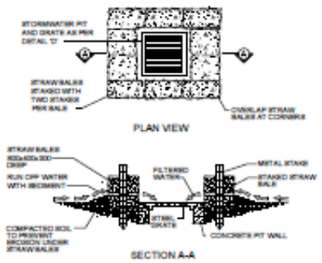
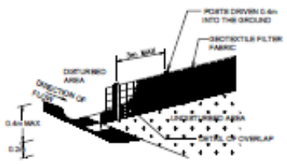
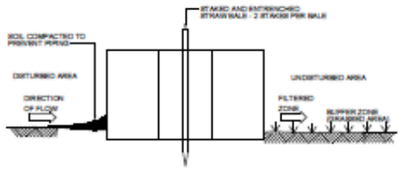


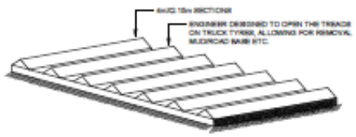
STORMWATER PIT WITH STRAW BALE SEDIMENT BARRIER
N.T.S.



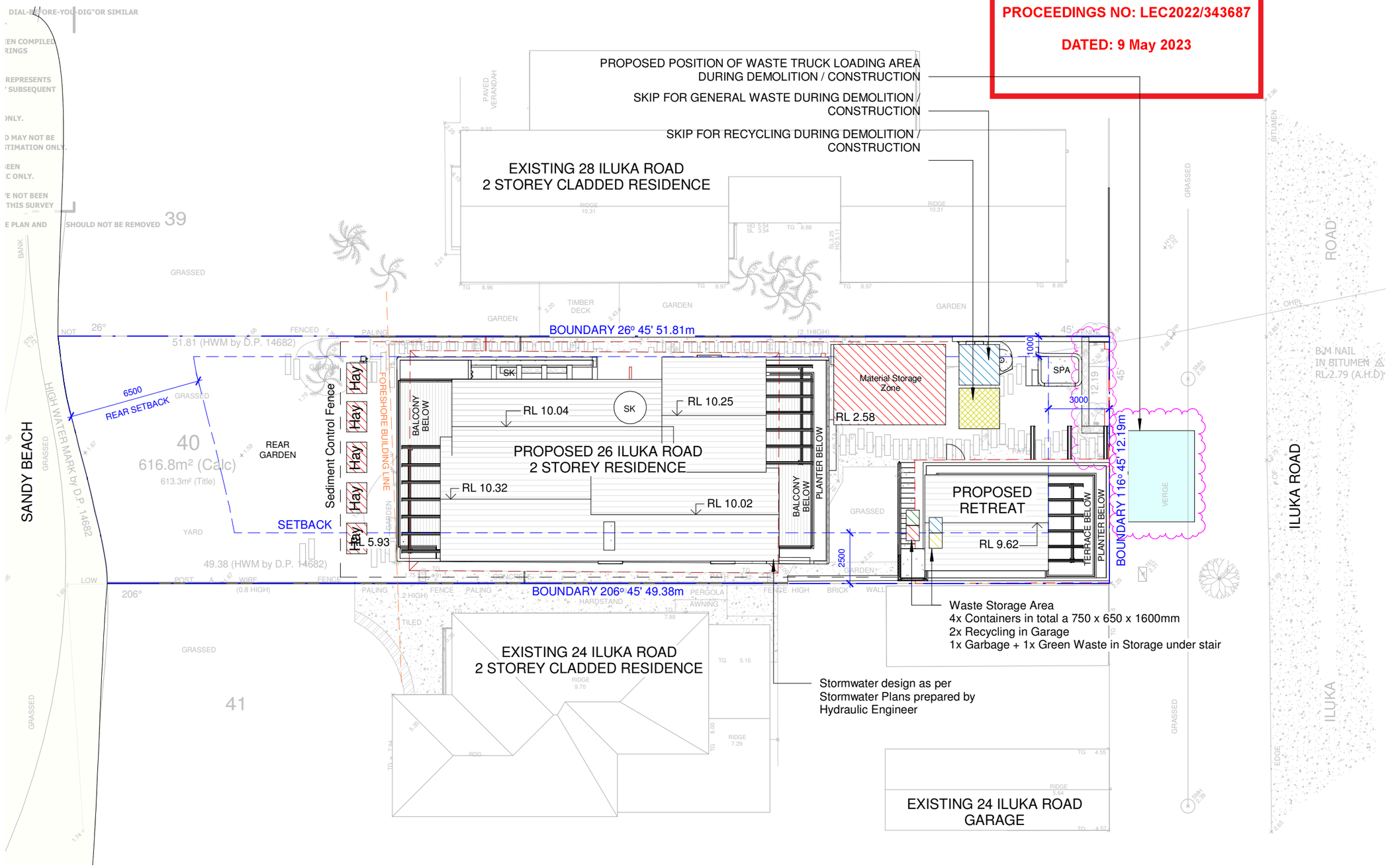
SEDIMENT CONTROL FENCE
N.T.S.



TYPICAL HAY BALE SECTION
N.T.S.



RUMBLE GRIDS TEMPORARY CONSTRUCTION VEHICLE EXIT
N.T.S.



northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

Project:

Turner House

26 Iluka Road
Palm Beach NSW 2108

Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	11/04/2023
3	Revised DA Set	18/04/2023
4	Revised DA Set	27/04/2023

Client:

Turner

Drawing Number: DA040 Issue 4

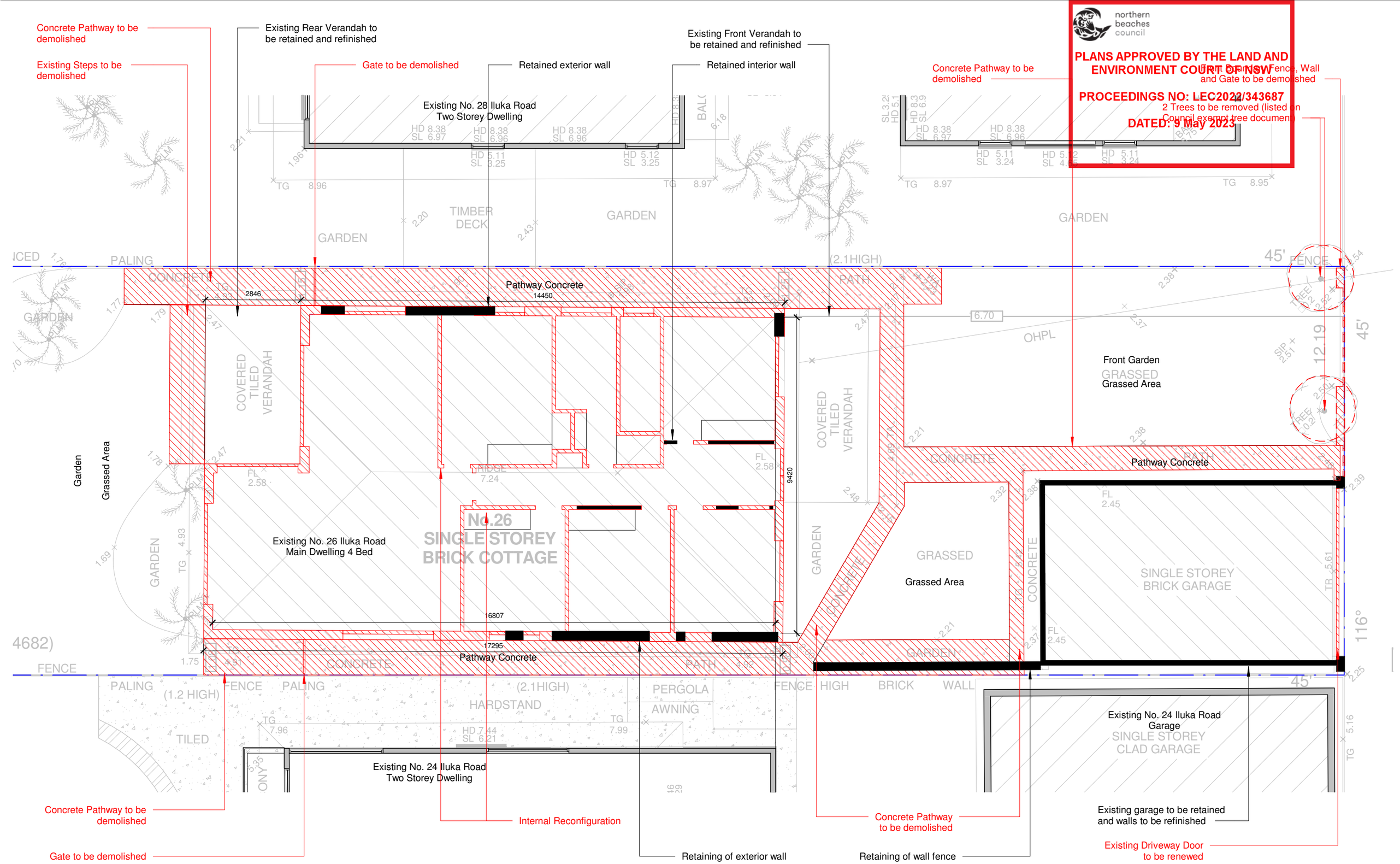
Date 27/04/2023

Drawing:

Erosion + Sediment Control

Scale 1 : 200 @ A3

Drawn by: EW Checked by: MB



northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108
Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21

Client:
Turner

Drawing Number: DA050 Issue 1

Date 15/11/21

Drawing:
Demolition Plan Ground Floor

Scale 1 : 100 @ A3

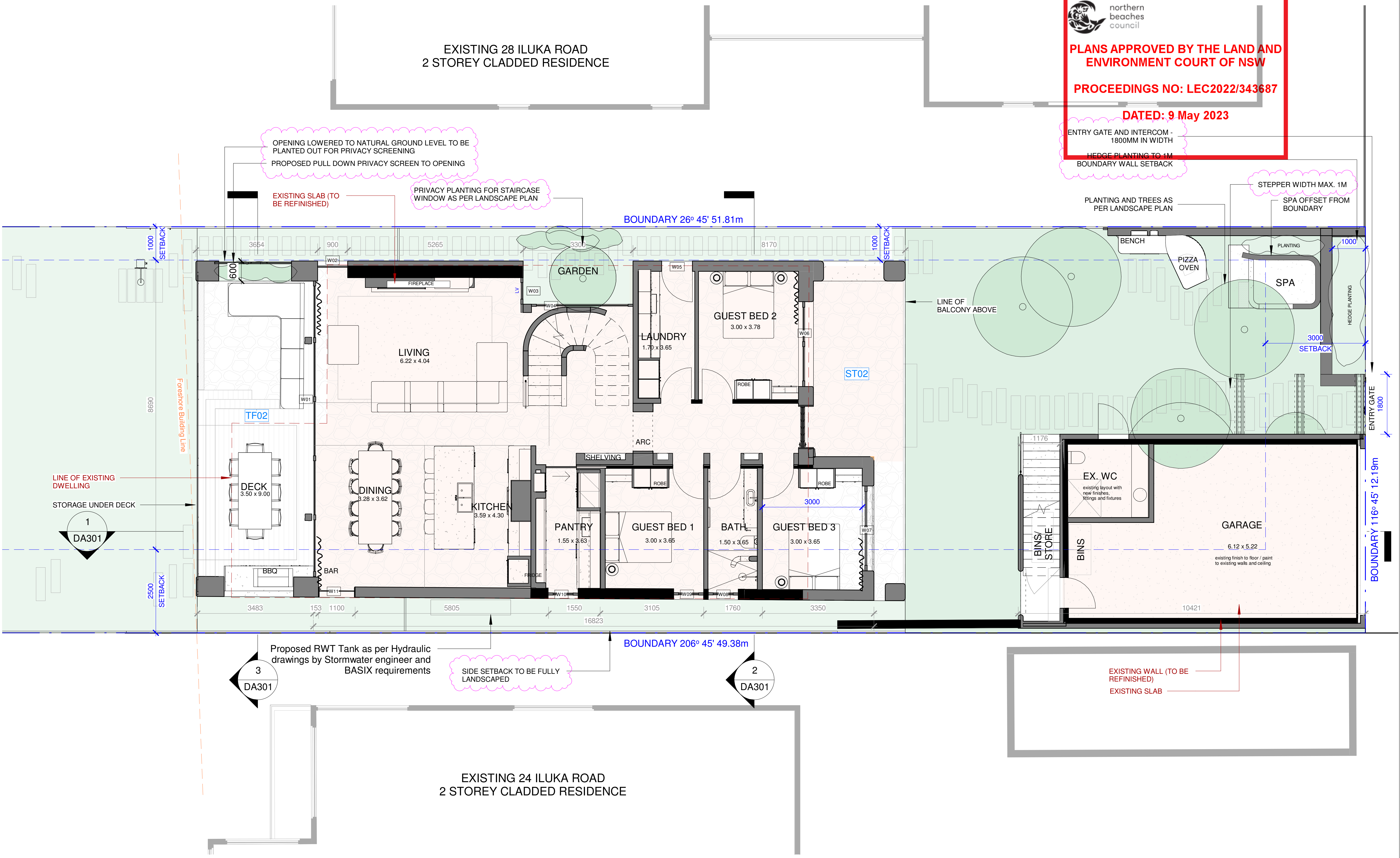
Drawn by: EW Checked by: MB

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023



EXISTING 28 ILUKA ROAD
2 STOREY CLADDED RESIDENCE
OPENING LOWERED TO NATURAL GROUND LEVEL TO BE PLANTED OUT FOR PRIVACY SCREENING
PROPOSED PULL DOWN PRIVACY SCREEN TO OPENING
EXISTING SLAB (TO BE REFINISHED)
PRIVACY PLANTING FOR STAIRCASE WINDOW AS PER LANDSCAPE PLAN
ENTRY GATE AND INTERCOM - 1800MM IN WIDTH
HEDGE PLANTING TO 1M BOUNDARY WALL SETBACK
STEPPER WIDTH MAX. 1M
PLANTING AND TREES AS PER LANDSCAPE PLAN
SPA OFFSET FROM BOUNDARY
BOUNDARY 26° 45' 51.81m
SETBACK
GARDEN
FIREPLACE
LIVING
6.22 x 4.04
LAUNDRY
1.70 x 3.65
GUEST BED 2
3.00 x 3.78
ROBE
ST02
LINE OF BALCONY ABOVE
BENCH
PIZZA OVEN
SPA
HEDGE PLANTING
3000
SETBACK
ENTRY GATE
1800
TF02
Foreshore Building Line
LINE OF EXISTING DWELLING
STORAGE UNDER DECK
DECK
3.50 x 9.00
DINING
3.28 x 3.62
KITCHEN
3.59 x 4.30
ARC
SHELVING
PANTRY
1.55 x 3.63
GUEST BED 1
3.00 x 3.65
BATH
1.50 x 3.65
GUEST BED 3
3.00 x 3.65
FRIDGE
BBQ
BAR
EX. WC
existing layout with new finishes, fittings and fixtures
GARAGE
6.12 x 5.22
existing finish to floor / paint to existing walls and ceiling
BINS/ STORE
BINS
BOUNDARY 116° 45' 12.19m
1
DA301
16823
BOUNDARY 206° 45' 49.38m
Proposed RWT Tank as per Hydraulic drawings by Stormwater engineer and BASIX requirements
SIDE SETBACK TO BE FULLY LANDSCAPED
3
DA301
2
DA301
EXISTING WALL (TO BE REFINISHED)
EXISTING SLAB
EXISTING 24 ILUKA ROAD
2 STOREY CLADDED RESIDENCE

cm

Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108

Project number 2021-128

Revisions

No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	30/05/2022
3	Revised DA Set	11/04/2023
4	Revised DA Set	27/04/2023

