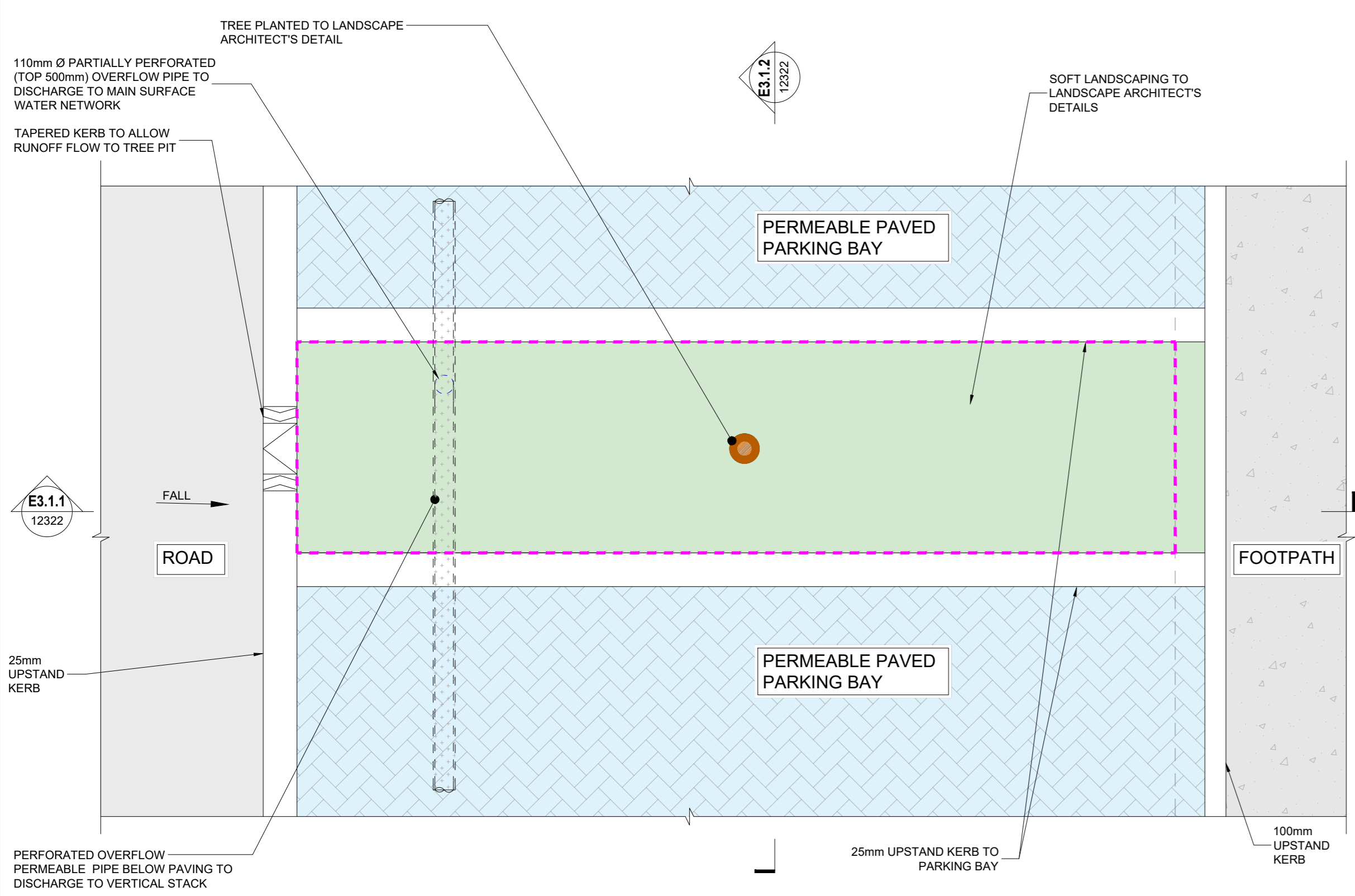
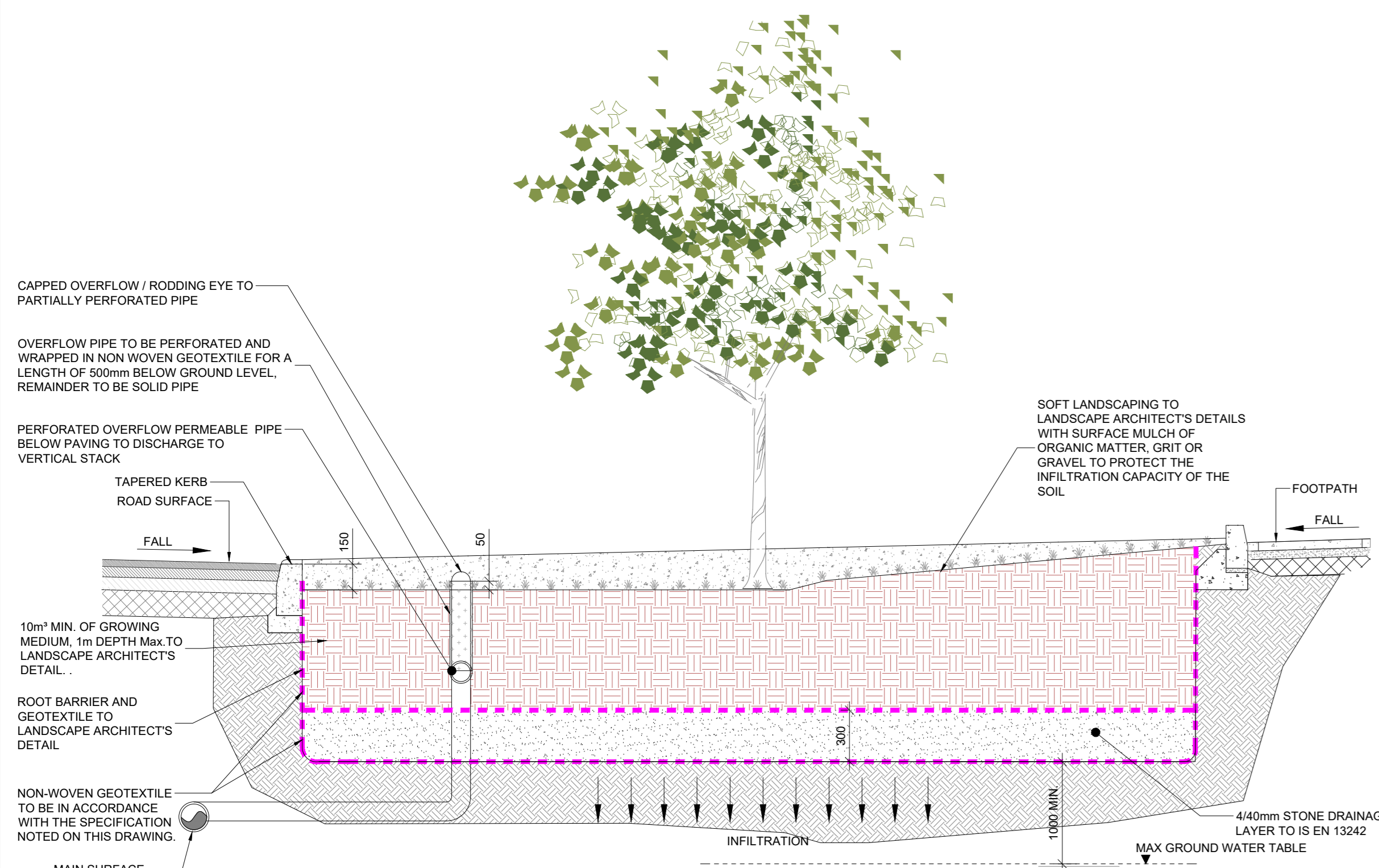


