WARRINGAH GOLF COURSE SWALE UPGRADE

LANDSCAPE & CIVIL DESIGN DEVELOPMENT

DRAWING LIST

SHEET NO.	DRAWING TITLE	CURRENT ISSUE	
LANDSCAPE & CIVIL DRAWINGS			
001	COVER SHEET	D	95% Design Development
101	EXISTING SITE PLAN	D	95% Design Development
102	SEDIMENT & EROSION CONTROL PLAN	D	95% Design Development
103	SEDIMENT & EROSION CONTROL DETAILS	D	95% Design Development
110	DEMOLITION PLAN	D	95% Design Development
120	EARTHWORKS PLAN	D	95% Design Development
130	DRAINAGE PLAN	D	95% Design Development
201	LEVELS AND GRADING PLAN	D	95% Design Development
210	MATERIALS AND FINISHES PLAN	D	95% Design Development
220	PLANTING PLAN	D	95% Design Development
301	SECTIONS SHEET 1	D	95% Design Development
302	SECTIONS SHEET 2	D	95% Design Development
303	SECTIONS SHEET 3	D	95% Design Development
401	DRAINAGE DETAILS SHEET 1	D	95% Design Development
402	DRAINAGE DETAILS SHEET 2	D	95% Design Development
501	LANDSCAPE DETAILS SHEET 1	D	95% Design Development
NORTHERN BEACHES COUNCIL STANDARD DRAWINGS			
S1006	JUNCTION PIT	A	
S1013	STEP IRON DETAILS	A	

Documentation - Notes

Plan Drawing Sheets

The Drawing Sheets include the cover page, legend, key plan, and other general information. A key plan outlines the sheet boundaries with reference markers to the sheet. For each sheet, an Existing Site Plan, Demolition Plan, Levels and Grading Plan, Materials & Finishes Plan, Jointing Plan, Planting Plan, and Civil Plan are provided as required to enable construction. A consolidated legend outlines the major components and their corresponding codes. The Drawing Sheets may also contain long sections and elevations. The drawing sheets can be printed at a reduced scale on A3 size for ease of use on site however the contractor should refer firstly to the original size sheets.

Construction Details

This A3 document contains enlarged details from the drawing sheets and 3D model. Details may be drawn in section, elevation, axonometric, or 3D format.

Technical Specification

A separate A4 document contains the material descriptions, build methodology, standards, environmental requirements and quality expectations of the procurement and construction process.

Site Set Out - Digital Files

Subject to copyright and if requested, Civille will make available a 2D or 3D digital design file to assist the contractor set out the works on site. The contractor should enquire with the Principal at tender stage to ascertain which types of file are available to assist with construction set out. The contractor is required to verify that any digital file provided by Civille is suitable for the intended use, has been translated correctly and is correctly geo-referenced prior to import into any device.

General Notes

The following notes apply to all the contract documents:

- All dimensions on the Drawing Sheets are in meters unless otherwise noted.
- All dimensions on the Construction Details are in millimeters unless otherwise noted.
- The contractor is not to scale from any printed drawing.
- The contractor must verify all dimensions on site and notify the Principal of any discrepancies prior to construction.
- The contractor must verify all existing services locations prior to excavation.

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Client
Northern Beaches Council

Project Name
Warringah Golf Course - Swale

Project No.
2225

Address
North Manly, NSW, 2100

Key Plan

Issue Log

Rev	Description	By/Checked	Date
A	Concept Design	JG/MR	23/01/2023
B	80% DD	AM	20/03/2023
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Scale

North

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Phase
Design Development

Sheet Title
Cover Sheet

Sheet No.
001

Rev
D

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Scale

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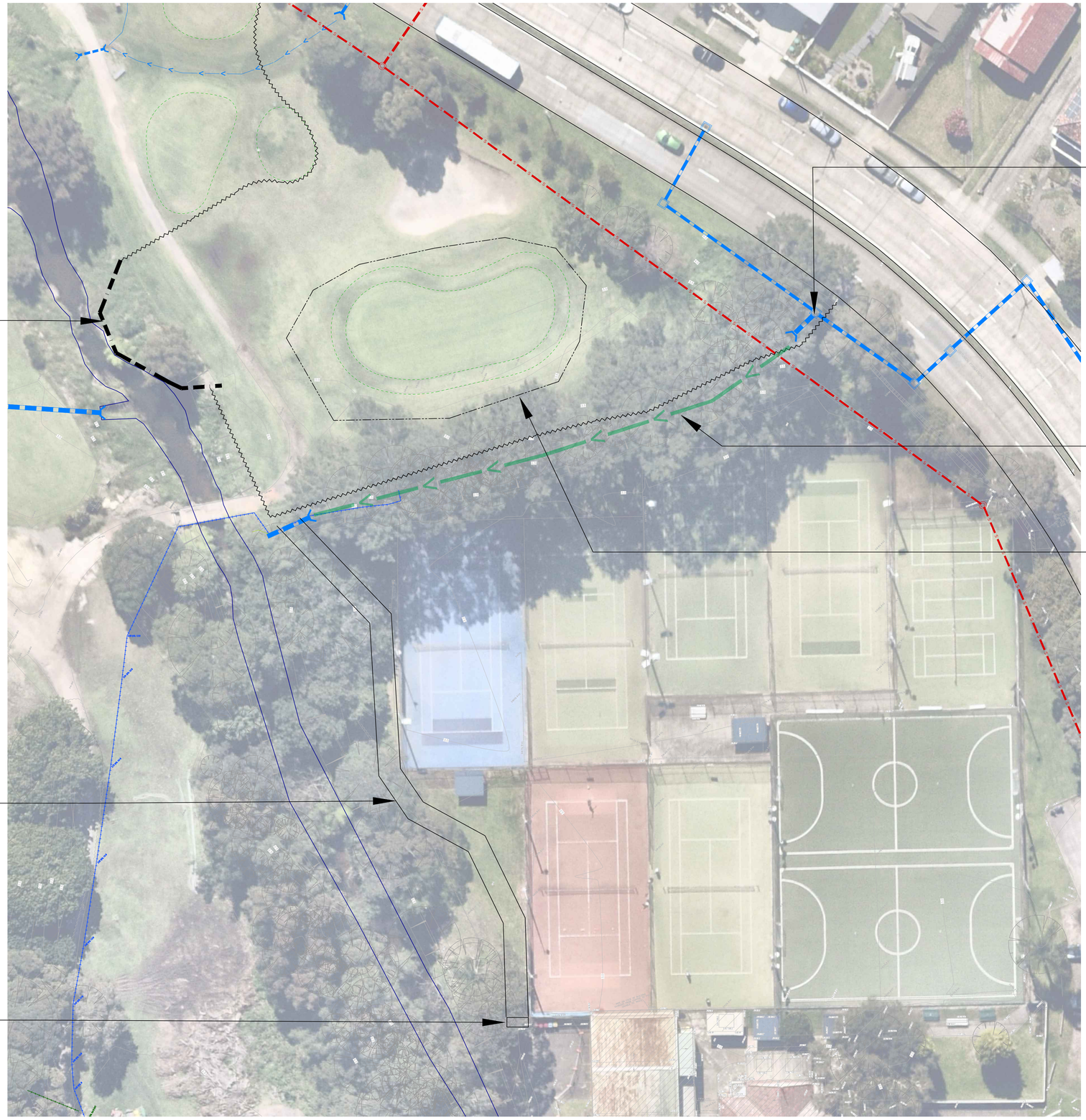
North

Phase
Design Development

Sheet Title
Existing Site Plan

Sheet No.
101

Rev
D



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Scale
1:300 @ A1 / 1:600 @ A3

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North

Phase
Design Development

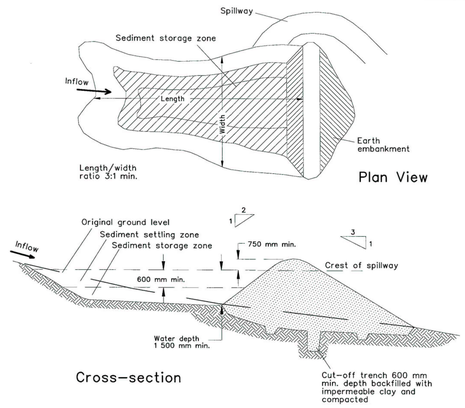
Sheet Title
Sediment & Erosion Control Plan