Client:
Turner

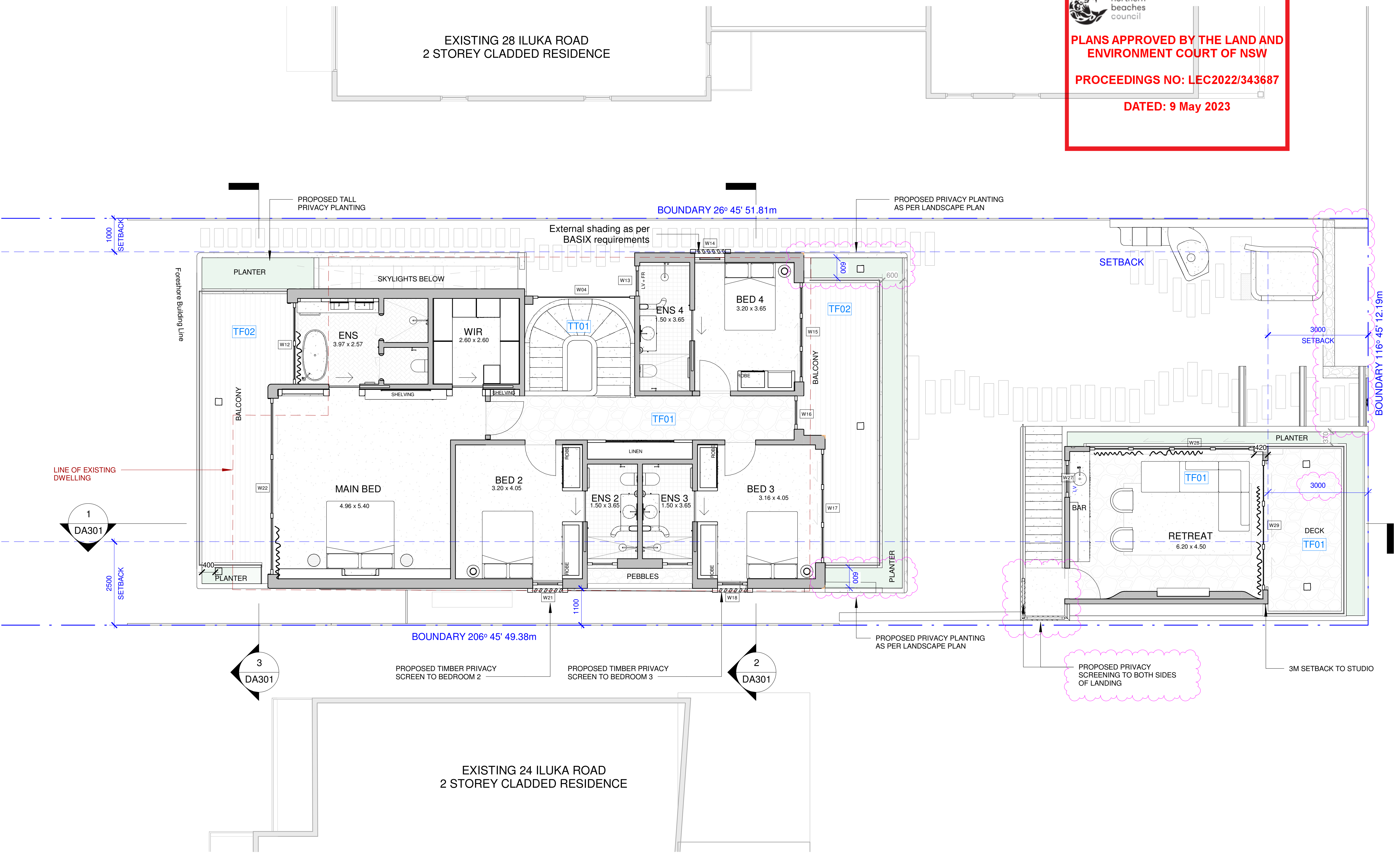
Drawing Number: **DA101**
Issue 4

Date 27/04/2023

Drawing:
Proposed Ground Floor

Scale 1 : 100 @ A3

Drawn by: AT/EW
Checked by: MB



cm

This Drawing must not be used for Construction unless signed as Approved

CM Studio Conditions of Use: This Document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.

Project:
Turner House
26 Iluka Road
Palm Beach NSW 2108
Project number 2021-128

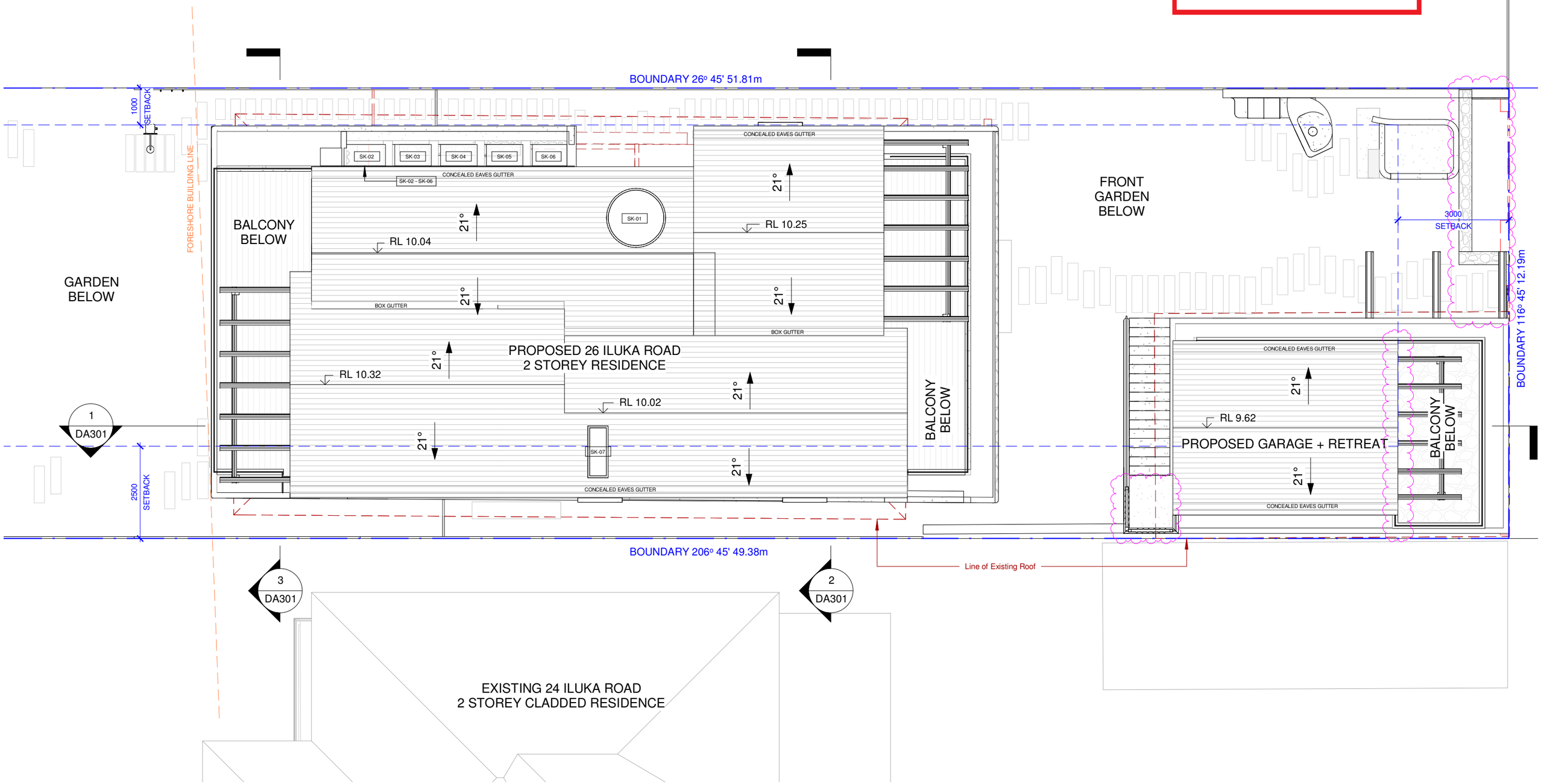
Revisions

No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	30/05/2022
3	Revised DA Set	11/08/2022
4	Revised DA Set	11/04/2023
5	Revised DA Set	18/04/2023
6	Revised DA Set	27/04/2023

Client: Turner

Drawing Number: DA102
Issue 6
Date 27/04/2023

Drawing: Proposed First Floor
Scale 1 : 100 @ A3
Drawn by: AT/EW
Checked by: MB



northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

cm

Project:

Turner House

26 Iluka Road
Palm Beach NSW 2108

Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	30/05/2022
3	Revised DA Set	11/04/2023
4	Revised DA Set	27/04/2023

Client:

Turner

Drawing Number: DA103 Issue 4

Date 27/04/2023

Drawing:

Proposed Roof Plan

Scale 1 : 100 @ A3

Drawn by: AT/EW Checked by: MB

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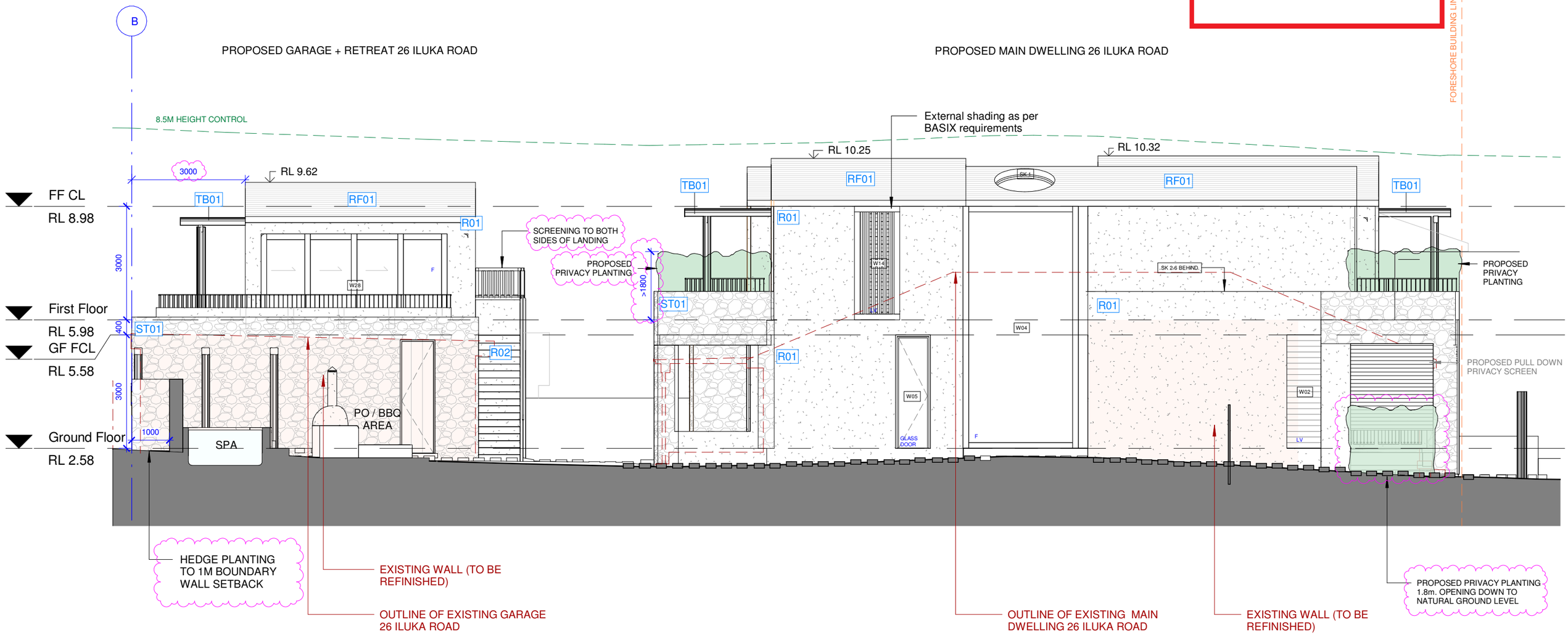
PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023



F	FIXED
AW	SWING / AWNING
LV	LOUVRES
	SLIDING ONE WAY
	SLIDING BOTH WAYS
FRST	FROSTED GLASS (CLEAR IF NOT SPECIFIED OTHERWISE)

cm

Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108
Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	30/05/2022
3	Revised DA Set	11/04/2023
4	Revised DA Set	18/04/2023
5	Revised DA Set	27/04/2023

