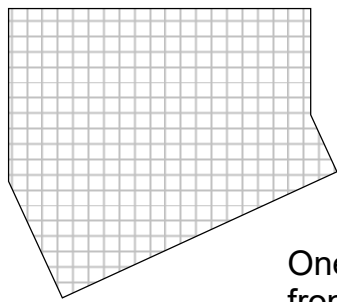
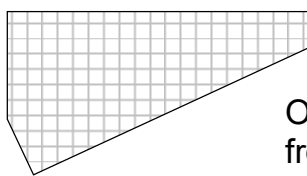


Provisionally allow for Finished Drive Level of 43.78 (505mm below datum) but ensure tree roots are at least 235mm below this target, adjust on site to suite.

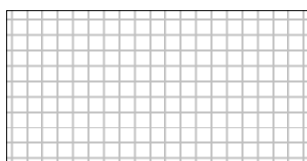
PILE & RING BEAM SET OUT



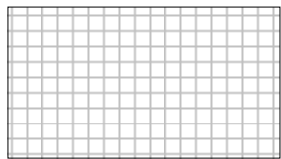
One number span from left to right



One number span from left to right



X 24 number 2000 (span) x 1000mm

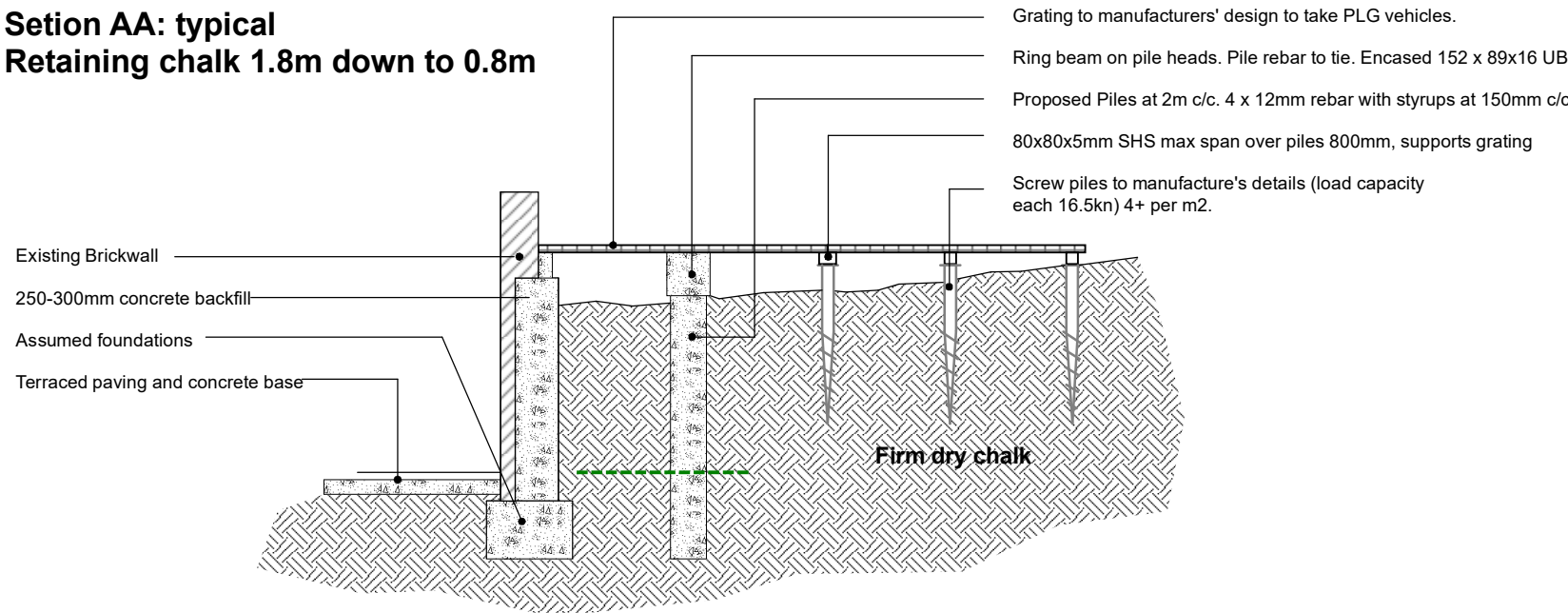


X 6 number 1800 (span) x 1000mm

GRATE SETOUT

63.23m2

Setion AA: typical Retaining chalk 1.8m down to 0.8m



DRAWING NOTE – ROOT PROTECTION SURFACE (CORE TRP 150)

Provide CORE TRP 150 (150mm deep) geocellular root protection system to all areas indicated, installed in accordance with manufacturer's guidance and arboricultural best practice.

