

POWERHOUSE ULTIMO REVITALISATION

Public Domain
& Landscape
Statement

RTS

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1.0 The Terrace

Submissions related to the design of the public domain have been reviewed in detail. The design has been developed in response to submissions. Design changes are described in detail below.

1.1 Revised design

- The Terrace has been redesigned since lodgment and addresses all issues raised in submissions. The updates to the design ensure that the Terrace offers clear pathways from the Goods Line to the new front door of the museum. Updates also provide several large hardscape areas for flexible event use.
- A new 4m wide path has been provided along the switch house edge, ensuring there is a very wide, clear public path to the new front door. Beneath the colonnade, this path widens to 8m, allowing clear pedestrian access but also significant spill out space for café seating and activation of the Switch House adjoining the Terrace. These dimensions are provided on the plan on the following page.
- The paths through the landscape have been redesigned to allow a greater width. The main diagonal desire line from the Goods line to the museum entrance has been widened to between 2.5m and 3.5m width. These dimensions are provided on the plan on the following page.
- Paths have all been designed to ensure that they lead directly to the entrance, whilst allowing ample space for loose furniture creating gathering areas for people to dwell in the space.
- The revised design includes a new hardscape area of approximately 350m² at the new front door of the Powerhouse. All the paths land in this space, allowing ample room for gathering groups of visitors at the entry or event activation throughout the year. This area is indicated on the plan on the following page.

- In addition to the 350m² hardscape space, there is another 300m² hardscape along the edge of the Switch House allowing for ample outdoor gathering space for any Powerhouse events that might spill out from the Switch House and entry foyer. This area is shown on the plan on the following page.
- In addition to these areas, there is a 460m² hardscape within the site boundary at the south of the terrace. This space is illustrated on the plan on the following page.
- This combined hardscape area of 1110m² provides space for temporary activation of the Terrace including the potential for extension of events along the length of the Goods Line such as the recent Vivid activation.
- The Terrace has been designed as a singular level surface, ensuring that if Powerhouse elects to hold a large scale outdoor event on the Terrace, this can be accommodated by using protective panels locked together across the level surface. This system has been specified for use across the Terrace for events, or for occasional loading of very large objects such as an aeroplane. This protective overlay is typically the way any ‘event park’ is activated in the city, including Sydney’s major ‘event park’ Tumbalong Park, which is 400m north east of the Terrace.
- Timing the cycle of any events with the natural managed cycles of the grassland is central to the design concept of engaging Aboriginal cultural practice with the cycle of museum curation.
- The flexibility within the spaces of the revised design ensures that the Terrace meets the needs of the daily visitor to the museum and museum programming from intimate experiences to large-scale events, all within a cycle of landscape management

ensuring the health of the grassland.

- The Terrace design meets the aspirations of the Powerhouse for a primarily planted entry forecourt with a compelling connection to Country. The Terrace design is intended to foreground the native grassland as a garden in the city managed through traditional Aboriginal cultural practice. The revised design also caters for temporary activation of the space.