Sheet No.
102

Rev
D

SEDIMENT AND EROSION CONTROL GENERAL NOTES

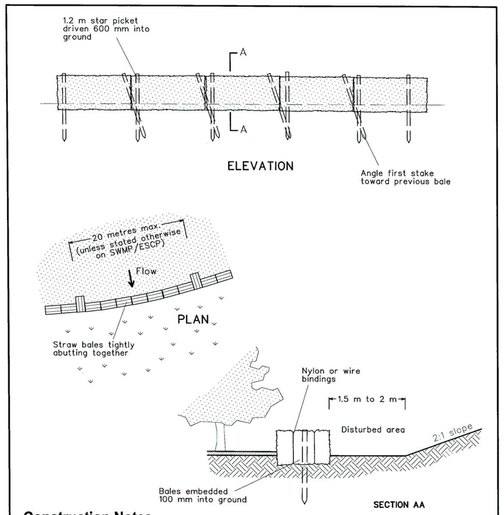
1. SEDIMENT AND EROSION CONTROL PLANS ARE FOR PRELIMINARY - NOT FOR CONSTRUCTION. THE CONTRACTOR IS TO DEVELOP THEIR OWN SEDIMENT & EROSION CONTROL PLAN TO SUIT THEIR PROPOSED WORKS/STAGING METHODOLOGY.
2. AN APPROVED SEDIMENT AND EROSION CONTROL PLAN IS TO BE FOLLOWED FOR THE DURATION OF THE WORKS. THE PLAN IS TO MEET THE COUNCILS REQUIREMENTS AND AS OUTLINED IN THE TECHNICAL SPECIFICATION AND LANDCOM'S MANAGING URBAN STORMWATER (BLUE BOOK).
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE MAINTAINED THROUGHOUT THE PERIOD OF THE WORKS, INCLUDING REPAIR AND/OR REPLACEMENT OF DAMAGED SECTIONS. INSPECTIONS ARE TO BE MADE REGULARLY AND AFTER STORM EVENTS.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING NO MATERIAL (INCLUDING CONCRETE WASHINGS) ENTERS THE DRAINAGE SYSTEM.
5. STOCKPILES ARE NOT TO BE LOCATED WITHIN AN OVERLAND FLOW PATH OR BELOW THE 50% AEP FLOOD LEVEL.
6. THE CONTRACTOR IS TO INFORM ALL SUBCONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING EROSION AND POLLUTION.
7. ALL WORKS AND SERVICES SHOULD BE CARRIED OUT IN SUCH A MANNER AS TO AVOID NUISANCE AND/OR DAMAGE TO THE ENVIRONMENT. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS IMPOSED BY THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979, PROTECTION OF ENVIRONMENT OPERATIONS ACT 1997 AND REGULATIONS, DEPARTMENT OF PLANNING AND ENVIRONMENT (INCLUDING ENVIRONMENTAL PROTECTION AUTHORITY) AND COUNCIL REQUIREMENTS. TOXIC CHEMICALS SHALL NOT BE USED ON THE SITE WITHOUT THE PRIOR WRITTEN APPROVAL OF COUNCIL.
8. ALL SEDIMENT AND/OR DEBRIS IN DRAINAGE PITS AND PIPES ARE TO BE REMOVED ON COMPLETION OF WORKS.



Construction Notes

1. Remove all vegetation and topsoil from under the dam wall and from within the storage area.
2. Construct a cut-off trench 500 mm deep and 1 200 mm wide along the centreline of the embankment extending to a point on the gully wall level with the riser crest.
3. Maintain the trench free of water and recompact the materials with equipment specified in the SWMP to 95 per cent Standard Proctor Density.
4. Select fill according to the directions of the SWMP that is free of roots, wood, rock, large stone or foreign material.
5. Prepare the site under the embankment by ripping at least 100 mm deep to help bond compacted fill to existing substrate.
6. Spread fill in 100 mm to 150 mm layers and compact at optimum moisture content in accordance with the SWMP.
7. Construct emergency spillway.
8. Rehabilitate structure in accordance with the SWMP.
9. Place a "Full of Sediment" marker to show when less than design capacity occurs and sediment removal is required.

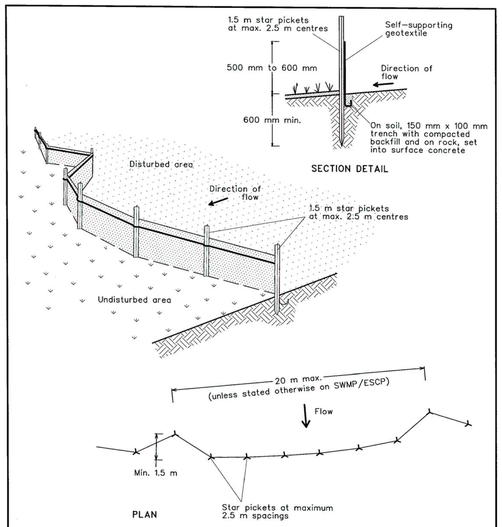
EARTH BASIN - WET SD 6-4
(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)



Construction Notes

1. Construct straw bale filter as close as possible to parallel to the contours of the site or at the toe of a slope.
2. Place bales lengthwise in a row with ends tightly abutting. Use straw to fill any gaps between bales. Straws to be placed parallel to ground.
3. Maximum height of filter is one bale.
4. On soft materials, embed each bale in the ground 75 mm to 100 mm and anchor with two 1.2 metre star pickets. Angle the first stake in each bale towards the previously laid bale. Drive stakes 600 mm into the ground and flush with the top of the bales.
5. Where a straw bale filter is constructed downslope from a disturbed batter the bales should be located 1 to 2 metres downslope from the toe of the batter.

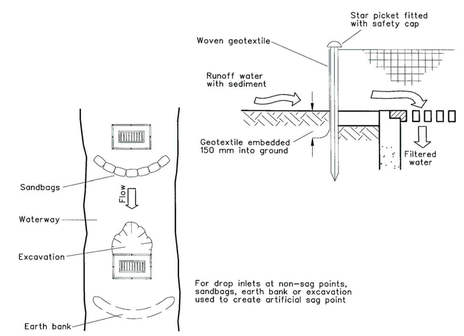
STRAW BALE FILTER SD 6-7



Construction Notes

1. Construct sediment fence as close as possible to parallel to the contours of the site.
2. Drive 1.5 metre long star pickets into ground, 2.5 metres apart (max.).
3. Dig a 150 mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
4. Fix self-supporting geotextile to upslope side of posts with wire ties or as recommended by geotextile manufacturer.
5. Join sections of fabric at a support post with a 150 mm overlap.
6. Backfill the trench over the base of the fabric and compact it throughly over the geotextile.

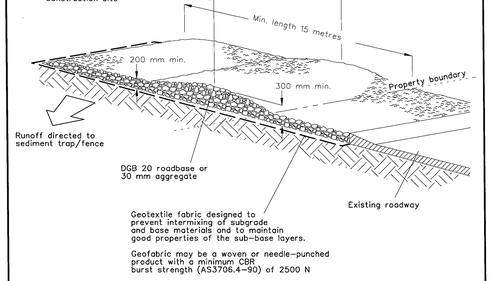
SEDIMENT FENCE SD 6-8



Construction Notes

1. Fabricate a sediment barrier made from geotextile or straw bales.
2. Support geotextile with mesh tied to posts at 1 metre centres.
3. Do not cover inlet with geotextile.
4. Construction details are similar to Standard Drawing 6-7 and Standard Drawing 6-8.

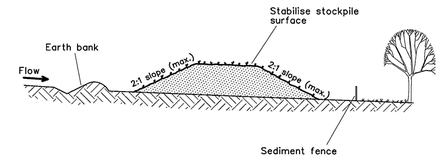
GEOTEXTILE INLET FILTER SD 6-12



Construction Notes

1. Strip topsoil and level site.
2. Compact subgrade.
3. Cover area with needle-punched geotextile.
4. Construct 200 mm thick pad over geotextile using roadbase or 30 mm aggregate. Minimum length 15 metres or to building alignment. Minimum width 3 metres.
5. Construct hump immediately within boundary to divert water to a sediment fence or other sediment trap.

