

Site address:

50 Seymour Road, Ringwood, Hampshire, BH24 1SH

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1. Introduction:

A retrospective planning application for a shed is made following a visit from Sarah Barnes, an NFDC Planning Enforcement Officer, on January 11th, 2024, following a report of an alleged unauthorised outbuilding at our property. The reference number for the case is EN/24/0009. A retrospective application is required as the shed has two roof apexes which are greater than 2.5m in total height and the shed is within 2m of the site boundary with the property at 76 Northfield Road. The combination of height and proximity to boundary breaches permitted development without planning permission. (E1 (e) ii of i). This was due to a misunderstanding of permitted development guidelines by the lead applicant.

2. Purpose:

The primary functions of the shed are storage of tools and firewood, and workspace for early garden cultivation tasks (chitting, seeding, transplanting etc.). It replaces a previous garden shed which was taken down and a garage to be taken down in February 2024 as part of the overall remodelling of 50 Seymour Road with planning permission 21/01039/P as granted on September 11th, 2018 (APP/B1740/D/18/3207935: 50 Seymour Road, BH24 1SH) and with completion certificate dated January 12th, 2024.

During her visit, Sarah Barnes observed the shed inside and outside, took photographs and stated that the shed was clearly being used as a shed.

3. Design:

The design of the shed is based on the industrial architecture principle with a dual section “sawtooth roof”ⁱⁱ and angled clerestory skylights for natural light. The design aesthetic is further applied with the use of corrugated, galvanised iron, more commonly known as corrugated iron (CI)ⁱⁱⁱ or wriggly tin, as roof and wall cladding material^{iv}. As well as having many functional advantages this design also celebrates the use of CI as a material. These advantages will be discussed in more detail in section 4. CI is very widely used for sheds, outbuildings and fences in the UK and has been used extensively around the world for many years. We have both spent time in New Zealand, Australia, Iceland and the Falkland Islands, where CI buildings are the norm for durability and ease of construction. We both grew up in families where outdoor work was enjoyed and valued. The CI sheds of Ringwood and West Moors were multi-purpose and used for tool maintenance as well as storage. The design reflects these memes and is an homage to them^v, the garden sheds of our childhood and to our treasured memories of travels.

Additionally, for the past decade our area has suffered an increasing problem with rat infestation. With deep regret we’ve had to engage pest control services several times when rat nests periodically got out of hand under our shed and in our outdoor wood store. We chose to include an indoor log store in the new shed to avoid the rat problem in future.

Lastly, following the spate of shed break-ins and burglaries locally we want our shed to be as secure as possible. This is especially important because we will be keeping a variety of tools inside that could be used to break and enter our own or neighbouring homes. During the summer our bicycles may occasionally be stored in the shed, so security is key to protect them too.

4. Sustainability:

We resolutely pursued an ethos of sustainability throughout the main project of 21/01039/P and this is continued in our approach to the design and build of the shed. The proposed works are already started and c. 95% completed as of February 17th, 2024. The shed is built using c. 75% recycled materials including crushed concrete, railway sleepers, 100mm x 50mm timber, sealed unit sliding door glass panels and CI. It is built to a "sawtooth roof" design by us, with North-facing clerestory skylights to admit natural light without direct sunlight. The roof and walls are outer clad using CI to provide a durable, weatherproof and secure outer skin. CI affords good protection against increasingly aggressive weather due to climate change; the potential ingress of rodents; and break-in by thieves or vandals.

Concerning power supply, the shed will be off-grid: equipped with a solar panel/battery/inverter combination for lighting inside and outside the shed as well as a low power 240VAC source for the charging of cordless electric garden tools.

a. Recycling and use of recycled materials:

Ground stabilisation using recycled, crushed concrete

The ground where the shed is located has historically been quite damp and soft. It was decided to overcome this problem by creating a more stable, yet still temporary, porous base.

A trench of c 400mm (w) x 400mm (d) was dug to match the footprint of the sleepers to be used as the base for the shed. Approximately 2 tonnes of topsoil has been retained for reuse around the shed (please see notes on post-build planting in our Biodiversity Statement) and elsewhere in the garden.

The trench was backfilled with c. 2m³ of 6F5 recycled, crushed concrete. This was purchased locally from Avon Material Supplies^{vi}. It is a more sustainable solution for a base than "native aggregate". This was compacted and levelled to create a stable, solid base.

Recycled railway sleepers as the base for the shed

Recycled azobé wood railway sleepers (2400mm (l) x 240mm (w) x 120mm(h)), were purchased locally from Romsey Reclamation^{vii}. These are rot-resistant without chemical treatment and are ideal for use in organic gardening gardens. There is no leachate of creosote or oil from these sleepers to ground.

(Note: Due to a communication misunderstanding during construction, the sleepers were laid on their 120mm face and not on their 240mm face as per the design, resulting in them adding an extra 120mm to the overall shed height. This was not noticed until much later in the build.)