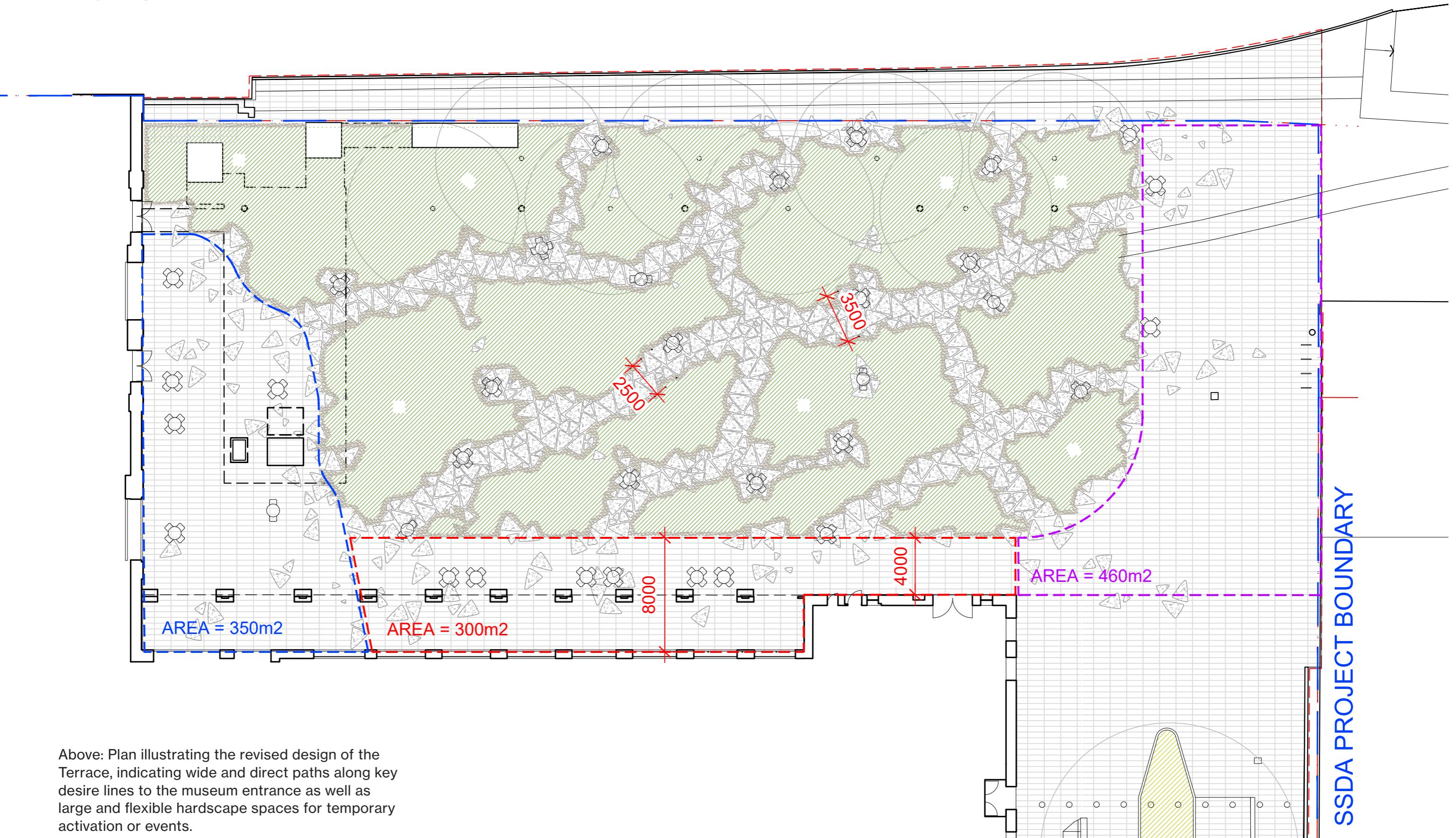
1.2 Heritage status of rail lines

- During the 1980s adaptive reuse of the site, several of the former historic rail lines were removed from their original location and relocated to the centre of the Terrace. From a heritage perspective they have no heritage significance in this location and are in fact, as an ‘interpretative element’ confusing because they can be misinterpreted as representing an original location.
- From a heritage perspective, the inlay of tracks in incorrect locations is a poor interpretation outcome, with their removal from terrace viewed as a positive outcome.
- The tracks themselves are not significant fabric and do not meet the threshold for local or State significance under the significance criterion as railway tracks are commonly found throughout Sydney and all of NSW. They are not rare, uncommon or provenanced to their correct location, therefore, their retention is not deemed necessary or desirable as part of any future siteworks.
- Their removal will not impact the significance of the Powerhouse Museum Complex and will, in fact improve the readability between original track locations and non-original track placement, which is important from ensuring the interpretation on site is authentic and meaningful.

The Terrace - Loading Requirements

- The design of the Terrace accommodates all vehicle swept paths required for day to day vehicular access to the Powerhouse, including access to the Harwood building.

1.3 The Terrace plan showing areas of hardscape and key path widths



Above: Plan illustrating the revised design of the Terrace, indicating wide and direct paths along key desire lines to the museum entrance as well as large and flexible hardscape spaces for temporary activation or events.

1.4 The Terrace loading requirements

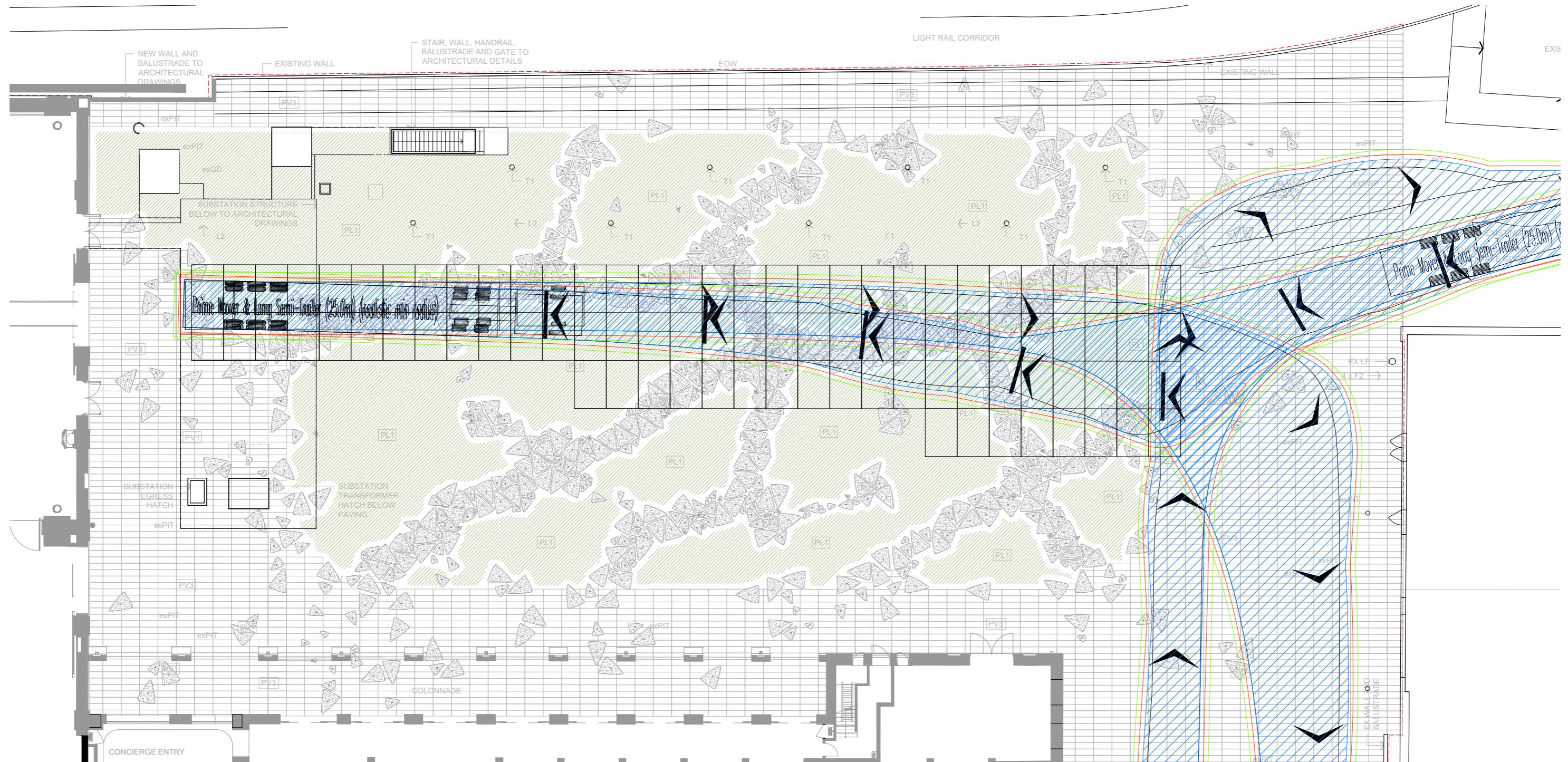
- The new loading dock accessed from Macarthur Street provides access for most of the loading requirements for exhibition objects.
- As per the current arrangement, operable bollards are located at the end of the Macarthur Street roadway preventing vehicles entering the pedestrianised section of Macarthur St/ the Powerhouse public domain. These bollards are operated by Powerhouse for deliveries.
- For occasional loading of very large objects into the Boiler house, the Terrace has been designed to accommodate access for articulated vehicles and cranes.
- The strategy to accommodate this loading will be to utilise a grid of Signaroad panels <https://aisfloors.com.au/product/signaroad/>
- The process for loading across the Terrace will be planned in detail as part of the major event of moving very large objects in or out of the museum. An area of grasses would be cut back to ground level, flush with the path system of the Terrace. The Signaroad panels would then be placed and bolted together as designed. This creates a singular trafficable surface.
- After loading, the panels would be removed and the areas of impacted planting would be rejuvenated or replanted.
- The path system of the Terrace has been designed to accommodate the loads required so there will be no damage.
- Rectification of the areas of landscape as required is regarded as an acceptable component of the overall logistics of very large object loading.
- The panel layout and proposed swept path alignment is illustrated in the plans on subsequent pages.



