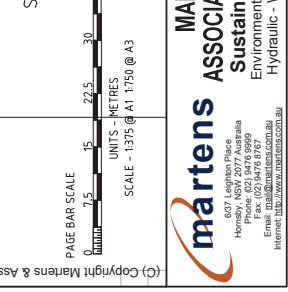
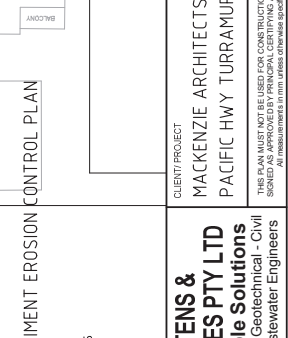
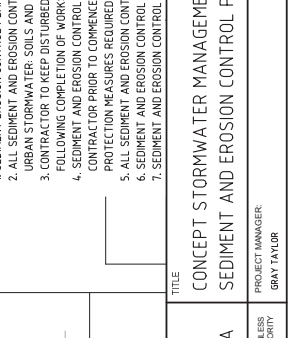
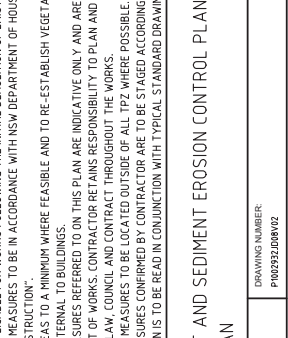
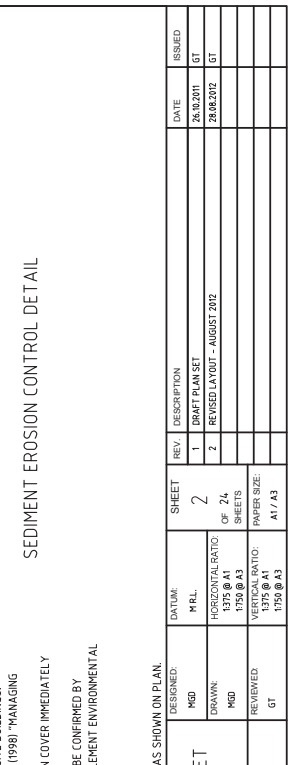
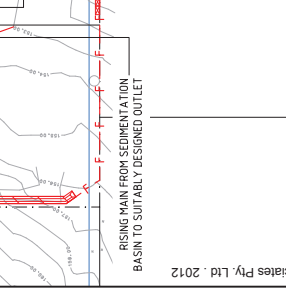
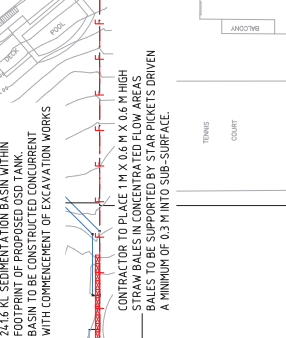