E3.1 TREE PIT - DIRECT DISCHARGE HARDSTANDING AREA - TYPE1



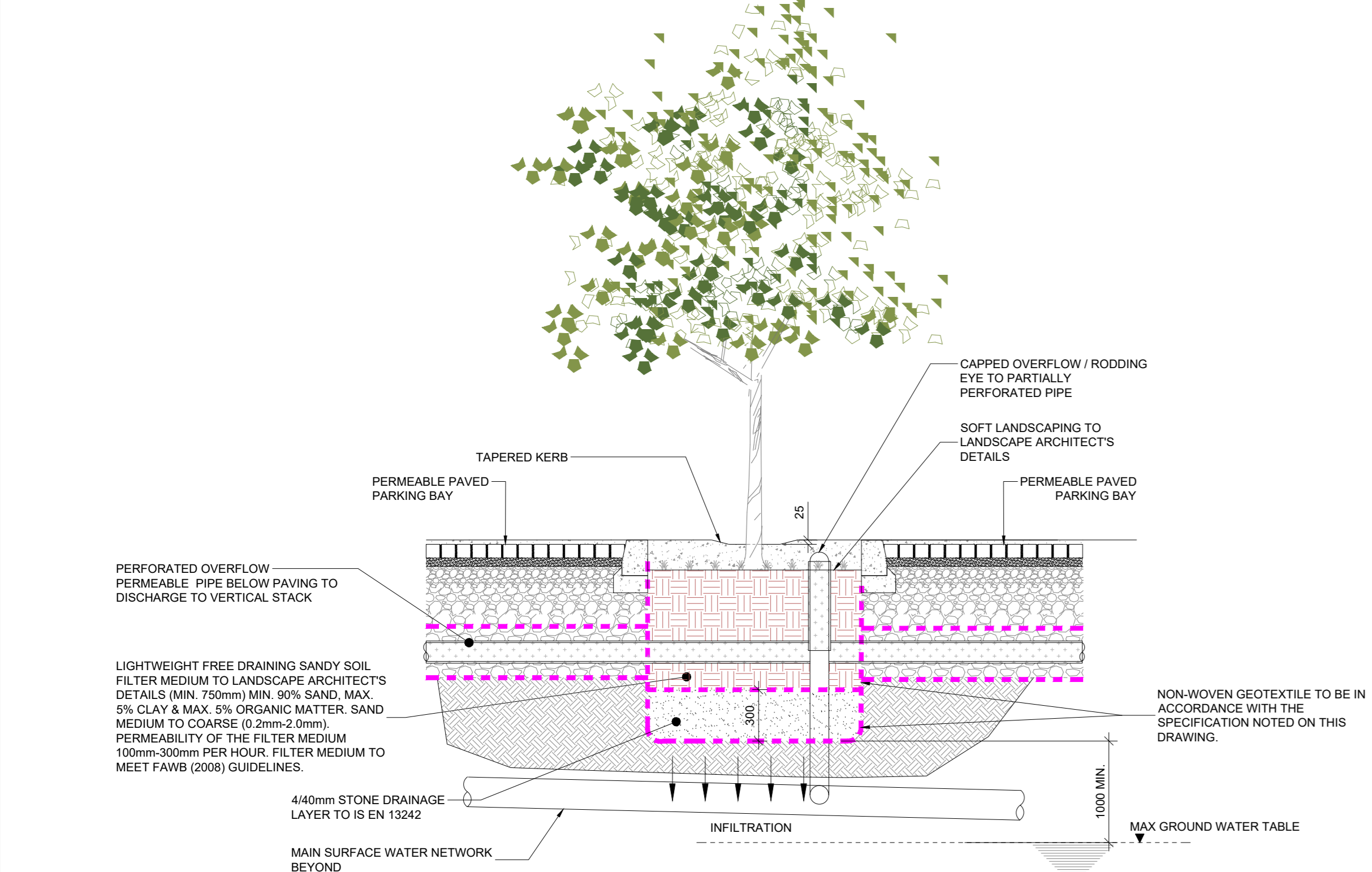
TYPICAL PLAN

SCALE @ A0: 1:25  
SCALE @ A2: 1:50



TYPICAL SECTION E3.1.1