Signaroad panels allow for the transformation of the Terrace into a trafficable surface when occasional very large object loading is required. Path paving has been designed to withstand the weights associated with vehicular loading.



1.5 The Terrace plan showing swept paths



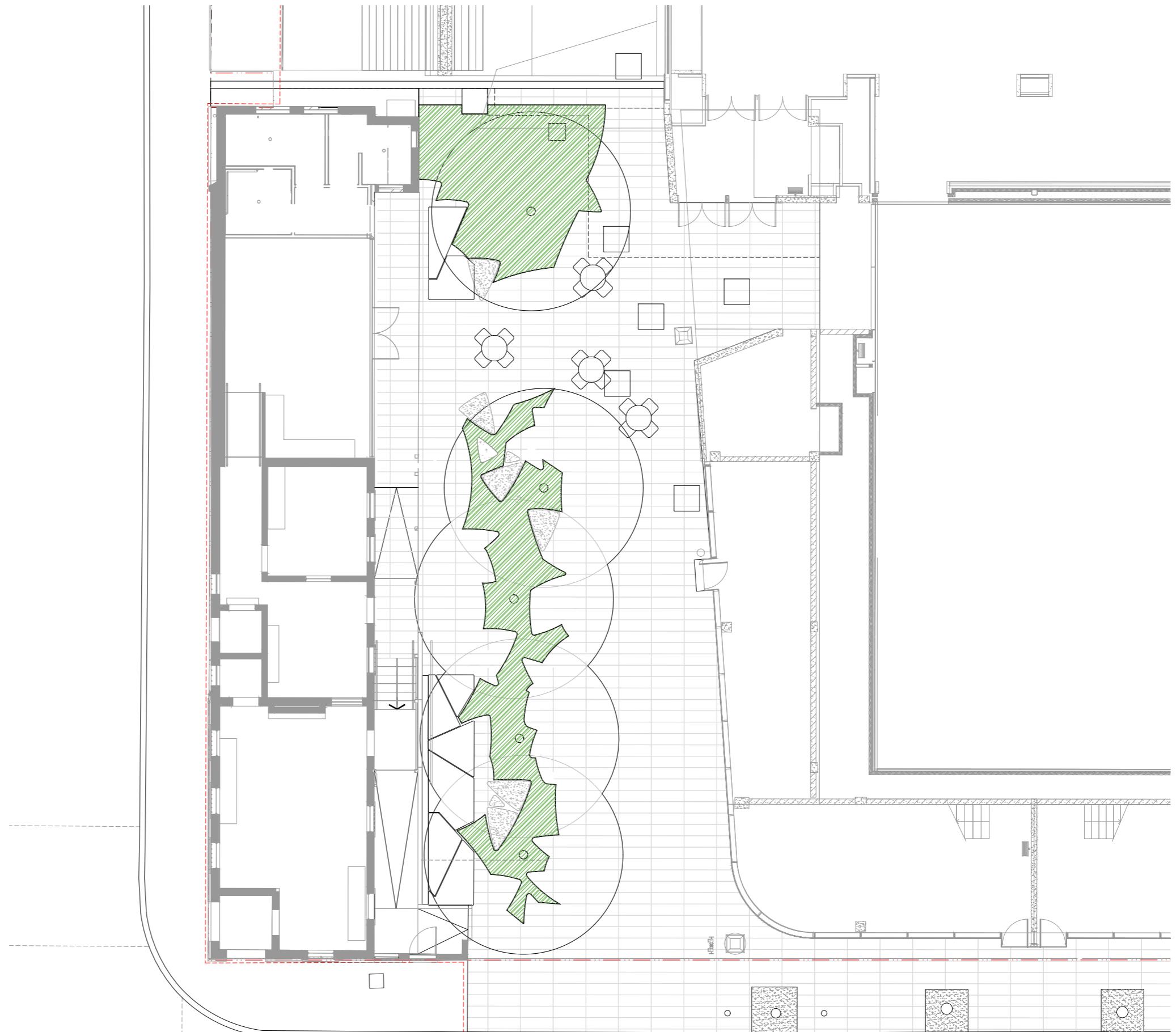
Above: Plan illustrating the layout of panels for articulated vehicle access to the Boiler House, for the occasional loading of very large objects.

Please refer to swept path drawings in the Transport Statement for further details.

2.0 Post Office Courtyard

2.1 Revised Design

- The design of the Post Office Courtyard has been updated to include 5 x *Angophora costata* trees to replace the previous proposal of *E.racemosa*.
- The proposed trees will be planted at a 4m spacing resulting in fewer trees than the SSDA proposal. This spacing will ensure the creation of a healthy stand of sculptural trees at spacings as they are often encountered in natural settings.
- There are no tree grilles in the Post Office Courtyard, rather, the *Angophoras* are all planted in soft landscape/ planter beds.
- Details on the provision of a large connected soil volume for these trees are provided on the following pages.

