

## Guide to the assessment of compounds within the ES

Chapter	Title	Reference
2	EIA Methodology	The effects of the construction phase were considered in all ES topic assessments as confirmed in Table 2-2 'Scope of the EIA/ES'.
5	Acoustics Part 1 - Noise	<p>The effects of the construction activity and construction compounds were considered in Chapter 5 Noise of the ES with respect to the following:</p> <ul style="list-style-type: none"> <li>- Paragraph 5.2.44 explain assumptions of baseline noise monitoring, the basis of the construction assessment.</li> <li>- Table 5-12 shows baseline measures made for the construction noise assessment.</li> <li>- Paragraph 5.4.9 explains the results of construction predictions, with detailed calculations for each construction area set out in Appendix 5.3.</li> <li>- Tables 5-14 and 5-15 provide results of construction predictions at noise sensitive receptors - without mitigation</li> <li>- Paragraphs 5.4.10 to 5.4.24 address construction noise results at sensitive receptors close to the construction compound areas - without mitigation.</li> <li>- Paragraphs 5.5.1 to 5.5.4 present construction mitigation measures including measures to be included in CoCP Part B.</li> <li>- With mitigation in place the residual effects of daytime construction noise at noise sensitive receptors is provided at Table 5-20.</li> <li>- With mitigation in place the residual effects of night-time construction noise at noise sensitive receptors is provided at Table 5-21</li> <li>- Paragraph 5.6.25 addresses cumulative inter-project effects and is supported by Table 5-22.</li> </ul>
6	Acoustics Part 2 - Vibration	<p>The effects of the construction activity and construction compounds were considered in Chapter 6 Vibration of the ES with respect to the following:</p> <ul style="list-style-type: none"> <li>- Paragraph 6.1.5 identified which areas of the site are most sensitive to construction vibration, namely at the Cambridge Biomedical Campus and at Shepreth Junction where compounds are located nearby.</li> <li>- Paragraph 6.2.10 to 6.2.11 which refers to study area for potential vibration effects at the new station area and Shepreth Junction where nearby construction compounds are most likely to affect sensitive receptors in proximity to them.</li> <li>- Paragraph 6.2.18 refers to the baseline vibration monitoring locations at sensitive receptor locations to key construction vibration sources, including reference to a map in Figure 6-2 Appendix 6.1 for the locations.</li> <li>- Paragraph 6.2.22 explains the vibration monitoring location at Shepreth Junction that corresponds to the nearby construction compound that potentially affects it.</li> <li>- Table 6-3 lists the vibration monitoring locations.</li> </ul>

		<ul style="list-style-type: none"> <li>- Paragraph 6.3.1. and Table 6-12 explain baseline vibration measurements that are required to undertake the construction vibration assessment.</li> <li>- Paragraph 6.4.3 and 6.4.4 explains the results of construction predictions, with detailed calculations for each construction area set out in Appendix 6.2</li> <li>Paragraphs 6.4.5 to 6.4.11 explain the construction mitigation measures proposed including for construction compounds.</li> <li>- Paragraphs 6.5.3 to 6.5.6 describe the Residual effects of construction works including effects of construction compounds. Table 6-14 includes construction compounds where they are relevant to the significance assessments compared with other construction zones.</li> <li>- Paragraph 6.5.13 addresses relevant potential cumulative effects of vibration during construction.</li> </ul>
7	Air quality	<p>The effects of the construction activity and construction compounds were considered in Chapter 7 Air quality of the ES with respect to the following:</p> <ul style="list-style-type: none"> <li>- Paragraph 7.2.27 refers to the study area, as reflected in Appendix 7.1, Figure 7-1 which clearly shows that the entire site boundary and construction compounds within it are included in the construction assessment. The construction dust assessment assumes construction dust emissions occur at the edge of entire site boundary rather than at defined places within; this is a precautionary approach.</li> <li>- Paragraphs 7.2.50 to 7.5.56 details the construction dust assessment and 7.5.56-7.5.57 details the breakdown of construction activities assessed at construction sites.</li> <li>- Paragraph 7.2.80 explains the construction peak year assessed using construction access points.</li> <li>- Paragraphs 7.4.2 to 7.4.5 identify the potential construction effects including at construction sites and mitigation measures.</li> <li>- Paragraphs 7.5.3 to 7.5.7 assesses the residual effect of construction phase traffic emissions from accessing the construction sites in the construction peak year.</li> <li>- Paragraphs 7.5.25 to 7.5.28 assesses the cumulative effects of construction with other committed schemes.</li> </ul>
8	Biodiversity	<p>The effects of the construction activity and construction compounds were considered in Chapter 8 Biodiversity of the ES with respect to the following:</p> <ul style="list-style-type: none"> <li>- Paragraph 8.1.5 which acknowledges that the construction of compounds has the potential to impact on biodiversity.</li> <li>- Paragraphs 8.2.29 - 31 which confirmed that, whilst not explicitly stated, the construction compounds and haul routes were part of the study area of the biodiversity assessment, given that they are all included in the overall TWAO site boundary.</li> <li>- Paragraphs 8.4.1-8.4.37, which set out the anticipated construction activity impacts (including those of the compounds) and the embedded measures and good practice approaches and</li> </ul>