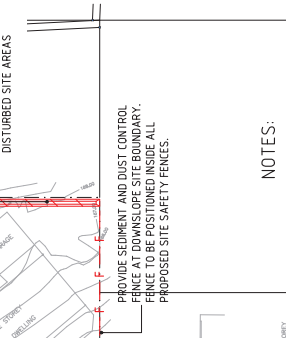
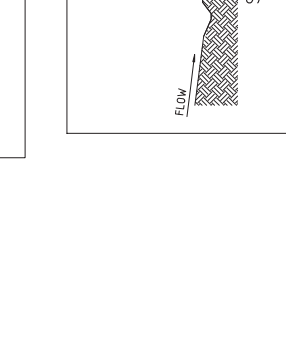
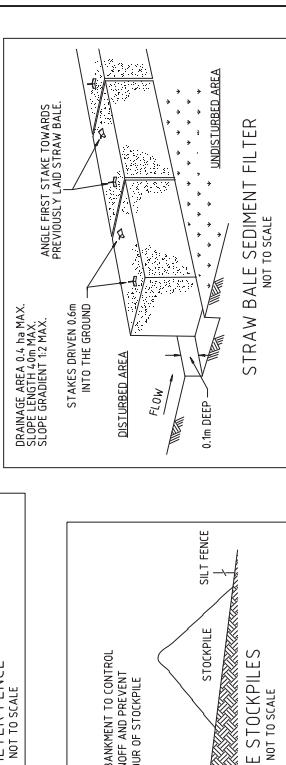
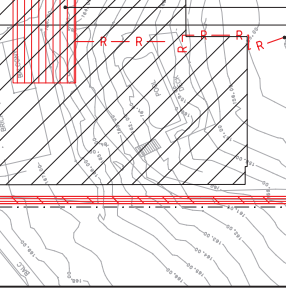
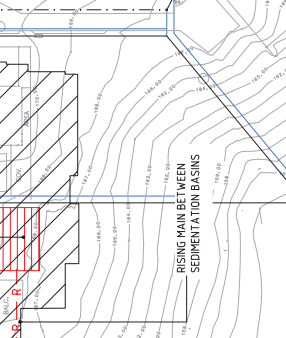
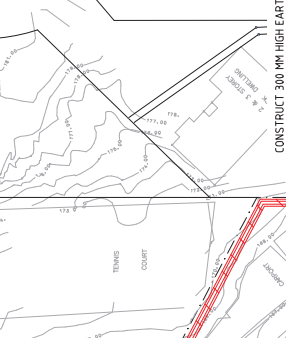
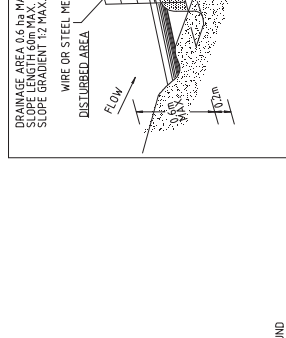