STABILISED SITE ACCESS SD 6-14



Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILES SD 4-1

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Key Plan

Issue Log

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North

Phase
Design Development

Sheet Title
Sediment & Erosion Control Details

Sheet No.
103

Rev
D

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Phase
Design Development

Sheet Title
Demolition Plan

Sheet No.
110

Rev
D

LEGEND

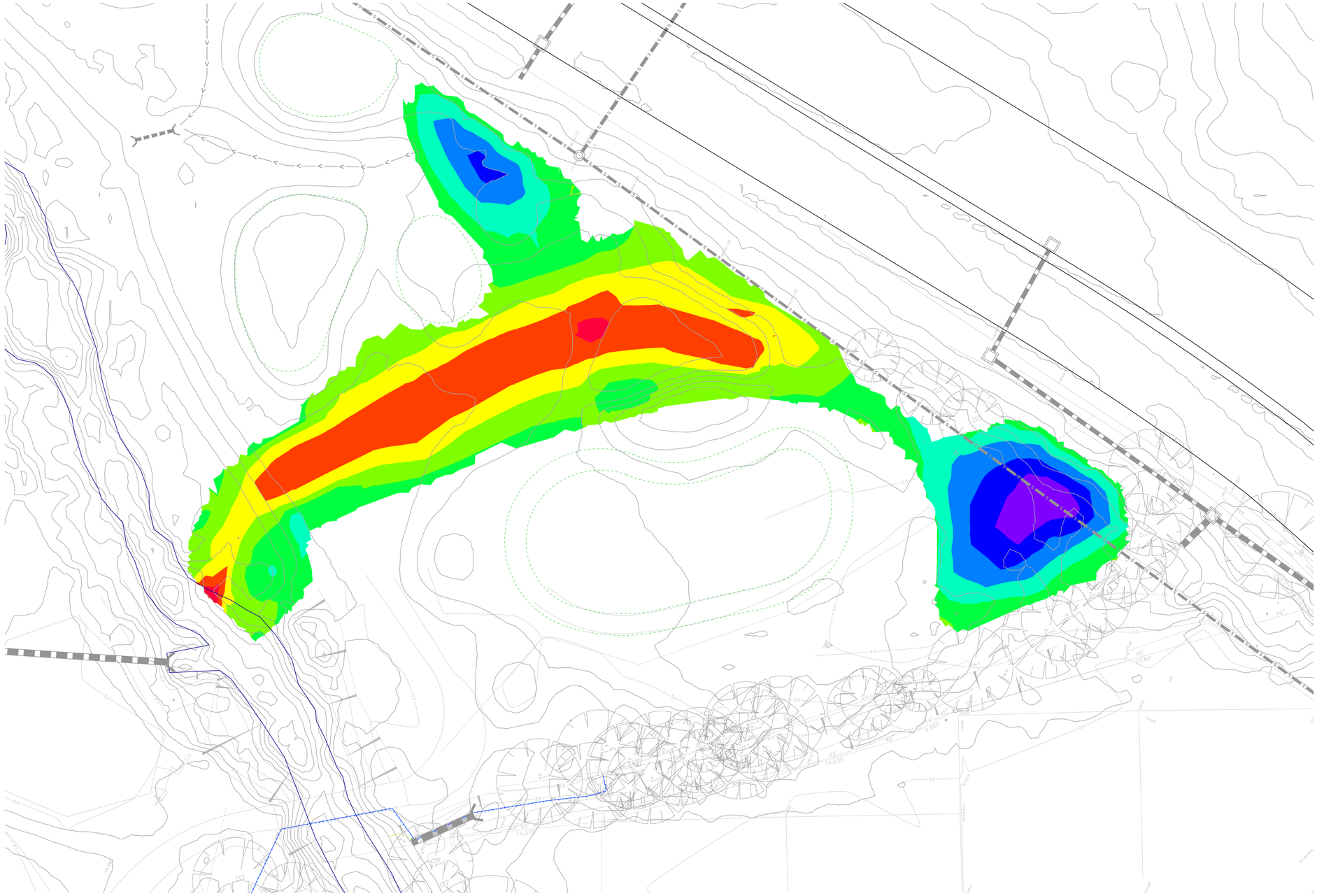
CUT

- -2.0 TO -1.5
- -1.5 TO -1.0
- -1.0 TO -0.5
- -0.5 TO 0

FILL

- 0.0 TO 0.5
- 0.5 TO 1.0
- 1.0 TO 1.5
- 1.5 TO 2.0
- 2.0 TO 2.5

NOTE, CUT-FILL LEVELS SHOWN ARE INDICATIVE, TAKEN AS THE DIFFERENCE BETWEEN APPROXIMATE EXISTING SURFACE TO DESIGN SURFACE



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North

Phase

Design Development

Sheet Title

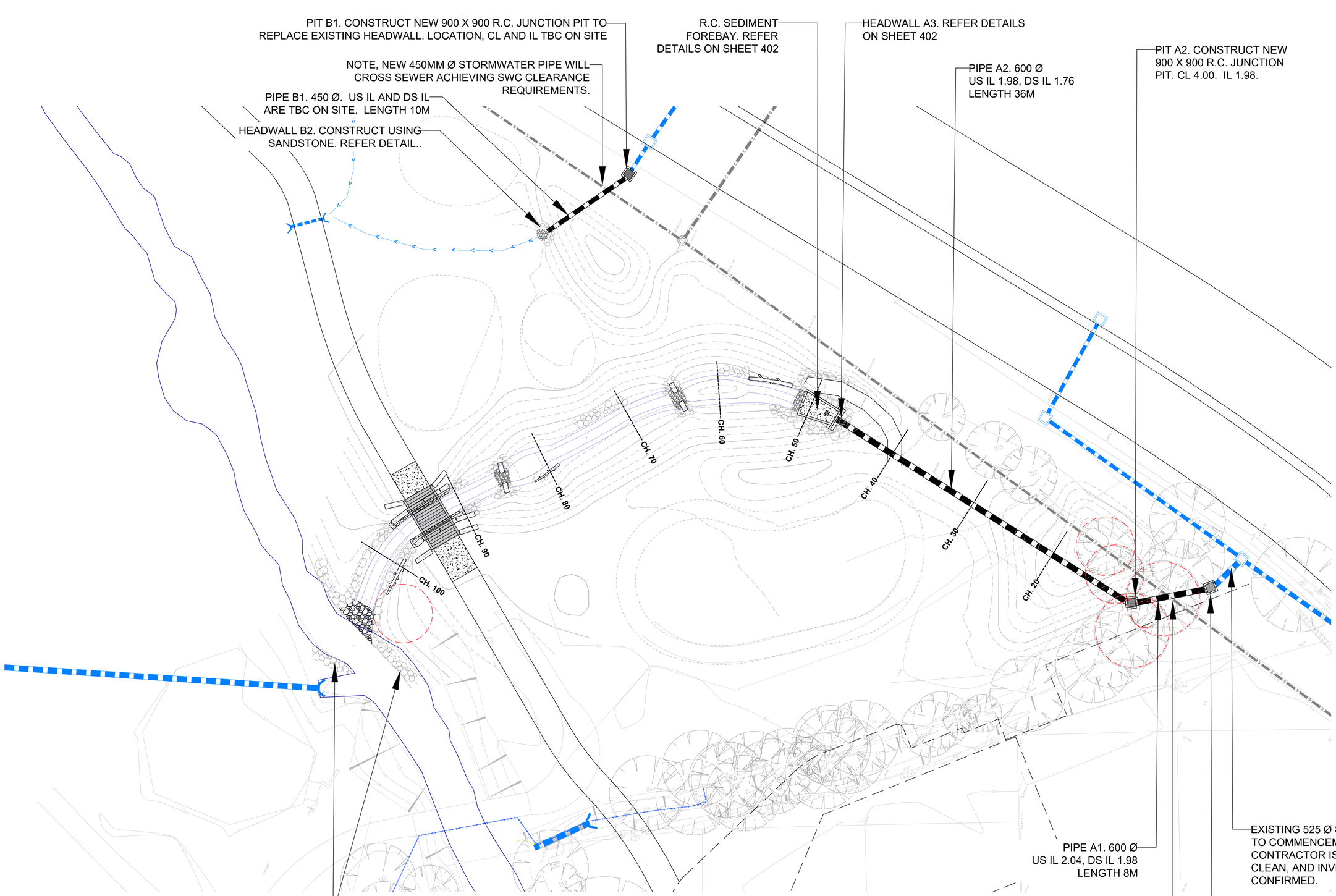
Earthworks Plan

Sheet No.

120

Rev

D



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Scale
1:200 @ A1 / 1:400 @ A3