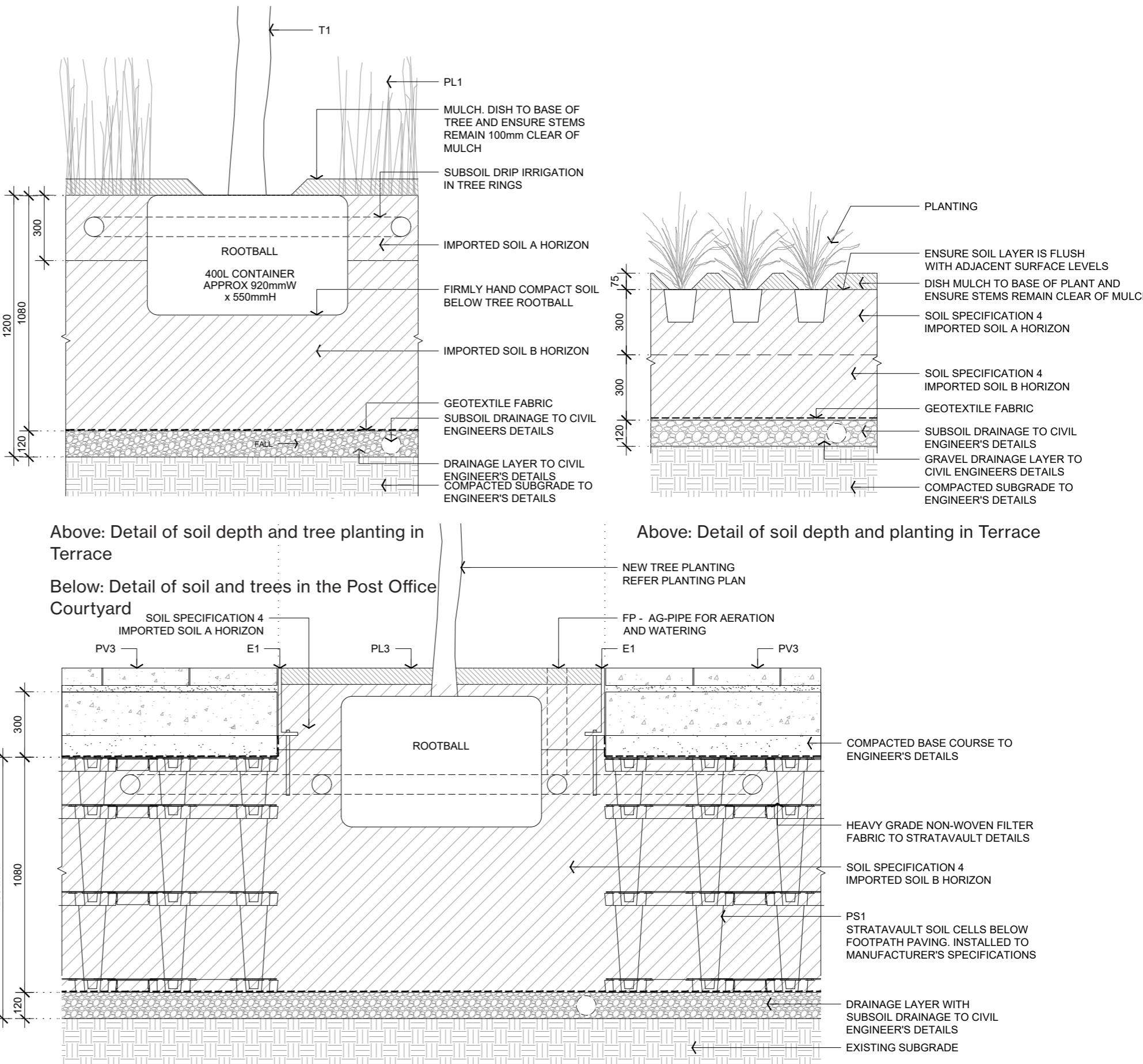


Right: Plan illustrating the revised layout of the Post Office Courtyard. Soil extents are described in the Soil section on subsequent pages.

