

Project Narrative
94 Palmer Lane, Atherton CA
April 25, 2025

Town of Atherton Planning Commissioners:

In addition to the Variance Application regarding the front and rear setbacks for 94 Palmer Lane, we are submitting an application to decrease the Tree Protection Zone (TPZ) for various trees on the property that are impacted by the proposed development.

With this application, we have submitted an arborist report prepared by Daniel Soto from Dsoto Tree & Arborist Services dated 9/15/22. In this narrative we will also refer to the **Proposed Site Plan w/TPZ information & Fire Department Requirements on Sheet A-3**. This sheet has also been included as part of the Variance Application for setbacks.

As part of our due diligence, we reached out to the Menlo Park Fire Department to engage in a discussion about fire protection requirements for the site. Due to the flag lot geometry and the long access corridor associated with the property, there are limited solutions to gain vehicular access for both fire trucks and passenger cars.

Menlo Park Fire Department will require a 16' wide driveway from the street to the rear lot line of the neighboring property that sits in front of 94 Palmer Lane. There is currently an asphalt driveway in this location that averages 13'-4" wide. Trees T9, T10, T12 & T13 are impacted by this driveway location. In general, 3 of these trees are exempt from the required TPZ because of the existing driveway on the property. We were advised by Sally Bentz that if we put in a new driveway in the exact location as the existing driveway, we would be exempt from the TPZ's in this location only. The Fire Department requires us to widen the existing driveway. However, they have agreed to let us narrow the driveway for a limited portion around trees T9, T10 & T12. **See Sheet A-3** for this agreed upon configuration and for the minimal impact to Tree T13.

As part of our design process, we located a small, 1-car detached garage at the rear of the property. Although it would logically make more sense for this to be located at the front of the property where the long driveway enters the main portion of the site, the rear location was chosen to adhere to the zoning ordinance called out in 17.40 for accessory buildings and structures that dictates a detached garage shall be more than 30' behind the front face of the main house. If the planning commission would allow us to have the detached garage in the front yard, because it sits more than 130' behind the street front, we would choose this preferred location instead of having a long driveway all the way to the back of the property which impacts several heritage trees.

To access the detached garage with a vehicle, we propose building a 12' driveway along the Southwest border of the property. This impacts the required TPZ of trees T14, T15, T16, T17, T18, T19, & T20. In general, you will see that these trees are located right on the property line. **See Sheet A-3**, for a graphic depiction and a numerical chart that shows the individual impact to

each tree and the reduced TPZ's. To help mitigate this overall impact, we are proposing to use a pervious & porous, gravel driveway system such as the BODPAVE 85 Porous Pavers made by Terram in this location (or an approved equal product with similar attributes). We have attached a product brochure to the end of this narrative to show typical characteristics of a porous paver system. In addition to allowing water to pass through the driveway, using this type of system allows us to excavate much less and use much less base rock than a typical concrete driveway. It should be noted that in a portion of this proposed driveway location, there currently exists a concrete swimming pool and concrete patio. These items will be demolished and the gravel driveway would replace a portion of these concrete structure. Only in this pool deck location, we would be considered exempt from the TPZ's because we are replacing the ground cover in the same location. However, we are replacing it with a better, porous material that will allow for better water percolation down into the soil.

On **Sheet A-3** you will see 4 additional heritage trees at the Northeastern property line. The TPZ's of Tree T21 & T22 are affected by the location of the new ADU. However, we are exempt from the required TPZ's for these two trees because the building is an ADU in this location. We will note that if you look on **Sheet A-3**, you will see that in this location there is currently a Pool House & Shed that will be demolished. Our proposed design for the ADU will be further away from the tree trunks than what is currently existing on site at the Pool House.