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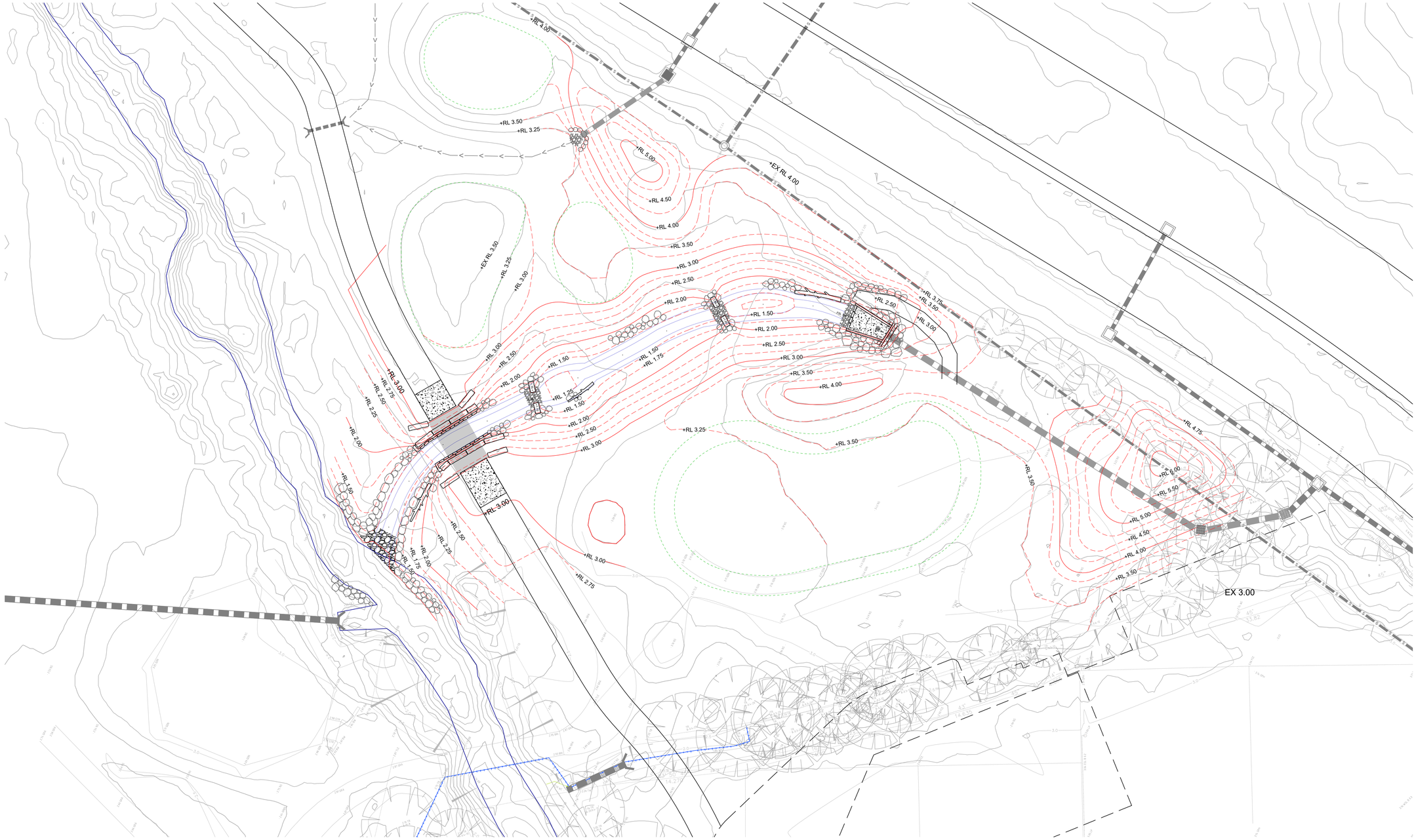
North

Phase
Design Development

Sheet Title
Drainage Plan

Sheet No.
130

Rev
D



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North

Phase

Design Development

Sheet Title

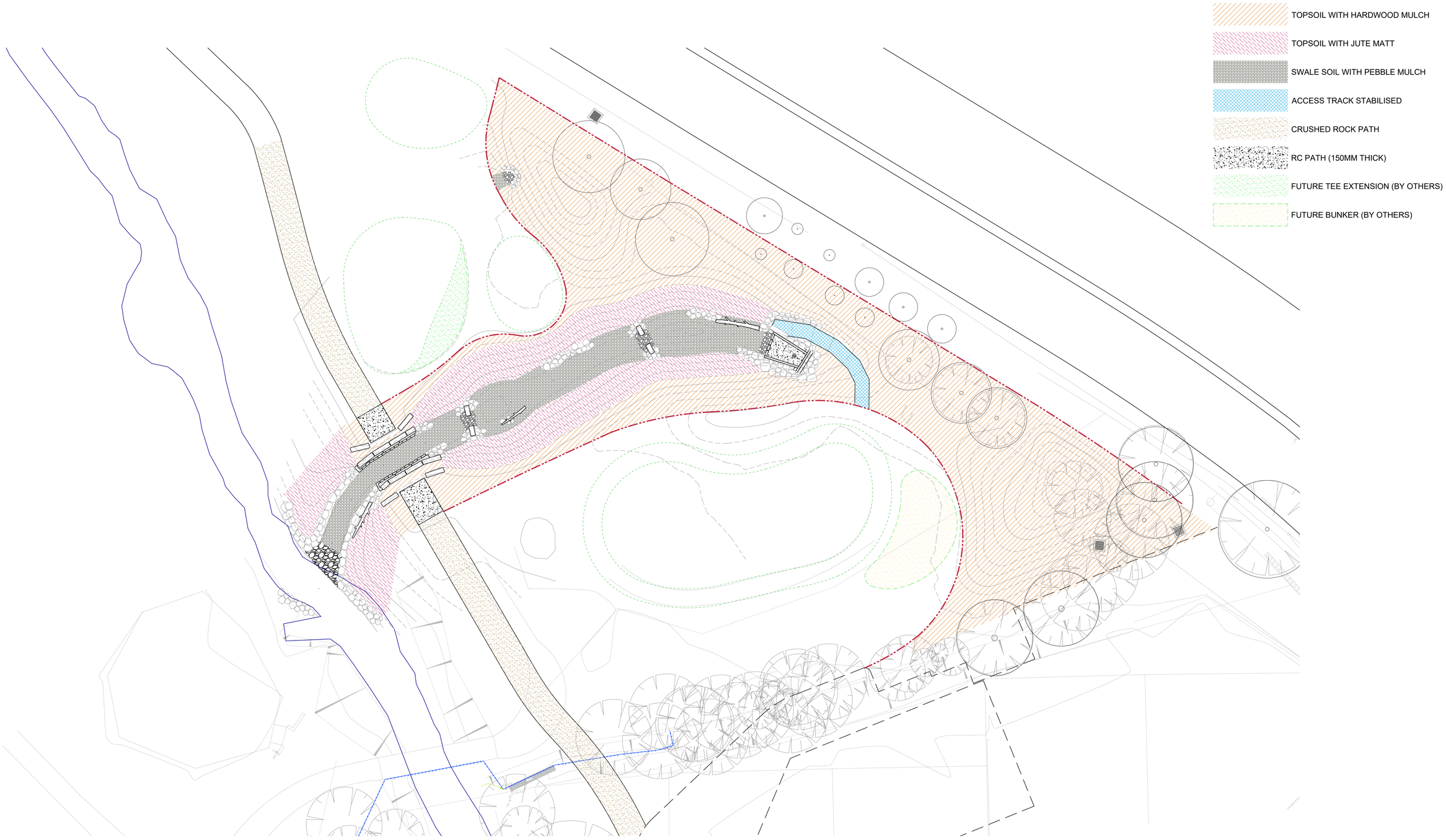
Levels & Grading Plan

Sheet No.

201

Rev

AD



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Phase
Design Development

Sheet Title
Materials & Finishes Plan

Sheet No.
210

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D

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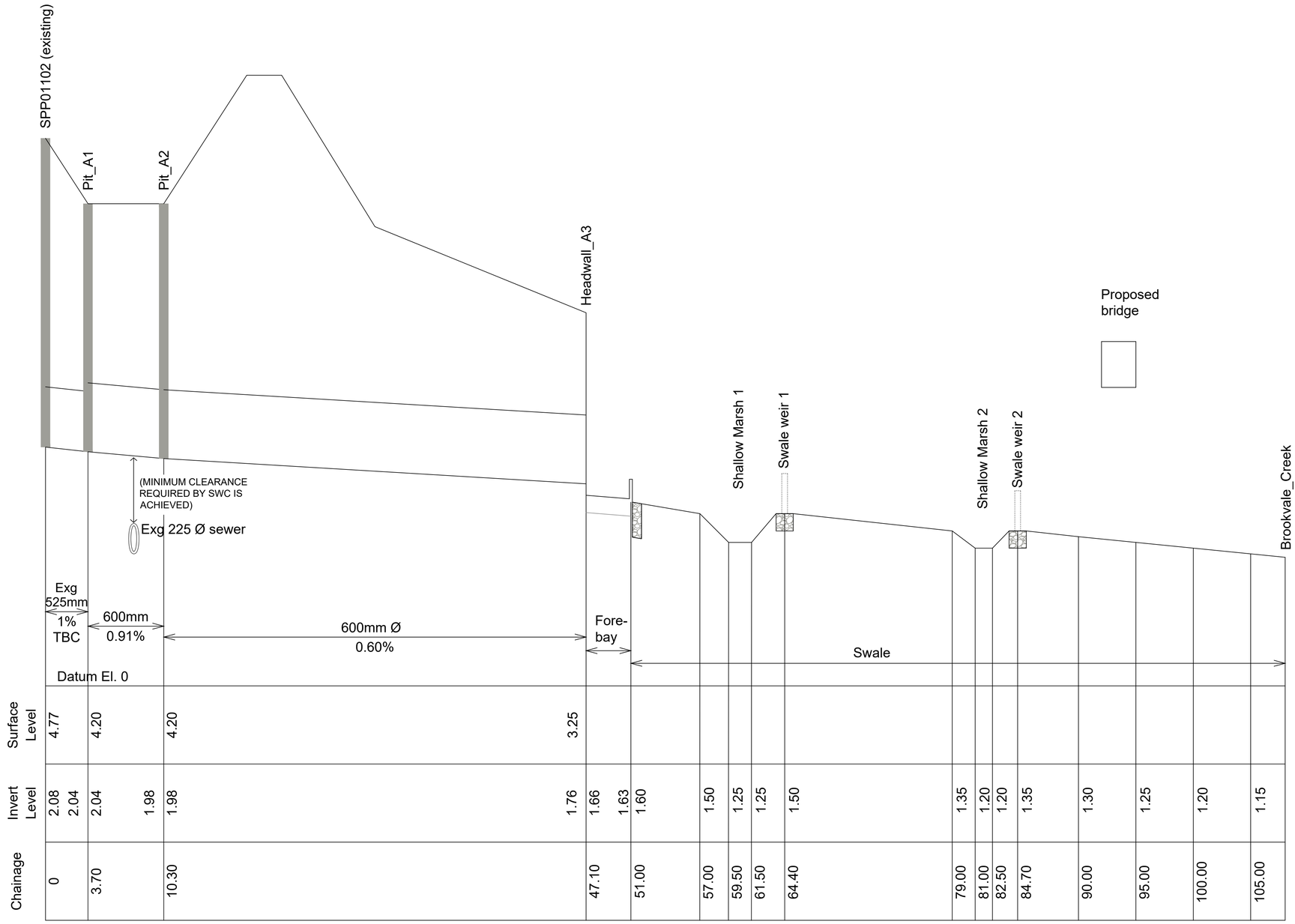
North