Client:
Turner

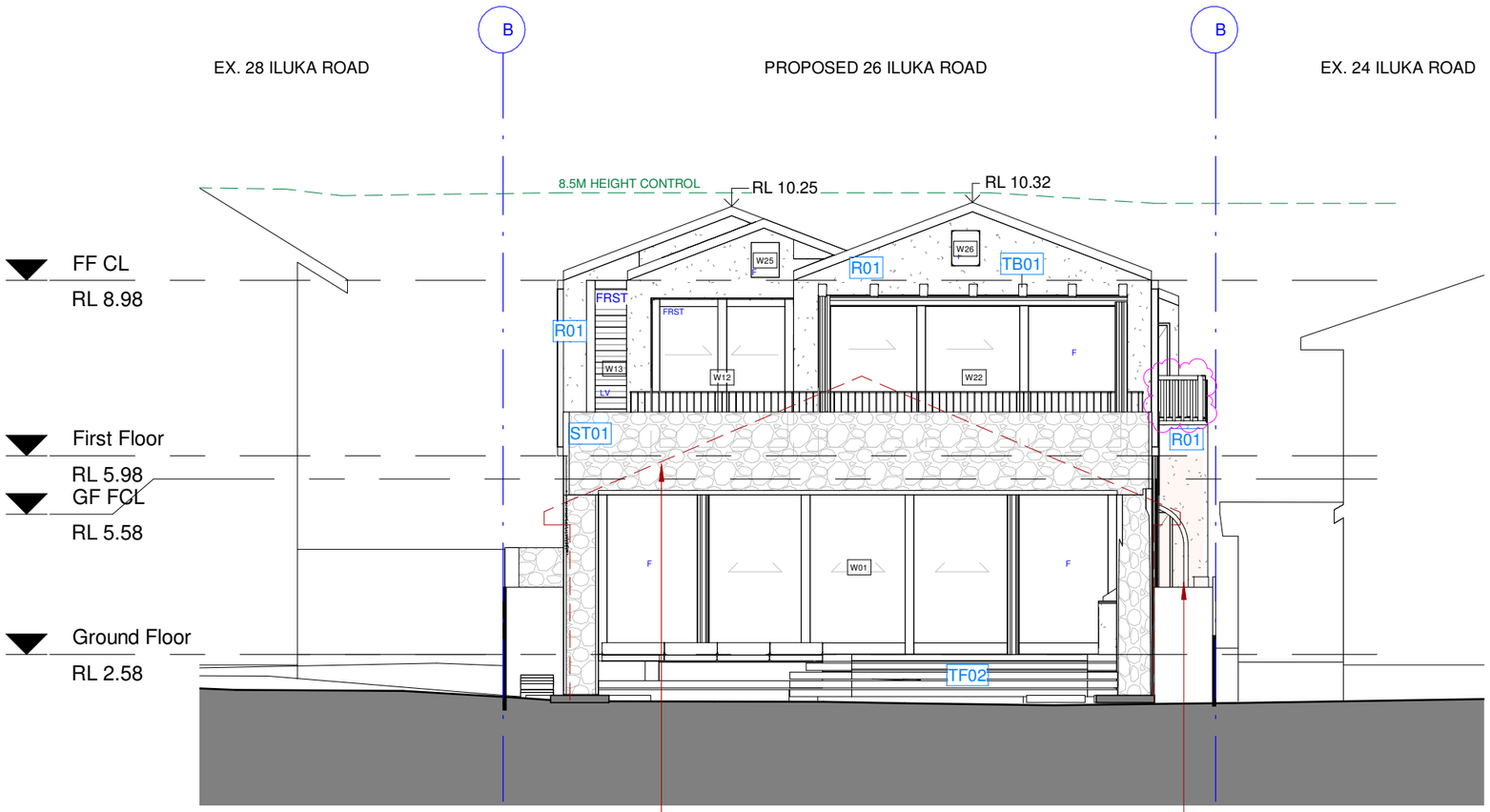
Drawing Number: DA201 Issue 5

Date 27/04/2023

Drawing:
Elevation NW

Scale 1 : 100 @ A3

Drawn by: AT/EW Checked by: MB



F	FIXED
AW	SWING / AWNING
LV	LOUVRES
	SLIDING ONE WAY
	SLIDING BOTH WAYS
FRST	FROSTED GLASS (CLEAR IF NOT SPECIFIED OTHERWISE)

Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108
Project number 2021-128

Revisions

No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	11/04/2023

Client:
Turner

Drawing Number: DA202 Issue 2

Date 11/04/2023

Drawing:
Elevation SW

Scale 1 : 100 @ A3

Drawn by: AT/EW Checked by: MB

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

PROPOSED MAIN DWELLING 26 ILUKA ROAD

PROPOSED GARAGE + RETREAT 26 ILUKA ROAD

B

FORESHORE BUILDING LINE

PROPOSED PRIVACY PLANTING

PROPOSED TIMBER PRIVACY SCREEN TO BEDROOM WINDOWS

PROPOSED PRIVACY PLANTING AS PER LANDSCAPE PLAN

8.5M HEIGHT CONTROL RIDGE

8.5M HEIGHT CONTROL FACE OF ELEVATION

NEIGHBOUR BEHIND

RL 10.32

RL 10.25

RL 10.02

RL 9.62

FF CL
RL 8.98

First Floor
RL 5.98

GF FCL
RL 5.58

Ground Floor
RL 2.58

3000

400

3000

3000

TB01 RF01 R01 ST01 SK07 FRST LV W21 W18 W11 W10 W09 W08

ENSUITE WINDOWS TO BE FROSTED

EXISTING WALLS (TO BE REFINISHED)

OUTLINE OF EXISTING MAIN DWELLING 26 ILUKA ROAD

EXISTING WALL (TO BE REFINISHED)

OUTLINE OF EXISTING GARAGE 26 ILUKA ROAD

F	FIXED
AW	SWING / AWNING
LV	LOUVRES
	SLIDING ONE WAY
	SLIDING BOTH WAYS
FRST	FROSTED GLASS (CLEAR IF NOT SPECIFIED OTHERWISE)

cm

Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108

Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	30/05/2022
3	Revised DA Set	11/08/2022
4	Revised DA Set	11/04/2023

Client:
Turner

Drawing Number: DA203 Issue 4

Date 11/04/2023

Drawing:
Elevation SE

Scale 1 : 100 @ A3

Drawn by: AT/EW Checked by: MB

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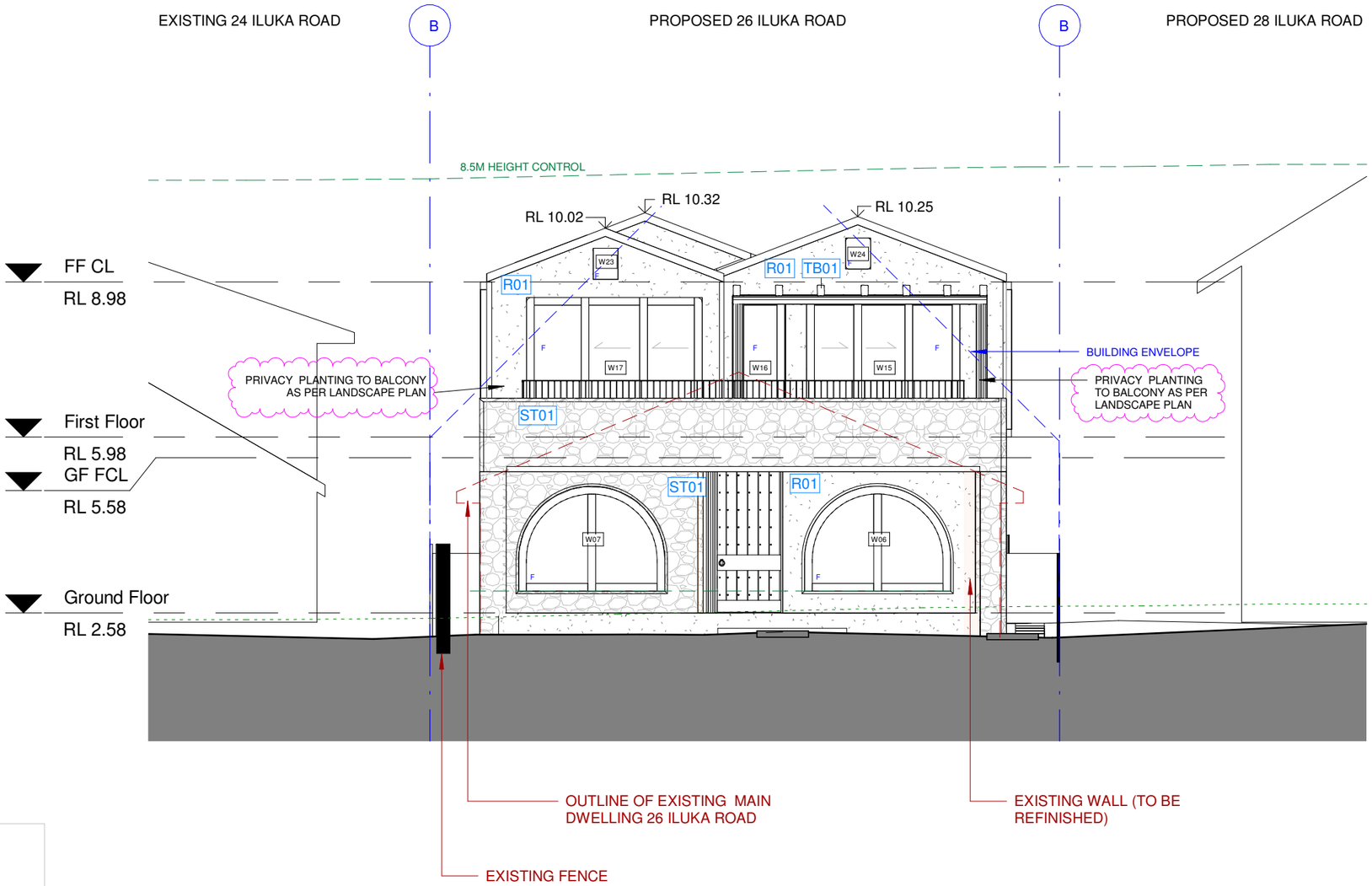
PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023



F	FIXED
AW	SWING / AWNING
LV	LOUVRES
	SLIDING ONE WAY
	SLIDING BOTH WAYS
FRST	FROSTED GLASS (CLEAR IF NOT SPECIFIED OTHERWISE)

cm

Project:

Turner House

26 Iluka Road
Palm Beach NSW 2108

Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	11/04/2023

Client:

Turner

Drawing Number: DA204 Issue 2

Date 11/04/2023

Drawing:

Elevation NE

Scale 1 : 100 @ A3

Drawn by: AT/EW Checked by: MB

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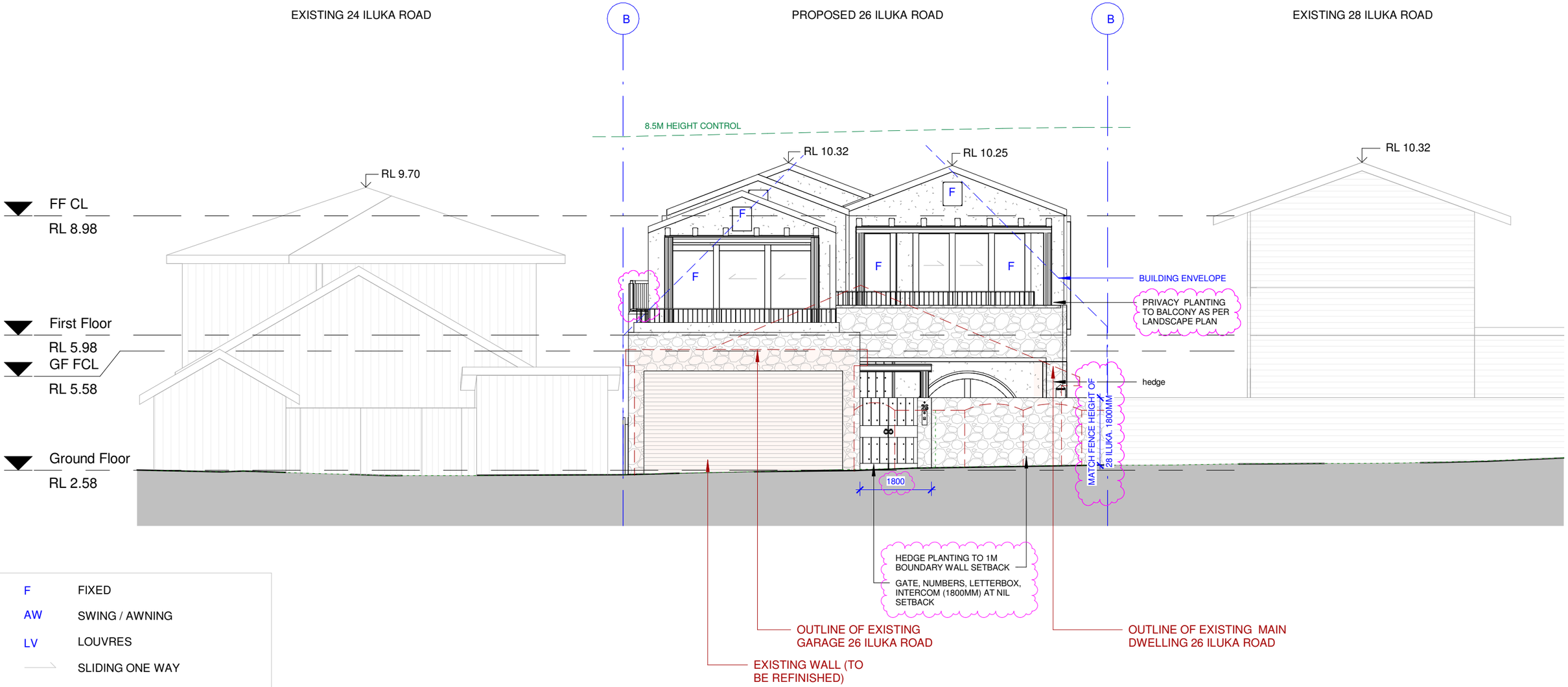
PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023