Paving slabs and clay cobbles

To permit access all around the shed, a spacing of 600mm was made between the shed and the boundary with 76 Northfield Road. More recycled concrete was used as a base for a path of paving slabs and clay cobbles that had been recovered from ground clearance during our main building project. We also used surplus recycled plastic gravel grids^{viii} around three sides of the shed to stabilise the replaced soil (work in progress), permit re-grassing of the ground and naturalise the ground appearance on the North, South and West sides of the shed.

Sealed unit double glazing panels

The skylight panels used in the clerestory skylights and the sealed unit with internal blind used in one of the doors were surplus panels from our main building project. They were delivered in error by the suppliers, who considered it uneconomical to retrieve them. Rather than the panels going to landfill, we decided to repurpose them in the design of the shed as a means to bring in good natural light, without direct sunlight. The skylights are not "windows" for looking through as their cill is 2m high from the inside floor of the shed. The internal adjustable Venetian blind in the left-hand door is an additional security feature because it hides the tools inside from view.

Wood

The shed uses wood in the form of scaffolding planks, oriented strand board (OSB) and 100mm x 50mm timber for the floor, frame and roof construction.

We were able to source a significant quantity of recycled 100mm x 50mm (165 linear metres) from the Southampton Wood Recycling Facility (SWRF)^x. It was not possible to use recycled OSB in the construction because the quality of available stock from SWRF was poor. Irregularly sized pieces with warpage due to moisture ingress were all that was available. The decision therefore was made to source new OSB from a local builder's merchant.

Similarly, it was not possible to use recycled scaffolding planks for the floor. Again, the stock from SWRF was poor and most pieces were ex-construction site with stones, concrete spits and nails in them. This makes them dangerous to cut. The decision was therefore made to use new scaffolding planks from SWRF. A single delivery of all 100mm x 50mm wood and the planks was made to minimise CO₂ emissions.

Galvanised Corrugated Iron (CI)

The use of galvanised corrugated iron for the roof and the outer cladding of the walls and doors was deliberate for several reasons:

1. It is a very durable material, which can last for many years if treated well. This is achieved by ensuring that all cut edges are deburred and treated with a typical cold galvanising paint.
2. Since 1829 it has been a classical material choice for shed building in England and around the world, as mentioned above in Section 3.
3. When used as the outer skin of walls where a "Tyvek[®]-type" breathable membrane is stapled to the OSB, between the OSB and the CI, it creates a natural, efficient moisture pump for the removal of any condensation inside the shed. Warmth from sunlight warms the inside and moisture evaporates out through the Tyvek[®] and either remains as vapour and convects out through the CI voids or condenses on the inner CI surface to drip down onto the ground. This is a process akin to how "GORE-TEX" works to be waterproof, yet breathable. We regard this as important for the functionality of the shed as a wood store. We have two woodburners in our home and for a clean, low smoke burn it is crucial that wood be as dry as possible. Our design enables firewood to dry and mature naturally with significantly less energy footprint than many of the commercial kiln drying options for firewood.^x
4. CI is high security. Over the years, there have been break-ins to properties in our local area (notably sheds and garages in recent years), and thefts of garden tools. Compared to a "shop-bought" garden shed of lapped wood construction our design is intended to be very difficult to break into. It is also more secure against rodent ingress than wood-only equivalents. We have had problems with rats nesting under our previous sheds: getting inside and eating stored seeds; using the shed as a larder; fouling the interior; introducing the risk of Leptospirosis (Weil's Disease).
5. We were able to source used, high quality CI sheets from a source in Amesbury via Facebook Marketplace. Our CI had originally been used on the MOD Salisbury Plain training area for battle simulation exercises. Being able to repurpose this CI was beneficial for two reasons: -

(i) It gave the CI a new lease of life when it would otherwise have been sent for metal scrap recycling. Being able to repurpose the CI "as-is" not only saves the iron ore, coal and limestone used when creating new CI resulting in less CO₂ formation, it also saves more CO₂ by not having to smelt the CI into another form^{xi}.

(ii) The fact that the CI we have used is already c.20 years old has given it a patina of age and taken away some of the harsher metallic nature that would be present if new CI were used. This will give a softer overall appearance, in harmony with the rest of the garden, once the last parts of the main building project are completed and the garden can be redesigned, regenerated and replanted. This is discussed more in the Biodiversity Statement accompanying this application.

b. Negative Carbon Footprint:

We intend for the shed to have a negative carbon footprint throughout its lifetime. It will have a solar panel/battery/inverter system to generate electricity by photoelectric conversion energy and be used to light the shed inside and out with 12V dc LED lights. The inverter will enable low amounts of 240 V ac to be generated, specifically for charging Li batteries for cordless electric garden tools. This is a central part of our future gardening strategy to shift from petrol and mains electric tools to cordless rechargeable tools. These are beneficial not only for us but for our neighbours in terms of noise and fume.

c. Other Sustainability Considerations:

We will install greenhouse-type guttering to collect rainwater from the shed roof and either feed into a water butt next to our adjacent greenhouse or fill the shallow, low-level drinking trough as described in the Biodiversity Statement. This will ensure we are collecting precious water from all our roof surfaces, as we already have a 3000l collection tank buried in the garden with pumped feed to outside taps for harvesting from our main roof.

