

LAUDERDALE AVENUE

LOT 22  
DP 650240

SP 52

LOT  
SECT 3  
DP 3

LOT 1  
DP 131558

#### LEGEND

- SITE BOUNDARY
- PROPOSED STORMWATER PIPE
- EXISTING STORMWATER PIPE
- EXISTING GRATED PIT
- RAINWATER TANK
- 150mm Ø UPVC PROPOSED PIPE SIZE AND FLOW DIRECTION
- DP PROPOSED DOWNPIPE
- OVERLAND FLOW

#### STORMWATER MANAGEMENT NOTES

##### SITE INFORMATION

ADDRESS: 24 LAUDERDALE AVENUE, FAIRLIGHT, NSW 2094  
LOCAL GOVERNMENT AREA: NORTHERN BEACHES COUNCIL  
DEVELOPMENT REGION: REGION 3, ZONE 1

SITE AREA: 461.6m<sup>2</sup>  
PROPOSED INCREASE IN IMPERMEABLE AREA: 31m<sup>2</sup>  
POST DEVELOPMENT IMPERMEABLE AREA: 276m<sup>2</sup>  
POST DEVELOPMENT IMPERMEABLE AREA PERCENTAGE: 60%

##### DEVELOPMENT CONTROL REQUIREMENTS

GOVERNING DOCUMENT: WATER MANAGEMENT FOR DEVELOPMENT POLICY, DATED 26 FEBRUARY 2021

DESIGN STORMS: MINOR = 20% AEP  
MAJOR = 1% AEP

##### DISCHARGE ATTENUATION REQUIREMENT:

- FOR A DEVELOPMENT WHERE THE INCREASE IN IMPERMEABLE AREA PROPOSED IS < 50m<sup>2</sup> AND THE TOTAL POST DEVELOPMENT IMPERMEABLE AREA < 60% OF TOTAL SITE AREA, NO OSD IS REQUIRED.

#### STORMWATER DRAINAGE NOTES

- ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.
- PIPES 300 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS 71 APPROVED SPNGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS.
- EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED.
- ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE UPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE UPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
- PIPES TO BE INSTALLED TO TYPE H31 (ROAD) H32 (LOTS) SUPPORT IN ACCORDANCE WITH AS 3725 (2007) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (2006) AND AS/NZS 3500 3.2 (2010).
- PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY THE CIVIL ENGINEER.
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED UPVC SEWER GRADE PIPE IS TO BE USED.
- CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- GRATES AND COVERS SHALL CONFORM TO AS 3996.
- ALL INTERNAL PIT DIMENSIONS TO CONFORM TO AS 3500.3 TABLE 7.5.2.1
- AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED, DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.
- THE CONTRACTOR IS TO ORGANISE AND STAGE CONSTRUCTION WORK AND UNDERTAKE ANY DIVERSION WORKS TO ENSURE THE EXISTING DRAINAGE IS ABLE TO CONVEY ALL STORMWATER FLOWS THAT MAY OCCUR DURING THE PERIOD OF THE CONSTRUCTION WORKS.
- ANY DAMAGE TO THE WORKS DUE TO STORMWATER FLOWS OR FLOODING DURING THE CONSTRUCTION PERIOD IS AT THE CONTRACTOR'S RISK.
- SETOUT POINTS FOR STORMWATER STRUCTURES ARE AS INDICATED IN THE DRAWINGS UNLESS OTHERWISE NOTED.
- ALL PAVED SURFACE LEVELS AND GRADES TO BE COORDINATED WITH GULLY PIT LEVELS TO ENSURE NO UNDRAINED AREAS OCCUR.
- THE SIDES OF ALL PITS DEEPER THAN 1.0m SHALL BE FULLY SUPPORTED AT ALL TIMES AND HAVE APPROPRIATE EDGE PROTECTION.
- ALL NEW PIPES TO BE LAID IN AN UPSTREAM DIRECTION. THE LINE, LEVEL AND LOCATION OF EXISTING SERVICES CROSSING THE LINE OF THE PROPOSED STORMWATER PIPE SHALL BE DETERMINED BY EXCAVATION PRIOR TO THE LAYING OF THE PIPE. IF CONFLICT IS APPARENT, THE ENGINEER SHALL BE NOTIFIED AND INSTRUCTIONS AS TO WHETHER THE EXISTING SERVICE IS TO BE PROPOSED PIPE OR THE PROPOSED PIPE INVERT ALTERED WILL BE ISSUED.
- PIPE BEDDING, HAUNCH AND BACKFILL TO BE AS SHOWN ON THE CIVIL DETAILS DRAWINGS AND THE CIVIL SPECIFICATION.
- SUBSOIL DRAINAGE PIPES TO BE SLOTTED PIPE AND FILTER SOCK CLASS 1000 TO AS2439 PART 1 LAID AT PREFERABLE MINIMUM GRADE 1 IN 100 OR ABSOLUTE MINIMUM 1 IN 200 WHERE LIMITED BY OUTFALL LEVELS.
- STORMWATER STRUCTURES ARE TO BE CONSTRUCTED PERPENDICULAR TO THE INCOMING PIPEWORK UNLESS OTHERWISE NOTED.
- PRECAST COMPONENTS SHALL BE CONNECTED BY MEANS OF EPOXY OR CHEMICAL GROUTED BARS OF THE SAME DIAMETER AND SPACING AS THE SMALLER BARS IN THE RESPECTIVE COMPONENTS.
- PRE-CAST PITS MUST HAVE LIFTING ANCHORS.
- WORKING LOADS ARE THOSE DUE TO FILL MATERIAL AND STANDARD HIGHWAY VEHICLES AS PER AS3725. CONSTRUCTION LOADS HAVE NOT BEEN ALLOWED FOR.
- ALL EXPOSED EDGES ON STORMWATER PITS TO BE ROUNDED TO 5mm RAD. UNO.

1:100 1 0 1 2 3 4 5 A1  
1:200 1 0 1 2 3 4 5 A3

REV	DESCRIPTION	DRAWN	APP'D	DATE
-	-	-	-	-
E	UPDATED TO SUIT REVISED ARCHITECTURAL LAYOUT	IAH	IAH	23.03.22
D	ISSUED FOR DA APPROVAL	IAH	IAH	12.10.21
C	ISSUED FOR DA APPROVAL	IAH	IAH	15.09.21
B	ISSUED FOR DA APPROVAL	IAH	IAH	09.09.21
A	ISSUED FOR DA APPROVAL	IAH	IAH	06.09.21

KATHRYN TURNER



NOBLE  
ARCHITECTURE

CLIENT/ARCHITECT

24 LAUDERDALE  
AVENUE  
FAIRLIGHT  
NSW 2094

STORMWATER MANAGEMENT  
PLAN

PROJECT

TITLE

0070-C-100.dwg

enscape  
studio



FOR APPROVAL  
NOT FOR CONSTRUCTION

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AS NOTED  
SCALE @ A1

0070  
PROJECT No

C-100  
DRAWING No

E  
REV

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