F	FIXED
AW	SWING / AWNING
LV	LOUVRES
	SLIDING ONE WAY
	SLIDING BOTH WAYS
FRST	FROSTED GLASS (CLEAR IF NOT SPECIFIED OTHERWISE)

cm

Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108
Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	18/04/2023
3	Revised DA Set	27/04/2023

Client:
Turner

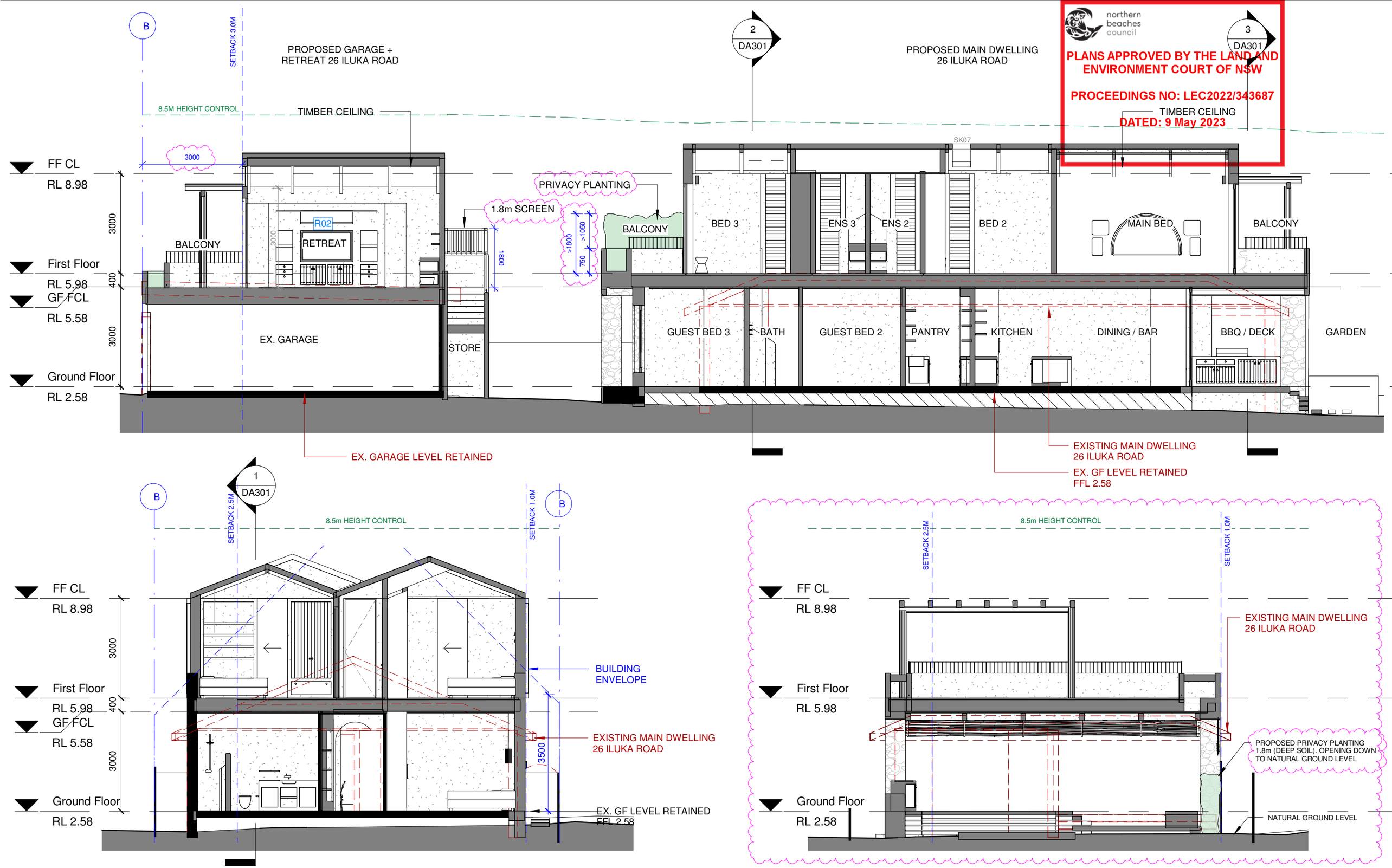
Drawing Number: DA205 Issue 3

Date 27/04/2023

Drawing:
Streetscape Elevation

Scale 1 : 100 @ A3

Drawn by: AT/EW Checked by: MB



Project:
Turner House

26 Iluka Road
Palm Beach NSW 2108
Project number 2021-128

Revisions		
No.	Description	Date
1	DA Set	15/11/21
2	Revised DA Set	11/04/2023
3	Revised DA Set	18/04/2023

Client:
Turner

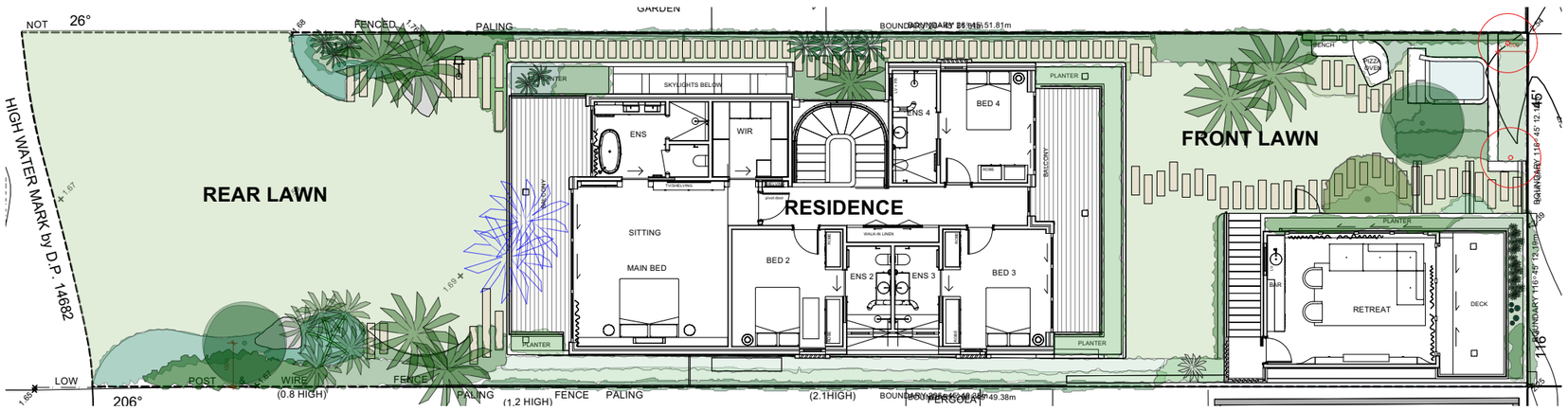
Drawing Number: DA301
Issue 3
Date 18/04/2023

Drawing:
Section A-A, B-B + C-C

Scale 1 : 100 @ A3
Drawn by: AT/EW
Checked by: MB

26 Iluka Rd, Palm Beach

DEVELOPMENT APPLICATION



GENERAL NOTES:

GRAPHIC ILLUSTRATION
Please note that the plant graphics are indicative sizes only and not an accurate representation at time of purchase.
Do not scale from drawings. All dimensions in mm unless otherwise stated. Figure dimensions shall take precendence over scale.
Contractors must verify all dimensions on site before commencing any work or making shop drawings.
All works shall be carried out in accordance with ASA, BCA and Local Government Regulations.
This drawing is protected by copyright.

SITE PREPARATION
All existing plants marked for retention shall be protected for the duration of works. Remove from site all perennial weeds and rubbish before commencing landscape works.

SOILWORKS
Thoroughly cultivate subsoil to a depth of 200mm. Supply and install to a depth of 300mm quality garden soil mix to all planting beds and 150mm turf underlay to lawn areas.

MULCH
Supply and install a 75mm layer of hardwood horticultural grade mulch to all planting beds set down 25mm from adjacent paving or garden edge.

MAINTENANCE
All failed or defective plant species to be replaced by landscaper for a 3 months period following completion of work.
Further maintenance during and after this period should include watering, weeding, fertilising, pest and disease control, pruning and hedging, reinstatement of mulch and keeping the site neat and tidy.

GENERAL PLANTING NOTES:

NOTE: It is recommended that all plants used be subject to an establishment period. During this period maintenance work carried out will include; watering, mowing, weeding, fertilising, pest and disease control, reseeding, returfing, staking and tying, replanting, cultivating, pruning, hedge clipping, aerating, reinstatement of mulch, top dressing and keeping the site neat and tidy.

NOTE: Plants shall be vigorous, well established, of good form consistent with species or variety, not soft or forced, free from disease and insect pests, with large healthy root systems and no evidence of having been restricted in growth or damaged. Root system shall be well balanced in relation to the size of the plant.

NOTE: install 'root barrier' or equivalent to manufacturers specifications to protect nearby structures and services.

NOTE: Install temporary drip irrigation system under mulch in tree protection zones and water on allotted days.

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

PLANT SCHEDULE

Botanic Name	Common Name	Mature Height	Pot Size	Qty
Agave gypsophila	Blue Wave Agave	0.6-0.9m	200mm	11
Agave weberi	Maguey Liso	1m	400mm	3
Aloe 'Baby Bush Yellow'	Baby Bush Yellow	0.4m	200mm	36
Alpinia nutans	Dwarf Cardamom	1.2m	200mm	14
Aptenia cordifolia	Desert Rose	0.1m	140mm	25
Banksia integrifolia	Coastal Banksia	5-10m	200Ltr	2
Cissus antarctica	Kangaroo Vine	0.3m	200mm	30
Correa alba	White Correa	1.2m	200mm	65
Delosperma cooperi	Ice Plant	ground cover	140mm	25
Dichondra repens	Kidney Weed	0.2m	140mm	270
Euphorbia Cowboy	Cowboy Cactus	1.5m	300mm	2
Ficus 'Green Island'	Green Island Ficus	1m	300mm	9
Ficus pumila	Creeping Fig	200mm	climber	5
Furcraea foetida	Mauritus Hemp	1.5-3m	500mm	3
Howea forsteriana	Kentia Palm	5-12m	advanced	3
Isolepis nodosa	Knobby Club Rush	1m	140mm	80
Juncus usitatus	Common Rush	1-1.2m	140mm	55
Leptospermum laevigatum	Coastal Tea Tree	2-5m	200mm	7
Ligularia reniformis	Tractor Seat	1m	200mm	7
Lomandra katrinus	Fine Matt Grass	0.7m	200mm	30
Lomandra sp.	Matt Grass	0.7m-1.2m	200mm	50
Monstera deliciosa	Fruit Salad Plant	0.5-1.5m	300mm	7
Myoporum parvifolium	Creeping Boobialla	Groundcover	140mm	54
Pandanus tectorius	Scew Pine	4-12m	advanced	1
Phormium tenax	NZ Flax	1.5-3m	400mm	2
Plumeria	Frangipani	6m	advanced	1
Rhapis excelsa	Lady Palm	4-5m	100Ltr	5
Sansevieria 'Uganda'	Snake Plant	0.6m	250mm	67
Solandra maxima	Cup Of Gold	Climber	250mm	2
Strelitzia nicolai	Giant Bird Of Paradise	5-7m	300mm	4
Syzygium 'Resilience'	Resilient Lilly Pilly	2-4m	400mm	11
Trachelospermum asiaticum	Asiatic Jasmine	0.3-0.5m	200mm	30
Viola hederacea	Native Violet	0.2m	140mm	48
Zoysia tenuifolia	Zoysia Grass	ground cover	140mm	170