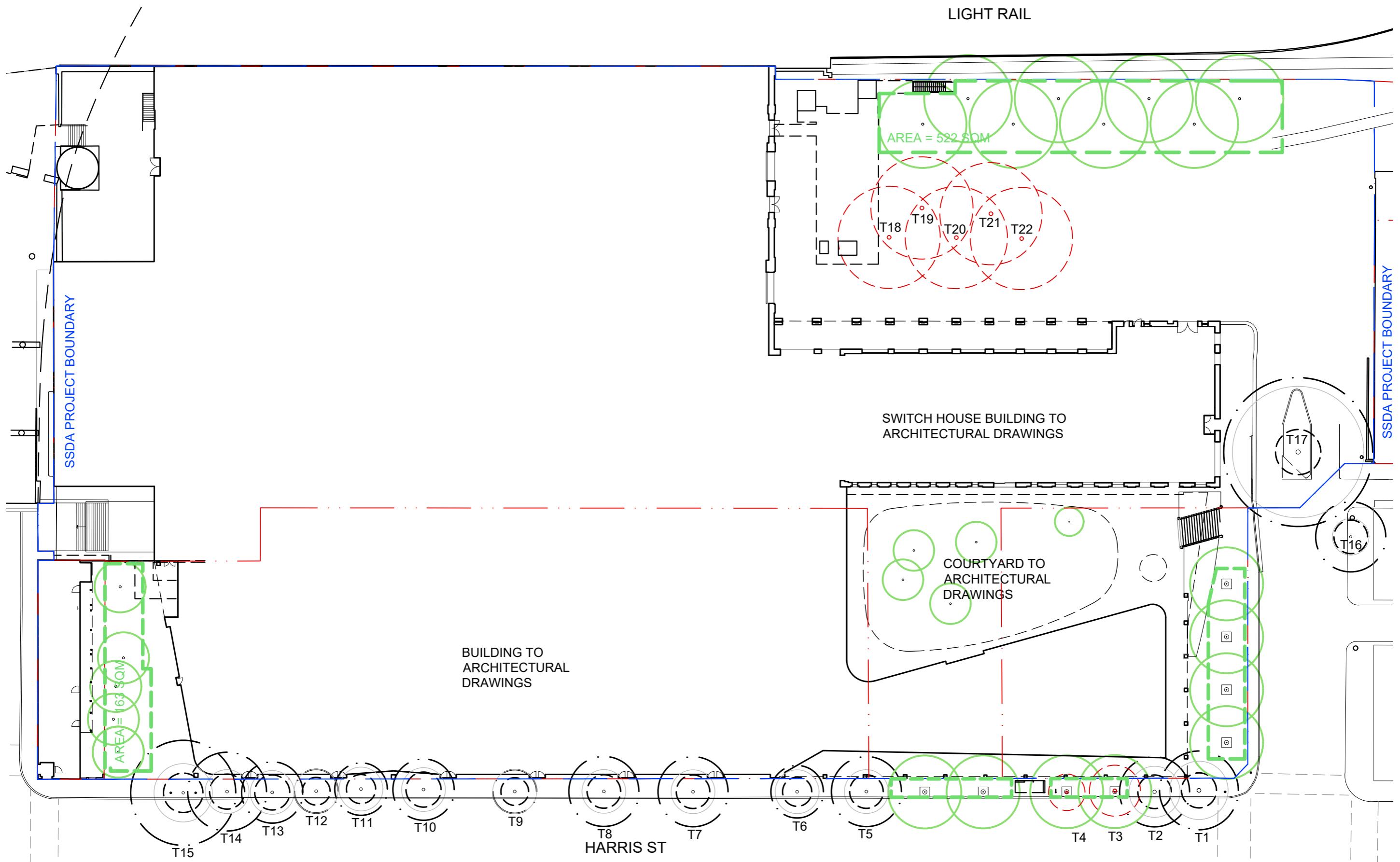
3.0 Soil and Tree Management

3.1 Soil

- Across the project, care has been taken to include ample quantities of the correct soil to enable optimum tree and plant growth.
- The deep soil plan has been updated and the extent is illustrated on the plan on the following page.
- For the Terrace landscape, the entire planted area is deep soil. The dimensions of the soil trench surrounding the proposed trees have been provided on the plans on the following pages. The soil trench is 522m³. Where paths cross this trench, they are founded on structural soil to allow extensive lateral root growth.
- For the Post Office Courtyard landscape, soil cells soil support the surrounding hardscape to ensure tree roots have ample space to extend in a horizontal direction.
- All of these trees have access to a 163m³ volume of connected soil. Where this soil is beneath the trafficable slab, it will be aerated and irrigated. See detail this page.



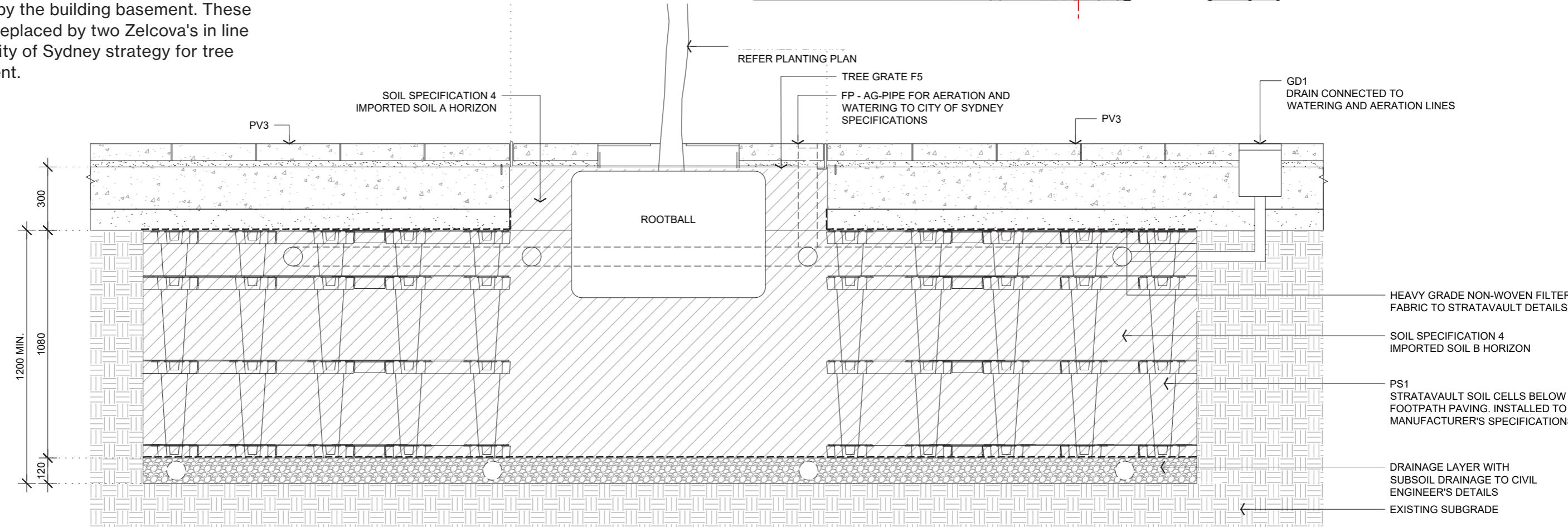
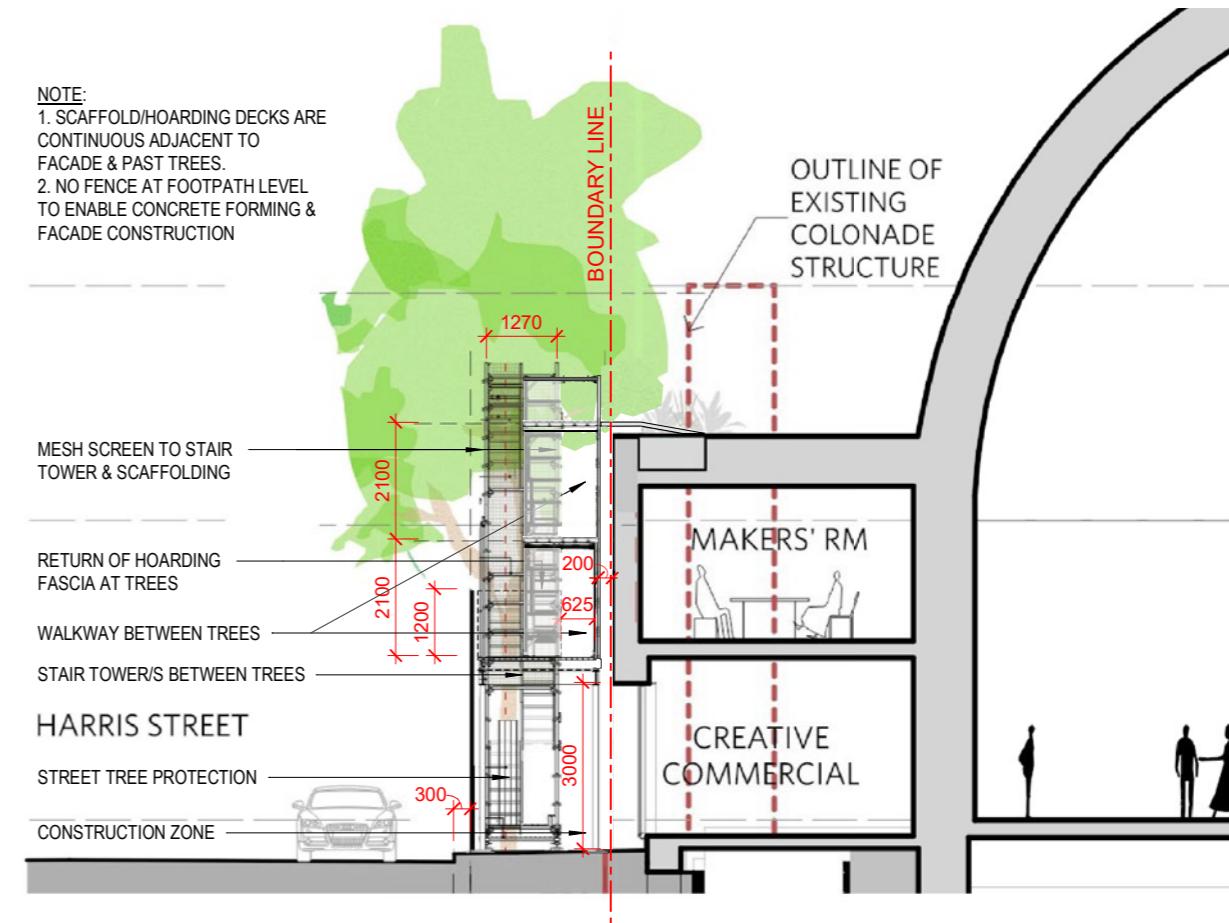
3.2 Soil and tree management plan