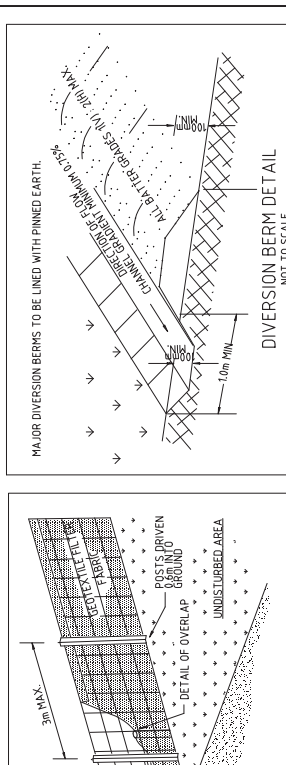
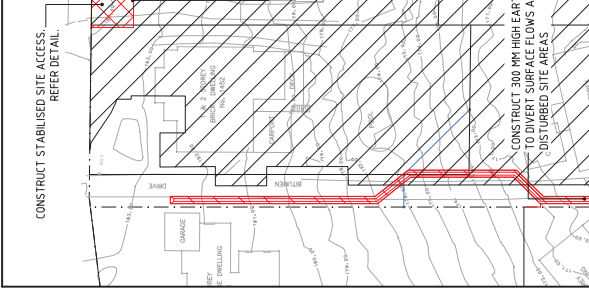
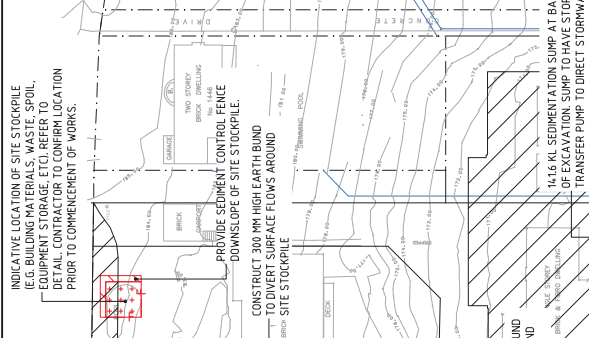
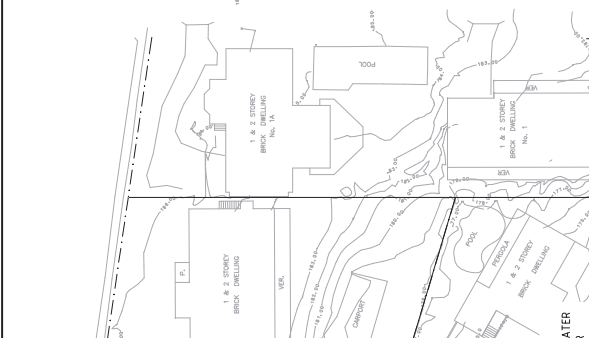
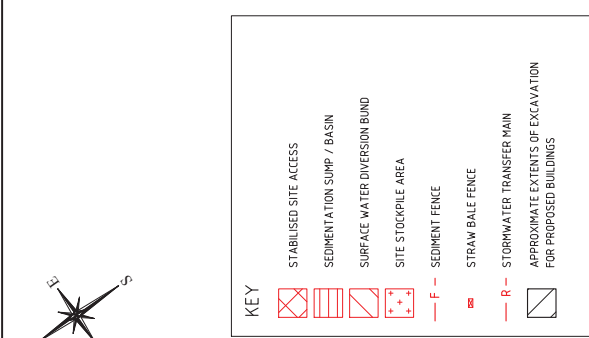
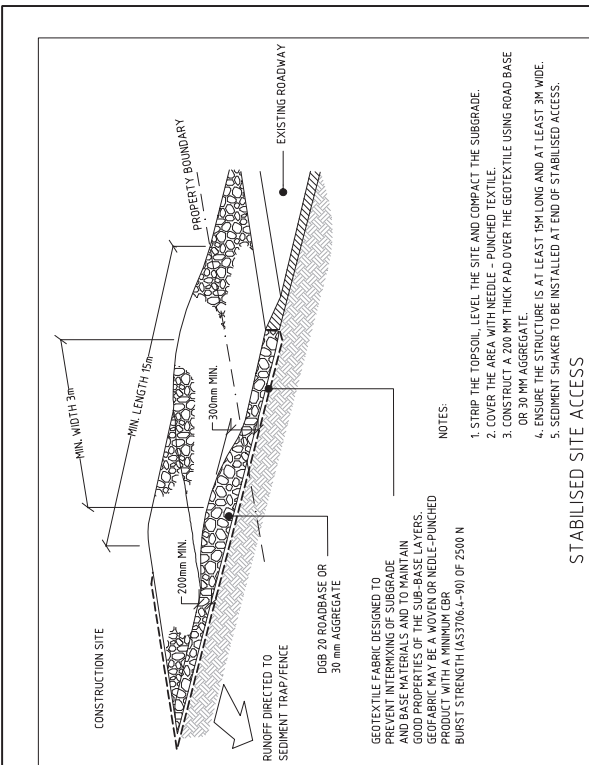
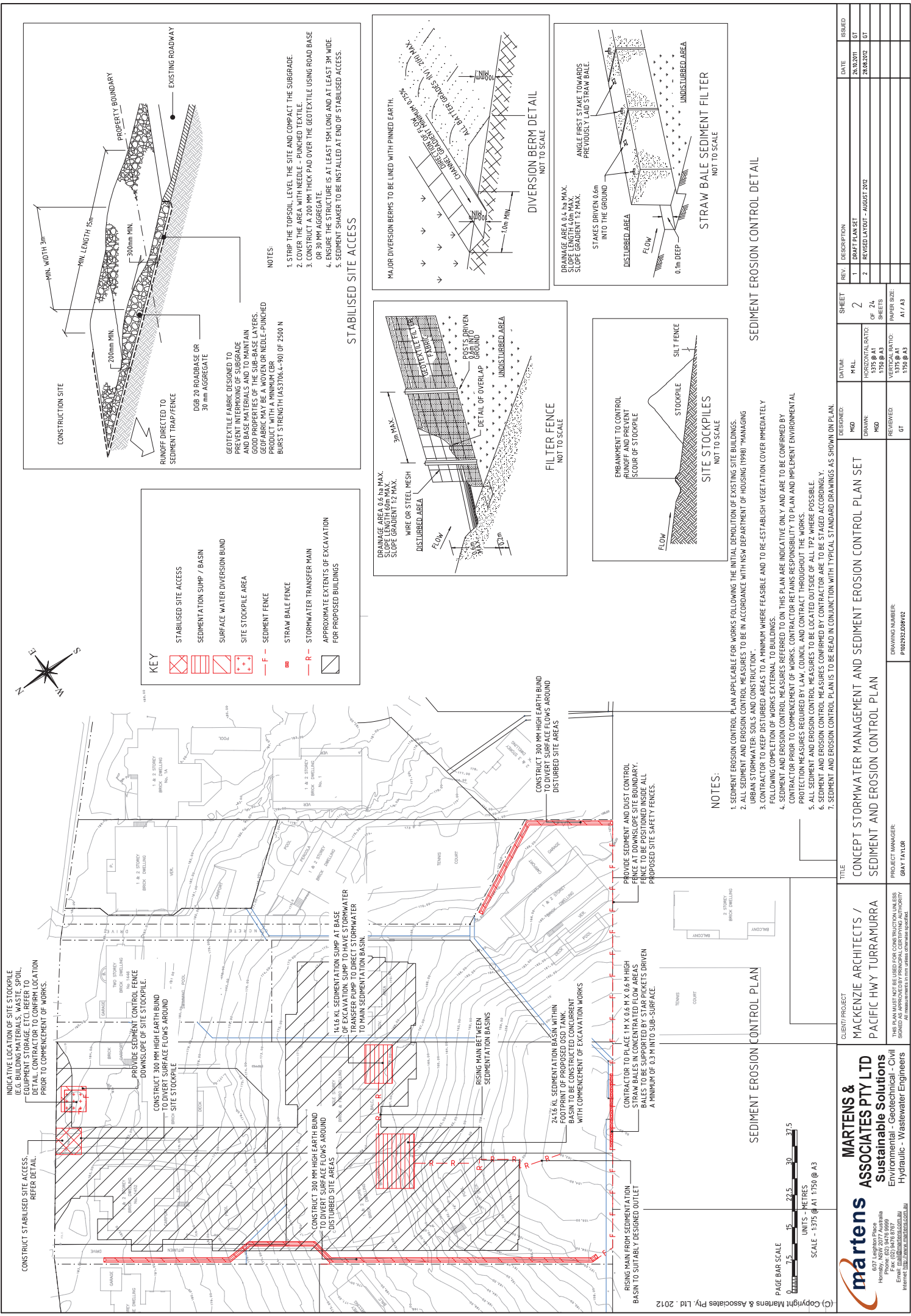