Along this same property line, near the ADU, the front porch of the main house will also slightly impact the TPZ's of Tree T23 & T24. See **Sheet A-3**. The patio would be a raised wood deck. When detailed, the structural support and any foundation posts will be located completely outside of the TPZ's of the trees. Any part of the decking that is shown inside the TPZ would be cantilevered and would not touch the ground. Even when cantilevered, at no time would the deck extend closer than 8X diameter of these two trees.

In Summary:

T9, T10, T12 exempt from TPZ requirements at Existing Driveway Location only.

T13 = 24" diameter which is 18'-10" from driveway = **9.4 X** the diameter of tree.

T14 = 16" diameter which is 7'-8" from driveway = **5.7X** the diameter of tree.

T15 = 18" diameter which is 8'-10" from driveway = **5.9X** the diameter of tree.

T16 = 32" diameter which is 9'-10" from driveway = **3.7X** the diameter of tree.

T17 = 24" diameter which is 10'-7" from driveway = **5.3X** the diameter of tree.

T18 = 16" diameter which is 9'-5" from driveway = **7.0X** the diameter of tree.

T19 = 19" diameter which is 9'-11" from driveway = **6.3X** the diameter of tree.

T21 & T22 exempt from TPZ requirements at ADU location only.

T23 = 22" diameter which is 14'-8" from wood deck = **8.0X** the diameter of tree.

T24 = 22" diameter which is 16'-3" from wood deck = **8.8X** the diameter of tree.

Thank you for your consideration of this application for TPZ exemptions.

Kelly Johnson, Zak Johnson Architects
Andre Mogoza, Owner

BODPAVE 85 Porous Pavers



www.terram.com

 **TERRAM**
Geosynthetics you can trust

Bodpave™ 85



FREQUENCY OF USE	SUGGESTED APPLICATIONS
GRASS Occasional consecutive vehicular use	
GRAVEL Regular vehicular use	



Permanent grassed or gravel car and coach parking bays, fire access routes, helipads, taxiways, cycle paths, driveways, access roads and other trafficked areas where a structurally-sound, well drained base is present or will be installed.

TERRAM BODPAVE 85 is an interlocking cellular porous plastic paving grid system for ground reinforcement which can be installed with either a grass or gravel filled surface. BODPAVE 85 units are manufactured in the UK from UV stabilised 100% recycled waste plastic and are strong, chemically inert & non-toxic. The unique design of the BODPAVE 85 units resist lateral movement, improves traction and allows expansion & contraction whilst promoting optimum grass growth, root protection and surface stabilisation. BODPAVE 85 porous paving provides a durable, safe and environmentally friendly surface for trafficked areas with a very low carbon footprint compared to traditional paving solutions.

Grid Structure



BODPAVE 85 is suitable for grassed surfaces, gravel retention and SUDS source control applications.

Applications (Grass or Gravel)

- Car Parking / Coach Parking bays
- Overspill / overflow grass car parks
- Emergency Service (Fire access routes)
- Grass aircraft taxiways & helipads
- Walkways and disabled access routes
- Golf buggy paths
- Driveways and residential lawn parking
- SUDS source control



BODPAVE 85 installation for a gravel car park.



Bodpave™ 85



Features and Benefits:

- Load bearing capacity up to 400t/m² - will cope with static axle loads up to 60kN
- Supplied as 4 pre-connected pavers (1m x 1m)
- allows rapid installation
- 24 interlocking connections per paver – excellent lateral transfer of traffic loads
- 18 ground spikes per paver – excellent shear connection with the ground allows slopes up to 1:8 / 12% / 7° and generally no pinning required
- Expansion/contraction tolerant – suitable for hot and cold climates
- Manufactured from 100% recycled and recyclable polymers – highly sustainable, non-toxic and chemically inert to chemicals naturally found in soils
- British manufactured - lower transport carbon footprint for UK deliveries
- 92% open surface structure- SUDS source control compliant
- Grass or gravel finish - free draining and naturally pleasing appearance
- Paving grids can be offset by 1 cell increments – east to fit around obstacles



