

STORMWATER MANAGEMENT PLAN

PARTRIDGE HYDRAULIC SERVICES WERE ENGAGED TO CARRY OUT A STORMWATER MANAGEMENT PLAN FOR THE PROPOSED SITE AT 39 PINES STREET, MANLY NSW. THE BELOW ADDRESSES THE MANAGEMENT OF STORMWATER WITHIN THE PROPOSED SITE BOUNDARIES.

1. INTRODUCTION - SITE DETAILS

EXISTING SITE DETAILS

THE SUBJECT SITE IS FULLY DEVELOPED WITH AN EXISTING SINGLE DWELLING, LOCATED AT 39 PINE STREET, MANLY. THE OVERALL SITE HAS AN APPROXIMATE AREA OF 650 m². THE LOT CURRENTLY COMPRISES:

- UNCOVERED CAR PARKING SPACE AND ASSOCIATED DRIVEWAY
- AN EXISTING SINGLE DWELLING
- TERRACE, POOL AND POOL CABANA TO THE BACK OF THE HOUSE
- ASSOCIATED LANDSCAPE TO THE REAR OF THE HOUSE

THE SITE IS REAR FALLING TOWARDS PUBLIC RESERVE TO THE SOUTH AND IS BOUND BY AN ADJACENT PRIVATE PROPERTIES FROM THE EAST AND THE WEST, AND PINE STREET TO THE NORTH. BOTH PEDESTRIAN AND THE VEHICLE ACCESS ARE FROM PINE STREET.

PROPOSED NEW DEVELOPMENT

IT IS PROPOSED TO UNDERTAKE FOLLOWING ALTERATIONS AND ADDITIONS:

- CONSTRUCTION OF NEW BASKETBALL AREA AT THE REAR OF THE PROPERTY WITH ASSOCIATED LANDSCAPE.
- CONSTRUCTION OF EXTENSION TO DINING AREA WITH NEW ROOF OVER.

2. EXISTING STORMWATER NETWORK AND DISCHARGE

THE SITE IS CURRENTLY DEVELOPED WITH ON-SITE INGROUND STORMWATER DRAINAGE SYSTEM DISCHARGE TO KERB AND GUTTER AT PINE STREET. ROOF AREAS ARE COLLECTED TO RAINWATER TANKS PRIOR OVERFLOW TO PUBLIC SYSTEM. HARDSTAND IS DRAINED VIA SURFACE LEVEL OVERFLOW TOWARDS THE RESERVE AT THE REAR BOUNDARY WITH NO CONTROL.

3. PROPOSED STORMWATER NETWORK CONCEPT AND DISCHARGE

IT IS PROPOSED TO CONSTRUCT ADDITIONAL STORMWATER SYSTEM ON FOLLOWING PRINCIPLES:

- REPLACE THE EXISTING ROUND RAINWATER TANK AND INSTALL TWO SLIMLINE RAINWATER TANKS (VOLUME TO MATCH)
- NEW BOX GUTTER TO BE INSTALLED TO COLLECT ROOF WATER AT THE DINING EXTENSION.
- NEW ROOF RUNOFFS TO BE CONNECTED TO RAINWATER TANK.
- NO CHANGES TO SITE DISCHARGE ARRANGEMENT.

5. STORMWATER QUANTITY MANAGEMENT

ACCORDING TO NORTHERN BEACHES COUNCIL - WATER MANAGEMENT FOR DEVELOPMENT POLICY (2020), SITE WITHIN REGION 3 - ZONE 1 DO NOT REQUIRED OSD TANK WHEN THE DEVELOPMENT IS A ONE-OFF EXTENSION OR AN ADDITION INVOLVING AN INCREASE IN IMPERVIOUS AREA OF LESS THAN 50 m² AND THE POST-DEVELOPMENT IMPERVIOUS AREA IS LESS 60% OF THE TOTAL SITE.

INCREASE IN IMPERVIOUS AREA: 365.7 - 347.8 = 17.9 m²
 POST DEVELOPMENT IMPERVIOUS AREA: 365.7 m² --> 59.9 %
HENCE, OSD IS NOT REQUIRED FOR THIS DEVELOPMENT.