We have been careful to cut wood and metal so that offcuts can be reused wherever possible. OSB offcuts (estimated at <5% of purchased total) were offered to the Ringwood Men's Shed initially and then placed on Freecycle, where they were taken by a Ringwood resident. All sawdust and other burnable waste from the construction process has been bagged and taken to the Somerley HWRC and placed in their energy recovery skips.

A minimal number of CI offcuts has been taken for metal recycling at Somerley HWRC (estimated at <2% of purchased total). All other wood has either been recycled as firewood for us at home (in the case of untreated wood) or taken to Somerley HWRC for energy recovery.

Unavoidably, sundries for the building project need to be bought new (screws, nails, sealants and door ironmongery). Wherever possible, we have bought locally from Screwfix, In-Excess, Toolstation, Elliots, Travis Perkins, B&Q etc. to minimise transport CO₂ emissions. We only needed to go further afield for some specific aluminium trims^{xii} and the solar panel kit^{xiii}. We have used local labour to assist with the build, but c. 50% of the work was conducted by us.

5. Future:

Our shed has been designed with a future view in mind. Based on the information above, we have constructed a shed with hopefully a longer lifespan than "flatpack" sheds. Since moving into our home in 2000 we have gone through two shop-bought wooden sheds. Despite our best efforts to keep them in good condition they have let us down. The last one was supposed to last for 25 years and barely made it to 10. The nature of the ground tends to be damp in the shade and rainwater often pools for several days at a time - more so now as extreme weather events have become more frequent. Even on a base of paving slabs our old sheds rotted from the base upwards. When time came to demolish the last one, we were able to kick it down and only the base required any effort to take apart.

We have also designed our shed with the future look of our garden in mind. It should be recognised that our main building project created a significant disruption to what was our mature garden, and it will take time to fully re-establish it. Indeed, at the time of the visit by Sarah Barnes, it could be said that the garden was still more of a building site than a garden. Once the shed is completed and the old garage is demolished, we can focus on our garden design. A part of that will include a naturalising of the shed to its surroundings, which will include planting on and around the shed to soften the appearance. Please refer to the Biodiversity Statement for this application for more details.

6. Conclusion:

Our design is different to what some might consider to be a traditional garden shed. But then we have what some might consider to be an unconventional shape to our home, following its remodelling.

We would like to quote from the "Grounds for Appeal" document^{xiv} of our original planning permission 21/01039/P as granted on September 11th, 2018 (APP/B1740/D/18/3207935: 50 Seymour Road, BH24 1SH) in which section 2.2 states:

In the appellant's submission, if there is not room for imaginative and contemporary architecture here then it is difficult to see where such architecture could ever be deemed acceptable. It is the variety of built form in this part of Seymour Road that opens the door for a more innovative approach...

...the point is that being 'different' does not, and should not, mean that a form of development is necessarily unacceptable.

We have made a very careful design with significant thought given, not only to our chosen aesthetic, but also to sustainability through the application of recycled materials, minimal carbon footprint and maximal biodiversity. We believe that what we have created could be a model for others in future. We hope that the information offered in this document and the Biodiversity Statement explains our design and our honest intentions. Please consider this in your decision for our application.

Dr. Mark Goulding CChem FRSC & Ms. Sue Pulman.
Ringwood, February 17th, 2024.

ⁱ <https://www.gov.uk/government/publications/permitted-development-rights-for-householders-technical-guidance/permitted-development-rights-for-householders-technical-guidance#class-e-buildings-etc>

ⁱⁱ https://en.wikipedia.org/wiki/Saw-tooth_roof#:~:text=A%20saw%2Dtooth%20roof%20is,deep%20plan%20building%20or%20factory.

ⁱⁱⁱ https://en.wikipedia.org/wiki/Corrugated_galvanised_iron

^{iv} <https://www.buildingconservation.com/articles/corrugated-iron-architecture/corrugated-iron-architecture.htm>

^v <https://www.facebook.com/groups/corrugatediron/>

^{vi} <https://www.avonmaterialsupplies.co.uk/AMS/crushed-concrete-6f5/>

^{vii} <https://www.romseyreclamation.com/sleepers%20reclaimed.htm>

^{viii} <https://www.ecodeck.biz/about-us/>

^{ix} <https://southamptonwoodrecycling.org.uk>

^x <http://anantias.ubb.cl/chapter11.pdf>

^{xi} <https://www.stenarecycling.com/news-insights/insights-inspiration/guides-articles/the-value-of-recycling-metals/>

^{xii} <https://www.aluminiumwarehouse.co.uk>

^{xiii} <https://callidus.shop>

^{xiv} Appeal Statement compiled by Jerry Davies, Planning consultant <https://www.idpc.co.uk/>