### EXHIBIT LIST

Reference No: HOL/00048  
Petitioner: The Solihull Tree Warden Group  
Published to Collaboration Area: Friday 01-Jul-2016

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<td>1</td>
<td>A108 Summary.pdf (A108)</td>
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<td>2</td>
<td>A109 Presentation.pdf (A109)</td>
<td>3 - 40</td>
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Solihull Tree Warden Group - Petition 048 - Summary of Arguments

The Solihull Tree Warden Group is one of 8000 groups participating in the scheme launched by the Tree Council in September 1990.

Many activities are carried out by the Group to conserve and enhance local trees, woods, and hedgerows. Apart from direct physical intervention, members of the group act as "eyes and ears" to spot developing problems, and they work to promote awareness and appreciation of trees.

1. Impact on trees and hedgerows in Solihull

The proposed railway would cut through numerous areas of woodland and hedgerow, and would also affect individual trees.

The Tree Wardens are pleased to read the measures proposed to limit and mitigate the damage, but feel these are inadequate and that a great deal more could be done through local engagement and more meaningful regulation.

The Tree Wardens support the proposals made by Warwickshire County Council and our local parish councils in their Petitions.

2. Valuation of trees

The Tree Wardens believe one of the available methods for the monetary valuation of trees should be used to support decision-making on details of the scheme and its construction plans.

By providing numerical information, valuation methods provide a sound basis for the cost/benefit comparison of alternatives.

3. Bio-diversity

The Tree Wardens seek a net increase in bio-diversity, distributed on an equitable basis along the line, and properly monitored and reported.

4. Mitigation of permanent effects

The Tree Wardens have set out many detailed mitigation proposals, and we want firm undertakings that improvements will be implemented.

We would draw attention to the wide range of Environmental standards that are now available, and to methods such as Hedgerow Connectivity Mapping. There are clear standards that can be used to maximise the chance of successful planting.

We also want to see strong local involvement in the decision-making processes and the National Environment Forum. This is particularly critical for decisions on compensatory plantings.

5. Mitigation of construction effects

The Tree Wardens are concerned that the Code of Construction Practice is only a draft and relies on many incomplete documents and procedures.

Furthermore, enforcement relies on self-policing by the Nominated Undertaker. Any deviation from the desired practices would invalidate the basis of the Environmental Statement.

The Tree Wardens have described a wide range of measures that need to be carried out.

We believe there needs to effective independent local oversight of the construction works.

The Tree Wardens would be pleased to provide local knowledge and advice, in conjunction with experts from the Local Authority.

The Tree Wardens want to see more effective measures to minimise harm to trees and hedgerows, including protection of root systems and secure fencing. Pollution and hydrological changes need to be tightly regulated.

1 July 2016
Solihull Tree Wardens

House of Lords Petition 048 to the Select Committee for the HS2 (London - West Midlands) Bill
Solihull Tree Warden Group

- planting and caring for trees
- early warning of threats, disease, vandalism
- involving schools and children
Issues raised in our petition

- Impacts on Solihull’s natural environment
- Valuation of trees
- Bio-diversity
- Mitigation of construction effects
- Mitigation of permanent effects
Impact of HS2 on Solihull’s natural environment
Solihull Borough (north)
Pool Wood

- once part of Coleshill Pools
- all 5 hectares to be taken
Coleshill Railway & Denbigh Spinney

- Denbigh Spinney – Local Wildlife Site
  - dominated by Interchange Station
- Coleshill Railway – a linear ecological corridor
  - cut by the line
Solihull Borough (south)
Marsh Lane Nature Reserve

- both sides of Old Kenilworth Rd
  - former aggregate extraction
- diverse habitats
- 197 species of birds
- 2 hectares to be lost
  - semi-improved grassland
  - embankment and balancing pond
- vital part of ecosystem
Sixteen-Acre Wood

- loss of nearly a hectare of trees
Marlowes Wood
Marlowes Wood

- 3.5 hectares taken by scheme and construction
- Heronry with 17 active nests
Marlowes Wood

- temporary roundabout to be removed
  - intrusion into connected spinney
  - relocate spoil heap outside the Wood
- original planting scheme in Berkswell Park to be carried out
- Marlowes heronry not to be disturbed until substitute habitat established, and protection plan agreed prior to any works
Park Lane Spinney

- half-hectare under threat
- Berkswell Park Pale
  - oak trees
  - archaeological deposits
Park Lane Cutting Main Compound

- temporary Workers' Accommodation and material stockpiles
- loss and damage
  - trees
  - hedgerows
  - hydrological change
  - compaction of the ground
Truggist Lane

- hedgerows
- individual trees
Kenilworth Greenway

- 1.5 km under threat as haul road
- Mature trees on Greenway only to be felled if essential, and root systems to be effectively protected
Big Poors Wood

- Big Poors Wood to be securely fenced and properly protected from incursion, and incursions investigated
Little Poors Wood

- section near Greenway to be destroyed
  - established oaks and other trees
  - woodland soil profiles
Little Poors Wood

- move works away from Little Poors Wood
- setting of the Wood to be protected from visual intrusion of the Scheme
- reinstatement of the Wood to re-use the topsoil, use equivalent species, and be protected and maintained
- protection of the Wood during construction to have local oversight and rigorous enforcement
The valuation of trees
How? and Why?