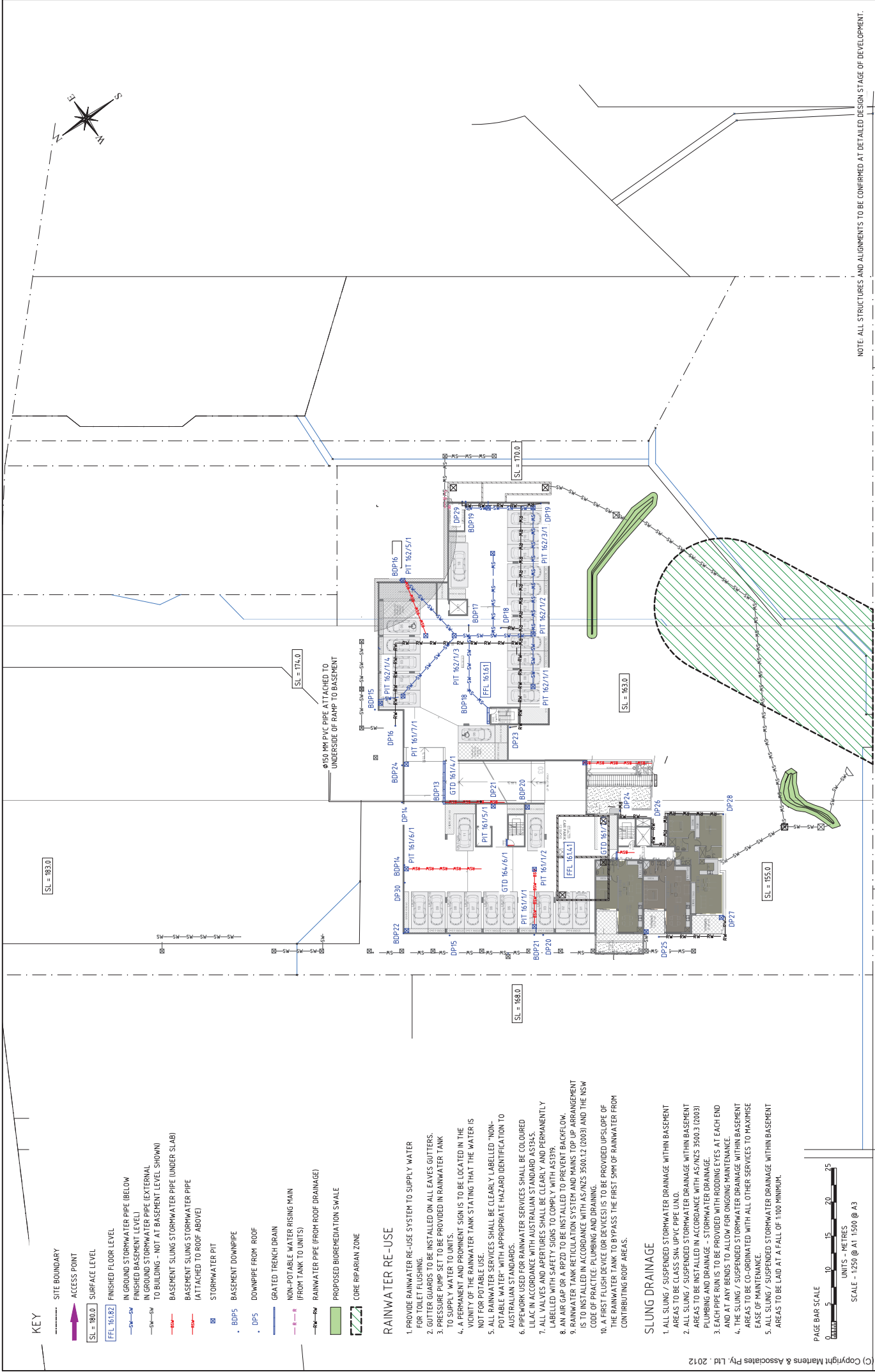
NOTE: PLAN SET TO BE READ IN CONJUNCTION WITH MA REPORT P1002932.JR02V02 (OCTOBER 2011) FOR DETAILS OF STORMWATER DESIGN.

