

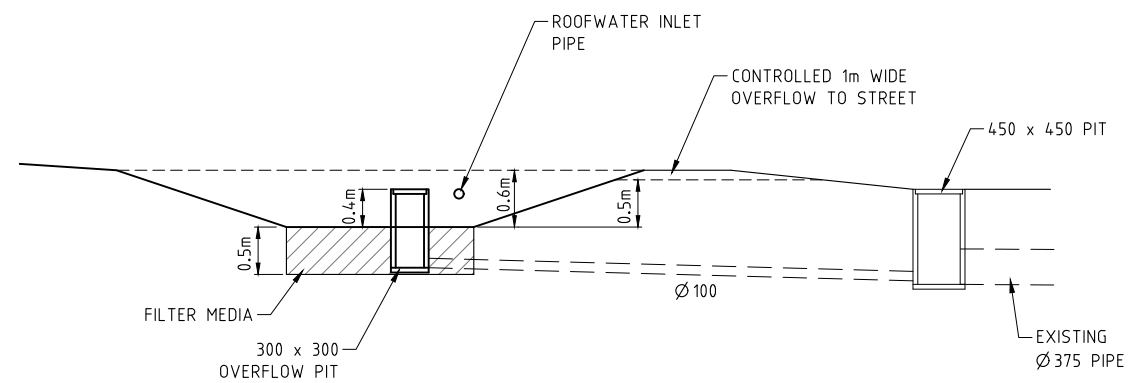
LEGEND:

- 13 --- EXISTING CONTOUR
- +13.38 EXISTING SURFACE LEVEL
- S — EXISTING SEWER
- SW — EXISTING STORMWATER PIPE
- SW — PROPOSED STORMWATER PIPE
- ROOFWATER FLOW DIRECTION
- RAINGARDEN LOCALLY GRADED OVERFLOW TO STREET
- OVERLAND FLOW PATH
- x — PROPOSED SUBSOIL DRAIN

NOTE - UNDERGROUND SERVICES
 UNDERGROUND SERVICE LOCATIONS SHOWN ON THIS PLAN HAVE BEEN DETERMINED BY FIELD SURVEY AND/OR OFFICE RECORDS, AND MAY NOT REPRESENT ALL SERVICES OR EXACT LOCATIONS. THE CONTRACTOR MUST ACCURATELY LOCATE AND DEPTH ALL SERVICES LIKELY TO BE ENCOUNTERED DURING CONSTRUCTION, PRIOR TO COMMENCING ANY EXCAVATION WORKS. VERY IMPORTANT TO CHECK BEFORE STARTING CONSTRUCTION. ANY CLASHES MUST BE REPORTED TO ENGINEER ASAP.

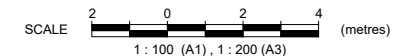
STORMWATER DRAINAGE NOTES:

1. ALL STORMWATER, PLUMBING AND DRAINAGE CONNECTIONS TO AS3500
2. CONCEPT DESIGN SHOWN ON PLANS AND ONLY SUITABLE FOR DA.
3. LOCATION OF PITS, PIPES AND STORMWATER INFRASTRUCTURE APPROXIMATE ONLY AND TO BE CONFIRMED ON SITE.
4. BIO-RETENTION @ 1.5% = 4m² / UNIT; ONSITE DETENTION @ 5l/m² = 1.2m³ / UNIT.



RAINGARDEN TYPICAL SECTION
 NOT TO SCALE

NOTE:
 RAINGARDEN 7m² x 0.4m DETENTION DEPTH.
 CONSTRUCT AS PER LISMORE CITY COUNCIL DCP CHAPTER 22, WATER SENSITIVE URBAN DESIGN TECHNICAL GUIDELINES FOR MINOR DEVELOPMENTS ILLUSTRATION 1.1 PAGE 8.