Phase
Design Development

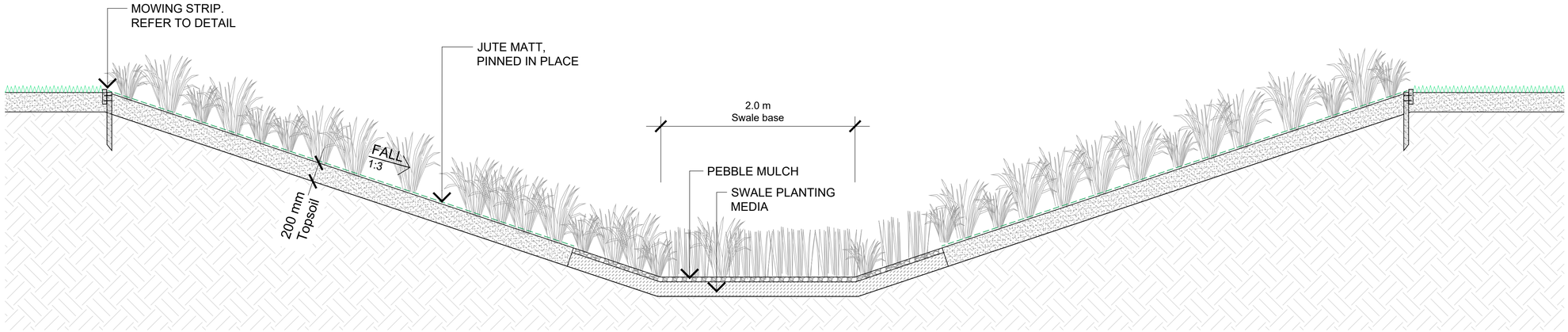
Sheet Title
Planting Plan

Sheet No.
220

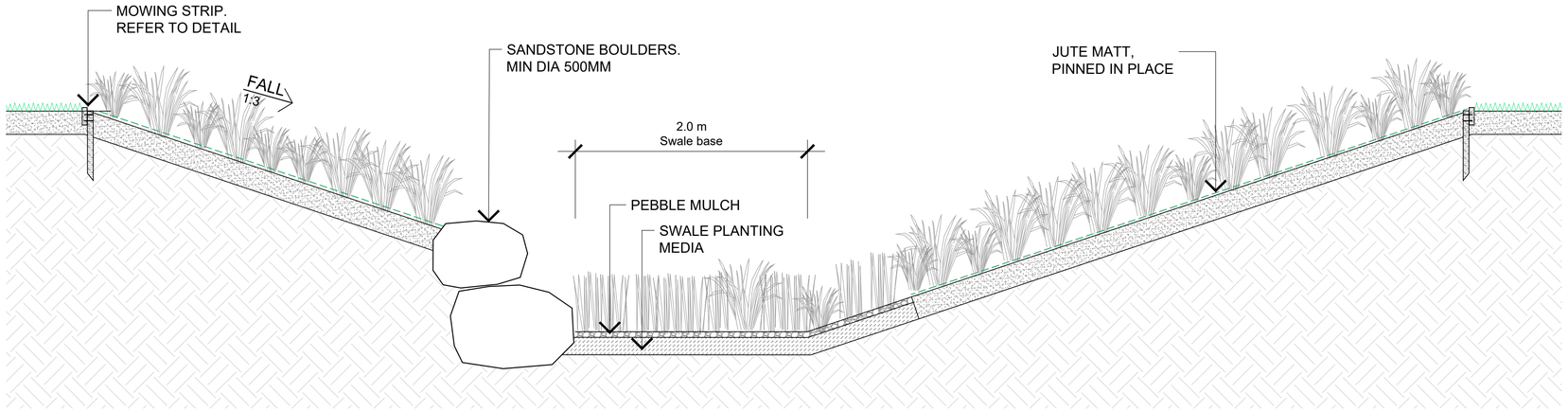
Rev
D


SPP01102 (existing)
Pit_A1
Pit_A2
Headwall_A3
Shallow Marsh 1
Swale weir 1
Shallow Marsh 2
Swale weir 2
Brookvale_Creek
Proposed bridge
(MINIMUM CLEARANCE REQUIRED BY SWC IS ACHIEVED)
Exg 225 Ø sewer
Exg 525mm
1% TBC
600mm 0.91%
600mm Ø 0.60%
Fore-bay
Swale
Datum El. 0

