Grounds Committee

Penns Field Play Area – Design Brief

Report produced by: Project Manager & Climate Officer 30 October 2024

Background

The current Penns Field Play Area has recently been removed for health and safety reasons, and now needs to be replaced as soon as possible.

The previous equipment consisted of





Some initial ideas and designs have been created, and these have been used to propose the following ideas. The winning contractor design will be put out in a digital public consultation for final ideas and suggestions.

Proposed Design Brief

We invite playground, supply and install contractors to tender for play equipment, surfacing and street furniture which complies with current British industry safety standards. Playing apparatus we would like you to consider are as follows:

- Spinning Pole
- Log Spinner
- Leaf stepper logs
- Junior Jungle Multi Tower
- Net Tower (seating)
- Junior Venture
- Trail Banky Scramble
- Inclusive Play Equipment

Artwork illustrating these play apparatus and equipment is provided in *appendix A.*

We would like to incorporate a theme so any ideas would be appreciated, and consider any floor inlay graphics.

We welcome suggestions for climate considerations as shown in the "Climate Considerations" section below. All health and safety compliance must be met with current BS and European standards and ROSPA compliant or equivalent.

Health and safety on site is the responsibility of the contractor and relevant documentation and safe systems of work must be followed and up to date. Further correspondence with the contractor and Petersfield Town Councils project and grounds manager will insure all relevant procedures are implemented. A projects Tender Specification pack will be issued to each contractor and the successful contractor will be signed up using a JCT contract agreement.

Shade Provision

Protecting children from scorching sun and intense heat during outdoor play and providing a comfortable space for families has become a new priority in adaptative and regenerative playground designs due to climate change. Shade makes outdoor places more inviting and enjoyable by offering dappled light provision.

Children are more vulnerable than adults to heat-related illnesses and UV radiation, and hotter summers reduce opportunities for outdoor play which is essential for their development. That's why adding shade to outdoor play spaces is critical.

Adaptive and Regenerative Design – Planning for the future

Prioritise main structural materials and designs that reduce heat absorption and can withstand continuous changing whether elements.

Eco-friendly materials that could be considered:

- Sustainable wood is an ecofriendly alternative is to make use of wood that is sourced from responsibly managed forests. This sustainably sourced wood has a low embodied carbon footprint, is biodegradable and renewable.

- Sustainable Sourcing: This is achieved through ensuring that the playground contactor has an FSC certificate or accreditation and is aligned with the European Union Deforestation-Free Regulations (EUDR) legal and sustainability requirements as well as UK Timber Regulations (UKTR) 2021.
- Biodegradability: Unlike many other materials such as steel, plastic or rubber wood is biodegradable and at the end of its lifecycle it will decompose minimizing the environmental impact.
- Carbon footprint: As wood acts naturally as a carbon sink through absorbing and storing CO2 from the atmosphere, when cut down the CO2 remains stored, reducing the overall carbon footprint.
- Reduced landfill waste: Considering the increasingly global change in waste management, making use of recyclable materials such as wood will ultimately lead to a reduction of waste in landfill.
- Promotes connection with nature: Encouraging a deeper understanding, connection and appreciation with nature from a young age. In addition, wood harmonizes with the natural environment and shows signs of growth and variation.
- Sensory experience: Wood provides a greater sensory experience as it is more pleasing to the touch, never too hot or too cold. Therefore, the overall texture and smell significantly contributes to a sensory-rich and highly engaging play environment.

Possible Options for the provision of shade:

Shelters, Gazebos Outdoor Classrooms, Forest Schools (commercialplay.co.uk)

- Versatile and durable, they provide 99% UV protection.
- These are designed for shade use only and are not in any way waterproof.

Both options could have gutters fitted for a rainwater harvesting system to collect and reuse rainwater for irrigation or other purposes for the playground.

Funding and Timings
The existing play area has been out of action since approximately June 2024.

The suggested budget for this work is £140,000, and we have earmarked reserves set aside for £119319.63 (earmarked reserves 326, 340 and 385).

A public consultation is likely to be held once a contractor has been chosen, with the implementation taking place before summer in 2025. The public consultation would provide us with feedback to ensure we choose the right equipment for the location and likely age groups that will be using it.

Climate Considerations

Petersfield Town Council set a target to be carbon neutral by 2050, in line with national government. This target recognises the critical role we have in that smaller local authorities can protect the local environment whilst ensuring that we are resilient and able to continue to deliver our public services. As a local authority, it is important to recognize our wider role to society in delivering public services for the public good. Any actions taken on climate change must be in line with this and would therefore have to adhere to the principles of proportionality, affordability and be equitable.