PROPOSED DEVELOPMENT 1444 - 1454 PACIFIC HIGHWAY, TURRAMURRA, NSW
CONCEPT STORMWATER MANAGEMENT AND SEDIMENT AND EROSION CONTROL PLAN SET

PLAN NO.

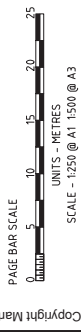
1. CONCEPT STORMWATER MANAGEMENT PLAN - COVER SHEET
2. CONCEPT STORMWATER MANAGEMENT PLAN - SEDIMENT AND EROSION CONTROL PLAN AND DETAIL
3. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 158.41
4. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 161.41
5. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 164.41
6. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 167.41
7. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 170.41
8. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 173.41
9. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 176.41
10. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 179.41
11. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 182.41
12. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 185.41
13. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 188.41
14. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 191.41
15. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 194.41
16. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING LEVEL 197.41
17. CONCEPT STORMWATER MANAGEMENT PLAN - BUILDING ROOF
18. CONCEPT STORMWATER MANAGEMENT PLAN - COMBINED OSD AND RAINWATER TANK 1 PLAN
19. CONCEPT STORMWATER MANAGEMENT PLAN - COMBINED OSD AND RAINWATER TANK 2 PLAN
20. CONCEPT STORMWATER MANAGEMENT PLAN - COMBINED OSD AND RAINWATER TANK 1 SECTIONS
21. CONCEPT STORMWATER MANAGEMENT PLAN - COMBINED OSD AND RAINWATER TANK 2 SECTIONS
22. CONCEPT STORMWATER MANAGEMENT PLAN - TYPICAL BIOREMEDIATION SWALE DETAILS
23. CONCEPT STORMWATER MANAGEMENT PLAN - TYPICAL STORMWATER DRAINAGE SYSTEM DETAILS
24. CONCEPT STORMWATER MANAGEMENT PLAN - TYPICAL OUTLET DETAILS