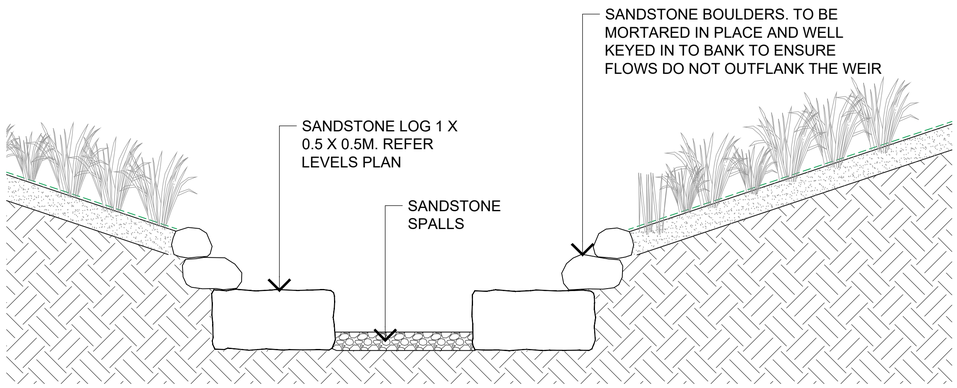
| | | |



01 Cross Section 01 - Typical Swale Section
1:25 @ A1



02 Cross Section 02 - Typical Swale Section with Rock Edge
1:25 @ A1



03 Cross Section 03 - Swale weir
1:25 @ A1

A Key Plan
NTS

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Scale
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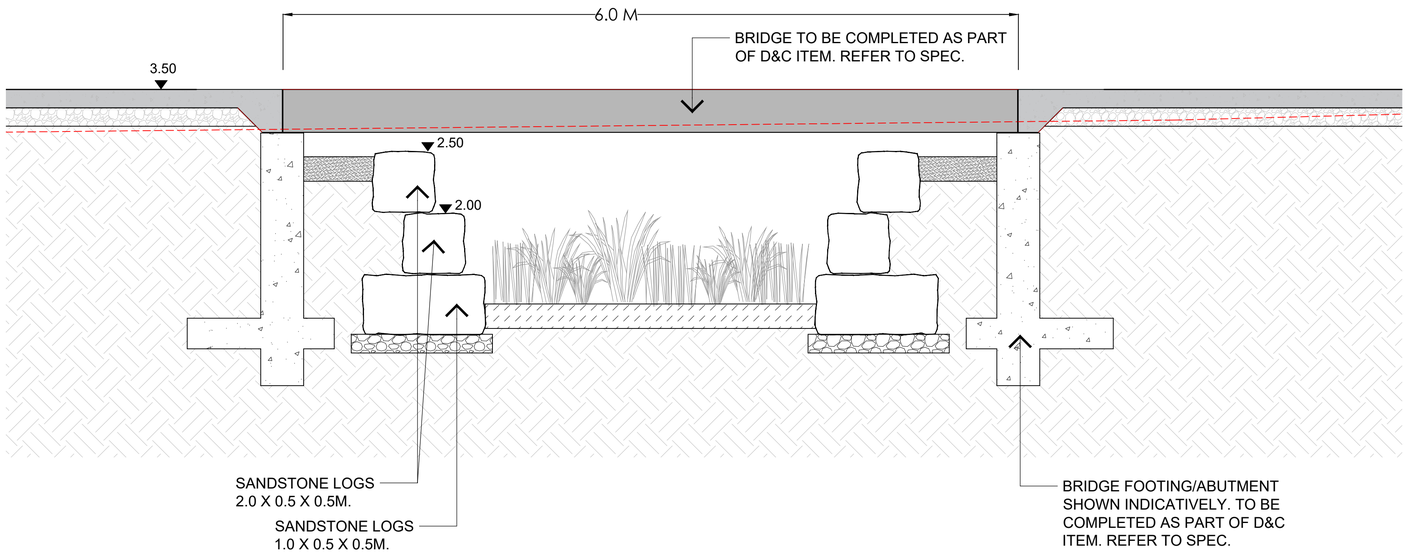
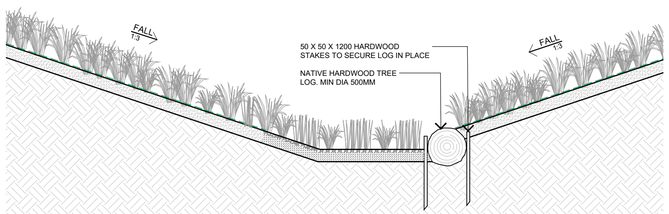
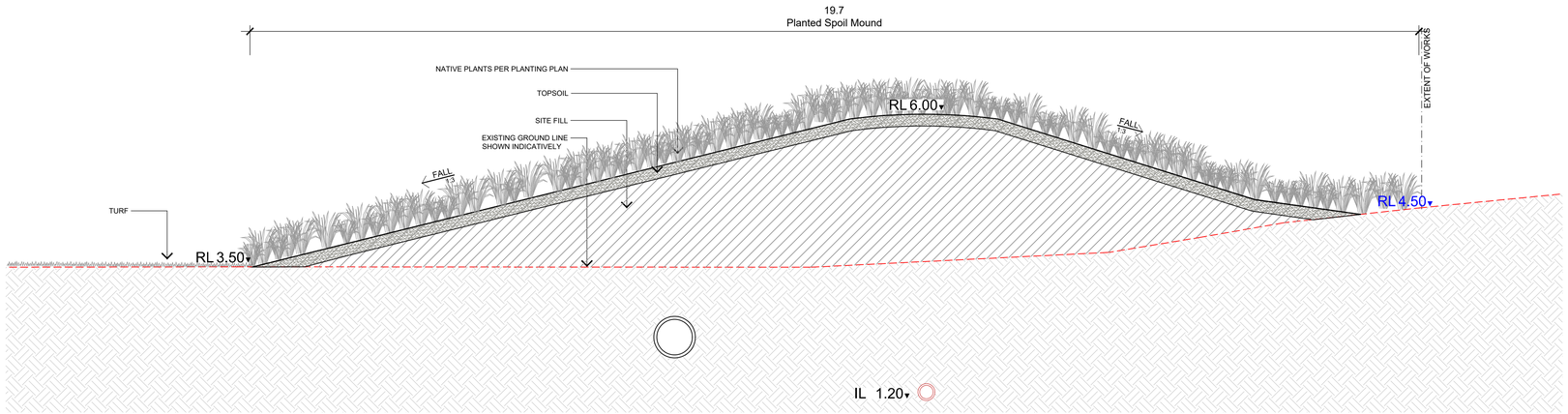
Phase
Design Development
Sheet Title
Sections Sheet 2
Sheet No.
302
Rev
D



04 Cross Section 04 - Bridge Section
1:25 @ A1



05 Cross Section 05 - Swale Section with Log
1:25 @ A1



06 Cross Section 05 - Spoil Mound
1:50 @ A1

A Key Plan
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Scale
1:50 @ A1 / 1:100 @ A3

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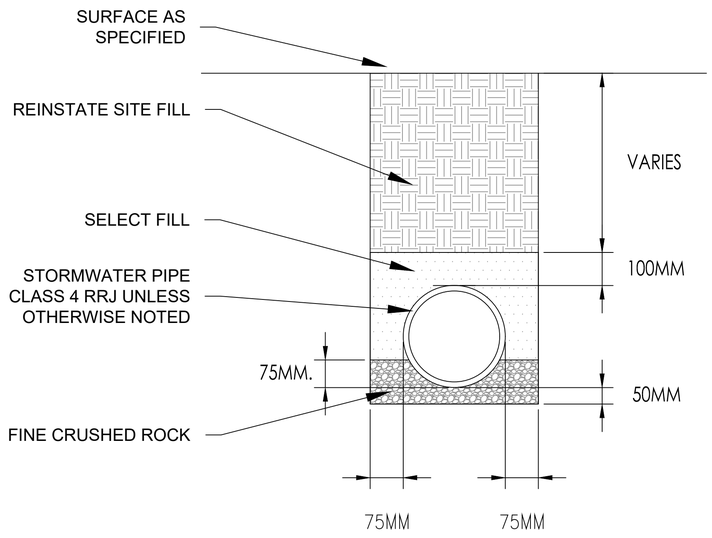
Phase
Design Development

