# GEO Certified® Report
# Thornbury Golf Centre

Prepared by Independent Verifier, Tony Hanson

Certified by GEO Foundation: August 2021
Valid until: August 2026

*“Thornbury Golf Centre has again achieved all the requirements for certification at a time where staff numbers were reduced due to the pandemic. The team has maintained a site that is a huge credit to them, providing ongoing benefits to their community and environment during a difficult and stressful time. Following this third certification, the club now moves into a tailored 5-year schedule of renewal – deserved recognition for the high standards achieved over many years.”*

*Tony Hanson*

*GEO accredited Independent Verifier*

# Introduction

GEO Foundation is pleased to confirm that Thornbury Golf Centre has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly and transparently developed modern sustainability Standard of best practice.

Thornbury Golf Centre has:

1. Met the required certification criteria for sustainable golf operations
2. Successfully completed the official third-party verification process
3. Successfully passed the final evaluation by GEO Certification Ltd. (autonomous subsidiary of GEO Foundation)

GEO agreed with the conclusions of the official verification report, that, having achieved all mandatory criteria; and with specific Continual Improvement Points set for the future, Thornbury Golf Centre should be awarded GEO Certified® status.

For the certification period stated above, Thornbury Golf Centre can therefore claim a position as a leader in advancing sustainability in golf – making important contributions in protecting nature, conserving resources and strengthening communities.

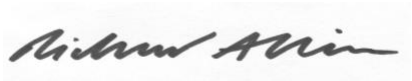
The GEO Certified® Report that follows comments on the actions undertaken against the criteria, as observed by the Independent Verifier during the assurance process.

Certification is nearly always the result of a dedicated team effort resulting in many practical and valuable social and environmental results around the golf course, maintenance facility and clubhouse. These dedication and leadership qualities are an important part of ensuring the resilience of the golf facility and the golf industry into the future and also as part of society's wider effort to pull together for people and planet.

We congratulate all involved.

Jonathan Smith
Founder and Executive Director, GEO Foundation
GEO Certification Ltd. Board Member

Kelli Jerome
Executive Director, GEO Foundation



Richard Allison
Manager, GEO Certified Facilities

# Verification and Certification

## Verification

The official third-party audit was carried out by an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

## Certification

GEO Certification Ltd, an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the verifier, ensuring:

- Comprehensiveness – that activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified®, GEO Foundation also provides a suite of credible, practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at **www.sustainable.golf**

## Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including Fairtrade, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at **www.isealalliance.org**

The Sustainability Agenda for golf covers the following themes and action areas:

| THEMES | ACTION AREAS |
|---|---|
| **Nature** | • Habitats & Biodiversity<br>• Turfgrass management<br>• Pollution prevention |
| **Resources** | • Water<br>• Energy<br>• Materials |
| **Community** | • Partnerships & Outreach<br>• Golfing & Employment<br>• Advocacy & Communications |

Included below are the observations made by the Independent Verifier against each item in the Standard.

## NATURE

### N1 Habitats and Biodiversity

| Objectives | Requirements | Mandatory Practices | Verifier Notes |
|---|---|---|---|
| **N1.1 Understand the site and surroundings** | **N1.1.1 Sound understanding of the nature and landscape value of the site** | Map all habitats and vegetation types on the site;<br>Regularly update landscape / biodiversity surveys | Detailed images and hole by hole management plan discussed. |

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| | | | Survey documents and management discussed in light of the engagement with various external wildlife and environment groups.<br><br>Habitat images and ongoing projects were discussed highlighting the care and sympathetic management style of the club |
| | **N1.1.2 Knowledge of legal designations for protected areas, habitats and species** | Understand legal responsibilities for protected landscapes and species;<br>Record and monitor protected, endangered, or rare species found on the site | There are no legal designations or protections on site. |
| | **N1.1.3 Understanding and respect for cultural heritage** | Protect any archaeological, historical or cultural designations on the site | There are no archaeological, historic or cultural designations on site |
| **N1.2 Opportunities to naturalise the course** | **N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass** | Observe, track and / or monitor golfer play | Fairways are shaped to provide the dual benefit of reduced requirement for management in terms of time and inputs, together with a more aesthetically pleasing and challenging course.<br><br>The managed amenity grass provides a balance of playability and golfing challenge.<br><br>The estimate is that over the last 5 years the naturalised area of the course has remained at similar levels due to previous optimisation. |
| **N1.3 Actively manage habitats for wildlife** | **N1.3.1 Projects to manage habitats in the best way for wildlife and golf** | Regularly review and follow a habitat management plan;<br>Prioritise native species when planting and landscaping | The habitat management encourages naturalised species and protects and enhances their habitats where possible.<br><br>CIPs<br>Continue the management programme and the engagement with charity wildlife stakeholders.<br><br>Continue with existing, and encourage other member/players to engage in wildlife spotting |
| **N1.4 Conserve key species** | **N1.4.1 Practical conservation measures for priority species** | | The club undertake a range of conservation projects including buffer zones and habitat creation<br><br>The last 12 months this has reduced due to furlough and increased workloads |