CLIENT PROJECT		TITLE		DESIGNED:		SHEET		DATE		ISSUED	
MACKENZIE ARCHITECTS /		CONCEPT STORMWATER MANAGEMENT AND SEDIMENT EROSION CONTROL PLAN SET		MMD		4		26.10.2010		GT	
PACIFIC HWY TURRAMURRA		STORMWATER LAYOUT BUILDING LEVEL 161/41		MMD		OF 24		28.08.2012		GT	
THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY		DRAWING NUMBER:		P1002932.008/02		PAPER SIZE:		A1 / A3			
PROJECT MANAGER:		GRAY TAYLOR		REVIEWED:		SHEET		DATE		ISSUED	
AT TURRAMURRA 11/10/2010				GT		A1 / A3					

NOTE: ALL STRUCTURES AND ALIGNMENTS TO BE CONFIRMED AT DETAILED DESIGN STAGE OF DEVELOPMENT.



- ### SLUNG DRAINAGE
1. ALL SLUNG / SUSPENDED STORMWATER DRAINAGE WITHIN BASEMENT AREAS TO BE CLASS SM, UPVC PIPE U.N.O.
 2. ALL SLUNG / SUSPENDED STORMWATER DRAINAGE WITHIN BASEMENT AREAS TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.3 (2003) PLUMBING AND DRAINAGE - STORMWATER DRAINAGE
 3. EACH PIPE RUN IS TO BE PROVIDED WITH RIDDING EYES AT EACH END AND AT ANY BENDS TO ALLOW FOR ONGOING MAINTENANCE
 4. THE SLUNG / SUSPENDED STORMWATER DRAINAGE WITHIN BASEMENT AREAS TO BE CO-ORDINATED WITH ALL OTHER SERVICES TO MAXIMISE EASE OF MAINTENANCE
 5. ALL SLUNG / SUSPENDED STORMWATER DRAINAGE WITHIN BASEMENT AREAS TO BE LAID AT A FALL OF 1:100 MINIMUM.

- ### RAINWATER RE-USE
1. PROVIDE RAINWATER RE-USE SYSTEM TO SUPPLY WATER FOR TOILET FLUSHING.
 2. GUTTER GUARDS TO BE INSTALLED ON ALL EAVES GUTTERS.
 3. PRESSURE PUMP SET TO BE PROVIDED IN RAINWATER TANK TO SUPPLY WATER TO UNITS.
 4. A PERMANENT AND PROMINENT SIGN IS TO BE LOCATED IN THE VICINITY OF THE RAINWATER TANK STATING THAT THE WATER IS NOT FOR POTABLE USE.
 5. ALL RAINWATER SERVICES SHALL BE CLEARLY LABELLED "NON-POTABLE WATER" WITH APPROPRIATE HAZARD IDENTIFICATION TO AUSTRALIAN STANDARDS.
 6. PIPEWORK USED FOR RAINWATER SERVICES SHALL BE COLOURED LILAC IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1345.
 7. ALL VALVES AND APERTURES SHALL BE CLEARLY AND PERMANENTLY LABELLED WITH SAFETY SIGNS TO COMPLY WITH AS1319.
 8. AN AIR GAP OR A RPZD TO BE INSTALLED TO PREVENT BACKFLOW.
 9. RAINWATER TANK RETICULATION SYSTEM AND MAINS TOP UP ARRANGEMENT IS TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.12 (2003) AND THE NSW CODE OF PRACTICE PLUMBING AND DRAINING.
 10. A FIRST FLUSH DEVICE (OR DEVICES) IS TO BE PROVIDED UPSLOPE OF THE RAINWATER TANK TO BYPASS THE FIRST 5MM OF RAINWATER FROM CONTRIBUTING ROOF AREAS.