3.0 Soil and Tree Management

3.3 Trees in streets and footpaths

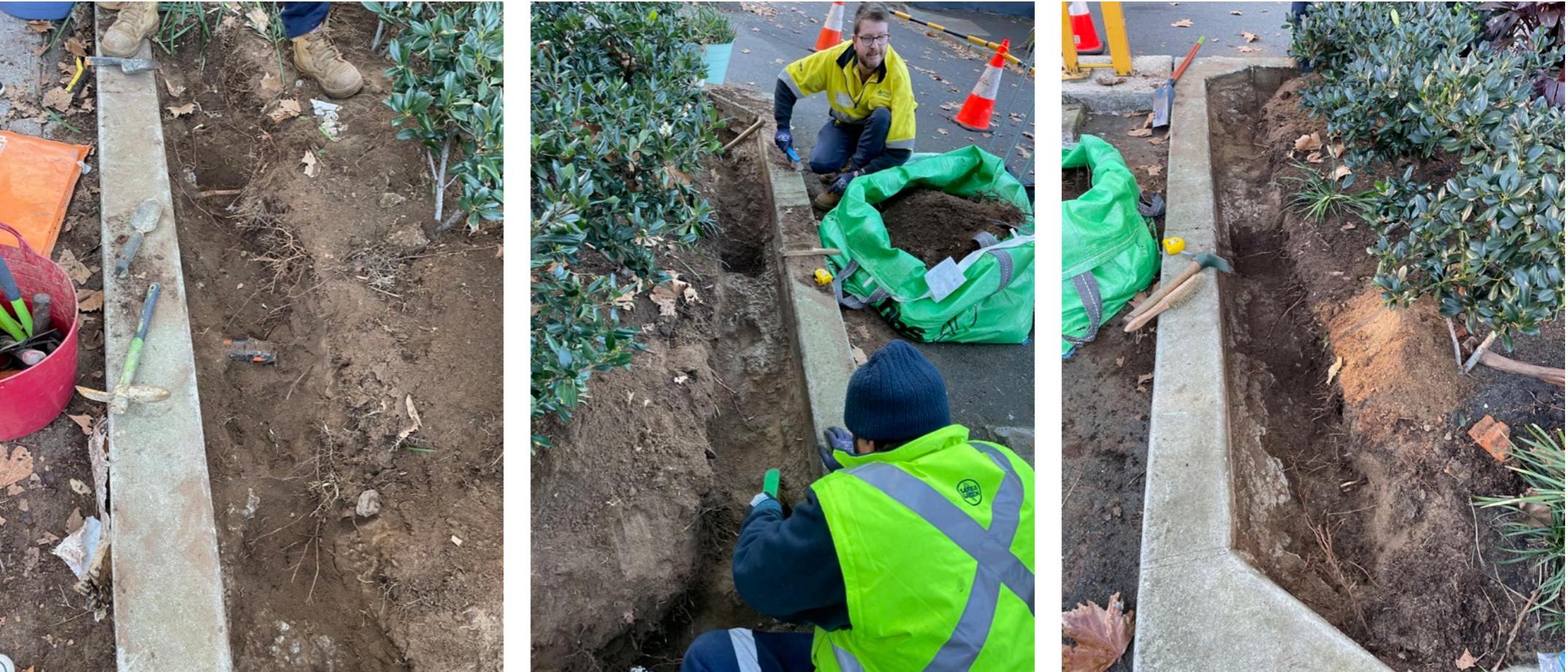
- Harris Street and Macarthur Street footpaths are paved with new custom precast concrete paving. This is to ensure a high quality finish and also to create the sense of a cohesive precinct occupied by the various buildings of the Powerhouse Museum.
- New trees are within tree grilles as per the detail on this page.
- Provision for scaffolding has been tested on Harris Street allowing the retention of the Plane Trees.
- 2 Plane trees are removed as they are impacted by the building basement. These trees are replaced by two Zelcova's in line with the City of Sydney strategy for tree replacement.