VER.	DESCRIPTION	APPR.	DATE
B	FINAL ISSUE FOR APPROVAL	DMcK	12/05/17
A	PRELIMINARY ISSUE FOR REVIEW	DMcK	11/05/17

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ENGINEERING & ENVIRONMENTAL SERVICES
 Stormwater • Flooding • Wastewater

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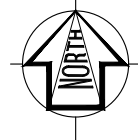
Email: office@eeservices.com.au

CLIENT:
PRAEDIUM PROPERTY

PROJECT:
**LOT 394 DP 1097790
 TOONGAHRA STREET,
 GOONELLABAH
 NSW 2480**

DRAWING TITLE:
**STORMWATER DRAINAGE
 LAYOUT PLAN**

DEVEL. APPLIC. No.:	DATE: 12/05/17
PROJECT LEADER: DMcK	DESIGNER: DMcK
DRAFTSPERSON: SBY	CHECKED: DMcK
APPROVED FOR AND ON BEHALF OF ENGINEERING & ENVIRONMENTAL SERVICES.	
SCALE: AS SHOWN	DATUM: AHD
PROJECT No.: 170125	FULL SIZE: A1
DRAWING No.: SW1	VERSION: B



TOONGAHRA STREET

LOT 395
DP 1097790

LOT 394
DP 1097790

KALLEE PLACE

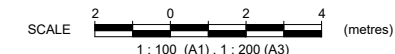
300 x 300
GRATED INLETS

LEGEND:

- 13 - - - - - EXISTING CONTOUR
- +13.38 EXISTING SURFACE LEVEL
- S- EXISTING SEWER
- SW- EXISTING STORMWATER PIPE
- SW- PROPOSED STORMWATER PIPE
- ➡ ROOFWATER FLOW DIRECTION
- ➡➡➡ RAINGARDEN LOCALLY GRADED OVERFLOW TO STREET
- ➡ OVERLAND FLOW PATH
- ▒ STABILISED SITE ACCESS (SD6-14)
- HAY BALES
- SILT — SEDIMENT FENCE (SD6-8)
- ~ GRASS TURF STRIPS (SD6-13)

EROSION AND SEDIMENT NOTES:

1. DETAILS SHOWN ON THIS DRAWING REPRESENT PROPOSED MINIMUM REQUIREMENTS FOR ONE POSSIBLE METHOD TO ACHIEVE COMPLIANCE WITH LEGISLATION TO PREVENT ENVIRONMENTAL HARM FROM EROSION AND SEDIMENT TRANSFER OFF THE CONSTRUCTION SITE, HOWEVER COMPLIANCE WITH THESE DRAWINGS MAY NOT BE SUFFICIENT TO ACHIEVE COMPLIANCE.
2. THE CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES THROUGHOUT THE COURSE OF THE CONSTRUCTION.
3. CONSTRUCTION IS TO BE MANAGED SUCH THAT AREAS NOT REQUIRED FOR CONSTRUCTION PURPOSES ARE TO BE LEFT UNDISTURBED WHERE POSSIBLE.
4. SEDIMENT CONTROL DESIGN MEASURES SHOULD BE SET IN PLACE PRIOR TO ANY CONSTRUCTION COMMENCING. THE CONTRACTOR IS TO MAINTAIN & CLEAN OUT ALL STRUCTURES.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR SITE AND WEATHER CONDITIONS AND WATER QUALITY LEAVING THE SITE AND IMPLEMENT APPROPRIATE MEASURES TO COMPLY WITH THE STATUTORY REQUIREMENTS.
6. SHOULD THIS REQUIRE ADDITIONAL MEASURES OR ALTERATIONS TO THE DETAILS SHOWN ON THIS DRAWING THE CONTRACTOR IS TO PROVIDE WORK METHOD STATEMENTS AND/OR REVISED DRAWINGS TO THE ENGINEER CLEARLY DETAILING THE PROPOSED CHANGES AND PRIOR TO IMPLEMENTING THEM.
7. EXISTING GRASS COVER TO BE RETAINED WHEREVER POSSIBLE.
8. SILTATION MANAGEMENT DEVICES TO BE IN ACCORDANCE WITH THE LISMORE CITY COUNCIL STANDARDS AND IEAUST EROSION AND SEDIMENT CONTROL GUIDELINES.



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CLIENT:
PRAEDIUM PROPERTY

PROJECT:
**LOT 394 DP 1097790
TOONGAHRA STREET,
GOONELLABAH
NSW 2480**

DRAWING TITLE:
**EROSION AND SEDIMENT
CONTROL LAYOUT PLAN**

DEVEL. APPLIC. No.:	DATE: 12/05/17
PROJECT LEADER: DMcK	DESIGNER: DMcK
DRAFTSPERSON: SBY	CHECKED: DMcK
APPROVED FOR AND ON BEHALF OF ENGINEERING & ENVIRONMENTAL SERVICES.	
SCALE: AS SHOWN	DATUM: AHD
PROJECT No.: 170125	DRAWING No.: SW2
FULL SIZE: A1	VERSION: B