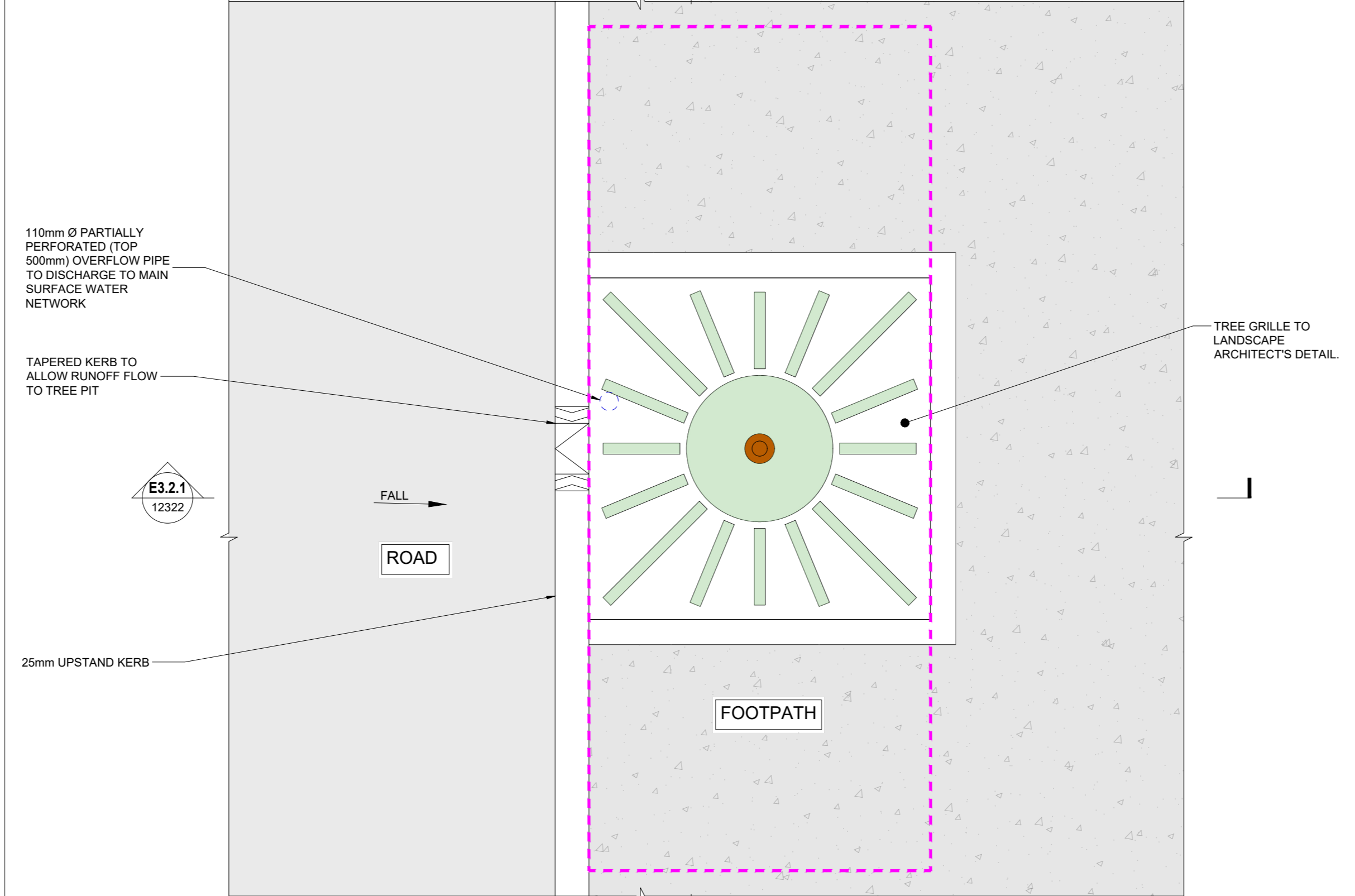
SCALE @ A0: 1:25  
SCALE @ A2: 1:50



TYPICAL SECTION E3.1.2

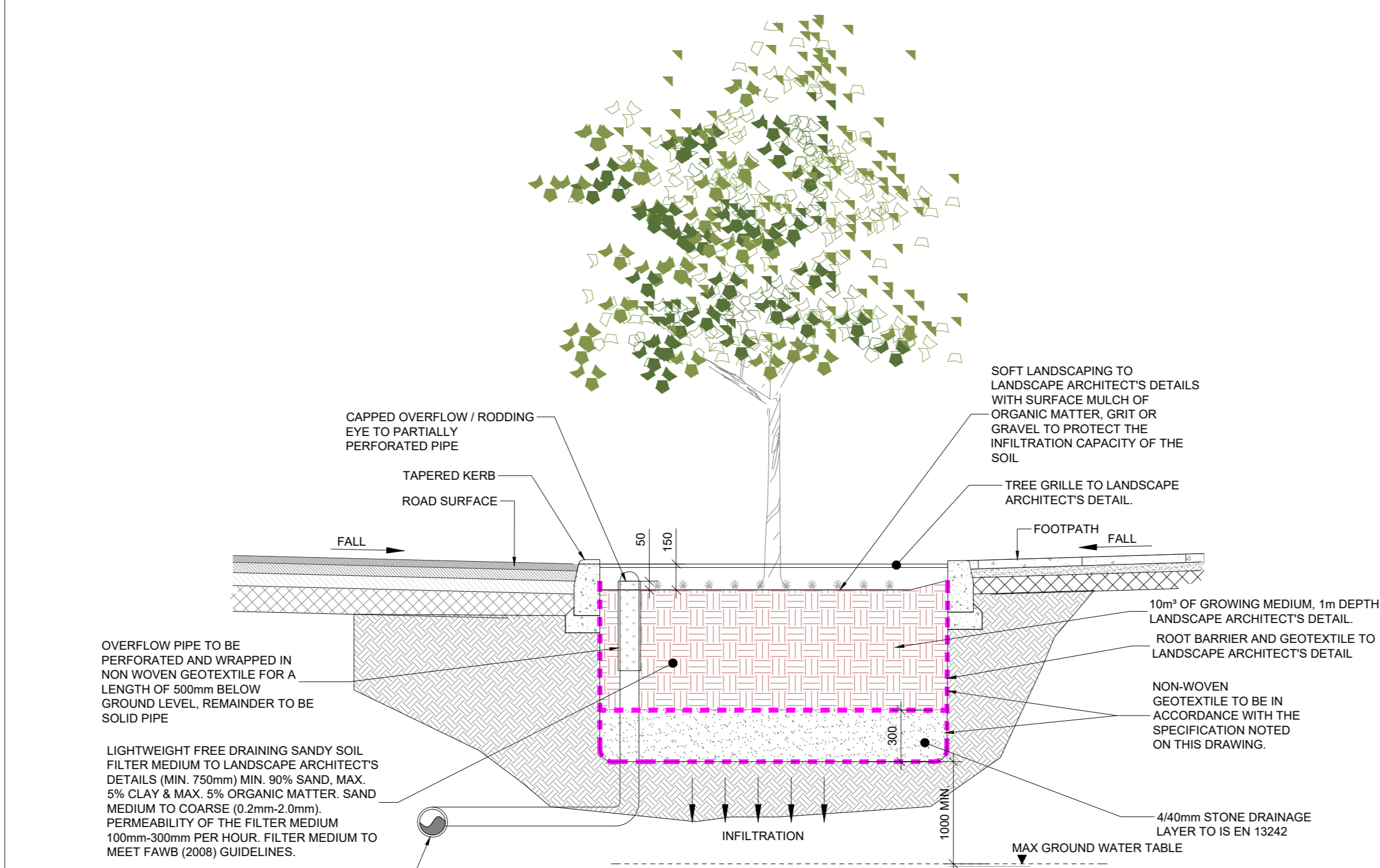
SCALE @ A0: 1:25  
SCALE @ A2: 1:50

E3.2 TREE PIT - DIRECT DISCHARGE