LOCATION PLAN

Project:
26 Iluka Rd, Palm Beach

Client:
Turner

Dwg no:
LP01-D9121

Title:
Ground Landscape

Drawn by:	Checked:	Scale:
TB	TS	1:100 @ A3

Issue:	Revision:	Date:
01	F	27.04.2023

Landscape Design Sydney
53 Cranbrook St
Botany NSW 2019

Tel: (02) 9316 9044
Fax: (02) 9316 9055

DANGAR BARIN SMITH

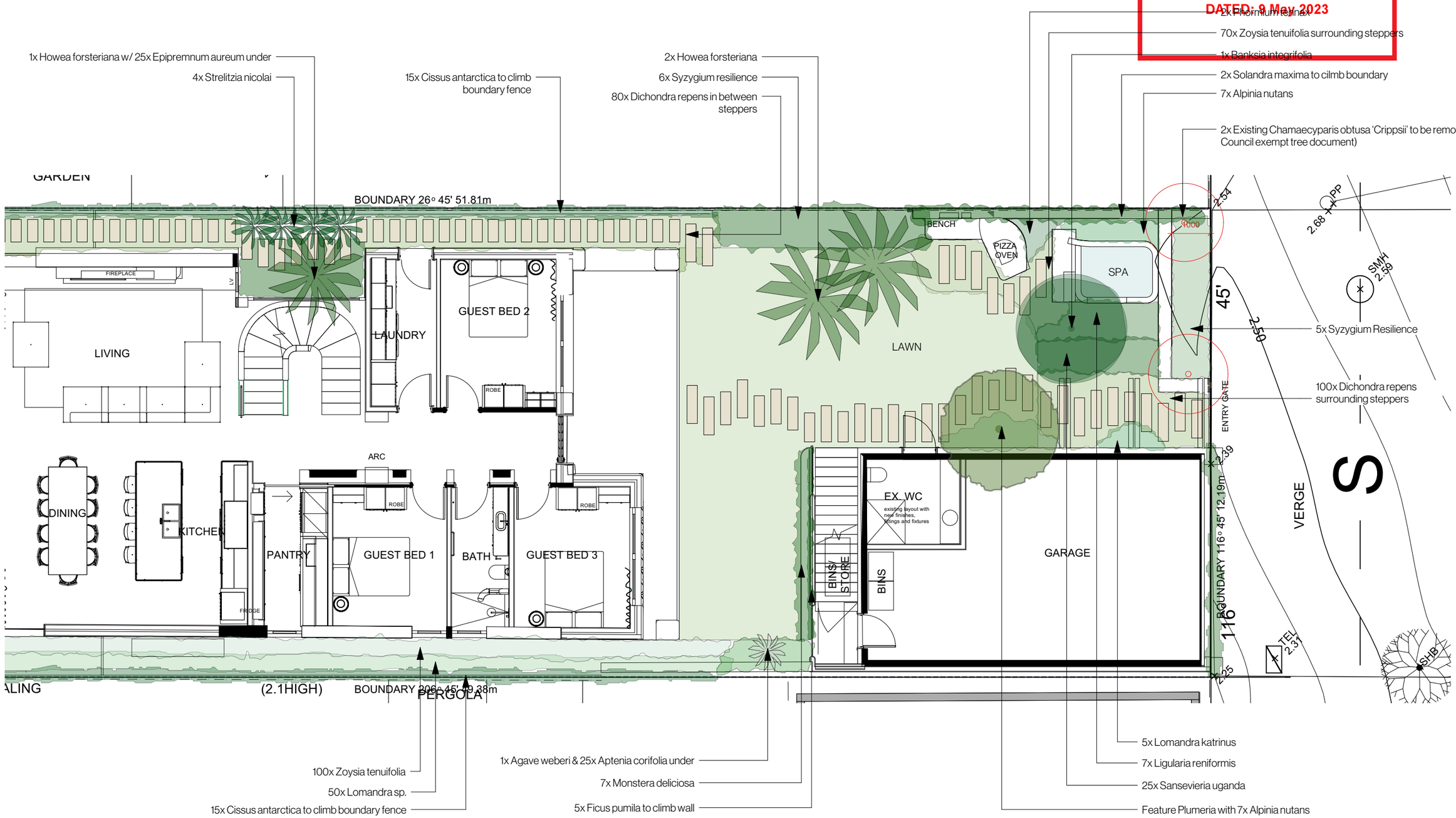
GROUND FRONT LANDSCAPE PLAN

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023



Project: 26 Iluka Rd, Palm Beach

Client: Turner

Dwg no: LP02-D9121

Title: Ground Landscape

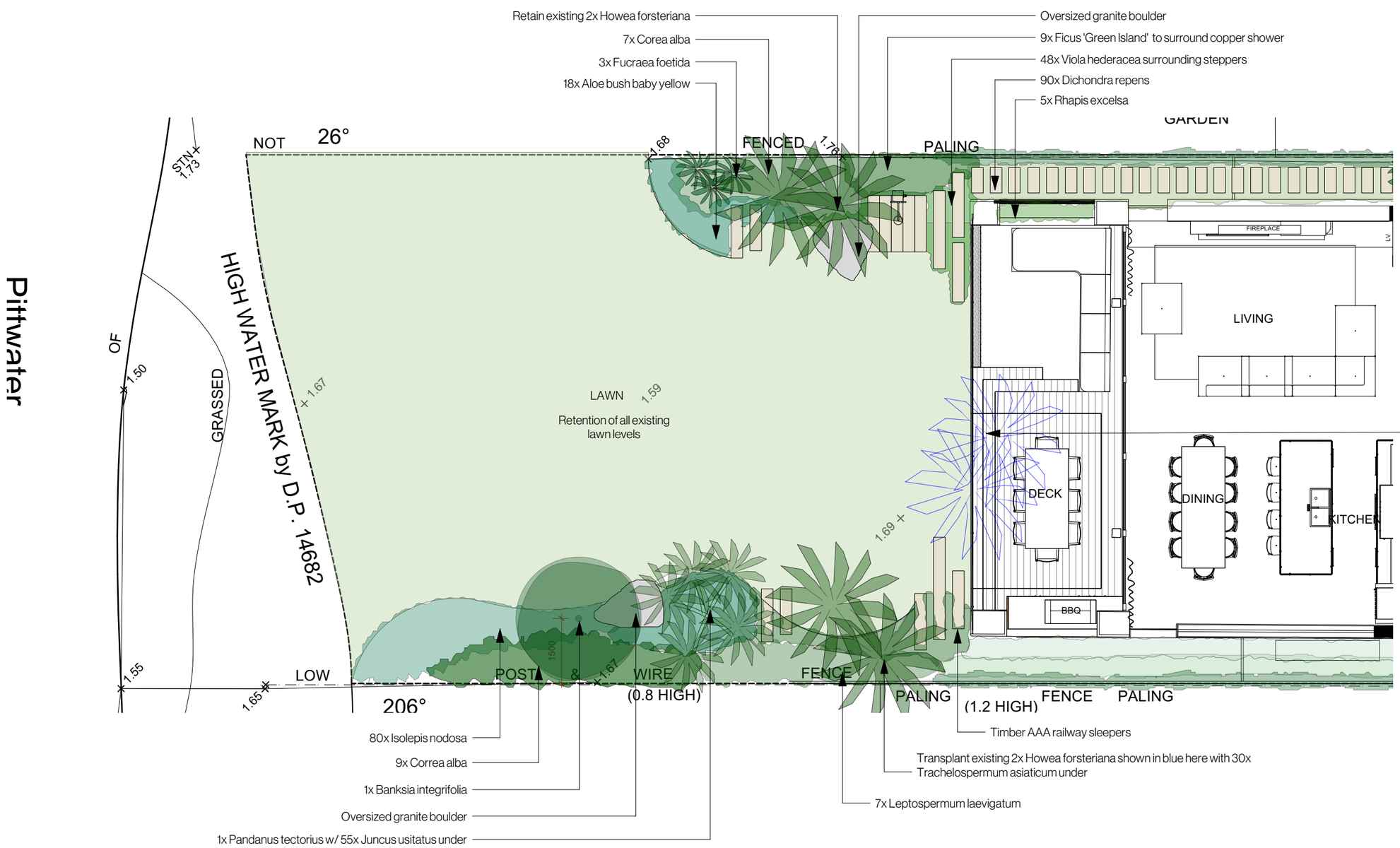
Drawn by:	Checked:	Scale:
TB	TS	1:100 @ A3

Issue:	Revision:	Date:
01	F	27.04.2023

Landscape Design Sydney
53 Cranbrook St
Botany NSW 2019
Tel: (02) 9316 9044
Fax: (02) 9316 9055

DANGAR BARIN SMITH

GROUND REAR LANDSCAPE PLAN



Project:
26 Iluka Rd, Palm Beach

Client:
Turner

Dwg no:
LP03-D9121

Title:
Ground Landscape

Drawn by:	Checked:	Scale:
TB	TS	1:100 @ A3

Issue:	Revision:	Date:
01	F	27.04.2023

Landscape Design Sydney
53 Cranbrook St
Botany NSW 2019

Tel: (02) 9316 9044
Fax: (02) 9316 9055

DANGAR BARIN SMITH

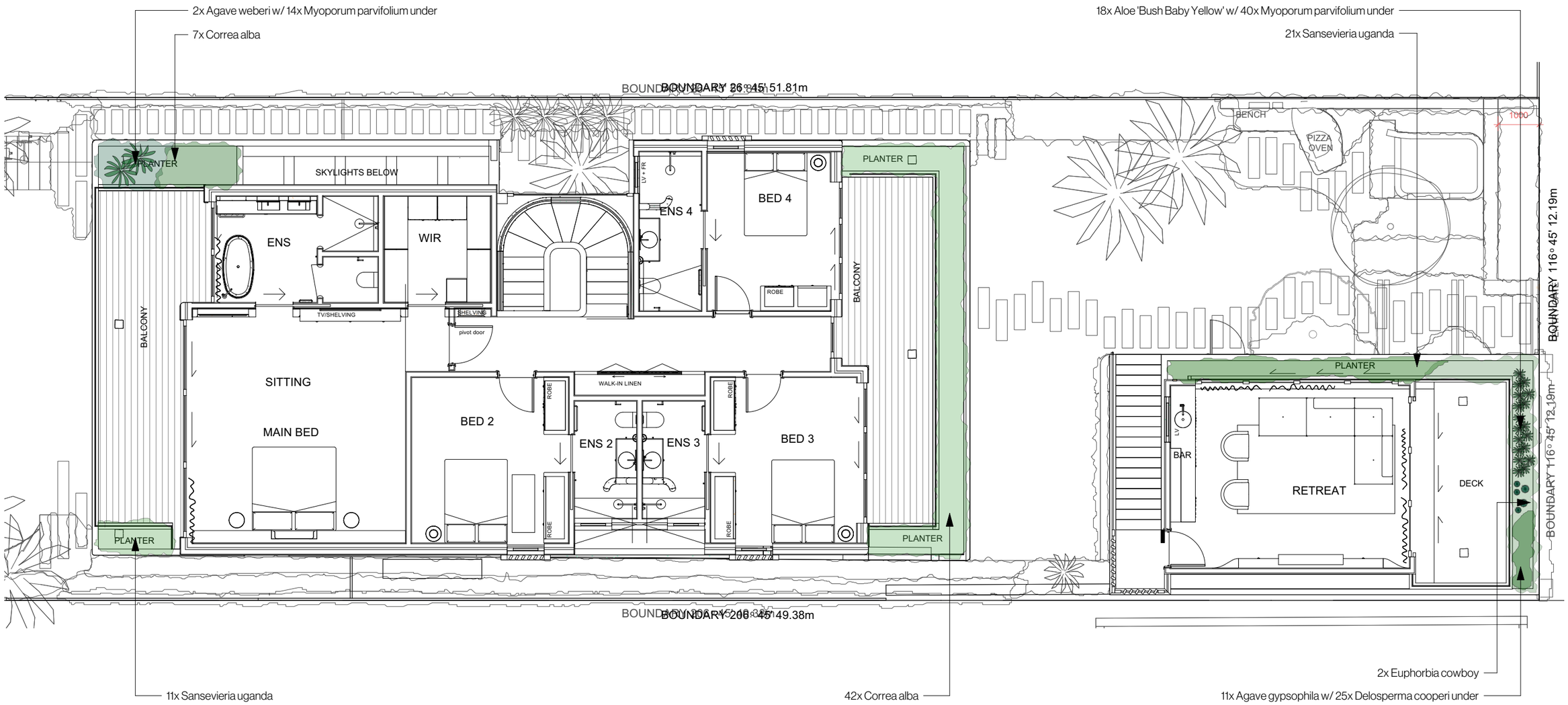
northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

FIRST FLOOR LANDSCAPE PLAN



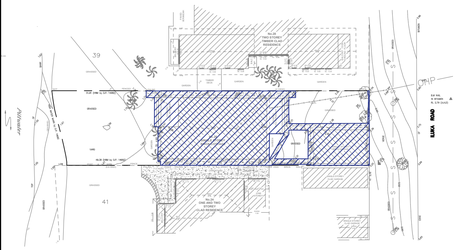
Project: 26 Iluka Rd, Palm Beach	Dwg no: LP04-D9121	Drawn by: TB	Checked: TS	Scale: 1:100 @ A3	Landscape Design Sydney 53 Cranbrook St Botany NSW 2019	Tel: (02) 9316 9044 Fax: (02) 9316 9055
Client: Turner	Title: First Landscape	Issue: 01	Revision: F	Date: 27.04.2023	Figure dimensions shall take precendence over scale. Contractors must verify all dimensions on job before commencing any work or making shop drawings. This drawing is protected by copyright.	

DANGAR BARIN SMITH

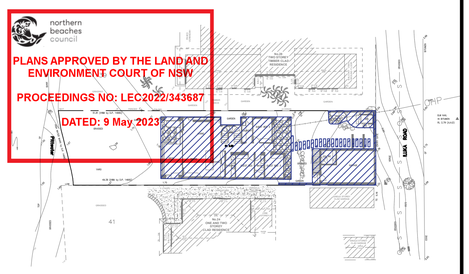
NOT FOR CONSTRUCTION

CIVIL CONSULTING ENGINEERS

PROPOSED NEW DWELLING AND DETACHED GARAGE
26 ILUKA ROAD, PALM BEACH



EXISTING IMPERVIOUS AREA: 330m² 53%)
SCALE = 1 : 500



PROPOSED IMPERVIOUS AREA: 303m² (49%)
SCALE = 1 : 500

STORMWATER DRAINAGE NOTES:

1. ALL PIPES TO BE 100mm ø UNLESS NOTED OTHERWISE.
2. ALL PIPES TO BE uPVC TO AS 1254–2002 UNLESS NOTED OTHERWISE.
3. ALL PIPES TO BE LAYED AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
4. ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS. (NO COMPACTION REQUIRED BELOW LANDSCAPING). COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
5. ALL DOWN PIPES TO BE 100mm ø UNLESS NOTED OTHERWISE.
6. DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK.
7. PROVIDE CLEANING EYES AT ALL DOWNPIPES.
8. ALL PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER. CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 1 N12 TOP TIE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 1000 DEEP TO BE MINIMUM 900x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH N12 AT 250 EACH WAY UNLESS NOTED OTHERWISE.
9. ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
10. ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
11. PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO APPROVED SEDIMENT AND EROSION CONTROL PLAN, EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
12. ALL LEVELS SHOWN ARE TO AHD UNLESS NOTED OTHERWISE.
13. ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
14. ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
15. ALL WORKS TO BE IN ACCORDANCE WITH AS 3500.3:2018 NATIONAL PLUMBING DRAINAGE CODE PART 3 – STORMWATER DRAINAGE.
16. UNLESS NOTED OTHERWISE, SUB–SOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
17. IF NOT INDICATED ON PLANS, PROVIDE LEAF CATCHERS TO ALL DOWNPIPES.
18. EXISTING STORMWATER SYSTEM TO BE CHECKED AND UPGRADED AS REQUIRED IN ACCORDANCE WITH AS 3500.3: 2018.
19. CARE SHOULD BE TAKEN WHEN UNDERTAKING WORKS IN THE VICINITY OF SELECTED TREES NOT TO DISTURB THE TREE ROOT SYSTEM. HAND DIGGING OF TRENCHES MAY BE NECESSARY. REFER ARBORISTS REPORT WHERE REQUIRED.
20. CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO EXCAVATION AND NOTIFY ENGINEER OF ANY POTENTIAL CLASHES WITH THE PROPOSED DRAINAGE EASEMENT PIPE LINE.
21. ALL SUB–SOIL DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH THE STRUCTURAL AND GEOTECHNICAL REQUIREMENTS, AUSTRALIAN STANDARDS AS 3500.3:2018 AND IS TO BE DIRECTED TO THE SITE DRAINAGE SYSTEM BY MEANS OF GRAVITY DISCHARGE ONLY. DO NOT CONNECT SUB–SOIL PIPES TO AREAS WITH HIGHER SURFACE LEVELS U.N.O..
22. ALL PIPES SHOWN ARE INDICATIVE ONLY AND MINIMUM CLEARANCES FROM THE EXTERNAL WALLS OF BUILDINGS, FOR THE EXCAVATION OF TRENCHES, ARE TO BE PROVIDED IN ACCORDANCE WITH AS 3500.3: 2018.
23. ANY COMPONENTS OF THE EXISTING SYSTEM PROPOSED TO BE RETAINED ARE TO BE CERTIFIED DURING CONSTRUCTION TO BE IN GOOD CONDITION AND OF ADEQUATE CAPACITY TO CONVEY ADDITIONAL RUNOFF AND BE REPLACED OR UPGRADED IF REQUIRED.
24. ANY CHARGED PIPES MUST BE A MINIMUM OF 100mm (UNLESS NOTED OTHERWSIE) WITH ALL JOINTS MUST BE SOLVENT WELDED. A CLEANING EYE, OR FLUSH OUT POINT, MUST BE PROVIDED AT THE LOW POINT IN THE SYSTEM WITHIN A PIT THAT CAN BE DRAINED TO AN ONSITE DISPERSAL SYSTEM.
25. PROVISION IS TO BE MADE FOR THE COLLECTION AND DISPOSAL IN AN APPROVED MANNER OF ANY OVERLAND FLOW OR SUB–SURFACE FLOW ENTERING THE SUBJECT PROPERTY, OR CONCENTRATED AS A RESULT OF THE PROPOSED WORKS. ANY REDIRECTION OR TREATMENT OF FLOWS ENTERING THE PROPERTY SHALL NOT ADVERSELY AFFECT ANY OTHER PROPERTIES.
26. PREVENT ANY STORMWATER EGRESS INTO ADJACENT PROPERTIES BY CREATING PHYSICAL BARRIERS AND SURFACE DRAINAGE INTERCEPTION.
27. GUTTER GUARDS MUST BE INSTALLED ON ALL GUTTERS TO MINIMISE DEBRIS ENTERING THE SYSTEM.
28. ALL SUB–SOIL DRAINAGES, STRIP DRAINS AND DRAINAGE PITS SHALL DISCHARGE TO THE ESTABLISHED SITE DISCHARGE POINT U.N.O AND BE CONSTRUCTED IN ACCORDANCE WITH AS3500.3: 2018 REQUIREMENTS.
29. OVERFLOW PATHS SHALL BE PROVIDED TO ALLOW FOR FLOWS IN EXCESS OF THE CAPACITY OF THE PIPE/DRAINAGE SYSTEM DRAINING THE SITE.
30. WHERE ANY NEW STORMWATER DRAINAGE SYSTEM CROSSES THE FOOTPATH AREA WITHIN ANY ROAD, SEPERATE APPROVAL UNDER SECTION 138 OF THE ROAD ACT 1993 MUST BE OBTAINED FROM COUNCIL FOR THOSE WORKS PRIOR TO THE ISSUE OF ANY CONSTRUCTION CERTIFICATE.
31. CONCEALED DOWNPIPES MUST BE INSTALLED IN ACCORDANCE WITH SECTION 4.5.6 OF AUSTRALIAN STANDARDS AS3500.3: 2018 REQUIREMENTS. BUILDER TO ENSURE LOCATIONS DO NOT RESTRICT NORMAL OPERATION OF DOORS, WINDOWS, ACCESS OPENINGS OR OCCUPANCY OF A BUILDING, DO NOT CAUSE NUISANCE OR LEAD TO INJURY OF A PERSON, DO NOT INTERFERE WITH THE STRUCTURAL INTEGRITY OF THE WALL OR COLUMN, AS CLOSE AS PRACTICABLE TO THE SUPPORTING STRUCTURE, ARE PROTECTED FROM MECHANICAL DAMAGE, AT LEAST 100mm CLEAR OF ANY ELECTRICAL CABLE OR GAS PIPE, AT LEAST 50mm FROM ANY OTHER PIPEWORK OR SERVICE. CONCEALED DOWNPIPES TO HAVE INSPECTION OPENINGS THAT EXTEND TO THE FACE OF THE WALL OR SLAB FOR MAINTENANCE. SEAMS AND JOINTS TO BE WATERTIGHT. IF INSPECTION OPENINGS ARE REQUIRED FOR TESTING AND MAINTENANCE PURPOSES, INSPECTION OPENINGS SHALL HAVE A NOMINAL SIZE OF NOT LESS THAT THE NOMINAL DIAMETER OF THE DOWNPIPE.
32. WHERE A DOWNPIPE IS CONNECTED TO A SITE STORMWATER DRAIN LOCATED BELOW A SLAB–ON–GROUND, THE CONNECTION OF A CONCEALED DOWNPIPE SHALL BE LOCATED ABOVE THE LEVEL OF THE FLOOR.
33. SUPPORT SYSTEMS OF DOWNPIPES OR PIPEWORK MUST BE INSTALLED IN ACCORDANCE AUSTRALIAN STANDARDS AS3500.3: 2018 REQUIREMENTS.
34. FOR CONCEALED EAVES GUTTERS, U.N.O THE TOP EDGE OF THE FASCIA SHOULD NOT BE LESS THAN 25mm BELOW THE TOP OF THE BACK OF THE GUTTER, OR INTEGRAL FLASHING (TAIL) WITH THE TOP EDGE OF THE FLASHING NOT LESS THAN 25mm ABOVE THE TOP OF THE FASCIA.
35. THE FOLLOWING ABBREVIATIONS DENOTE:
FSL – FINISHED SURFACE LEVEL OR RL – REDUCED LEVEL
IL – INVERT LEVEL OF PIPE
INV. – INVERT LEVEL OF PIT
CL – CENTRELINE OF ORIFICE
TWL – TOP WATER LEVEL

NOTE:
THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE, FOOTPATH AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THAT THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES.

RAINWATER HARVESTING REQUIREMENTS:

1. CONSIDERING THE ROOF CATCHMENT AREA, LOCATION OF PROPERTY, INTENDED USE OF RAINWATER AND GARDEN SIZE WE RECOMMEND PROVIDING A RAINWATER TANK FOR USE AS PER BASIX REQUIREMENTS, HCCRENS WATER SMART PRACTICE NOTE (N).4) AND THE NSW HEALTH REQUIRMENTS FOR NON DRINKING USE ONLY AS FOLLOWS:
a) TO BASIX REQUIREMENTS.
2. THE TANKS PROVIDED WILL REDUCE PRESSURE ON COUNCIL'S STORMWATER INFRASTRUCTURE.
3. REFERENCES: COOMBES P.J. & KUCZERA G. (2001), "RAINWATER TANK DESIGN FOR WATER SUPPLY & STORMWATER MANAGEMENT." STORMWATER INDUSTRY ASSOCIATION REGIONAL CONFERENCE. PATRICK DUPONT & STEVE SHACKEL, "RAINWATER" AUSTRALIAN GOVERNMENT (2004), "GUIDANCE ON USE OF RAINWATER TANKS".
4. ALL CONNECTIONS TO PLUMBING AND RAINWATER TANKS TO BE IN ACCORDANCE WITH SYDNEY WATERS' GUIDE "INSTALLING A RAINWATER TANK" AVAILABLE AT www.sydneywater.com.au OR
FROM LOCAL COUNCIL GUIDLINES.
5. PROVIDE A DUAL SUPPLY SYSTEM AND BACKFLOW PREVENTION SYSTEM IN ACCORDANCE WITH 'BASIX–DESIGN GUIDE FOR SINGLE DWELLINGS' BY NSW DEPARTMENT OF INFRASTRUCTURE, PLANING AND NATURAL RESOURCES AND AS3500.1.
6. IF NOT SPECIFIED ON PLANS, THE FIRST FLUSH SYSTEM IS TO HAVE A MINIMUM SIZE OF 20L PER 100m2 OF ROOF CATCHMENT AREA PRIOR TO ENTERING THE RAINWATER TANK. INDIVIDUAL SITE ANALYSIS IS REQUIRED IN HEAVILY POLLUTED AREAS TO DETERMINE IF LARGER VOLUMES OF FIRST FLUSH RAINWATER ARE TO BE DIVERTED. IF IN DOUBT, CHECK WITH LOCAL HEALTH AUTHORITIES.
7. SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4–6mm AND DESIGNED TO BE SELF–CLEANING.
8. FIRST FLUSH DEVICES, OR APPROVED ALTERATIVE, TO BE INSTALLED WITH AN AUTOMATED DIVERSION AND DRAINAGE SYSTEM, THAT IS, NO MANUAL DIVERSION AND DRAINAGE VALVES. REFER TYPICAL FLUSH OUT PIT FOR DETAILS. THIS SHOULD CATER FOR THE FIRST 1mm OF RAINFALL.
9. BEFORE PURCHASING MATERIALS OR PAINT TO BE USED ON ROOF CATCHMENT AREAS, THE MANUFACTURER'S RECOMMENDATIONS ON LABELS AND BROCHURES FOR RAINWATER TANK SUITABILITY TO BE READ AND ADHERED TO.
10. PRE–STORAGE PITS FOR UNDERGROUND RAINWATER STORAGE TANKS AND FLUSH OUT PITS MAY ASSIST IN LIMITING SILT, AND PREVENT VERMIN, INSECTS (INCLUDING MOSQUITOES) AND DEBRIS FROM ENTERING THE RAINWATER STORAGE AREA.
11. RAINWATER TANK TO BE WATER PROOFED IN ACCORDANCE WITH HB 230–200B
12. BUILDER OR PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK – HB 230–2008. IF IN DOUBT CONTACT ENGINEER.
13. NOISE EMISSIONS FROM ANY PUMPS DO NOT EXCEED 5dB(A) ABOVE AMBIENT BACKGROUND NOISE LEVEL MEASURED AT THE ALLOTMENT BOUNDARY.
14. AT THE COMPLETION OF THE WATER SERVICE INSTALLATION AND PRIOR TO HYDROSTATIC TESTING, THE SYSTEM SHALL BE THOROUGHLY FLUSHED TO REMOVE ANY FOREIGN MATTER. THE FLUSHING SHALL BE UNDERTAKEN IN ACCORDANCE WITH AS3500.1:2003 REQUIREMENTS – APPENDIX I, PARAGRAPH I3 AND CONTINUE UNTIL THE FLUSHED WATER RUNS COMPLETELY CLEAR. THE SYSTEM SHALL THEN BE PRESSURE TESTED IN ACCORDANCE WITH CLAUSE 16.3.1.
15. AT THE COMPLETION OF THE WATER SERVICE INSTALLATION THE RAINWATER STORAGE TANKS ARE TO BE TESTED IN ACCORDANCE WITH SECTION 16 OF AS3500.1:2003.

ONSITE DRAINAGE CALCULATIONS – NORTHERN BEACHES COUNCIL WATER MANAGEMENT POLICY (2020)	
TOTAL SITE AREA	617 m^2
PRE–DEVELOPED IMPERVIOUS AREA	330 m^2 (53 %)
POST–DEVELOPED IMPERVIOUS AREA	303 m^2 (49 %)
COUNCIL REGION ZONE	REGION 1 – PITTWATER
TOTAL INCREASE IN IMPERVIOUS AREA	0 m^2 < 50 m^2
REQUIRED OSD VOLUME	0 m^3
DRAINS SUMMARY CALCULATIONS:	
PRE DEVELOPMENT SITE DISCHARGE	
5 YR	26 l/s
100 YR	34 l/s
POST DEVELOPMENT SITE DISCHARGE	
5 YR	26 l/s
100 YR	34 l/s
ONSITE DISPOSAL DETAILS	
DISPERSION TRENCH LENGTH	10.0 m
DISPERSION TRENCH TYPE	JUMBO 410
RAINWATER TANK DETAILS	
VOLUME OF RAINWATER (BASIX)	1.1 m^3

INFILTRATION/ABSORPTION TRENCH NOTES (METHOD 1):

1. EXCAVATE THE TRENCH ALONG A LEVEL SITE CONTOUR TO PROVIDE AT LEAST 100mm COVER OVER THE TOP OF THE LINER.
2. THE TRENCH FLOOR SHOULD BE LEVEL, EVENLY RAKED, AND HAVE NO LOW SPOTS WHICH WOULD ALLOW "PONDING".
3. ALLOW AT LEAST 75mm OVERLAP FOR EACH LENGTH OF EVERTRENCH.
4. IDEALLY, THREE SPREADER BARS (OPTIONAL) SHOULD BE FITTED INTO EACH STANDARD EVERTRENCH LINER, THE FIRST 220mm FROM THE INLET END, THEN EQUALLY SPACED ALONG THE EXCAVATION.
5. CUT THE PIPE ENTRY HOLE IN ONE TRENCH LINER END CAP. AN EASYDRAIN™ PIT BOSS MAY BE USED TO ENSURE A SECURE CONNECTION. FIT THE CAPS TO THE LINER AND CONNECT THE PIPING FROM THE SEPTIC TANK OR SULLAGE DISTRIBUTOR.
6. COVER THE EVERTRENCH WITH GEOTEXTILE FABRIC AND PLACE A QUANTITY OF 20–25mm AGGREGATE MATERIAL ALONG THE TRENCH LINER AND AT BOTH ENDS, SO THAT THE TOP OF THE LINER IS JUST COVERED. RAKE LEVEL.
7. LAY GEOTEXTILE OVER THE AGGREGATE FOR THE FULL LENGTH OF THE TRENCH.
8. COVER THE GEOTEXTILE WITH A LAYER OF APPROVED SANDY LOAM AND LEAVE A MOUND FOR NATURAL COMPACTION. TURF MAY BE LAID OVER THE TRENCH AREA. DO NOT COMPACT THE TRENCH AREA OR EXPOSE IT TO TRAFFIC.
9. THESE TRENCHES ARE GENERALLY LIMITED TO SITES WHERE SOIL IS CONSIDERED PERMEABLE ENOUGH TO "SOAK UP" THE EXPECTED AMOUNTS OF WASTE–WATER. THE TRENCH SHOULD BE WIDE ENOUGH TO ACCEPT THE SELECTED EVERTRENCH LINER AND DEEP ENOUGH SO THAT THE TOP OF THE SELECTED LINER IS AT LEAST 100mm BELOW THE SOIL SURFACE LEVEL.
10. TRENCH TO BE HAND DUG AROUND TREE ROOT SYSTEM IN ACCORDANCE WITH ARBORIST AND/OR LOCAL COUNCIL REQUIREMENTS.
11. A GEOTECHNICAL ENGINEERS REPORT OR RECOMMENDATIONS MAY BE REQUIRED FOR AREAS OF LOW SOIL INFILTRATION RATES OR FOR LARGER DEVELOPMENTS. THE ENGINEER SHOULD BE NOTIFIEDDURING CONSTRUCTION AND EXCAVATION OF TRENCHES TO CONFIRM SUITABILITY OF SOILS.
12. WHERE POSSIBLE, INSTALL HIGH LEVEL EMERGENCY OVERFLOW PIPE AND CONNECT TO SITE DRAINAGE SYSTEM OR NEAREST DISCHARGE POINT IN ACCORDANCE WITH AS3500.3.2 AND/OR COUNCIL REQUIREMENTS.
13. DO NOT CONNECT SUB–SOIL DRAINAGE LINES THAT ARE LESS THAN 150mm ABOVE THE SURFACE LEVEL OF THE TRENCH. NOTIFY ENGINEER IF THE DEVELOPMENT HAS LOW LAYING SUB–SOIL DRAINAGE LINES..