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| **N2 Turfgrass** | | | |
| **N2.1 Maintain optimum turf and soil health** | **N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors** | Select appropriate grass species for climate | Turf species have been reviewed and adjusted to reduce the requirements for inputs and maintain the desired playing characteristics.<br><br>The course team will continue to monitor the sward and adjust as necessary. |
| | **N2.1.2 Practices to maintain good soil structure and condition** | | The Integrated Turf Management programme maintains good soil and turf health including moisture removal, slitting, coring and topdressing. |
| | **N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation** | Undertake soil tests and nutrient analysis | Soil nutrient levels are tested to ensure applications are balanced and required, resulting in very low inputs.<br><br>Discussions outlined the sympathetic management creating the required quality of turf grass and playing surface.<br><br>The monitoring of pests and disease, and maintaining within acceptable parameters, inform decisions on the use of all inputs.<br><br>Input data samples and stock levels were reviewed. |
| **N2.2 Prioritise mechanical maintenance** | **N2.2.1 Non-chemical pest, disease and weed management** | Sharpen mowing blades;<br>Remove surface moisture;<br>Hand weeding | Standard physical management includes observation, moisture removal and hand weeding wherever possible.<br><br>Equipment maintenance and fault reporting are key management areas to ensure efficiency and course condition. |
| **N2.3 Use chemicals responsibly** | **N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues** | Establish patterns and levels of risk for pests and diseases;<br>Scout the course daily for early signs of pests and disease;<br>Accurate pest and disease identification;<br>Map and track pest and disease hotspots;<br>Establish pest and disease thresholds | Course management planning is based on the accumulation of knowledge, observation and technology.<br><br>Observations and assessment allow the club to understand the potential risks and to make early interventions maintaining turf quality and reducing the requirements for inputs. |
| | **N2.3.2 Application of chemicals with full safety precautions** | Use only legally registered and approved products;<br>Ensure staff are fully qualified and licenced to use pesticides; | Chemical logs and stocks were reviewed along with staff qualifications and training records. |

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| | | Regularly calibrate and test applicators;<br>Use appropriate protective equipment;<br>Dilute and dispose of leftover product on untreated areas of turf | Buffer and no spray zones are maintained.<br><br>PPE, wash stations and spill prevention kits are available at key locations – images provided |
| **N3 Pollution Prevention** | | | |
| **N3.1 Prevent pollution across the entire site** | **N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations** | Document procedures for emergency spill responses;<br>Maintain mowing buffer zones around water and all ecologically sensitive areas;<br>Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas;<br>Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas. | The team have a good understanding of the site along with the risks around their storage of hazardous materials.<br><br>Spill kits are in place and stock levels are recorded.<br><br>Spray buffer zones are maintained to reduce the risks of fugitive escape of potential pollutants to the wider environment.<br><br>CIP<br>Formalise the existing incident response documents – In line with the Pollution Prevention Guideline – 21 |
| | **N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations** | Ensure all hazardous materials are safely and securely stored;<br>Ensure compliance with all required standards and systems for hazardous waste and wastewater discharge | The licenced waste contractor retained by the Club also collect hazardous materials from the hospitality and office areas of operation and include whole site management.<br><br>CIP<br>Continue the review of wastewater treatment on site and the potential for more naturalised reed bed systems where appropriate. |
| | **N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations** | Ensure wash areas are on impermeable, leak-free surfaces;<br>Mixing and loading of pesticides and fertilisers over an impermeable surface;<br>Triple rinse pesticide containers and applicators | Licenses discussed and confirmed.<br><br>Hazardous materials storage includes bunding and containment |
| **N3.2 Safely manage hazardous substances** | **N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances** | Maintain a register of hazardous materials available to authorised staff;<br>Safe storage in secure and ventilated concrete or metal building;<br>Sufficient storage capacity;<br>Impermeable flooring; | Documentation, records and infrastructure confirmed and outlined above<br>Storage tanks are proprietary with integral bunds, located within the maintenance buildings. |