6. STORMWATER QUALITY MANAGEMENT

NO STORMWATER WATER QUALITY DEVICE HAS BEEN PROPOSED FOR THIS MINOR DEVELOPMENT. NEW ROOF ARE COLLECTED INTO RAINWATER TANKS. 20 m² OF HARDSTAND DRAINED INTO NEARBY LANDSCAPING AND TOWARDS RESERVE.

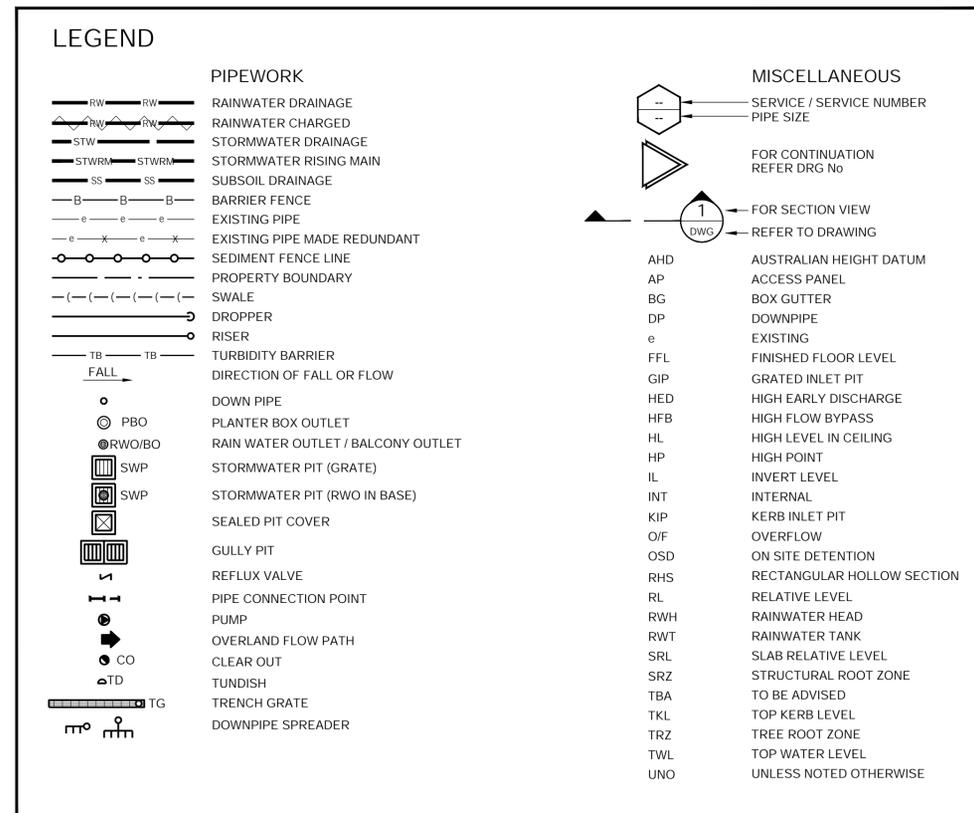
7. COUNCIL DOCUMENTS REFERENCE

THE ABOVE ASSESSMENT HAS BEEN PREPARED AND BASED ON PUBLISHED TOPOGRAPHIC MAPS, PHYSICAL LAND SURVEY, HYDRAULIC AND HYDROLOGICAL CALCULATIONS, AVAILABLE AERIAL PHOTOGRAPHY OF THE SITE AND IN ACCORDANCE WITH RELEVANT AUSTRALIA STANDARDS AND COUNCIL DEVELOPMENT CONTROL PLANS BELOW:

- AS 3500 PLUMBING AND DRAINAGE
- NORTHERN BEACHES COUNCIL - WATER MANAGEMENT DEVELOPMENT POLICY - AUG 2020

GENERAL NOTES

1. THIS IS A STORMWATER DRAINAGE PLAN ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT INFORMATION.
2. ALL STORMWATER RUNOFF FROM SURFACE, PITS, SUMPS AND UNDERGROUND PIPE NETWORK TO BE COLLECTED VIA ON-SITE DRAINAGE SYSTEM PRIOR TO DISCHARGE FROM THE SITE.
3. ALL PIPES ARE TO BE 100DIA UPVC LAID AT 1.0% MIN GRADE. UPVC PIPES TO BE SOLVENT WELDED JOINTS U.N.O
4. ALL PIPES ARE TO BE PROPRIETARY PRE-CAST ITEMS, COVER LEVELS TO MATCH U.N.O
5. ALL GRATED DRAINS TO HAVE BASE GRADED 1.0% MIN WITH HEAVY DUTY GRATES.
6. IT IS THE BUILDER'S RESPONSIBILITY TO LAY ALL PIPES IN ACCORDANCE WITH ALL RELEVANT AUTHORITY REQUIREMENTS (EG. COUNCIL, EPA, SYDNEY WATER).
7. THE CONTRACTOR SHALL LOCATE EXISTING SERVICES ON SITE PRIOR TO CONSTRUCTION AND SHALL TAKE EXTREME CAUTION DURING CONSTRUCTION.
8. ALL WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE LOCAL AUTHORITY'S CIVIL SPECIFICATION AND STANDARDS TO THE SATISFACTION OF THE LOCAL AUTHORITY OR PRIVATE CERTIFYING AUTHORITY'S REPRESENTATIVE. ANY DISCREPANCY, VARIATION OR ADDITIONAL WORKS SHALL BE APPROVED BY THE BUILDER'S REPRESENTATIVE BEFORE COMMENCEMENT OF WORKS.
9. THE LOCAL AUTHORITY OR PRIVATE CERTIFYING AUTHORITY'S INSPECTION OF WORKS SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE INSPECTOR'S INSPECTION SCHEDULE REQUIREMENTS AND ENSURE THAT EACH IDENTIFIED STAGE OF WORKS IN ACCORDINGLY INSPECTED.
10. THESE DRAWINGS ARE DIAGRAMMATIC REPRESENTATION OF WORKS TO BE CARRIED OUT ONLY AND ARE NOT TO BE SCALED OFF.
11. ALL LEVELS SHALL BE OBTAINED FROM ESTABLISHED BENCH MARKS ONLY. DATUM USED ON THESE DRAWINGS IN AUSTRALIA HEIGHT DATUM (AHD) UNLESS NOTED OTHERWISE.
12. UTILITY INFORMATION SHOWN ON THE PLANS IS NOT INTENDED TO DEPICT MORE THAN THE PRESENCE OF ANY SERVICES. ACTUAL LOCATIONS SHOULD BE VERIFIED BY HAND EXCAVATION PRIOR TO CONSTRUCTION.
13. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PROVIDED WHERE SHOWN ON THE DRAWINGS, IN ACCORDANCE WITH THE SPECIFICATION AND THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (IF APPLICABLE).



2	ISSUE FOR DA	JP	ES	19.02.24
1	ISSUE FOR DA	JP	ES	15.11.23

Rev.	Issue / Amendment	By	App.	Date
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PARTRIDGE

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Project
ALTERATIONS AND ADDITIONS
 39 PINE STREET
 MANLY NSW 2095