Tools for decision making
Monetary valuation of trees

- trees unlike other assets
  - long growth period
  - fully mature trees cannot be replaced
- valuation depends on purpose
  - amenity
  - ecological contribution
- shaping decisions
  - planning
  - construction
Methods of valuing trees

- the Helliwell system
- Capital Asset Value for Amenity Trees (CAVAT)

Quarterly Journal of Forestry July 2012 *Amenity Tree Valuation* p195

<table>
<thead>
<tr>
<th>Nature of assessment</th>
<th>Helliwell</th>
<th>CAVAT</th>
<th>CTLA DRC method</th>
<th>i-Tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual assessment - factors multiplied</td>
<td>Replacement costs, extrapolated and adjusted</td>
<td>Replacement costs, extrapolated and adjusted</td>
<td>Functional capability in relation to ecosystem services</td>
<td></td>
</tr>
<tr>
<td>What is assessed?</td>
<td>Visual contribution to public or private amenity</td>
<td>Value according to relative contribution to public amenity</td>
<td>Cost indication of value (public/private)</td>
<td>Monetary value of tangible benefits to the population</td>
</tr>
<tr>
<td>Level of assessment</td>
<td>Individual, groups or woodland</td>
<td>Individual/ population</td>
<td>Individual/ population</td>
<td>Individual/ population</td>
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<tr>
<td>Public/private amenity?</td>
<td>Public/private</td>
<td>Public</td>
<td>Private/public</td>
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</tr>
<tr>
<td>Useable in court (e.g. for assessment of damages)</td>
<td>Yes – currently accepted in UK courts</td>
<td>Yes – though not yet tested</td>
<td>Yes – currently accepted in US courts</td>
<td>No</td>
</tr>
<tr>
<td>Useable as a management tool?</td>
<td>Yes – potentially</td>
<td>Yes – designed for this purpose - enables AVMT*</td>
<td>Yes – used in US Potentially in UK</td>
<td>Yes - Partial</td>
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*AVMT: Asset Value Management for Trees*
CAVAT

- size
- condition
- setting
- detail Guide available
Use of valuations

- practical system for guiding decisions
- cost/benefit analysis for placement of haul roads, work sites, drainage works
- inform offset and compensation
Bio-diversity
Impact on Bio-diversity

- “No net loss”
- no commitment on distribution of offset
- ancient woodland
  - irrereplaceable
  - wildlife
  - soils
  - recreation
  - cultural heritage
  - landscape
- habitat severance
Bio-diversity objectives

- net increase in bio-diversity
- equitable offset along whole route
- connectivity - green bridges and tunnels
- 2 million trees to be planted
  - monitoring of plan
  - species profile
  - annual report of viable new trees
  - New Clause 7 tabled in HoC
Habitat connectivity

- 2 green bridges removed from Scheme
- retain green bridges
  - Pasture Farm
  - footpath M214 overbridge
- fencing to be negotiable by wildlife
  - deer
  - fox
  - badger
Bio-system replacement

- as soon as reasonably practicable
- European Environmental Impact Assessment criteria
- UK Chartered Institute of Ecology and Environmental Management standards
- British Standard BS 8545 "Trees: from nursery to independence in the landscape"
- offset tree replacement ratio of 5-for-1
Hedgerows

- preserve ecological function of retained hedgerows
- replacement hedges
  - enhance ecological connectivity
  - sustain agriculture
- use connectivity mapping
  - appropriate locations and species
  - biodiversity offsetting agreements
- best practice oversight
  - planted and nurtured to maturity
Mitigation of construction effects
Construction oversight

- Code of Construction Practice
  - inadequate enforcement regime
  - inadequate and only draft
  - relies on incomplete documents

- independent oversight of Works
  - Ecological Officer
  - expert advice from Local Authority Tree Officers and Solihull Tree Wardens
  - New Clauses 8 - 15 tabled in HoC
Construction practices

- apply latest standards
  - spillages, run-off, residues
- control of weed propagation
  - training, inspections, access
- mitigation of hydrological findings
  - large variation in permeability
- review process
- community engagement
Mitigation of permanent effects
Mitigation of permanent effects

- apply quantitative evaluation e.g. CAVAT
- best practice for replanting and offset
- full participation
  - local Tree Wardens
  - Solihull Metropolitan Borough Council
  - local parish and town councils
  - linkage to National Environment Forum
- long-term ecological monitoring and corrective action
- proposed tunnel removes most issues
Solihull Tree Warden Group requests
Revision of management plans

- full local involvement
- design, construction, environmental policy
- environmental off-setting
- proper cost/benefit analysis
- tree valuation
- hedgerow connectivity mapping
- detail improvements to Scheme
- stronger construction oversight
- New Clauses tabled in HoC

Thank you