



**the BIG
Biodiversity
Challenge**
do one thing

HS2 Enabling Works – Oak Sapling engagement
HS2 phase 1 - Solihull
Laing Murphy JV/Three Shires Ltd for HS2

BIG Biodiversity Challenge Award Category: **Community Engagement Award**

Project overview

Laing O'Rourke / Murphy Joint Venture (LMJV) have been appointed by HS2 Ltd to undertake enabling works to support the construction of the High Speed 2 line. This includes a programme of vegetation clearance ahead of the civil engineering works commencing. As part of the vegetation clearance works a specimen oak tree (*Quercus Robur*) that was due for removal as part of the clearance package was identified as an excellent species example for form, shape and vigour who's acorn crop could be harvested by our supply chain partner Three Shires Ltd and grown on as saplings and donated to local schools and community groups.

What were the biodiversity conditions on site, prior to the enhancement?

- An English oak tree (*Quercus robur*) near to Coleshill in Warwickshire had to be removed during archaeology work before the land is prepared for the new railway line. The tree had to be removed as it would be directly impacted by the construction works for HS2.
- Acorns were collected from the tree in September 2020 by experienced Three Shires ecologists working on behalf of Three Shires and grown on to saplings.
- The saplings have been planted in local community spaces including a forest school and garden areas for local community projects providing localised biodiversity enhancement across 12 schools and community projects.

What were the reasons behind this project?

An opportunity was identified that allowed some compensation for the loss of the oak tree, over and above HS2's commitment to no net loss to biodiversity which is being implemented through the design and construction of HS2's Green Corridor. These require to be grown from UK provenance seed sources. This project was set up so next generation, genetically identical, tree stocks with 100% geographic provenance could be used which benefits from being grown within the same climatic and physical conditions. The project provided saplings to schools and community projects that have been impacted by the construction of the scheme.



Tree identified for collection of acorns



Close up of tree

What were the biodiversity measures taken?

Acorns were harvested by ecologists and grown on in the nurseries of Three Shires Ltd. As a result 400 saplings were grown and donated to 12 schools and community groups.

These saplings are being incorporated into existing green spaces for example within forest school areas as well as providing learning opportunities for school children in the planting and care of the trees. The planting of the oak saplings will provide site enhancement to these local community groups and schools.

LMJV's community team reached out to schools and community groups in the Coleshill and Solihull area and discussed the potential for donation of the saplings, identifying locations where the saplings would benefit the school or community group. When identified Three Shires attended the locations and undertake tree planting activities with school children and community groups. Planting of oak has significant ecological benefit. Research published by the UK Centre for Ecology and Hydrology identifies significant benefits for biodiversity with 2300 species support by oak tree and 229 species rarely found on trees other than oak.

The following groups have received donations:

- Coleshill C of E Primary School
- Coleshill Gardening Club
- Coleshill Town Council
- High Meadow Community School
- Ladywalk Nature Reserve
- Middleton Parish Council
- Oaklands Park
- Saltley Stallions
- The Coleshill Community Hub
- Water Orton Parish Council
- Water Orton School
- Woodlands School

This was undertaken as a voluntary activity by LMJV and Three Shires staff and builds on existing relationships that LMJV have built with local community groups.



Talking to students at High Meadow community school



Water Orton Primary School pupils and a representative from HS2 planting donated oak saplings, March 2022



Further information

In September 2020 acorns were harvested and propagated in Three Shires nursery.

In January 2022 400 saplings were identified for onward planting.

The planting of oak trees will provide significant ecological enhancement as well as educational benefits for the community groups involved.

The client HS2 Ltd has produced a video highlighting the works and benefit provided to the local community. This can be accessed at - <https://youtu.be/WTEpvs36BMM>

This could be scaled up with sufficient lead in – for example source stock of trees and plant species could be selected from specific flora to be impacted by the scheme and harvested for future planting.

“We have a project to develop our outdoor learning areas, including improving the landscape, creating an outdoor gym and planting trees. We have recently received a grant from The National Lottery’s ‘Together for Our Planet’ programme where our aim is to promote climate change and help our community take practical climate action. Planting new trees around our school grounds is a huge step in the right direction and it doesn’t stop there. We are hoping to transform our grounds into outstanding learning areas that will provide all of our children, their families and the community of Water Orton with a range of different opportunities for learning, playing, exercising and exploring.”

Mr Chris Plow, Deputy Headteacher at Water Orton School

Project Team

- HS2 Ltd
- LMJV
- Three Shires

What was the motivation for carrying out the enhancement?

Seeing the immediate impact of the enabling works motivate our teams to identify ways this could be mitigated further than the works that have been completed to date, this is one example that we could work collaboratively on to achieve a positive outcome.



James Lloyd of Three Shires showing pupils at Water Orton School how to plant a sapling