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| | | | Spill containment kits present;<br>Emergency wash area;<br>Fire extinguisher in the immediate area;<br>Secondary containment for fuel, either externally constructed, or integrally manufactured;<br>Regular inspection of storage tanks | The evidence, information and discussions confirmed detailed awareness of the potential risks and reduce the likelihood of accidental spill.<br><br>Emergency wash areas discussed alongside the sites regular H&S review |
| | **N3.3 Responsibly manage waste / storm water** | **N3.3.1 Appropriate wastewater usage and discharge licences** | Wastewater discharge licence;<br>Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation) | Discharge licenses confirmed.<br><br>Washdown areas reviewed – currently an ESD biological dosing closed loop system<br><br>CIP<br>Review the alternative to the dosed water recycling system when the existing system is due for replacement. |

# RESOURCES

**R1 Water**

| Objectives | Requirements | Mandatory Practices | Verifier Notes |
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| **R1.1 Minimise water demand** | **R1.1.1 Measures to reduce the need to consume water** | Target irrigation to essential playing surfaces only | The club monitor weather forecasts and soil moisture to determine irrigation requirement.<br><br>Irrigation coverage is monitored, and the system is regularly serviced to ensure efficiency. |
| **R1.2 Maximise water efficiency** | **R1.2.1 Practical measures to use water more efficiently on the golf course** | Conduct regular irrigation performance checks;<br>Provide staff training on efficient irrigation practices;<br>Ensure effective application of water to target areas; | Moisture monitoring and weather information are used to assess irrigation need.<br><br>Catch can tests and spray ark reviews are conducted regularly to ensure accurate delivery.<br><br>CIP |

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| | | | Ensure irrigation schedules are informed by weather patterns and soil moisture analysis | Review irrigation system and controls during the next round of capital expenditure. |
| | | **R1.2.2 Practical measures to use water more efficiently in buildings** | Audit water use regularly;<br>Review bills frequently and look for irregularities;<br>Encourage water-saving practices amongst staff and visitors;<br>Categorise and track water consumption | Water bills are reviewed to check volumes consumed and to identify extraordinary consumption that may indicate leaks.<br><br>Records are maintained as part of the accounting function.<br><br>Stakeholders are encouraged to reduce consumption. |
| | **R1.3 Source water responsibly** | **R1.3.1 Measures towards alternative, lower quality sources of water** | Ensure appropriate water abstraction permit and reporting, as required | Water is currently sourced from ground water abstraction.<br><br>The club has a close relationship with the Environment Agency – assisting in monitoring groundwater levels. |
| | **R2 Energy** | | | |
| | **R2.1 Reduce energy demand** | **R2.1.1 Measures to reduce the amount of energy consumed in course maintenance** | Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs | The management reviews the area of managed amenity to balance playing times and naturalised habitat. |
| | **R2.2 Maximise energy efficiency** | **R2.2.1 Measures to use energy and fuels more efficiently in buildings** | Audit energy use regularly;<br>Regularly review bills;<br>Categorise and track energy consumption | Energy bills are reviewed regularly to monitor consumption and allow patterns to be identified to assess future consumption.<br><br>Consumption is categorised to identify areas of use. |
| | **R2.3 Source energy responsibly** | **R2.3.1 Measures to source alternative, renewable forms of energy** | Determine potential sources of renewable energy in the area and on-site, through renewable energy providers | The club has transferred to a renewable tariff.<br><br>CIP<br>Review on-site renewable opportunities for next certification (2026) |
| | **R3 Materials** | | | |
| | **R3.1 Reduce materials demand** | **R3.1.1 Products and materials selection based on necessity, including opportunities for recycled,** | Undertake a review of materials consumed | Waste coming to site is reviewed and reduced via bulk purchasing where possible.<br><br>Waste is separated and the hierarchy applied to reduce the amount directed to landfill. |