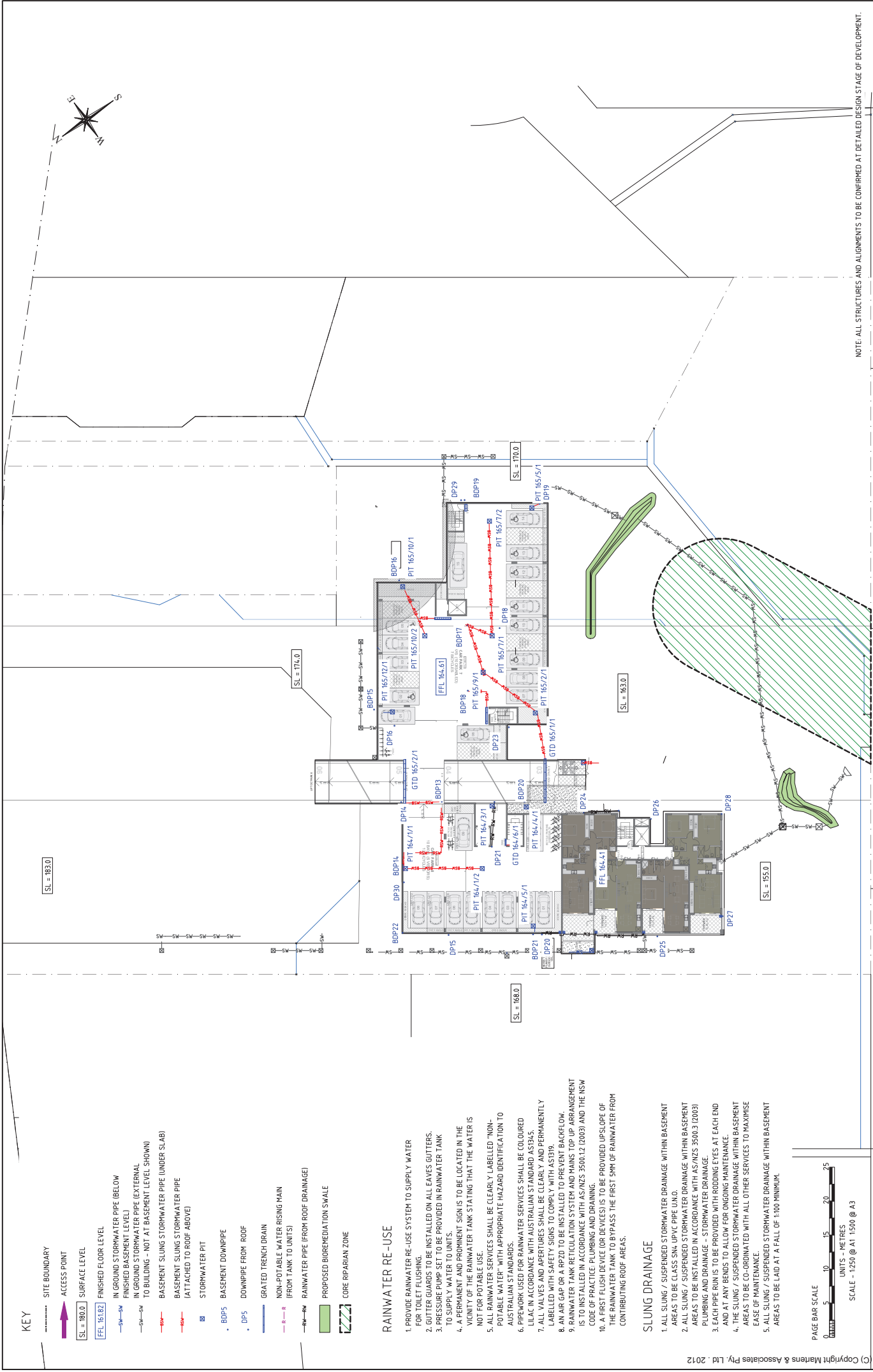
- ### KEY
- SITE BOUNDARY
 - ACCESS POINT
 - SL = 180.0 SURFACE LEVEL
 - FFL 161.82 FINISHED FLOOR LEVEL
 - IN GROUND STORMWATER PIPE (BELOW FINISHED BASEMENT LEVEL)
 - IN GROUND STORMWATER PIPE (EXTERNAL TO BUILDING - NOT AT BASEMENT LEVEL SHOWN)
 - BASEMENT SLUNG STORMWATER PIPE (UNDER SLAB)
 - BASEMENT SLUNG STORMWATER PIPE (ATTACHED TO ROOF ABOVE)
 - STORMWATER PIT
 - BDPS BASEMENT DOWNPIPE
 - DP5 DOWNPIPE FROM ROOF
 - GRATED TRENCH DRAIN
 - NON-POTABLE WATER RISING MAIN (FROM TANK TO UNITS)
 - RAINWATER PIPE (FROM ROOF DRAINAGE)
 - PROPOSED BUREMEDIATION SWALE
 - CORE RIPARIAN ZONE