Sheet Title
Cross Sections

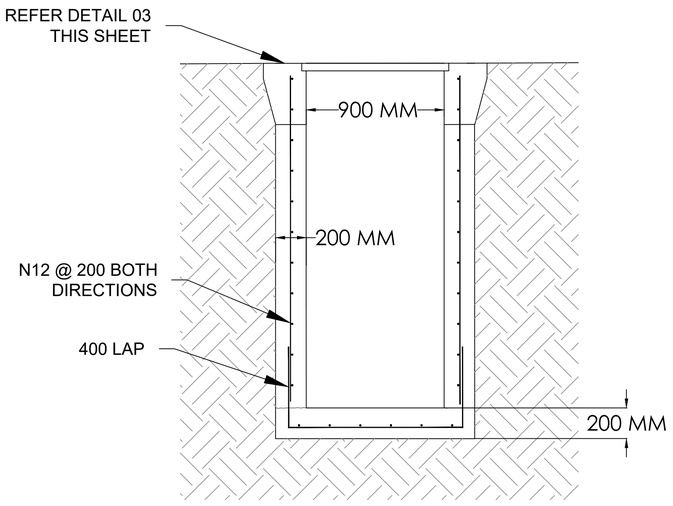
Sheet No.
303

Rev
D



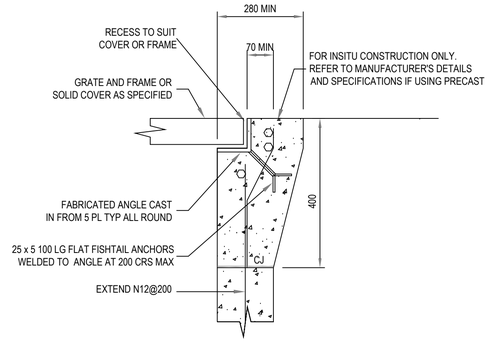
01 Typical Stormwater Trench Detail

NTS



02 Typical Stormwater Pit Detail - Up to 2.5m depth

NTS



PIT IN LANDSCAPE AREA DETAIL

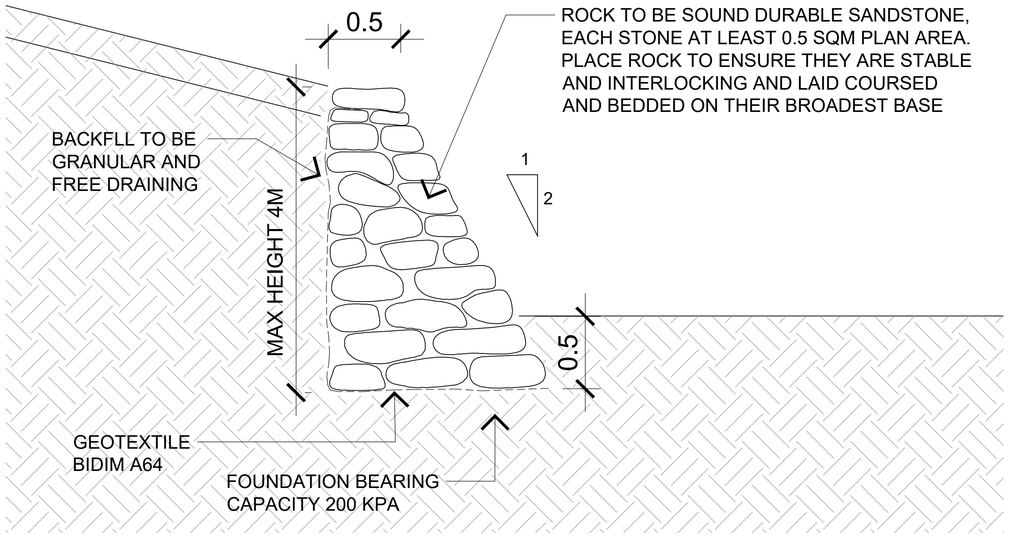
SCALE A

03 Typical Stormwater Pit Lid Detail

NTS

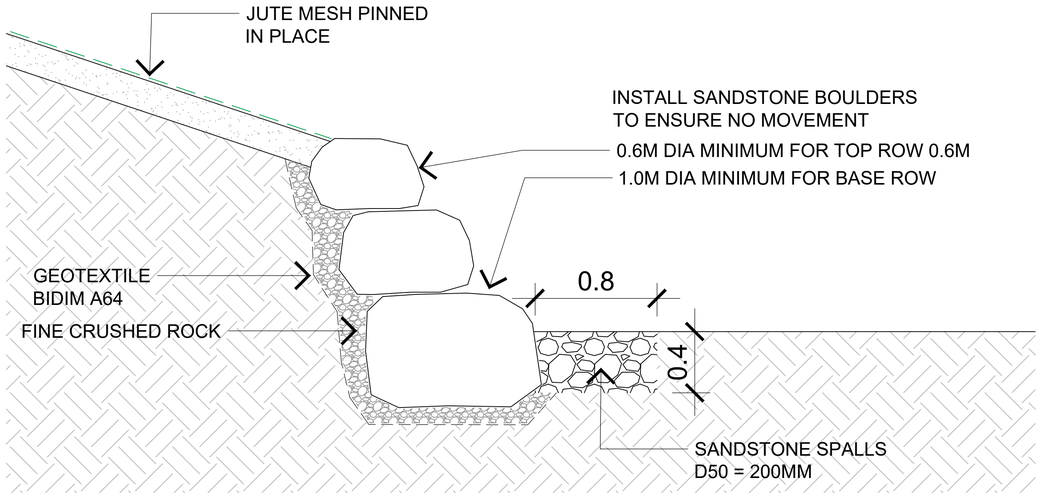
NOTES

1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CONCRETE MINIMUM STRENGTH GRADE IS 32MPa AT 28 DAYS AS PER AS3600 CONCRETE STRUCTURES UNLESS NOTED OTHERWISE.
3. COVER TO STEEL REINFORCEMENT SHALL BE MINIMUM 50mm.
4. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANISED.
5. STEEL GRATES AND FRAMES ARE TO BE FABRICATED FROM MILD STEEL AND HOT DIP GALVANISED TO AS1650.
6. ALL GRATES ARE TO BE MINIMUM CLASS D (HEAVY DUTY) UNLESS NOTED OTHERWISE AND BICYCLE SAFE AS PER AS3996.
7. GRATES TO BE INSTALLED IN HIGH PEDESTRIAN ACTIVITY AREAS ARE TO BE HEEL PROOF.



04 Typical Rock Wall Detail

NTS



05 Typical Creek Boulder Edge

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Project Name
Warringah Golf Course - Swale

Project No.
2225

Address
North Manly, NSW, 2100

Key Plan

Issue Log

Rev	Description	By/Checked	Date
A	Concept Design	JG/MR	23/01/2023
B	80% DD	AM	20/03/2023
C	90% DD	AM	20/06/2023
D	95% DD	AM	04/09/2023

Scale
1:50 @ A1 / 1:100 @ A3

North

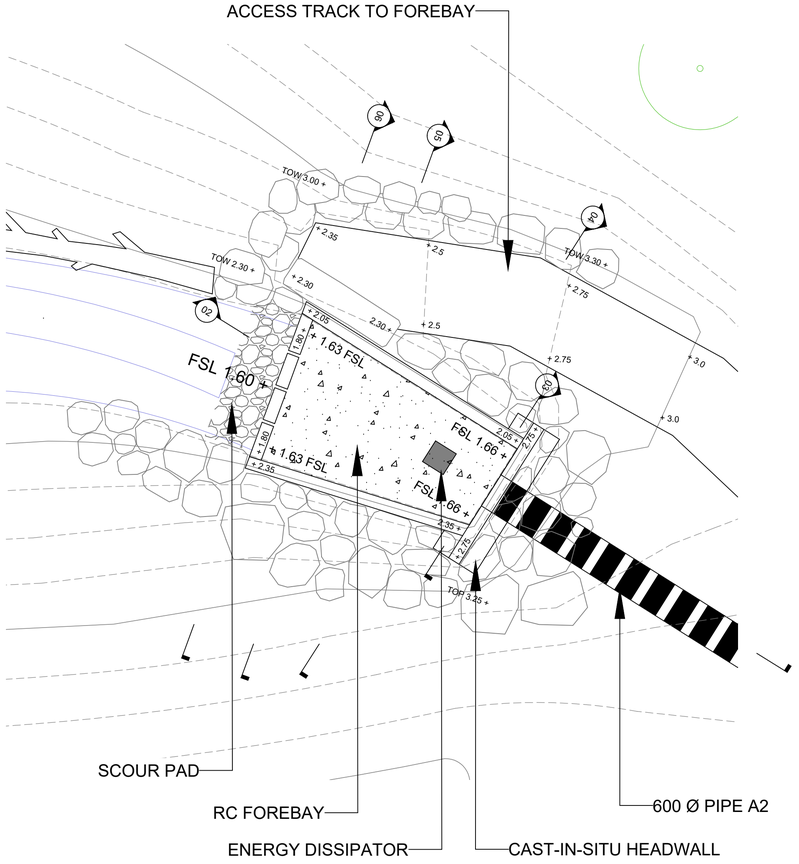
All dimensions are in metres unless otherwise noted.
Do not scale from this drawing.