3.0 Soil and Tree Management

3.4 Tree 17

- Tree 17 is a mature Plane Tree in good health, growing in the centre of Macarthur Street.
- Due to constraints, the loading dock entry ramp has been positioned such that vehicles cross the tree root zone.
- Exploratory root investigations have been conducted in the tree pit surrounding Tree 17. This survey has informed the solutions provided to conform with the requirements of Section 3.2.9 of the Arboricultural Impact Assessment.

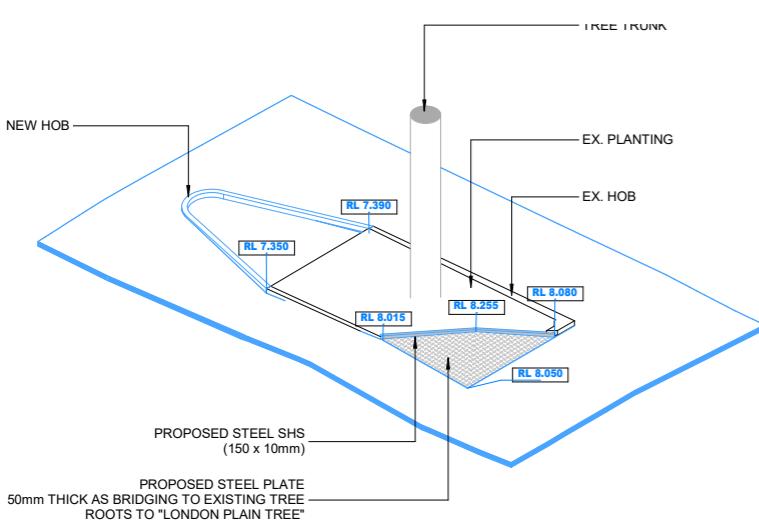


Above: Photographs taken during tree root investigation for Tree 17. This investigation resulted in a strategy for bridging key roots with a structural system illustrated on the following page.

3.0 Soil and Tree Management

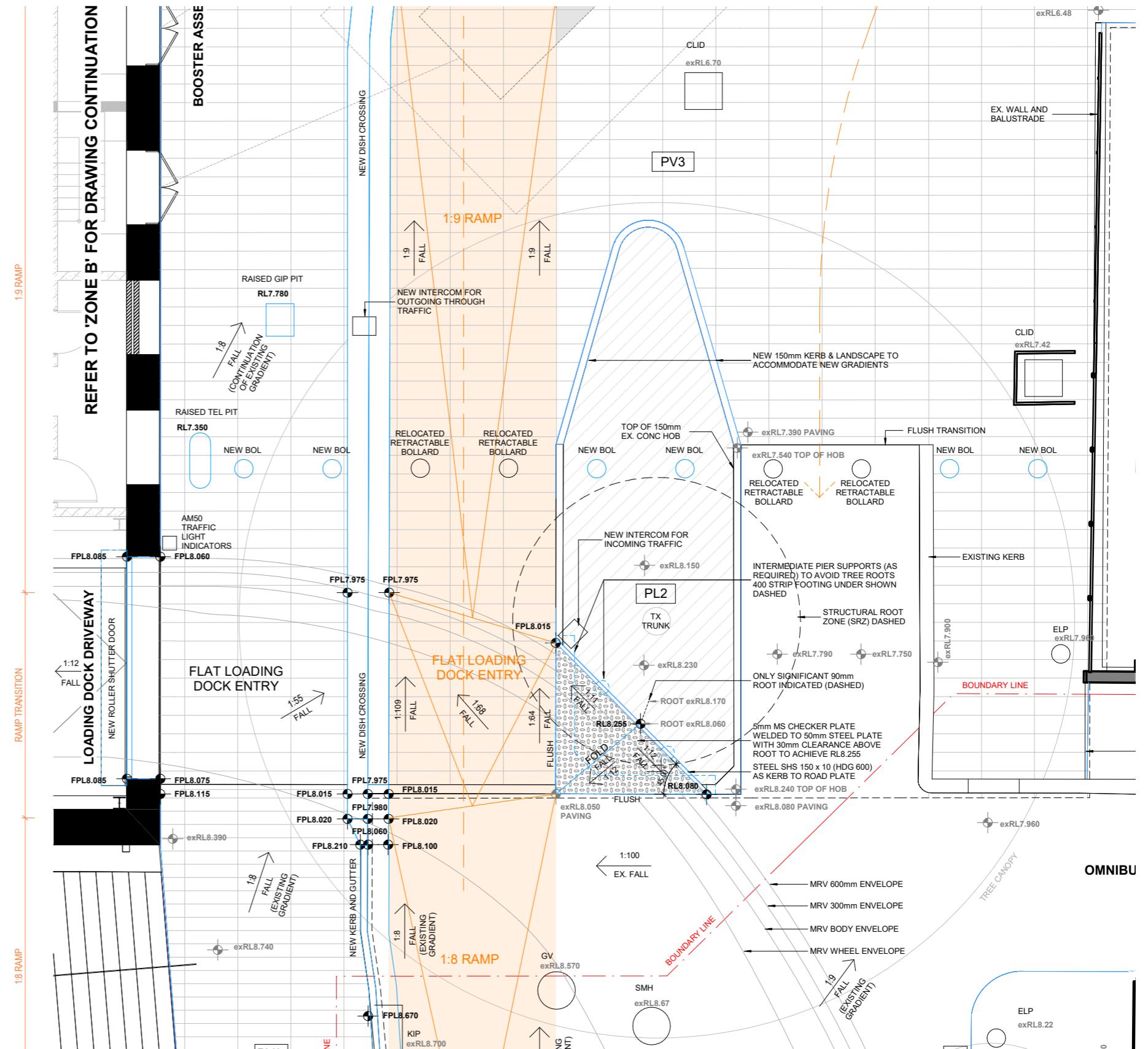
3.4 Tree 17

- The solution consists of a structural engineer designed slip-resistant road plate and kerb, bridges the existing roots of the tree to allow for access into the loading dock.
- The design has been developed with the Project Arborist and bridges the structural root zone.