FROM HARDSTANDING AREA - TYPE 2



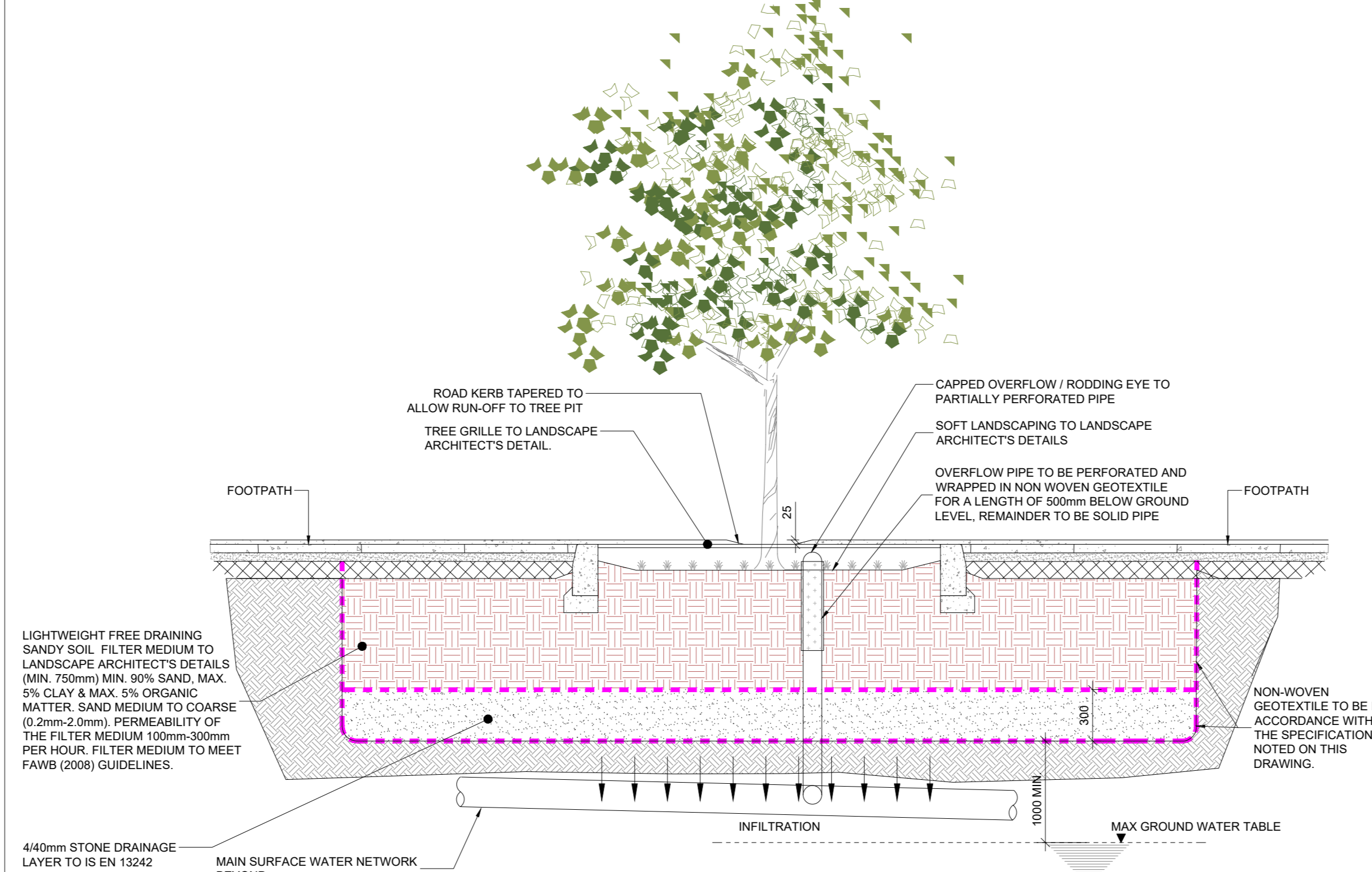
TYPICAL PLAN

SCALE @ A0: 1:25  
SCALE @ A2: 1:50



TYPICAL SECTION E3.2.1

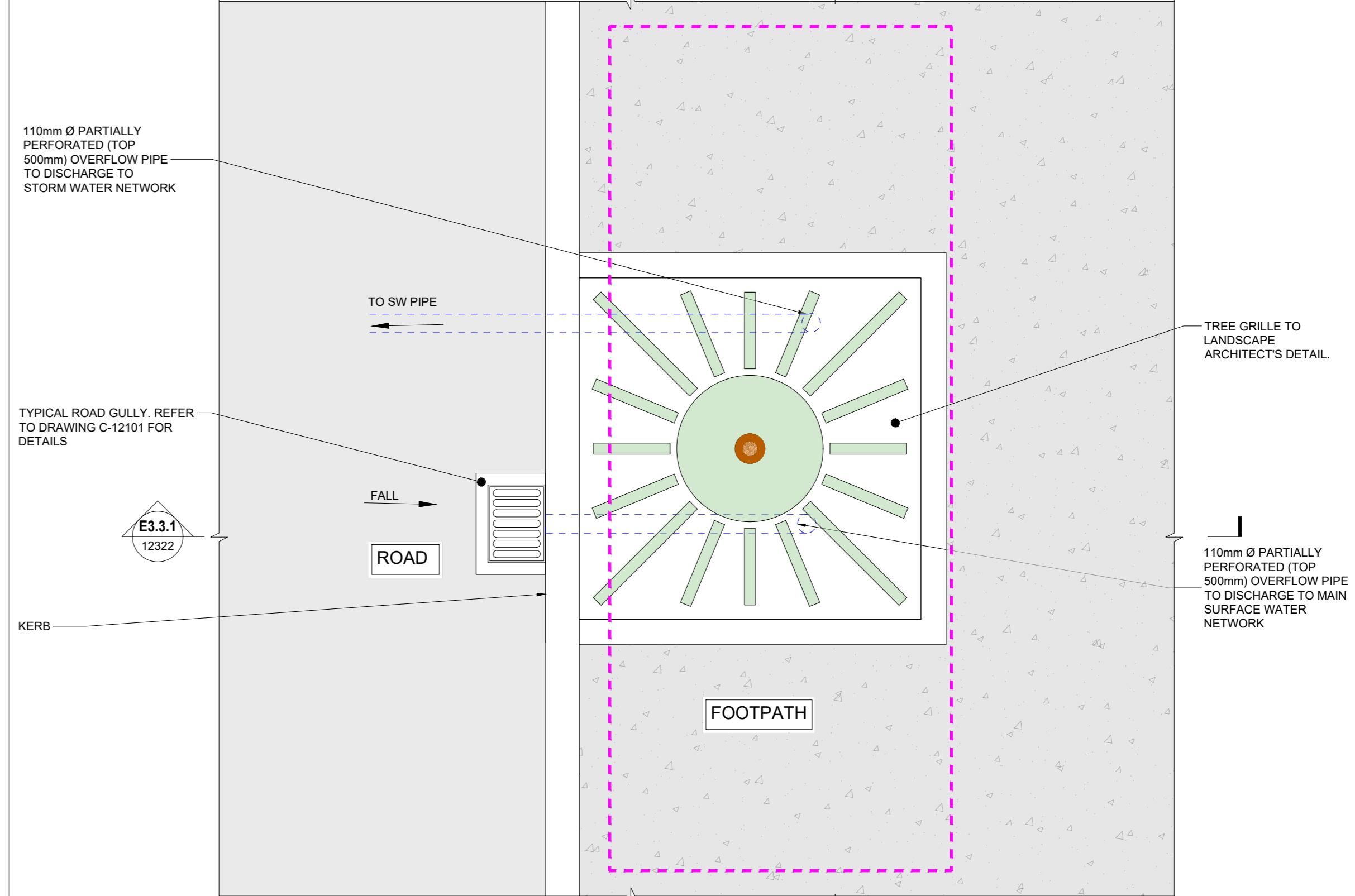