Sustainable Drainage System (SUDS) - Source Control

The open cell structure of TERRAM BODPAVE 85 provides high surface water infiltration and is ideally suited to provide source control within a Sustainable Urban Drainage System (SUDS). BODPAVE 85 permeable paving grids should be installed onto a well prepared, free draining, firm and relatively level existing or newly constructed sub-base. By careful specification of suitable materials the sub-base can be designed to hold rain water (source control SUDS) allowing it to slowly drain away into either the underlying ground or surface water drainage system depending upon site conditions. Construction profiles for each application will be determined by specific site conditions & loading criteria. Detailed specification, design and installation guidance literature and technical information are available to download from www.terram.com. Please note that for all BODPAVE 85 grass paver/gravel paver installations, we strongly recommend that all areas should have sufficient drainage prior to the installation. Failure to ensure this may result in the product not performing as intended.

Please note that regular tight turning of vehicles and “dry” steering may cause damage to the units and/or displace gravel infill; vehicle manoeuvring should be carefully considered at specification/design stage. Gravel filled units may require some maintenance when subjected to regular channelised and turning traffic loadings. For confirmation of the correct construction profile required and guidance on suitable loadings please contact our office on 01621 874200 to speak with a member of our technical team.



Bodpave™ 85



Typical profile



Not all layers will apply to every application and drainage may be required. Please refer to design guidance documents.



Car Park Bay Markers

TERRAM also manufacture car park bay markers that have been designed to snap-fit into the square-shaped cells of the BODPAVE 85 units. Each marker is 215mm x 70mm and can be used to create dashed or solid lines and L or T shapes. They can be fixed permanently in place by used a suitable exterior grade high-strength adhesive.



Line marker details

COLOUR	SIZE	MATERIAL
White/Yellow	215 x 70	HDPE

Bodpave 85 product details

PAVER SIZE (mm)	NOMINAL CELL SIZE (mm)	QUANTITY (per m ²)	COLOUR	WEIGHT (Nominal)	LOAD BEARING CAPACITY	MATERIAL
500 x 500 x 50	67 Plaque & 46 Round	4 Grids	Black	6.24kg/m ²	400tonnes/m ²	Recycled Polyethylene
500 x 500 x 50	67 Plaque & 46 Round	4 Grids	Green	6.24kg/m ²	400tonnes/m ²	Recycled Polyethylene
<i>Ground Spikes:</i>	<i>Each paver includes a 35mm integral ground spike</i>					
<i>Assembled Size on Pallet:</i>	<i>1000mm x 1000mm (2 x 2 units)</i>					
<i>Weight:</i>	<i>6.24kg per m² / 1.56kg per tile</i>					
<i>Pallet Dimensions:</i>	<i>1000mm x 1000mm x 2340mm / Contains 18 units / 45 layers (45m²) / Total pallet weight 300kg</i>					

TERRAM Data Sheets, Installation & Design Guidances and Case Studies can be downloaded from www.terram.com

Further market specific literature available:

- Railways
- Road and Highways
- Landfill
- Coastal & Waterways
- Pipelines / Utilities
- Forestry & Landscaping
- Fruit & Viticulture

www.tubex.com

Application specific literature, product data sheets, case studies and installation guides are available on request or can be freely downloaded from **www.terram.com**

Information contained herein is, to the best of our knowledge, accurate in all material respects. However, since the circumstances and conditions in which such information and the products mentioned herein can be used may vary and are beyond our control, no representation or warranty, express or implied, of any nature whatsoever is or will be made and no responsibility or liability is or will be accepted by us, any of our affiliates or our or their respective directors, officers, employees or agents in relation to the accuracy or completeness or use of the information contained herein or of any such products and any such liability is hereby expressly excluded to the maximum extent permitted by law.

TERRAM excels in the innovative application of technology to create versatile, high-performance materials which are unique, cost-efficient and deliver significant added value.

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