It is also worth noting that on the Sports, Recreation and Environment Climate Action Plan, item G3 regarding play equipment states:

“To consider for all future projects the use of recycled and/or sustainably sourced play equipment and to demonstrate the commitment to reduce or eliminate the use of new plastics and wood from non-sustainable uncertified sources”.

Item G3 is aimed at achieving a playground that is durable whilst still ensuring a balance with environmental conservation from materials chosen for installation and ongoing maintenance.

Traditional playground designs often rely on materials that have a significant environmental impact. From the extraction of raw materials to the manufacturing process and eventual

disposal, these materials contribute to carbon emissions and waste generation. By embracing a playground design that is sustainable, the Town Council will be capable of mitigating the associated environmental impacts creating a playground that is safe, inspires the youth and enhances as well as preserves the local natural environment.

There are two crucial climate considerations for this particular project, namely embodied carbon and impacts on the surrounding landscape.

The embodied carbon of a project contributes significantly to the overall carbon footprint therefore, careful consideration should be given to every aspect of this project and sustainable options prioritised throughout the procurement, agreed design and installation.

Adaptive and Regenerative Design – Planning for the future

- This will ensure the new playground has the capacity to evolve with changing environmental conditions. Thus, reducing embodied carbon through extended lifespan and reduced need for renewal.
- Prioritise main structural materials and designs that reduce heat absorption and can withstand continuous changing whether elements such as heavy rain and flooding.
- Rainwater harvesting systems to collect and reuse rainwater for irrigation or other purposes for the playground. Planting is a key component of a well-designed playground. If rainwater can be used and stored for watering purposes, then this would contribute significantly to sustainability.

Material Selection

To reduce embodied carbon of this project, diligence should be employed on the main structural material selection and prioritisation of verified low carbon materials.

Main Structures

Eco-friendly materials that could be considered:

- Sustainable wood is an ecofriendly alternative is to make use of wood that is sourced from responsibly managed forests. This sustainably sourced wood has a low embodied carbon footprint, is biodegradable and renewable.
- Recycled plastics is another ecofriendly alternative in making use of recycled plastics to create a playground structure that is not only robust but weather resistant to.
- Recycled tyres are an additional eco-friendly alternative to provide safety surfaces.

Although using reclaimed and recycled materials for the main play area structure may not be a feasible option. Low carbon FSC (Forest Stewardship Council) certified wood may be more appropriate. Therefore, sustainably sourced wood should be considered as the primary material as it is renewable, recyclable, has a low carbon footprint and has low embodied energy and carbon.

- Sustainable Sourcing: This is achieved through ensuring that the playground contactor has an FSC certificate or accreditation and is aligned with the European Union Deforestation-Free Regulations (EUDR) legal and sustainability requirements as well as UK Timber Regulations (UKTR) 2021.

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Flooring

- Self-binding gravel as the main source of flooring with suitable soft flooring under the play equipment should also be prioritised as a sustainable alternative that fosters co-benefits. Self-binding gravel, with its lighter colour has improved reflectivity, reduces heat absorption, making outdoor spaces more comfortable and environmentally friendly.
- In addition, by anchoring soil particles and stabilising the terrain, self-binding gravel acts as a natural erosion control measure, preserving the integrity of landscapes and minimising sediment runoff. One of the key advantages of self-binding gravel and path toppings is significant reductions in maintenance required.
- Rubber chippings offer an exciting and innovative solution to transform children's playgrounds areas into vibrant and secure environments, they provide a durable and clean surface that withstands years of use.

Nature and Biodiversity

By prioritising an environmentally friendly playgrounds and nature, children are provided with close to nature experiences fostering education and appreciation. Through this prioritisation the Council will be able to promote and enhance the natural area and the ecosystems they support. This in turn will enhance biodiversity through the introduction of plants, shrub and trees which will attract local wildlife and highly beneficial and pollinating insects.

- Design elements like birdhouses, ponds, butterfly gardens, or insect hotels to attract and support local wildlife and enhance biodiversity. This should be accompanied by interactive educational signage providing a platform to learn about different species and ecosystems. Not only do green spaces with native vegetation provide increased visual amenity but also improve air quality by enhancing oxygen production and filtering pollutants, resulting in cleaner and fresher air.

- Another co benefit of providing an environmentally friendly playground that prioritises green surroundings is improved health and well-being of children as well as their parents. Spending time in green environments has been proven to reduce stress levels, improve attention span, and boost overall mental well-being. Green playgrounds offer a sanctuary for children and their parents to connect with the calming effects of nature.