SCALE @ A0: 1:25  
SCALE @ A2: 1:50



TYPICAL SECTION E3.2.2

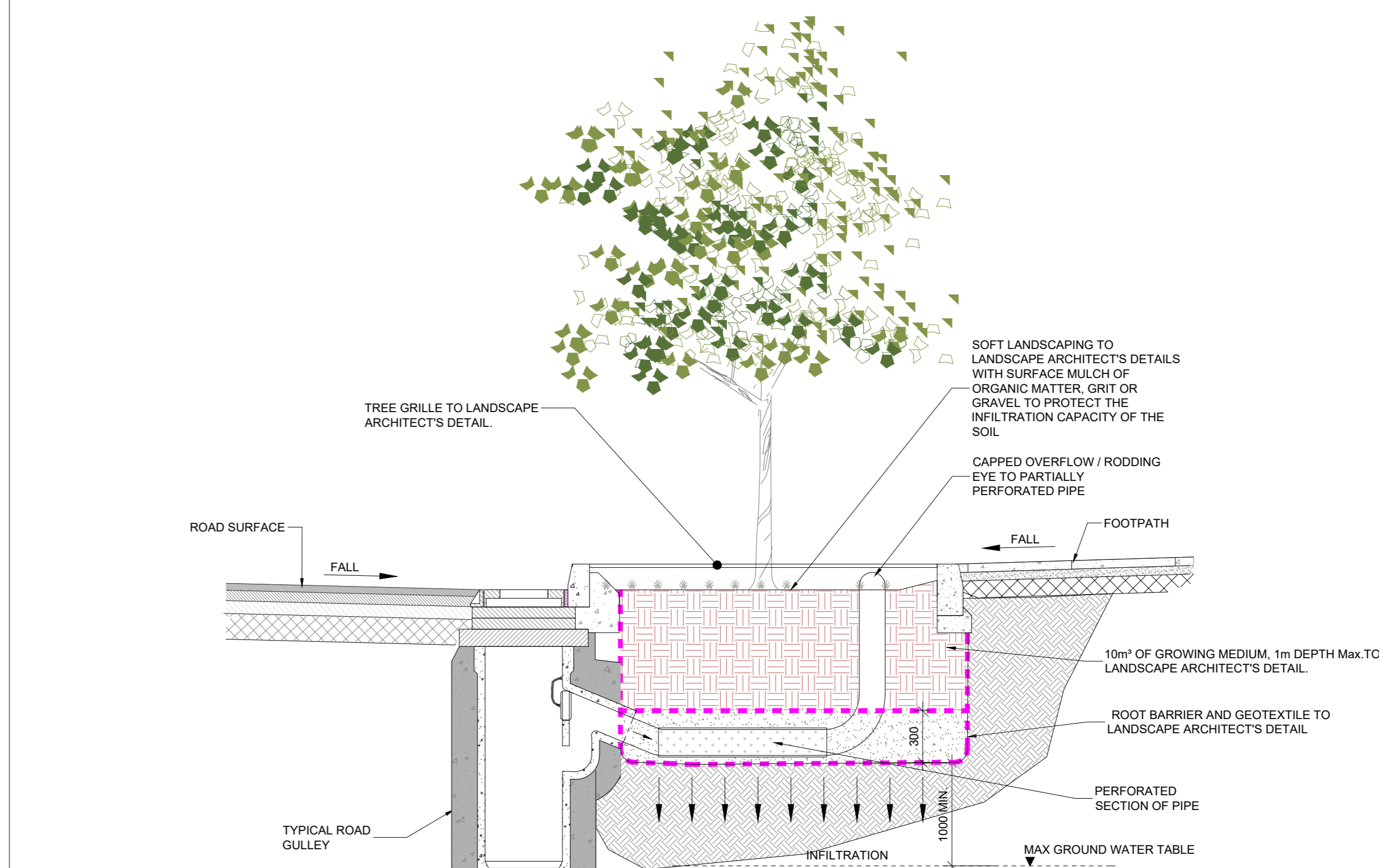
SCALE @ A0: 1:25  
SCALE @ A2: 1:50

E3.3 TREE PIT - DIRECT DISCHARGE FROM ROAD GULLEY