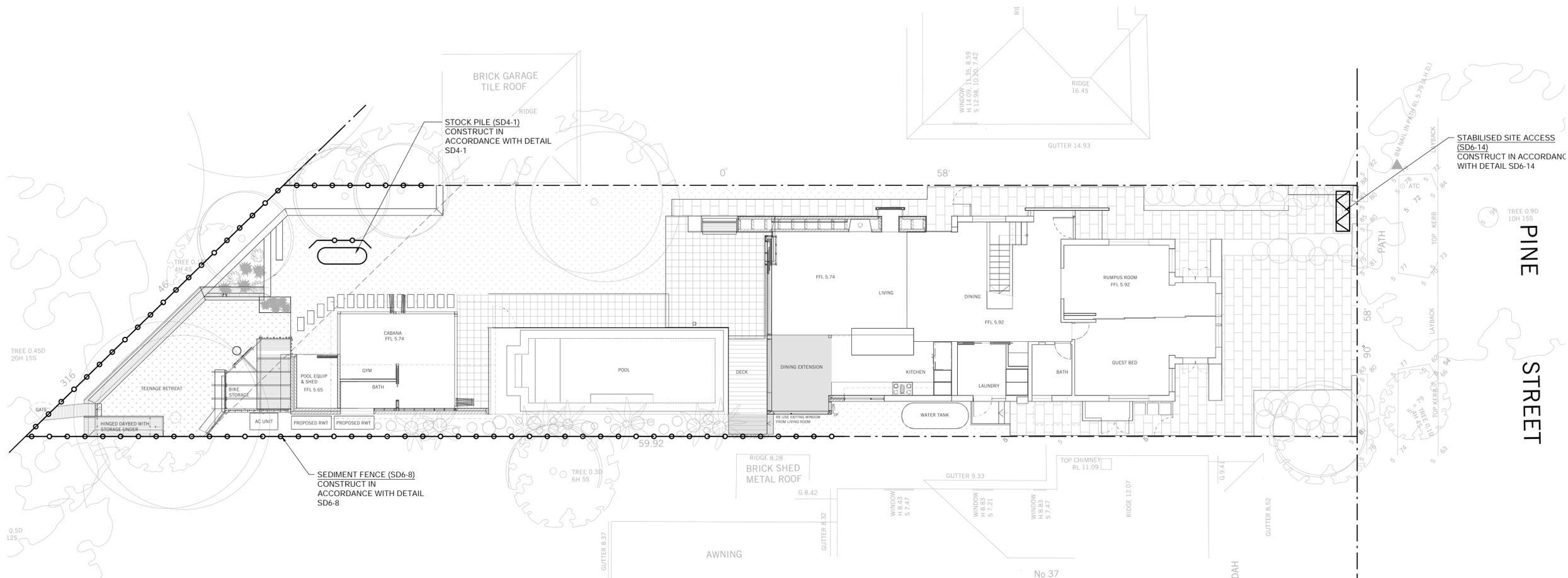
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STORMWATER SERVICES
STORMWATER MANAGEMENT PLAN
AND GENERAL NOTES

