4.1.4 and 4.1.5) The detail of the operations needs to be understood so that the socio-economic and environmental impacts of each set of construction works can be fully assessed. In turn the mitigation measures can be assessed as to whether they are adequate and what the residual impacts will be on businesses, the local community and the environment.*

Highways England Comment

- 1.8.1 Highways England notes the concern regarding the scope for contractors/undertakers to vary the requirements within the Outline Construction Environmental Management Plan ("CEMP") and has agreed to delete the subparagraph in requirement 8 of the draft DCO. This amendment is reflected in the revised draft of the DCO which was submitted at Deadline II.
- 1.8.2 Highways England confirms that the final, detailed CEMP developed by the contractor will be subject to approval as described in Requirement 8, Schedule 2 of the draft DCO. This will ensure that the CEMP is developed and approved prior to the start of works, and control measures will be put in place before construction starts and continue for the duration of the construction programme.
- 1.8.3 However, it is recognised that as detailed design progresses on major infrastructure projects such as the Scheme, certain aspects of how the construction works will be managed may change (the planning and sequencing of the works are to be developed prior to commencement of construction). Should this occur, then Highways England will review any such changes to ensure that any such changes do not lead to potential impacts that would be 'environmentally or socially worse' than those assessed in the ES or the Socio-Economic Report. It should be noted that the assessments in the ES and the Socio-Economic Report were made on a worst-case scenario basis. The CEMP will also be updated accordingly (as outlined above).
- 1.8.4 The CEMP sets out the framework for controlling impacts on people and the environment resulting from construction activities which are the responsibility of the contractor. The outline document is not intended to secure mitigation measures that will be resolved through detailed design and approval of the final, detailed CEMP prior to construction, or to relate to operational activities once the Scheme is open such as routine maintenance and response to incidents. Rather, it presents a framework and mechanism whereby the impacts and implementation of the final design can be controlled. The implementation of the CEMP in its final form is secured under Requirement 8, Schedule 2 of the draft Development Consent Order ("DCO") (Application Document Reference 3-1).
- 1.8.5 The quality of the output is also assured, because the contractor is required to implement a CEMP that is certified to ISO 14001, as explained in paragraph 2.2.4

of the outline Environmental Management Plan (“EMP”) (Appendix 4.2 of the ES) (Application Document Reference 6-3). Under ISO 14001, there are requirements for the periodic review of the implementation of the CEMP through a programme of audits and review by senior management. The contractor will set out its proposals for this review process in the CEMP. The review process will be undertaken by the contractor and reported to Highways England. The key objective of this review process is to drive continual environmental improvement.

- 1.8.6 Consequently, in view of the protection outlined in 1.8.2 to 1.8.5 above Highways England does not agree that the mitigated works could have significant ramifications on the operation of the local business and road network.
- 1.8.7 With specific reference to this location, the Scheme includes the off line construction of the Riding Court Road overbridge so that local road impacts are restricted to localised traffic management and short term closures and width restrictions. As explained in paragraph 1.7.1 ii & iii above, Highways England does not propose any works to Riding Court Road to the east of the tie-in point. The Scheme boundary indicates the need for temporary acquisition of Riding Court Road and Ditton Road to allow for any traffic management that may be required on Riding Court Road to enable safe construction of the adjacent works. Highways England's detailed design and construction teams will consult with CEMEX, in accordance with section 4 of the CEMP, to develop a programme and methodology of work to minimise any impact on the CEMEX site access prior to the implementation of any traffic management on Riding Court Road (as explained in paragraph 1.7.1 ii above).
- 1.8.8 The potential environmental and socio-economic impacts of the Scheme for which development consent is sought have been assessed within the Environmental Statement (“ES”) (Application Document Reference 6-1) and the Socio-Economic Report (Application Document Reference 7-2) respectively. Mitigation measures to avoid, reduce, remedy and offset any adverse environmental impacts have been proposed and the assessment undertaken on a worst case basis with mitigation, in place in accordance with DMRB requirements.
- 1.8.9 Consequently, Highways England considers that the outline CEMP and approval procedure in the draft DCO is sufficient for securing the mitigation required to

control any adverse environmental and/or social impacts which arise as a consequence of construction activities.

1.9 *I trust you will bring these details out through the Examination process and involve CEMEX if it becomes clear that there will adverse impacts on their ability to implement 13/01667 or changes required.*

DEVELOPMENT TRAFFIC FLOWS

Vehicular Traffic Attractions

1.10 The TA provides forecast daily vehicular movements for all proposed site operations over the lifetime of the site, including staff commuting, as reproduced Table 4.1 below.

	Vehicle Type	Daily Vehicle Movements					
		Year 1		Years 2-6		Years 7-12	
		In	Out	In	Out	In	Out
Minerals Extraction							
Delivery of Aggregates	Tipper Lorry	40		40	40	-	-
Site Staff Commuting	Car	7	7	7	7	-	-
Delivery Diver Commuting	Car	13	13	13	13	-	-
Concrete Batching Plant							
Incoming Cement	Tanker	4	4	4	4	-	-
Outgoing Concrete	Mixer Lorry	47	47	47	47	-	-
Site Staff Commuting	Car	2	2	2	2	-	-
RMC Driver Commuting	Car	8	8	8	8	-	-
Infilling							
Delivery of infill	Tipper Lorry	-	-	36	36	36	36
Site Staff Commuting	Car	-	-	2	2	2	2
TOTAL HGVS		91	91	127	127	36	36
TOTAL VEHICLES		121	121	159	159	38	38

Table 4.1: Forecast Daily Vehicle movements.

1.11 The figures in Table 4.1 represent movements over a typical full operating day (i.e. a normal weekday).

1.12 *In order to inform air quality assessment work undertaken in respect of the application proposals, equivalent Annual Average Daily Traffic (AADT) movements have been calculated. AADT movements are significantly lower than those for a full operating day as they account for reduced operational hours on a Saturday and no working on Sundays or bank holidays. The resultant AADT vehicular movements for all proposed site operations over the lifetime of the site, including staff commuting, are set out in Table 4.2.*

Highways England's Comment

- 1.12.1 Highways England has reviewed the Transport Assessment and understands that the typical weekday total of 159 movements each way during years 2-6 of the operation equates to an average daily traffic total of 123 vehicles each way, of which a total of 95 each way are HGVs.
- 1.12.2 The Design Manual for Roads and Bridges (“DMRB”) sets out traffic screening criteria for air quality assessment (see paragraph 6.2.31 the ES) for annual average daily traffic (“AADT”) flows (>1000 veh/day) and heavy duty vehicles (“HDVs”) (>200 veh/day). Changes above this level could lead to a potentially significant effect on air quality.
- 1.12.3 Slough Borough Council has declared an Air Quality Management Area (“AQMA”) around the A4 and M4 at junction 5, therefore this area is sensitive to potential changes in air quality.
- 1.12.4 The additional traffic movements identified above are below this criteria, therefore a potentially significant impact on air quality (i.e. a change of >0.4 µg/m³) is not anticipated.
- 1.12.5 The maximum concentration of nitrogen dioxide at receptors close to junction 5 with the Scheme in place is 37.7 µg/m³, therefore an increase of this magnitude is unlikely to lead to a significant air quality effect (i.e. a nitrogen dioxide concentration of >40 µg/m³ at a sensitive receptor).
- 1.12.6 Therefore, these additional vehicles are unlikely to lead to a significant effect on air quality.