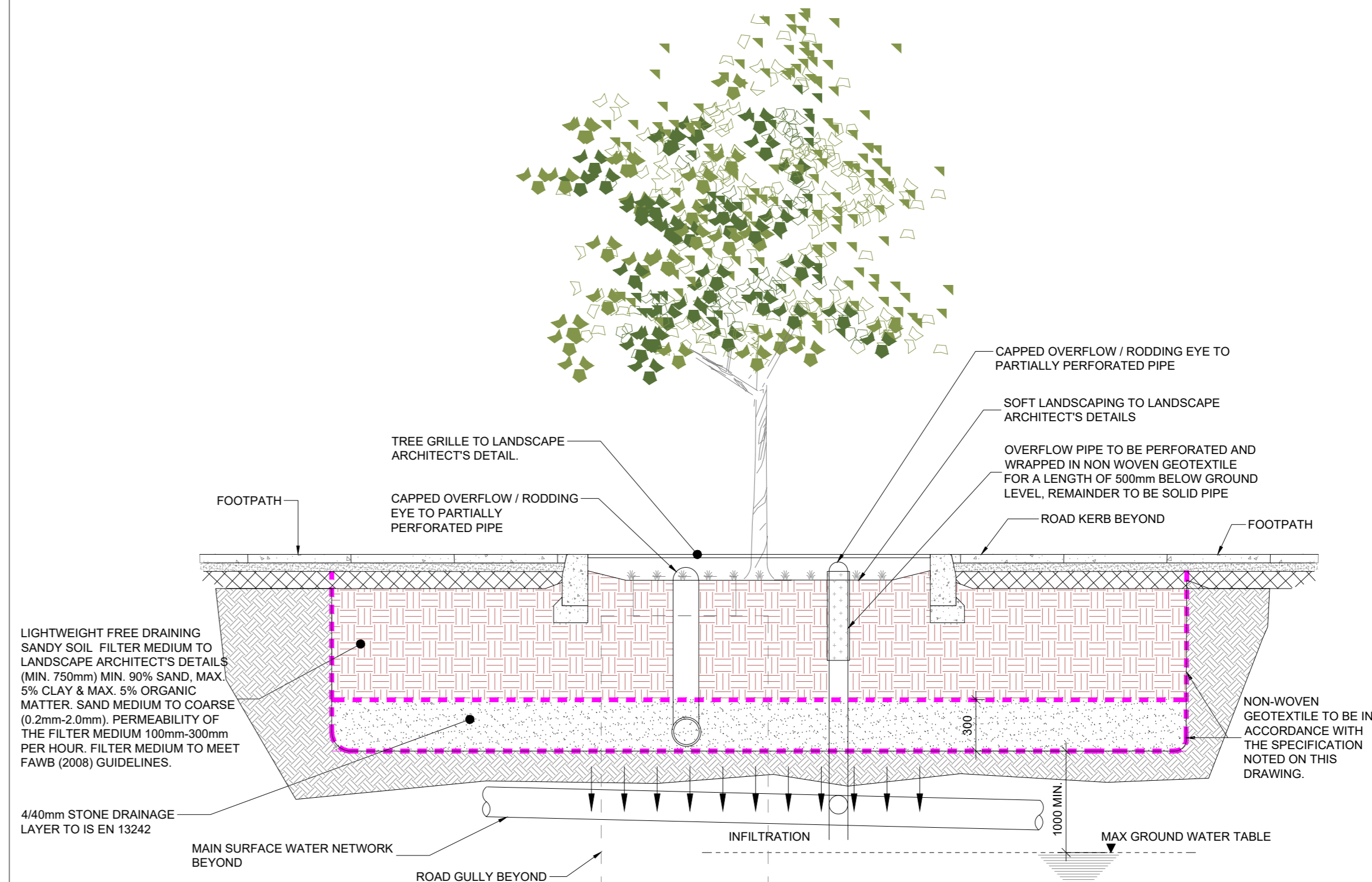
TYPICAL PLAN

SCALE @ A0: 1:25  
SCALE @ A2: 1:50



TYPICAL SECTION E3.3.1

SCALE @ A0: 1:25  
SCALE @ A2: 1:50



TYPICAL SECTION E3.3.2

SCALE @ A0: 1:25  
SCALE @ A2: 1:50

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECTS' DRAWINGS FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ASK.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.