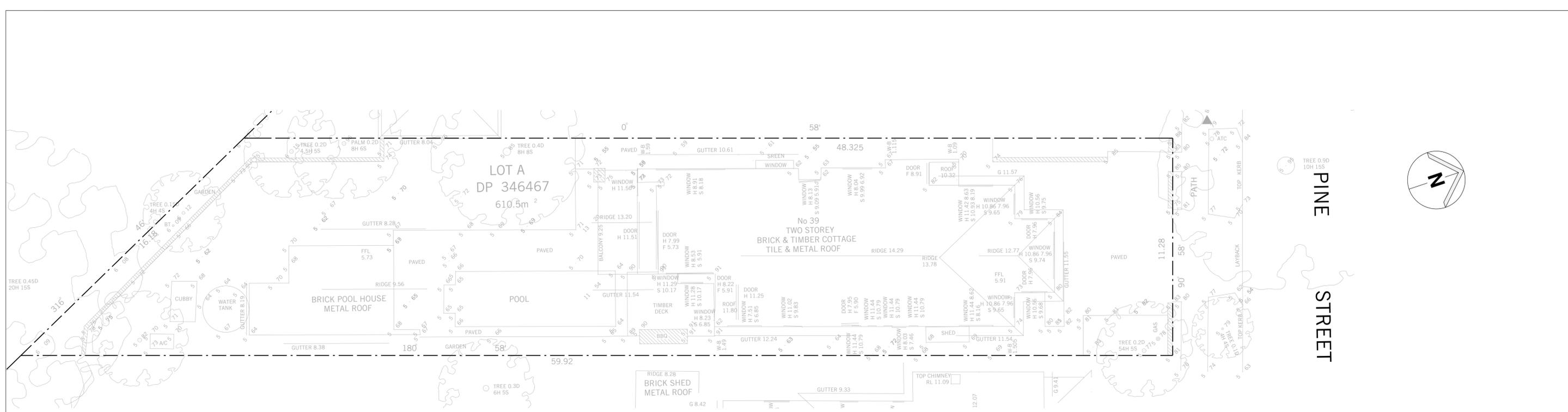
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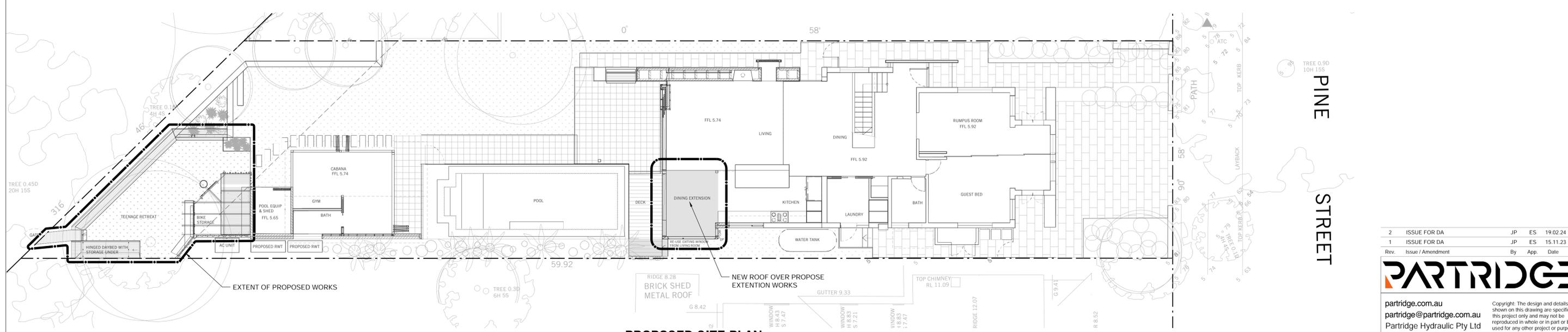
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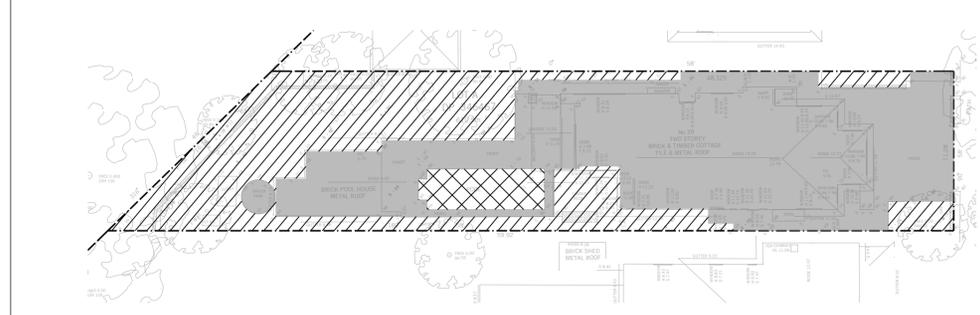




EXISTING SITE PLAN
SCALE 1:100



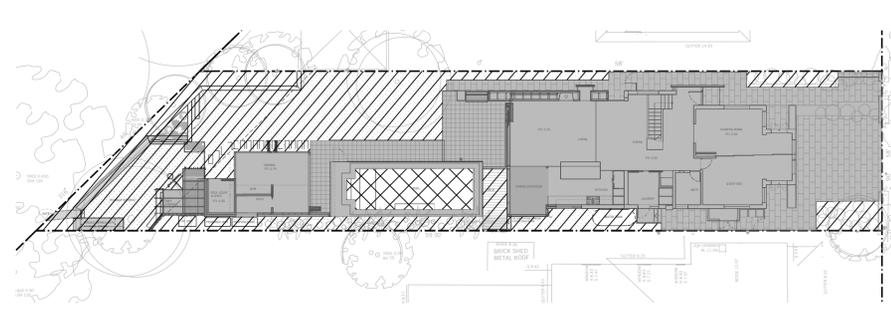
PROPOSED SITE PLAN
SCALE 1:100



EXISTING SITE PERMEABILITY PLAN
SCALE 1:250

LEGEND

	EXISTING	PROPOSED	
	IMPERVIOUS AREA	352.4 m ²	365.7 m ²
	PERVIOUS AREA	233.4 m ²	219.9 m ²
	POOL AREA (TO SEWER)	24.9 m ²	24.9 m ²