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| | | **reused and locally sourced alternatives** | | CIPs<br>Continue the process of review the potential to increase waste separation on course from players |
| | **R3.2 Purchase responsibly** | **R3.2.1 Practical use of an ethical / environmental purchasing policy** | Adopt a sustainable, or ethical / environmental purchasing policy to maximise the use of locally sourced goods and goods made from recycled, recyclable and certified materials | Waste and environmental policies were discussed and confirmed. |
| | **R3.3 Reuse and recycle** | **R3.3.1 Waste stream separation for maximum recycling and re-use opportunity** | Demonstrate waste separation, reuse and recycling;<br>Track how much waste goes to landfill, or is reused / recycled | Waste is reviewed as part of the operational cost base and discussions on potential reduction and improved recycling rates are ongoing.<br><br>Recycled materials have already been used to provide bug hotels<br><br>CIPs<br>Continue looking for opportunities to reduce waste coming to site and reusing where possible. |
| | **R3.4 Demonstrate legal compliance** | **R3.4.1 Compliance with all local and regional waste management regulations** | Use authorised waste and recycling contractor for general, hazardous, industrial and green waste | Waste contractors are licenced, and transfer documents retained. |

# COMMUNITY

## C1 Outreach

| Objectives | Requirements | Mandatory Practices | Verifier Notes |
|---|---|---|---|
| **C1.1 Diversify access and provide multi-functionality** | **C1.1.1 Social and recreational activities at the facility** | | The club has an open and inclusive membership and guest policy.<br><br>Community use of the facilities is encouraged |
| **C1.2 Provide for volunteering and charity** | **C1.2.1 Opportunities available for volunteering and support of charities and good causes** | | Staff are encouraged to engage with local and national charities to volunteer and raise funds. |
| **C1.3 Establish active community partnerships** | **C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups** | Create a 'sustainability working group' | Management heads of department meetings include sustainability and environmental management as a standard agenda item. |

## C2 Golfers & Employees

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| **C2.1 Improve health and wellbeing** | **C2.1.1 Benefits to human physical and mental health from golf and facility activities** | | The club are aware of the physical and mental health benefits provided by golf and promote and celebrate them. |
| **C2.2 Be open and inclusive** | **C2.2.1 Inclusivity and diversity in membership and visitor policies** | Demonstrate inclusive policies for members and visitors | The facility has an open and inclusive policy. |
| **C2.3 Employ fairly and safely, and provide career opportunities** | **C2.3.1 Ethical and legal employment, working conditions and professional development** | Follow all relevant national legislation and best practice for employment, health & safety etc | Staff receive induction training and are encouraged to continue their learning internally and externally.<br><br>Additional training is provided as required using either internal or external resources. |

## C3 Communications

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| | **C3.1 Engage golfers and members** | **C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors** | Provide information on the facility's sustainability commitments, actions, or achievements | Communications pathways include meetings, notice boards, newsletter and social media.<br><br>Discussions and suggestions are encouraged |
| | **C3.2 Celebrate and promote sustainability** | **C3.2.1 Activities that raise awareness and engage people in the wider community** | Provide evidence of external communications and community engagement | External Stakeholders are engaged and encouraged to contribute and benefit from the facilities activities.<br><br>Local wildlife groups are encouraged. |

## Golf and Sustainability

Among all sports, golf has a particularly close relationship with the environment and communities, golf facilities can bring many benefits to people and nature - from the protection of greenspace and conservation of biodiversity; healthy recreation for all ages; local supply chains; and jobs, tourism and other forms of economic value.

Adopting a more sustainable approach is also good for golf. It's about presenting a high-quality golf course and providing a memorable experience in natural surroundings. It's about being as efficient as possible. And it's about supporting the community in a range of ways that bring increased recognition, respect and contact.

At a broader level, it's important that golf credibly demonstrates its commitment, and its social and environmental value – strengthening the sport's image and reputation for the long term.

Golf facilities that participate in OnCourse®, an international sustainability initiative assured by the non-profit GEO Foundation, are taking a comprehensive approach and striving to be leaders in the community.

Find out more at www.sustainable.golf