TRANSPIRATION/DISPERSION TRENCH NOTES (METHOD 2):

1. EXCAVATE AN AREA 1800mm WIDE AND 300mm DEEP ALONG A LEVEL SITE CONTOUR.
2. EXCAVATE A CENTRAL TRENCH ALONG THE FULL LENGTH OF THE PREPARED AREA FOR THE SELECTED LINER. THE TOP OF THE LINER SHOULD BE LEVEL WITH THE BOTTOM OF THE PREPARED AREA. THE FLOOR SHOULD BE LEVEL, EVENLY RAKED, WITH NO LOW SPOTS.
3. CARRY OUT STEPS 3, 4, 5, 6 & 7 LISTED FOR METHOD 1 (ABSORPTION TRENCH).
4. COVER THE GEOTEXTILE AND FLOOR OF THE WIDER EXCAVATION WITH 100mm OF 10mm AGGREGATE, THEN 100mm OF COARSE SAND, AND FINALLY WITH SANDY LOAM.
5. LEAVE A MOUND FOR NATURAL COMPACTION. TURF MAY BE LAID OVER THE AREA. DO NOT COMPACT THE AREA OR EXPOSE IT TO TRAFFIC.
6. THIS METHOD ARE GENERALLY USED WHERE LOCAL SOIL CONDITIONS CANNOT COPE WITH THE VOLUME OF WASTE–WATER IN THE NORMAL NARROW ABSORPTION TRENCH SYSTEMS. TRANSPIRATION ENCOURAGES TREATED WASTE–WATER TO BE TAKEN UP BY PLANT ROOTS OVER A WIDE AREA, AS WELL AS PERMEATING THE SOIL, OFFERING ADDITIONAL SAFETY FOR SOIL ABSORPTION SYSTEMS. BEDS CONSIST OF STANDARD WIDTH TRENCHES THAT ARE DEEPER THAN NORMAL, WITH THE AREA ABOVE THE SELECTED TRENCH LINER OF MUCH GREATER WIDTH, AND FILLED WITH AGGREGATE TO ALLOW EASIER MOVEMENT OF MOISTURE.

SURVEY NOTES:

1. THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY THE PROJECT SURVEY. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. RTS CIVIL CONSLTING ENGINEERS PTY LTD DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE.
2. SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT THE ENGINEER.
3. REFERENCE SHOULD BE MADE DIRECTLY TO THE SURVEYOR BEFORE SETTING OUT.

EXISTING UNDERGROUND SERVICES NOTES:

1. THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.
2. RTS CIVIL CONSULTING ENGINEERS PTY LTD CANNOT GUARANTEE THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
3. CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.
4. CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.
5. CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.
6. CONTRACTOR IS TO CONFIRM FINDINGS FOR THE LOCAL COUNCL OR SYDNEY WATER IN RELATION TO THE SEWER OR WATER MAINS LOCATED. CONFIRMATION OF MAINS IS REQUIRED PRIOR TO CONSTRUCTION. POSSIBLE CONFLICT OF SERVICES ARE TO BE REPORTED TO THE SUPERINTENDENT OR ENGINEER FOR FURTHER DIRECTIONS.

EXTERNAL NOTES:

1. ALL ACTIVITIES AND WORKS EXTERNAL TO THE SITE, OR THAT AFFECT PUBLIC ROADS, ARE TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S CODES AND STANDARDS.
2. PUBLIC FOOTPATHS SHALL BE RECONSTRUCTED TO THE SATISFACTION OF COUNCIL'S DIRECTOR OF ENGINEERING SERVICES. A ROAD OPENING PERMIT SHALL BE OBTAINED FOR ALL WORKS CARRIED OUT IN A PUBLIC OR COUNCIL CONTROLLED LAND.
3. RESTORATION OF LANDSCAPING, ROADS AND PATHS SHALL BE TO COUNCIL'S REQUIREMENTS. ALL OTHER RESTORATION SHALL BE TOTHE SATISFACTION OF THE AFFECTED PARTIES.
4. WHERE WORKS ARE UNDERTAKEN ON PUBLIC ROADS, ADEQUATE TRAFFIC CONTROL AND DIRECTIONS TO MOTORISTS SHALL BE PROVIDED BY OTHERS.

DRAWING SCHEDULE:

CP100 – COVER PAGE, NOTES & CALCULATIONS
SW100 – STORMWATER MANAGEMENT PLAN
SW200 – STORMWATER DRAINAGE DETAILS

MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS AS3500.3: 2018 – TABLE 7.5.2.1			
DEPTH TO INVERT OF OUTLET	MINIMUM INTERNAL DIMENSIONS (mm)		
	RECTANGULAR		CIRCULAR
	Width	Length	Diameter ø
≤ 450	350	350	–
≤ 600	450	450	600
> 600 ≤ 900	600	600	900
> 900 ≤ 1200	600	900	1000
> 1200	900	900	1000

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NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE

DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

CARELESS DIGGING CAN:DIGGING CAN:

- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC
- INCONVENIENCE USERS OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS
- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS
- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS
- CUT OFF EMERGENCY SERVICES
- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED

MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. – TEL. 1100

ALL DIMENSIONS MUST BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK.

A1 ORIGINAL

Rev:	Date:	Description:	Reviewed:
A	18.11.21	STORMWATER MANAGEMENT PLAN FOR DA SUBMISSION	R.M

Issued for: DEVELOPMENT APPLICATION
Approved by:
Date : 18.11.21
Rhys Mikhail
Director | Principal Engineer | NER: 2570982 | RPEQ: 17480
BEng (Civil) Hons MIEAust CPEng NER RPEQ APEC IntPE(Aus)

Title:	Initial:	Date:
DESIGN	R.M	15.11.2021
DRAWN	S.M	15.11.2021
CHECKED	R.M	16.11.2021
APPROVED	R.M	16.11.2021

CIVIL CONSULTING ENGINEERS
STORMWATER • CIVIL • FLOOD MITIGATION
ABN: 81 615 065 588 Phone: 0490 507 300 Email: admin@rtscivil.com.au Web: rtscivil.com.au

Architect: CM STUDIO cm
Client: KIERAN TURNER

Project and Drawing Title:
26 ILUKA ROAD, PALM BEACH
COVERPAGE, NOTES & CALCULATIONS

Local Council: NORTHERN BEACHES

Project Number:	Drawing ID:	Issue:
210805	CP100	A

NOTES:
1. U.N.O REFER TO THE COVERPAGE CP100 SERIES FOR DETAILED NOTES AND CALCULATIONS.
2. ALL DIMENSIONS SHALL BE VERIFIED ONSITE BY BUILDER BEFORE COMMENCING WITH WORK.

NOT FOR CONSTRUCTION

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: LEC2022/343687

DATED: 9 May 2023

LEGEND

	STORMWATER PIT
	NEW STORMWATER PIPE
	STORMWATER PIPE FLOW DIRECTION
	EXISTING STORMWATER PIPE
	FLUSH–OUT LINE
	BOUNDARY LINE
S	EXISTING SEWER MAIN
OHP	EXISTING OVERHEAD POWER LINES
W	EXISTING WATER MAINS
T	EXISTING TELECOMMUNICATIONS LINE
G	EXISTING GAS MAINS
DP1 100ø	DENOTES DOWNPIPE
	DENOTES SIZE OF DOWNPIPE
DP1	100mmø DOWNPIPE TO RWT
DP2	90mmø DOWNPIPE TO DT1
DT1	10.0m LONG DISPERSION TRENCH – REFER DETAILS
RWT	2,000L "THINTANK" RAINWATER TANK (2.4mL x 1.97mH x 0.47mW)
EG1	CONCEALED EAVES GUTTER TO ARCHITECTS DETAIL
BG1	300mm WIDE MIN. BOX GUTTER TO ARCHITECTS DETAIL WITH RAINWATER HEAD SUMP AND OVERFLOW – REFER DETAILS

MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS AS3500.3: 2018 – TABLE 7.5.2.1			
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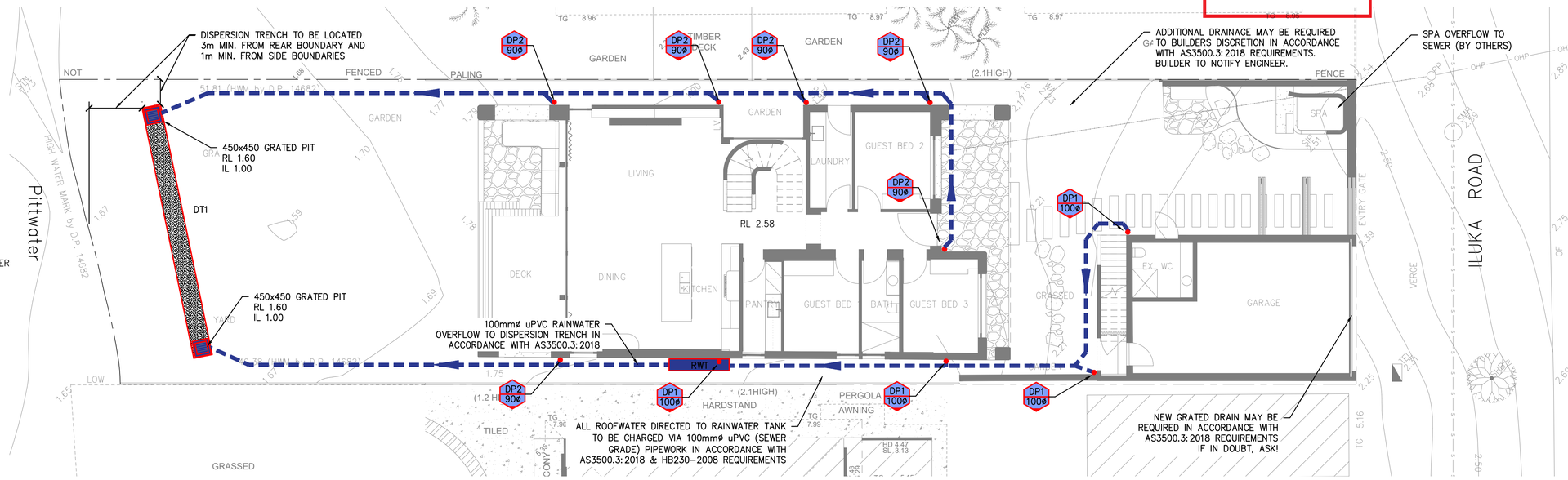
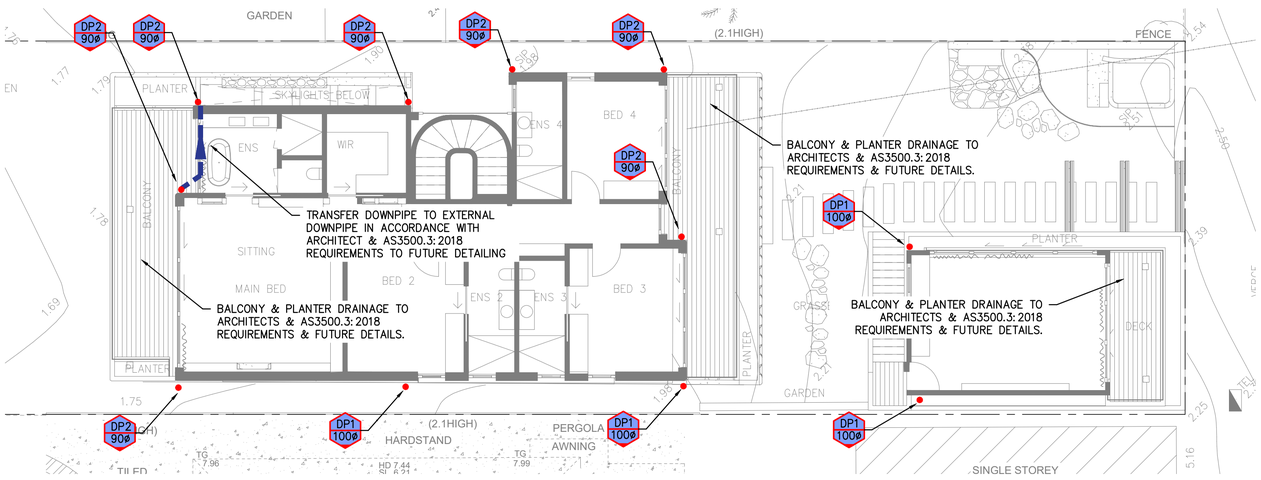


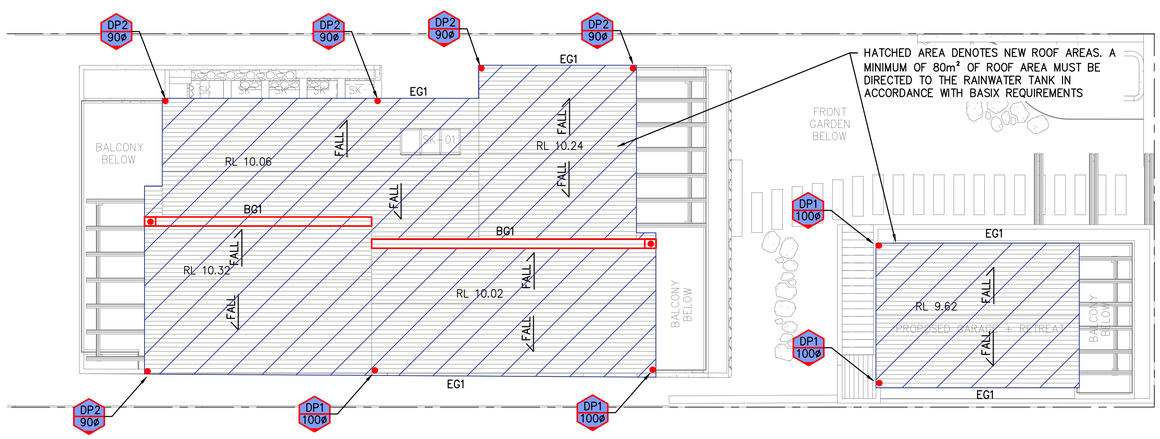
SITE STORMWATER MANAGEMENT PLAN

SCALE = 1 : 100



FIRST FLOOR STORMWATER MANAGEMENT PLAN

SCALE = 1 : 100



FIRST FLOOR STORMWATER MANAGEMENT PLAN

SCALE = 1 : 100

NOTE:
THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTLILITY SERVICES WITHIN THE SITE, FOOTPATH AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THAT THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES.