Phase
Design Development

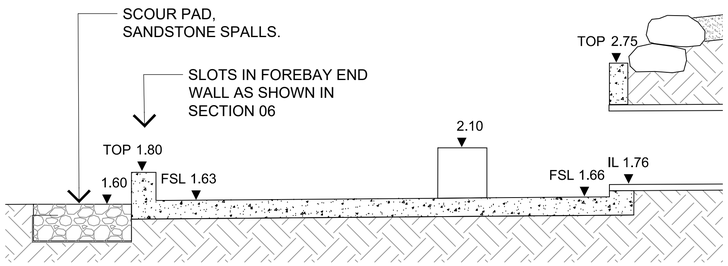
Sheet Title
Drainage Details Sheet 1

Sheet No.
401

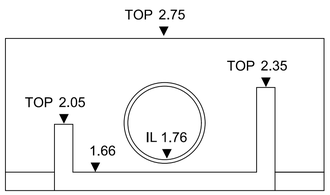
Rev
D



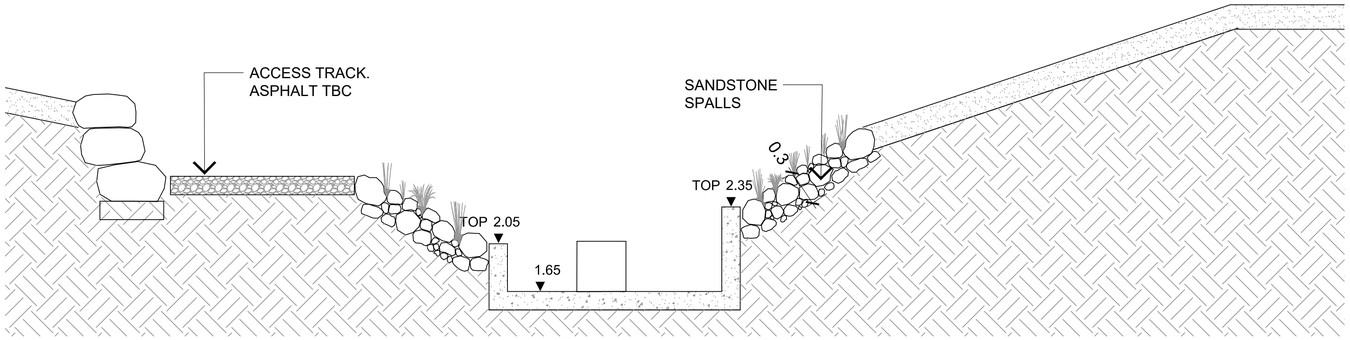
01 Swale Inlet Detail Plan
1:50 @ A1



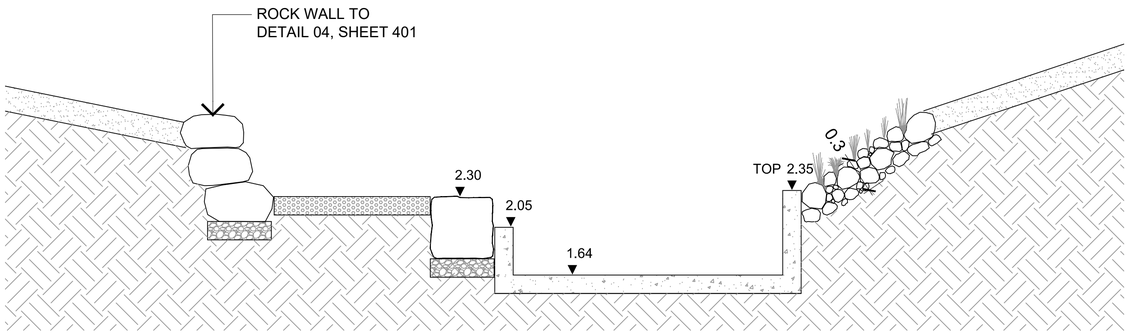
02 Swale Inlet Long Section
1:25 @ A1



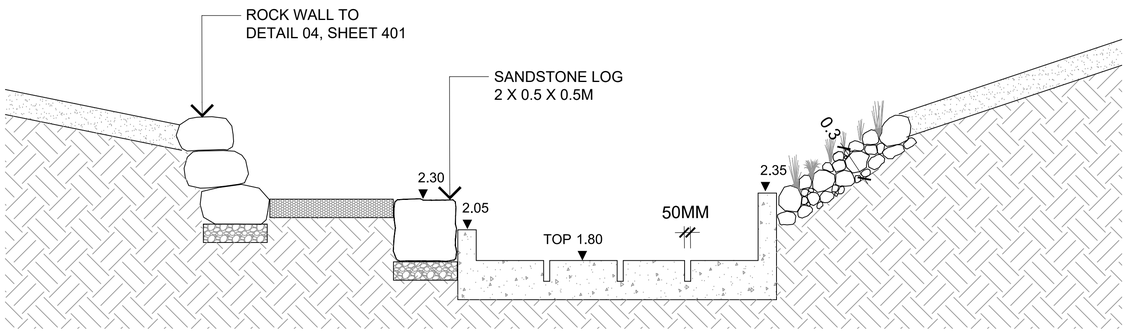
03 Swale Inlet Cross Section
1:25 @ A1



04 Swale Inlet Cross Section
1:25 @ A1



05 Swale Inlet Cross Section
1:25 @ A1



06 Swale Inlet Cross Section
1:25 @ A1

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D	95% DD	AM	04/09/2023

Scale
1:50 @ A1 / 1:100 @ A3

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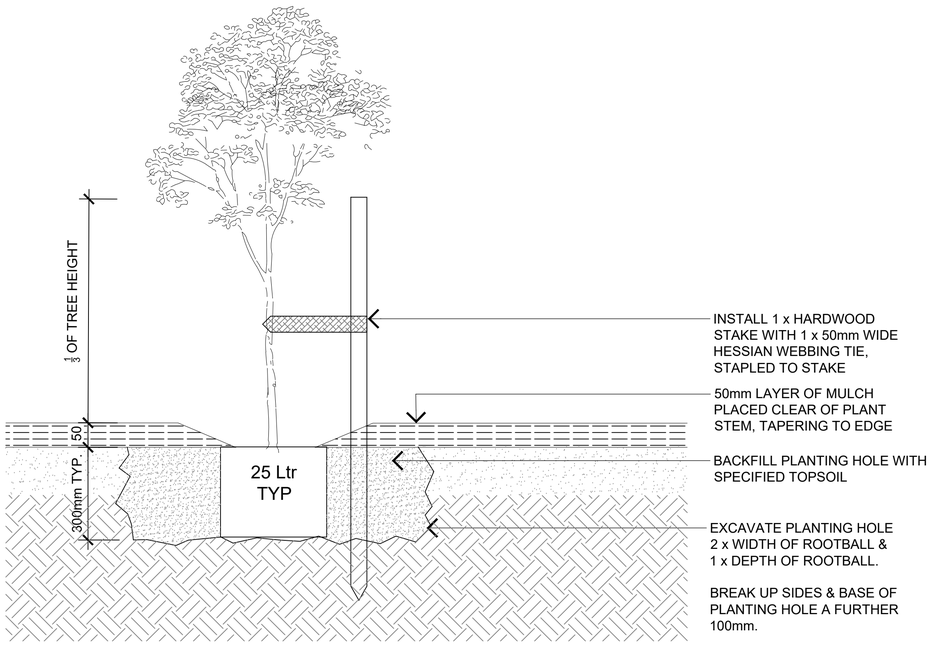
North

Phase
Design Development

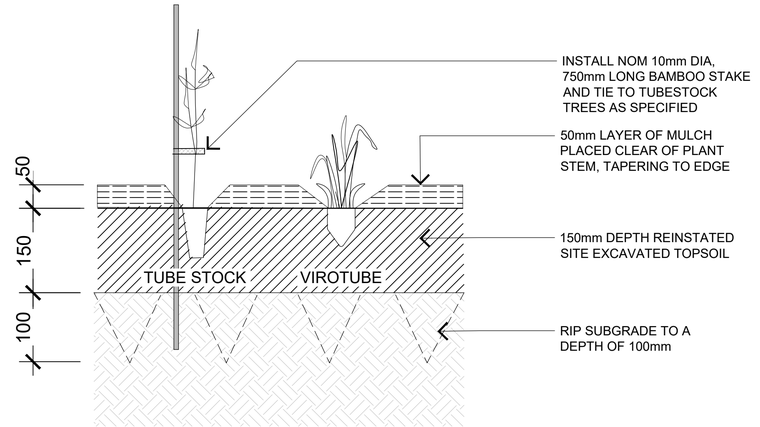
Sheet Title
Drainage Details Sheet 2

Sheet No.
402

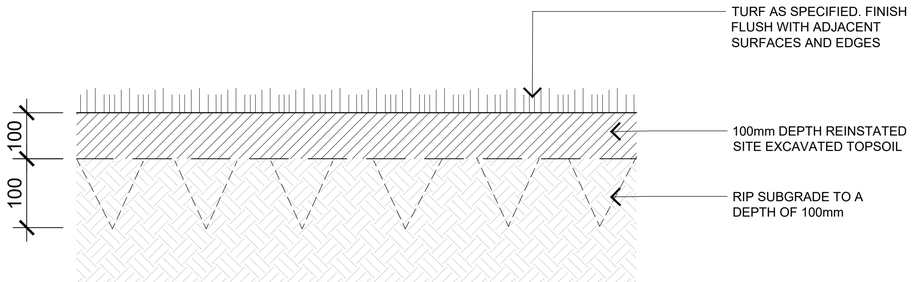
Rev
D



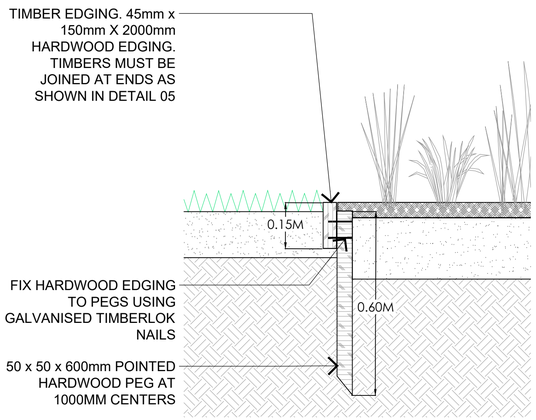
01 Tree Planting Typical



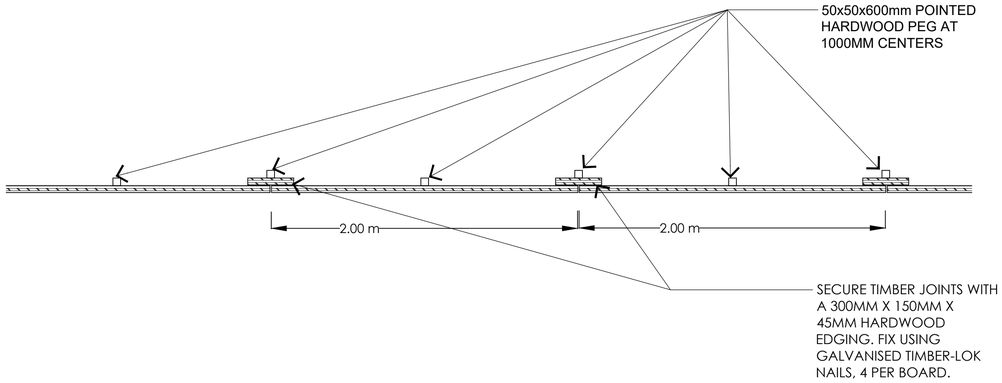
02 Mass Planting Typical



03 Turf Planting Typical



04 Mowing Strip Typical Section



05 Mowing Strip Typical Plan

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D	95% DD	AM	04/09/2023

Rev	Description	By/Checked	Date

Scale

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Phase
Design Development

Sheet Title
Landscape Details Sheet 1

Sheet No.
501

Rev
D