NOTES

1. NON-WOVEN GEOTEXTILE SPECIFICATION: THE GEOTEXTILE SHALL:
  - SUSTAIN A TENSILE LOAD OF NOT LESS THAN 5.0kN/m AT BREAK AND HAVE A MINIMUM FAILURE STRAIN OF 10% WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 10319.
  - HAVE A MINIMUM PUNCTURE RESISTANCE OF 1200 N WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12236.
  - HAVE A SIZE DISTRIBUTION OF PORE OPENINGS SUCH THAT THE APPARENT OPENING SIZE 900 WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12956, OR OTHER APPROPRIATE TEST, IS LESS THAN 300 MICRONS.
  - ALLOW WATER TO FLOW THROUGH IT, IN EITHER DIRECTION, NORMAL TO ITS PRINCIPAL PLANE AT A RATE OF NOT LESS THAN 0.10m/s, UNDER A CONSTANT HEAD OF WATER OF 100mm AND A MAXIMUM BREAKTHROUGH HEAD OF 50mm WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12956.
2. PLAN AREA OF THE BIO-RETENTION AREA SHOULD BE 2-4% OF THE OVERALL AREA DRAINED. MAXIMUM WIDTH 10m UNLESS NOTED OTHERWISE.

MAINTENANCE REQUIREMENTS FOR BIORETENTION SYSTEMS & TREE PITS

REGULAR INSPECTIONS:

- INSPECT INFILTRATION SURFACES FOR SILTING AND PONDING, RECORD DEWATERING TIME OF THE FACILITY AND ASSESS STANDING WATER LEVELS IN UNDERDRAIN (IF APPROPRIATE) TO DETERMINE IF MAINTENANCE IS NECESSARY. FREQUENCY - QUARTERLY.
- CHECK OPERATION OF UNDERDRAINS BY INSPECTION OF FLOWS AFTER RAIN. FREQUENCY - ANNUALLY.
- ASSESS PLANTS FOR DISEASE, INFECTION, POOR GROWTH, INVASIVE SPECIES ETC AND REPLACE AS NECESSARY. FREQUENCY - QUARTERLY.
- INSPECT INLETS AND OUTLETS FOR BLOCKAGE. FREQUENCY - QUARTERLY.

REGULAR MAINTENANCE

- REMOVE LITTER AND SURFACE DEBRIS AND WEEDS. FREQUENCY - QUARTERLY (OR MORE FREQUENTLY FOR TONNAGE OR AESTHETIC REASONS).
- REPLACE ANY PLANTS, TO MAINTAIN PLANTING DENSITY. FREQUENCY - AS REQUIRED.
- REMOVE SEDIMENT, LITTER AND DEBRIS BUILD-UP FROM AROUND INLETS OR FROM FOREBAYS. FREQUENCY - QUARTERLY TO ANNUALLY.
- INFILL ANY HOLES OR SCOUR IN THE FILTER MEDIUM, IMPROVE EROSION PROTECTION IF REQUIRED. FREQUENCY - AS REQUIRED.
- REPAIR MINOR ACCUMULATIONS OF SILT BY RAKING AWAY SURFACE MULCH, SCARPING SURFACE OF MEDIUM AND REPLACING MULCH. FREQUENCY - AS REQUIRED.

REMEDIAL ACTIONS

- REMOVE AND REPLACE FILTER MEDIUM AND VEGETATION ABOVE. FREQUENCY - AS REQUIRED BUT LIKELY TO BE > 20 YEARS.

ROOTSPACE SUPPORT STRUCTURE UNDER COVERED / GRILLED TREE PITS.

IN ALL COVERED COVERED / GRILLED TREE PITS AND IN ALL INSTANCES WHERE THE TREE PIT SOIL EXTENDS BENEATH THE FOOTPATH / PAVEMENT, A PROPRIETARY ROOTSPACE PAVEMENT SUPPORT SYSTEM BY GREENLEAF IRELAND, OR EQUAL, APPROVED SHALL BE INTEGRATED ACROSS THE FULL EXTENT OF THE TREE PIT. REFER TO LANDSCAPE ARCHITECTS DETAILS FOR TREE PIT SOIL DETAILS.

PL2	24.01.25	ISSUED FOR PLANNING	AO
PL1	25.08.24	ISSUED FOR PLANNING	AO
ISSUE	DATE	DESCRIPTION	BY

Project Engineer: Peter O'Dwyer Project Director: Brian Mahony

BM STAGE

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The Institution of Structural Engineers ACEI

CLIENT LAND DEVELOPMENT AGENCY

PROJECT TITLE LDA WILTON Sarsfield Road LRD BM PROJECT No. 23.215

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DRAWING TITLE TYPICAL SUDS DETAILS TREE PITS

DRAWING REFERENCE 23215-BMD-ZZ-ZZ-DR-C-12320 STATUS REVISION PL2