		<p>that were necessary to mitigate these, that formed part of the assessment.</p> <ul style="list-style-type: none"> <li>- Paragraphs 8.5.3-8.5.102 which drew conclusions upon the likely effects of construction activity and construction compounds upon biodiversity receptors.</li> <li>- Paragraphs 8.5.133-8.5.153, which drew conclusions upon the likely cumulative effects of construction activity and construction compounds (in combination with other developments) upon biodiversity receptors.</li> </ul>
9	Climate - Adaptation	<p>The effects of construction activity and construction compounds on the overall development's climate resilience and adaptation measures are considered in the following paragraphs of the Climate Change Adaptation assessment (ES Chapter 9):</p> <ul style="list-style-type: none"> <li>- Paragraph 9.4.2 includes flood risks to the construction compounds and construction site in general and mitigation measures that would be incorporated within a CoCP to mitigate for climate change risks.</li> <li>- Paragraphs 9.5.2 - 9.5.4 addresses the residual effects of construction following the implementation of relevant construction mitigation measures within the CoCP.</li> <li>- paragraphs 9.5.7 - 9.5.10 discusses cumulative effects of climate change adaptation during the construction phase.</li> </ul>
10	Climate - Greenhouse Gases	<p>The effects of construction activity and construction compounds on greenhouse gas (GHG) emissions are considered in the following paragraphs of the Climate – Greenhouse Gases assessment (ES Chapter 10):</p> <ul style="list-style-type: none"> <li>- Paragraph 10.4.4 and Table 10-7 consider the mitigating measures to reduce GHG emissions arising from the 'Plant and equipment use' at construction compounds.</li> <li>- Paragraph 10.5.3 and Table 10.9 consider all the construction works using electricity or fuel in the site compounds that emit GHG.</li> <li>-Paragraph 10.5.5 to 10.5.7 considers the GHG emissions arising from the transport of materials by road to the construction compounds.</li> <li>-Paragraph 10.5.8- 10.5.12 considers the residual effects of construction-related GHG emissions arising from the transport of waste by road from construction compounds to waste management sites.</li> <li>-Paragraph 10.5.13-10.5.15 considers the residual effects of construction-related GHG emissions from construction plant and other heavy equipment.</li> <li>-Paragraphs 10.5.16-10.5.17 considers the residual effects of construction-related GHG emissions from water use during the construction works.</li> <li>-Paragraph 10.5.19 considers the residual effects of construction-related GHG emissions from construction workers travelling to the construction sites.</li> </ul>

11	Cultural Heritage	<p>The effects of the construction activity and construction compounds were considered throughout the Cultural Heritage assessment (ES Chapter 11). This included:</p> <ul style="list-style-type: none"> <li>- Paragraph 11.1.4, which introduced the relevance of assessment of effects during construction to be included.</li> <li>- Paragraph 11.2.6, which confirmed that, whilst not explicitly stated, the construction compounds and haul routes were part of the study area of the biodiversity assessment, given that the compounds are all included in the overall TWAO site boundary.</li> <li>- Paragraphs 11.4.1-11.4.9, comprising the 'Construction Approach and Mitigation of Construction Effects', which set out the anticipated construction activity impacts (including those of the compounds and haul routes) and the mitigation measures that were necessary to mitigate these, that formed part of the assessment.</li> <li>- Paragraphs 11.5.2-11.5.14, which drew conclusions upon the likely residual effects of construction activity, including on construction compounds, upon cultural heritage assets.</li> </ul>
12	Ground Conditions and Contamination	<p>The effects of the construction activity and construction compounds were considered throughout the Ground Conditions and Contamination (ES Chapter 13). This included:</p> <ul style="list-style-type: none"> <li>- Paragraph 12.2.20 -12.2.22, which introduced the Study Area to include a 250m radius from the site boundary, which itself includes all the construction compounds.</li> <li>- Paragraphs 12.4.2-12.4.28, which set out the anticipated construction activity impacts (including those of the compounds) and the mitigation measures that were necessary to mitigate these, that formed part of the assessment.</li> <li>- Paragraphs 12.5.2-12.5.6, which drew conclusions upon the likely effects of construction activity and construction compounds upon contamination and agricultural soils receptors.</li> <li>- Paragraphs 12.5.8-12.5.9, which drew conclusions upon the likely cumulative effects of construction activity (in combination with other developments) upon ground contamination and agricultural soils receptors.</li> </ul>
13	Landscape and Visual	<p>The effects of the construction activity and construction compounds were considered throughout the LVIA (ES Chapter 13). This included:</p> <ul style="list-style-type: none"> <li>- Paragraph 13.2.77, which introduced Assessment Scenario 1 (AS1) – the assessment of effects at the anticipated peak construction year.</li> <li>- Paragraphs 13.3.4, 6 &amp; 7, which confirmed that the construction compounds and haul routes were part of the study area of the LVIA.</li> <li>- Paragraphs 13.4.16 &amp; 17, which set out the anticipated construction activity impacts (including those of the compounds) and the embedded measures that were necessary to mitigate these, that formed part of the assessment.</li> <li>- Paragraphs 13.5.2-33, which drew conclusions upon the likely effects of construction activity and construction compounds upon</li> </ul>