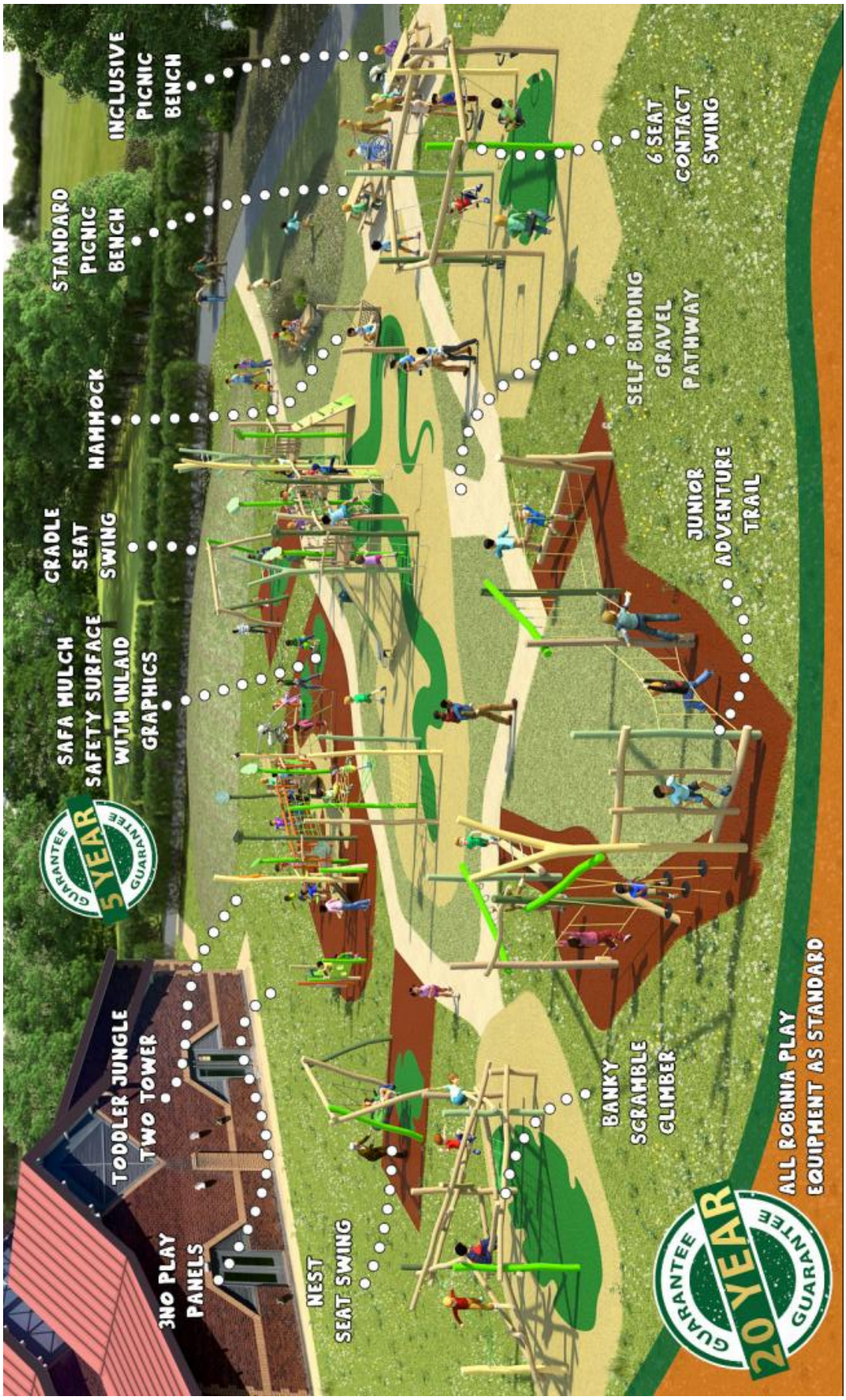
Education

Provision should be made for interactive signage, engaging activities, and informative displays with the goal of inspiring children to become environmentally conscious individuals who make a positive impact on their surroundings. The integration of educational elements creates interactive learning experiences on sustainability and ecological concepts. Children learn about the importance of protecting the environment and the impact their actions can have.

Appendix A

Inclusive Equipment – some ideas

Equipment - some ideas




STANDARD BENCH
LOG SPRINGER
3M GABEON SEATING WITH ROBINIA BENCH
1M HIGH MOUND
JUNIOR JUNGLE MULTI TOWER
SPINNER POLE
LEAF STEPPER LOGS
NET TOWER (SEATING)