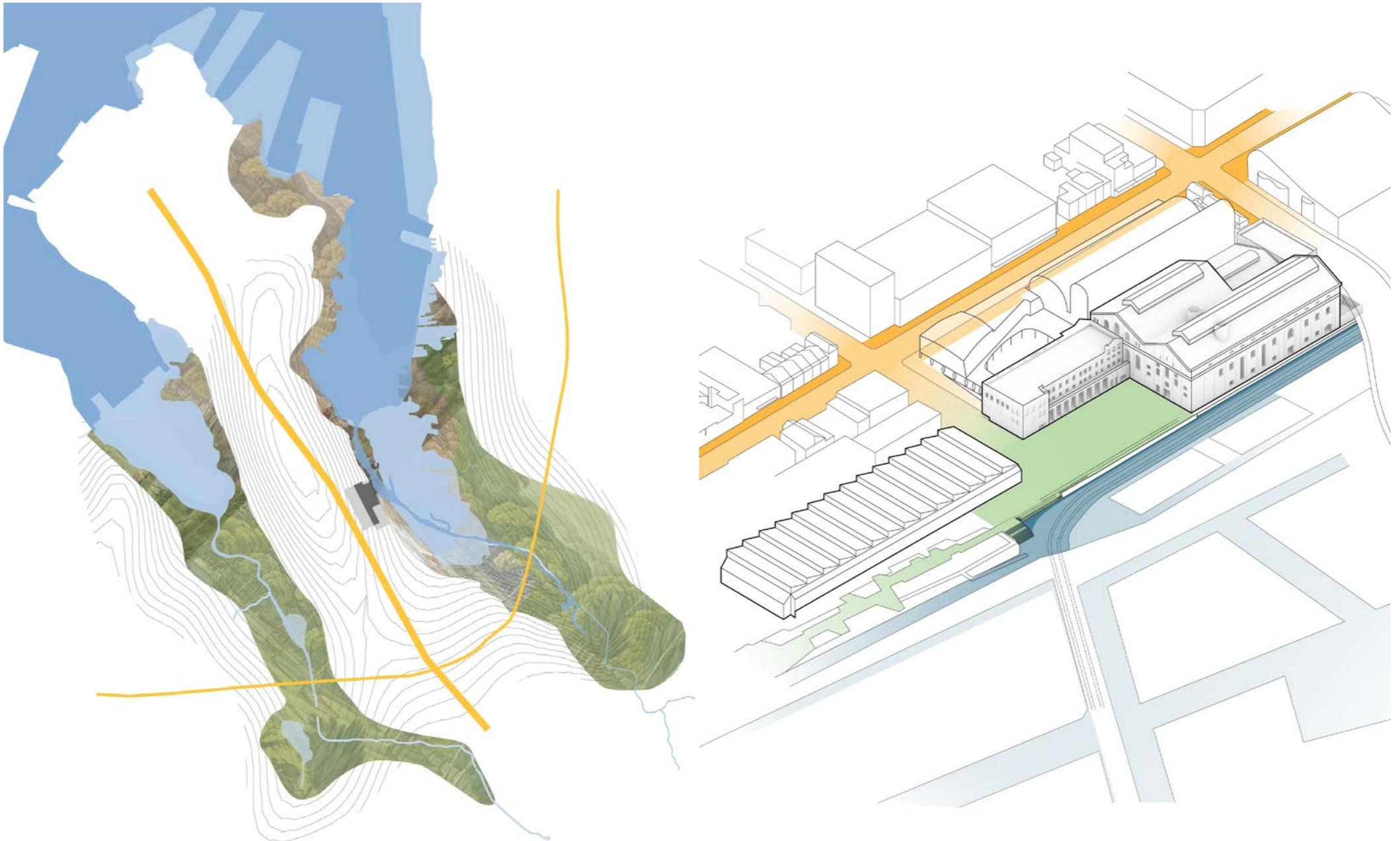
Above: 3D drawing of the steel plate solution.

Right: Plan of the bridging solution



4.0 Connecting with Country

- The Public Domain Strategy responds directly to the Connecting with Country Design Narrative by Yerrabingin.
- Increasing the legibility of the ridge to valley transition has been a key part of the design narrative since the competition winning scheme.
- This strategy has now been broadened and detailed in the public domain such that each public space responds in its own way to its topographic and geological position within this transect.
- The spaces, although unique, are unified both conceptually and materially ensuring that the whole city block is legible as the public setting of the Powerhouse.
- In addition to making the landform and landscape legible, the design of the Terrace allows for the re-emergence of cultural practice on the site through the ongoing Aboriginal management of its significantly scaled native grassland.



4.0 Connecting with Country

- The form of each design of the different spaces follows the characteristics of the sandstone as it is eroded from ridge to alluvial flat slowly opening up to allow more vegetation.
- This process starts on the ridge of Harris Street with the hardscape of the Post Office Courtyard fractured in a dramatic and interesting way, allowing the emergence of the Angophora as often marveled at across Sydney's sandstone escarpments.
- The level 1 Courtyard sees the emergence of more vegetation, balancing the hardscape.
- The Terrace becomes the final state of transformation, where the pavers are rounded organic forms, echoing alluvial drift and the form of oysters once gathered here. At this level, planting has overtaken the hardscape of the city and dominates the space. this is living, breathing managed Country.



4.0 Connecting with Country

- The Post Office Courtyard is fractured in a dramatic and interesting way, allowing the emergence of life from the hardscape of the Harris Street ridge. The Angophora emerges.



4.0 Connecting with Country



4.0 Connecting with Country



4.0 Connecting with Country

- The Level 1 Courtyard has slightly more planting than hardscape at a ratio of 60:40
- the landscape is opening up, as the forms are eroded by water.



1 Yarrangobilly Caves sunken rock platform
2 Yarrangobilly Caves sunken rock platform



4.0 Connecting with Country

- The Level 1 Courtyard has slightly more planting than hardscape at a ratio of 60:40
- Planting spills into the street.



4.0 Connecting with Country



- The Terrace becomes the final state of transformation, where the pavers are rounded organic forms, echoing alluvial drift and the form of oysters once gathered here. At this level, planting has overtaken the hardscape of the city and dominates the space. this is living, breathing managed Country.

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