MARTENS & ASSOCIATES PTY LTD
Sustainable Solutions
Environmental - Geotechnical - Civil
Hydraulic - Wastewater Engineers

6/37 Leighton Place
Hornsby, NSW 2077 Australia
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Email: info@martensandassociates.com.au
Internet: www.martensandassociates.com.au

PROJECT MANAGER:
GRAY TAYLOR

DRAWING NUMBER:
P1002932.008/02



KEY		CLIENT PROJECT		TITLE	
SITE BOUNDARY		MACKENZIE ARCHITECTS /		CONCEPT STORMWATER MANAGEMENT AND SEDIMENT EROSION CONTROL PLAN SET	
ACCESS POINT		PACIFIC HWY TURRAMURRA		STORMWATER LAYOUT BUILDING LEVEL 164.41	
SURFACE LEVEL		THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS		PROJECT MANAGER:	
FINISHED FLOOR LEVEL		SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY		GRAY TAYLOR	
IN GROUND STORMWATER PIPE (BELOW		AT TURRAMURRA 1100 FORD ROAD, TURRAMURRA		DRAWING NUMBER:	
FINISHED BASEMENT LEVEL				P1002932.008/002	
IN GROUND STORMWATER PIPE (EXTERNAL					
TO BUILDING - NOT AT BASEMENT LEVEL SHOWN)					
BASEMENT SLUNG STORMWATER PIPE (UNDER SLAB)					
BASEMENT SLUNG STORMWATER PIPE					
(ATTACHED TO ROOF ABOVE)					
STORMWATER PIT					
BDPS BASEMENT DOWNPIPE					
DOWNPIPE FROM ROOF					
GRADED TRENCH DRAIN					
NON-POTABLE WATER RISING MAIN					
(FROM TANK TO UNITS)					
RAINWATER PIPE (FROM ROOF DRAINAGE)					
PROPOSED BIORETENTION SWALE					
CORE RIPARIAN ZONE					

DATE	ISSUED
26.10.2010	GT
28.08.2012	GT

REV.	DESCRIPTION	SHEET
1	DRAFT PLAN SET	5
2	REVISED LAYOUT - AUGUST 2012	OF 24

DATUM:	M.S.L.	HORIZONTAL RATIO
1	1250 @ A1	1500 @ A3
2	1500 @ A3	1500 @ A3

DESIGNED:	MD	REVIEWED:	GT
DRAWN:	MD		

VERTICAL RATIO:	1500 @ A3
PAPER SIZE:	A1 / A3

DATE	ISSUED
26.10.2010	GT
28.08.2012	GT

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VERTICAL RATIO:	1500 @ A3
PAPER SIZE:	A1 / A3

KEY

- SITE BOUNDARY
ACCESS POINT
SURFACE LEVEL
FINISHED FLOOR LEVEL

- IN GROUND STORMWATER PIPE (BELOW FINISHED BASEMENT LEVEL)
IN GROUND STORMWATER PIPE (EXTERNAL TO BUILDING - NOT AT BASEMENT LEVEL SHOWN)
BASEMENT SLUNG STORMWATER PIPE (UNDER SLAB)
BASEMENT SLUNG STORMWATER PIPE (ATTACHED TO ROOF ABOVE)
STORMWATER PIT

- BOP5 BASEMENT DOWNPIPE
DP5 DOWNPIPE FROM ROOF
GRATED TRENCH DRAIN
NON-POTABLE WATER RISING MAIN (FROM TANK TO UNITS)
RAINWATER PIPE (FROM ROOF DRAINAGE)
PROPOSED BIOMEDIATION SWALE
CORE RIPARIAN ZONE

RAINWATER RE-USE

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SLUNG DRAINAGE

1. ALL SLUNG / SUSPENDED STORMWATER DRAINAGE WITHIN BASEMENT AREAS TO BE CLASS SNA UPVC PIPE UNO.
2. ALL SLUNG / SUSPENDED STORMWATER DRAINAGE WITHIN BASEMENT AREAS TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.3 (2003).
3. EACH PIPE RUN IS TO BE PROVIDED WITH RIDDING EYES AT EACH END AND AT ANY BENDS TO ALLOW FOR ONGOING MAINTENANCE.
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