NOTE: PIT, PIPE & DOWNPIPE LOCATIONS ARE INDICATIVE ONLY & MAY VARY DUE TO CONSTRAINTS. IF IN DOUBT, ASK!

WARNING! CARE WHEN DIGGING AROUND TREE ROOTS. HAND DIGGING ONLY! MAY REQUIRE ARBORIST SUPERVISION.

DIAL 1100 BEFORE YOU DIG

A1 ORIGINAL

Rev:	Date:	Description:	Reviewed:
A	18.11.21	STORMWATER MANAGEMENT PLAN FOR DA SUBMISSION	R.M

Issued for: DEVELOPMENT APPLICATION

Approved by:

Date : 18.11.21

Rhys Mikhail

Director | Principal Engineer | NER: 2570082 | RPEQ: 17480
BEng (Civil) Hons MIEAust CPEng NER RPEQ APEC IntPE(Aus)

Title:	Initial:	Date:
DESIGN	R.M	15.11.2021
DRAWN	S.M	15.11.2021
CHECKED	R.M	16.11.2021
APPROVED	R.M	16.11.2021

RTS CIVIL CONSULTING ENGINEERS
STORMWATER • CIVIL • FLOOD MITIGATION
ABN: 81 615 065 588 Phone: 0490 507 300 Email: admin@rtscivil.com.au Web: rtscivil.com.au

Architect: CM STUDIO cm

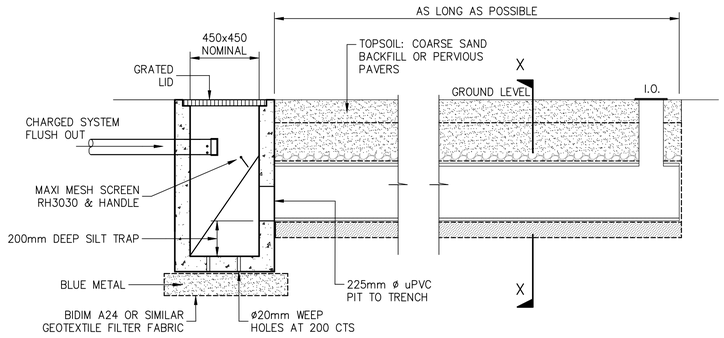
Client: KIERAN TURNER

Project and Drawing Title:
26 ILUKA ROAD, PALM BEACH
STORMWATER MANAGEMENT PLAN

Local Council: NORTHERN BEACHES

Project Number:	Drawing ID:	Issue:
210805	SW100	A

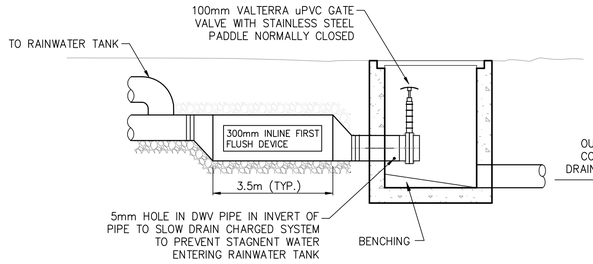
NOTES:
1. U.N.O REFER TO THE COVERPAGE CP100 SERIES FOR DETAILED NOTES AND CALCULATIONS.
2. ALL DIMENSIONS SHALL BE VERIFIED ONSITE BY BUILDER BEFORE COMMENCING WITH WORK.



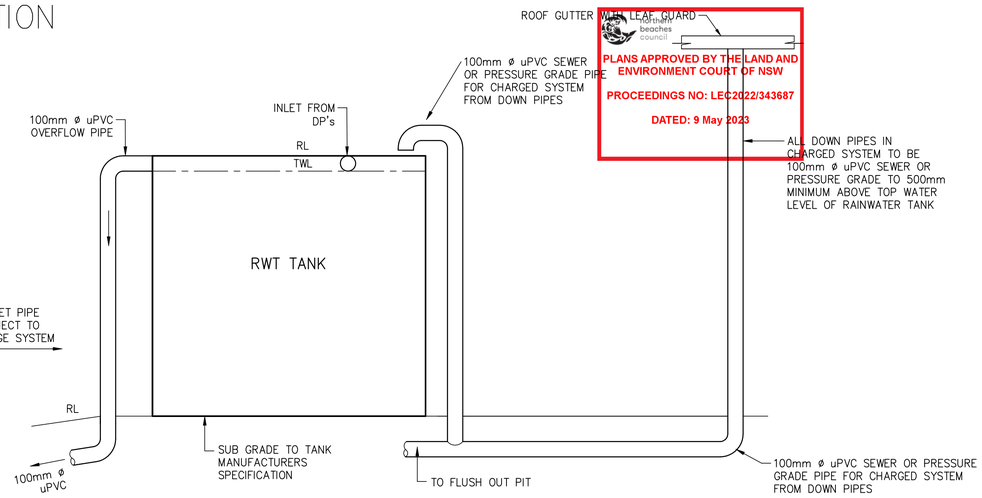
DISPERSION TRENCH LONGITUDINAL SECTION
NOT TO SCALE

NOTE:
PRECAST OR CAST INSITU PIT. REFER STORMWATER NOTES OR PROVIDE ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER IF APPROVED BY ENGINEER

NOTE:
THIS CAN BE ANY TYPICAL PIT PROVIDED OR IF NEEDED TO BE FITTED AT LOW POINT OF SITE AND THERE IS NO ADEQUATE DISCHARGE POINT NEARBY, PROVIDE 300mm SUMP. CONTACT ENGINEER IF IN DOUBT.

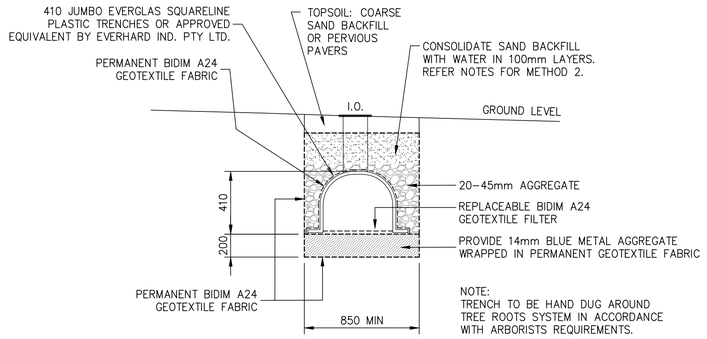


FIRST FLUSH DETAIL – INGROUND
SCALE = 1 : 20



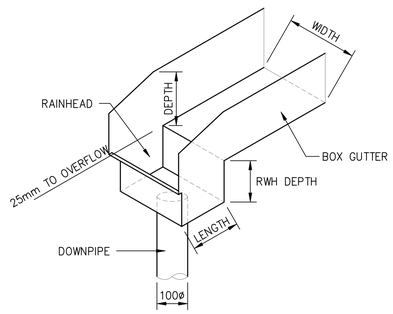
NOTE: MOSQUITO PROOF MESH TO BE PROVIDED AT ALL END POINTS OF CHARGED LINES AND RAINWATER TANK.

TYPICAL SECTION RAINWATER TANK
NOT TO SCALE

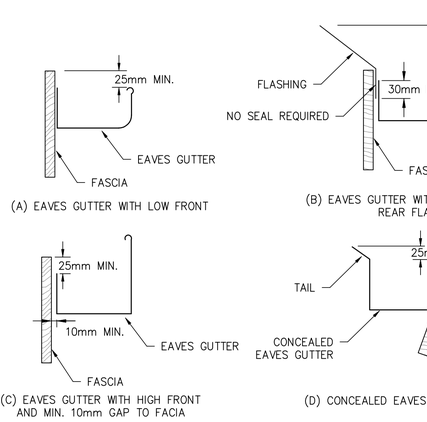


NOTE:
TRENCH TO BE HAND DUG AROUND TREE ROOTS SYSTEM IN ACCORDANCE WITH ARBORISTS REQUIREMENTS.

SECTION X–X
NOT TO SCALE

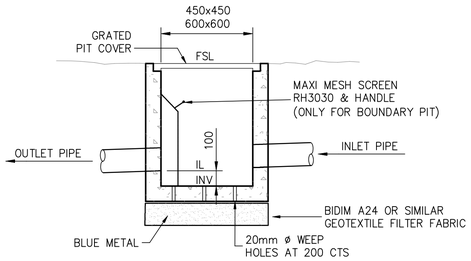


TYPICAL BOX GUTTER & RAINHEAD DETAIL
NTS

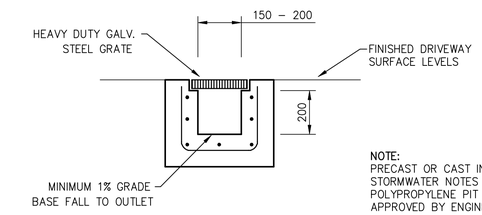


EAVES GUTTER OVERFLOW METHODS
SCALE: 1:20

NOTE:
PRECAST OR CAST INSITU PIT. REFER STORMWATER NOTES OR PROVIDE ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER IF APPROVED BY ENGINEER



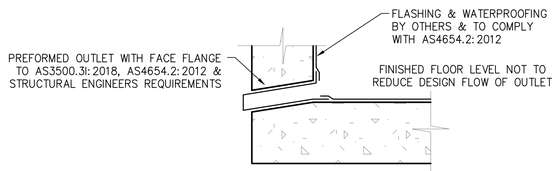
TYPICAL PIT DETAIL
SCALE = 1 : 20



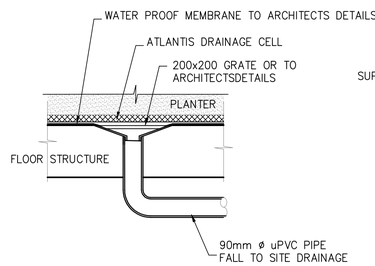
NOTE:
PRECAST OR CAST INSITU PIT. REFER STORMWATER NOTES OR PROVIDE ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER IF APPROVED BY ENGINEER

TYPICAL DRIVEWAY GRATED DRAIN (GD)
SCALE = 1 : 20

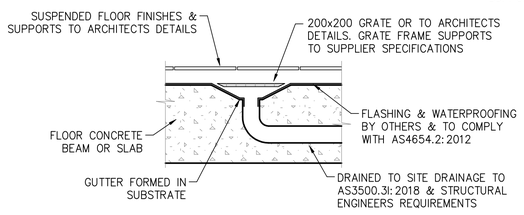
NOTE:
FLOOR DRAINS TO BE INSTALLED WITHIN ALL PLANTERS AND PATIOS TO ARCHITECTS DETAILS AND AS3500.3 REQUIREMENTS. FLOOR DRAINS ARE TO DRAIN BY GRAVITY TO THE NEAREST DRAINAGE STRUCTURE AND MUST BE LOCATED AT LEAST 500mm ABOVE CONNECTION POINT. BALCONY HOB TO ARCHITECT DETAILS. ENSURE ALL BALCONIES ARE FITTED WITH 2 x 50mmø SPITTER PIPES TO ACT AS OVERFLOW POINT IN ACCORDANCE WITH AS4564.2: 2012 REQUIREMENTS.
IF IN DOUBT, CONTACT THE ENGINEER.



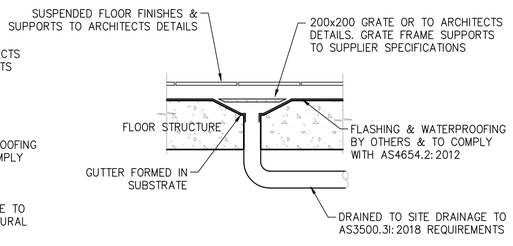
PREFORMED OUTLET TO PARAPET OR BALCONY OVERFLOW
NOT TO SCALE



STANDARD FLOOR DRAIN
SCALE = 1 : 20



STANDARD FLOOR PATIO DRAIN
SCALE = 1 : 20



STANDARD FLOOR DRAIN (OPTION FOR BALCONIES ONLY)
SCALE = 1 : 20

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Project and Drawing Title:
26 ILUKA ROAD, PALM BEACH
STORMWATER DRAINAGE DETAILS

Local Council: NORTHERN BEACHES

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