Installation requirements:

- Existing ground to be left undisturbed within Root Protection Area (RPA)
- Remove vegetation only; no excavation, reduction or compaction of subgrade permitted
- Install a geotextile separation layer directly over existing ground
- Lay CORE TRP panels to manufacturer's specification, ensuring full interlock and continuity
- Panels to be filled with clean, angular, free-draining aggregate
- Provide EcoGrid layer and porous surface finish above as detailed
- Construction to be carried out using low ground pressure methods to avoid root damage

Structural performance:

- CORE TRP 150 suitable for vehicle loads 18–30 tonnes GVW (manufacturer guidance)
- System to be overlaid with EcoGrid to provide enhanced load distribution
- Build-up designed to support emergency fire appliance loading (45 kN wheel load)

General:

- No storage of materials or trafficking outside defined construction route
- Any exposed roots to be protected in accordance with arboricultural guidance
- Works to comply with BS 5837:2012 – Trees in relation to design, demolition and construction

EXISTING WALL IS RETAINING 1.8m

EXISTING WALL IS RETAINING 1.4m

EXISTING WALL IS RETAINING 1.m

Setion AA

DRAWING NOTE – RING BEAM, PILES / ROOT BRIDGE BUILD-UP & LOADING

Pile reinforcement to be tied into ring beam.

Ring beam to be 300mm wide x 280mm deep, formed around structural steel as detailed.

The ring beam is to support the road grating system and permeable surface above. Provide a minimum 25mm clearance above existing ground / tree roots at all locations.

Typical build-up (bottom to top):

- 25mm minimum air gap above ground / roots
- 80×80×4mm SHS support beams
- 50mm Staco SP 50-3 welded steel grating
- 2 layers geotextile separation
- 1 layer biaxial geogrid
- 2mm aluminium equalisation plate provided under fire appliance wheel track
- 40mm EcoGrid E40 (infilled with clean angular stone – load spread approx. 550mm footprint)
- 20mm SuDS resin-bound stone surface

Performance requirement:

The construction shall be capable of supporting 45 kN wheel loads (fire appliance loading) under straight-line travel only. Build-up designed to support emergency fire appliance loading (45 kN wheel load)

DRAWING NOTE – GROUND SCREWS, STEEL FRAME / ROOT BRIDGE BUILD-UP & LOADING

Provide Radix ground screws installed in accordance with manufacturer's specification, founded into firm chalk. Ground screws to support the SHS steel frame. Provide minimum 4 No. screws per m² unless noted otherwise.

Provide 80×80×4mm SHS steel beams spanning between ground screws, forming support to grating. SHS to be fully restrained and fixed to screw pile heads as detailed.

Pile reinforcement to be tied into ring beam.

Ring beam to be 300mm wide x 280mm deep, formed around structural steel as detailed.

The ring beam and SHS frame are to support the road grating system and permeable surface above. Provide a minimum 25mm clearance above existing ground / tree roots at all locations.

Typical build-up (bottom to top):

- 25mm minimum air gap above ground / roots
- Radix ground screws (load capacity 16.5 kN each minimum)
- 80×80×4mm SHS support beams
- 50mm Staco SP 50-3 welded steel grating
- 2 layers geotextile separation
- 1 layer biaxial geogrid
- 2mm aluminium equalisation plate under fire appliance wheel track
- 40mm EcoGrid E40 (infilled with clean angular stone – load spread approx. 550mm footprint)
- 20mm SuDS resin-bound stone surface

General:

No storage of materials or trafficking outside defined construction route
Any exposed roots to be protected in accordance with arboricultural guidance
Works to comply with BS 5837:2012 – Trees in relation to design, demolition and construction

SITE: Land Adjacent to Lyne House, Worthing, BN14 9QY

SCALE: 1:50 on A1 Paper

DRAWING: Root Bridge

Drawing Ref: LR.R.BRIDGE.01

CONSTRUCTION

Drawn by: AM
March 2025

Revision:

(210 added and grate change
P10 - 01 changed)