		<p>landscape and visual receptors (based upon the detailed considerations set out in Appendix 13.3).</p> <ul style="list-style-type: none"> <li>- Paragraphs 13.5.80-138, which drew conclusions upon the likely cumulative effects of construction activity and construction compounds (in combination with other developments) upon landscape and visual receptors (based upon the detailed considerations set out in Appendix 13.3).</li> </ul>
14	Materials and Waste	<p>The effects of the construction activity and construction compounds were considered throughout the Materials and Waste assessment (ES Chapter 14). This included:</p> <ul style="list-style-type: none"> <li>- Paragraph 14.2.6 - 14.2.8, which included reference to construction effects including at site compounds, and that they formed part of the assessment study area.</li> <li>- Paragraphs 14.4.2-14.4.21, which set out the anticipated construction activity impacts (including those of the compounds) and the embedded measures that were necessary to mitigate these, that formed part of the assessment.</li> <li>- Paragraphs 14.5.2-14.5.11 which drew conclusions upon the likely effects of construction activity upon materials and waste receptors.</li> <li>- Paragraphs 14.5.13-14.5.19, which drew conclusions upon the likely cumulative effects of construction activity and construction compounds (in combination with other developments) upon materials and waste receptors.</li> </ul>
15	Population and Health	<p>The effects of the construction activity and construction compounds were considered throughout the Population and Health assessment (ES Chapter 15). This included:</p> <ul style="list-style-type: none"> <li>- The assessment considered all elements of the proposed Development, including the construction compound, albeit implicitly, as set out for example at 15.1.3 and 15.2.32.</li> <li>- Paragraph 15.5.14 makes specific reference to the construction compound – it states that National Cycle Network Route 11 (NCN11) will require temporary diversion to accommodate the main eastern construction compound (Construction Compound 1) and construction haul road for the proposed development for a period of about three years.</li> </ul>
16	Socioeconomics	<p>The effects of the construction activity and construction compounds were considered throughout the Socioeconomics assessment (ES Chapter 16). This included:</p> <ul style="list-style-type: none"> <li>- The assessment considered all elements of the proposed Development, including the construction compound, as set out in 16.1.3.</li> <li>- Para 16.5.19 states - Based on the information included in Chapter 4 of this ES including Figures 4-2 to 4-8, it has been concluded that there will be temporary disruption to the AstraZeneca buildings from the construction compounds. Construction Compound 6 (CC6) will be located at the north east of the AstraZeneca car park/ service yard to support construction</li> </ul>

		<p>of the station. This will be a temporary/ transient compound will only take space for identified construction activities.</p> <p>- Paragraph 16.5.22, 16.5.24 and 16.5.42 makes specific reference to the construction compounds and their effect on cycle routes . They state that National Cycle Network Route 11 (NCN11) will require temporary diversion to accommodate the main eastern construction compound (Construction Compound 1) and construction haul road for the proposed Development for a period of about three years.</p>
17	Transport	<p>The effects of the construction activity and construction compounds were considered throughout the Traffic and Transport ES Chapter 17. This included:</p> <p>- Paragraph 17.1.13 and Figure 17-1 which shows the location of the construction compounds.</p> <p>- Paragraph 17.1.14 and 17.1.15 which described the Construction Access Points.</p> <p>- Paragraph 17.1.18 and Appendix 17.1 which shows construction traffic routes and construction access points.</p> <p>-Paragraph 17.1.16 which described construction haul routes and Figure 17-2 showing these.</p> <p>-Paragraph 17.4.3 to 17.4.26 which described Construction Approach and Mitigation of Construction Effects.</p> <p>-Table 17-12 which shows estimated construction vehicle movements to each construction compound.</p> <p>-Tables 17-14 to 17-16 which show assessment of Effects.</p> <p>-Paragraphs 17.5.16 which drew conclusions upon the likely traffic and transport effects of construction activity and construction compounds during construction.</p> <p>- Paragraphs 117.5.50 to 52 which drew conclusions upon the likely traffic and transport cumulative effects of construction activity and construction compounds during construction.</p>