PROPOSED SITE PERMEABILITY PLAN
SCALE 1:250

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Project
ALTERATIONS AND ADDITIONS
39 PINE STREET
MANLY NSW 2095

Title
**STORMWATER SERVICES
EXISTING & PROPOSED SITE PLAN
AND IMPERVIOUS AREAS**

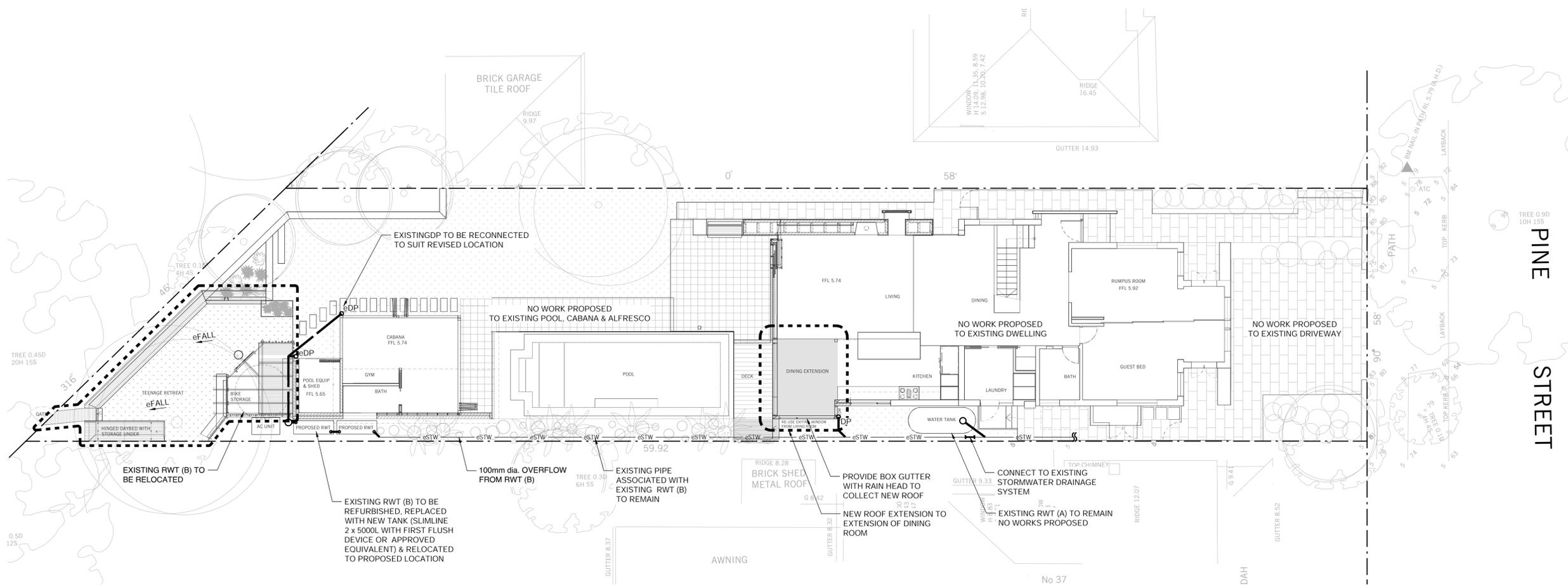
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GROUND FLOOR LAYOUT

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Project
 ALTERATIONS AND ADDITIONS
 39 PINE STREET
 MANLY NSW 2095

Title
**STORMWATER SERVICES
 PROPOSED STORMWATER DRAINAGE LAYOUT
 PLAN & DETAIL - GROUND FLOOR**

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