DESCRIPTION

# UNIVERSITY DRIVE CALLAGHAN NSW 2300



### DRAWING SCHEDULE

ARCHITECT

DRG No. DRAWING TITLE

COODA COVER SHEET AND DRAWING SCHEDULE SEDIMENT AND EROSION CONTROL PLAN

CO2DA GROUND LEVEL STORMWATER MANAGEMENT AND LEVELS PLAN SHEET 1 OF 2
CO3DA GROUND LEVEL STORMWATER MANAGEMENT AND LEVELS PLAN SHEET 2 OF 2
CO4DA BASEMENT LEVEL STORMWATER MANAGEMENT AND LEVELS PLAN SHEET 1 OF 2
CO5DA BASEMENT LEVEL STORMWATER MANAGEMENT AND LEVELS PLAN SHEET 2 OF 2

C10DA CIVIL DETAILS SHEET 1 OF 2
C11DA CIVIL DETAILS SHEET 2 OF 2

### NOT FOR CONSTRUCTION

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Α	RE-ISSUED FOR DA APPROVAL	AG	ВС	ВН	05.04.16	SNL BUILDING	SMITH & TZANNES	
В	RE-ISSUED FOR DA APPROVAL	AG	ВС	ВН	07.07.16	CONSTRUCTIONS PTY LTD		ĺ
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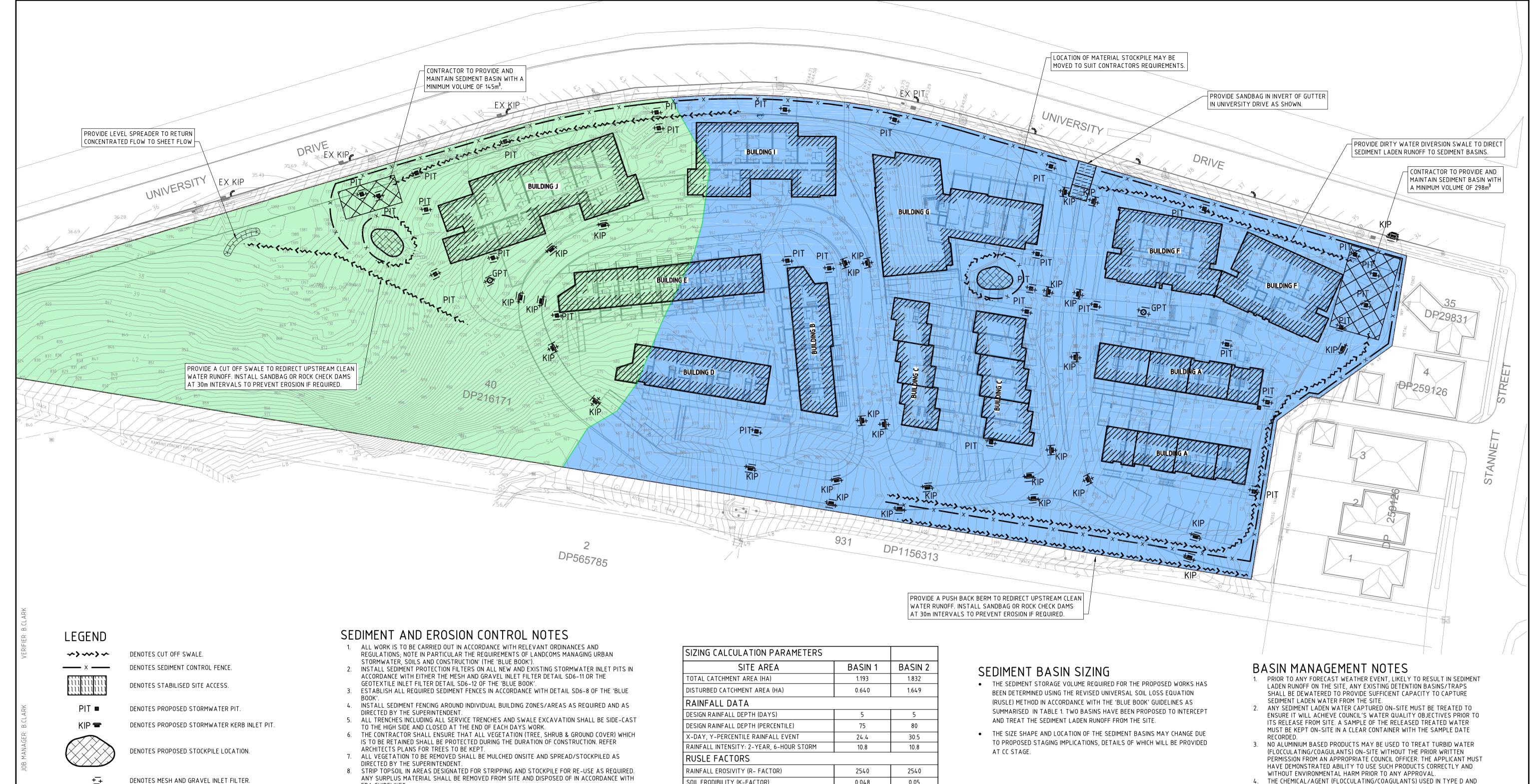
UNIVERSITY DRIVE CALLAGHAN NSW 2300 DRAWING TITLE

COVER SHEET AND DRAWING SCHEDULE

SHEET AND NUMBER
NL150001

COODA B

DRAWING SHEET SIZE = A1



THE CONTRACTOR SHALL ENSURE COUNCIL ASSETS AND THE UTILITIES ARE PROTECTED AT ALL TIMES. ANY AND ALL DAMAGES TO COUNCIL ASSETS AND/OR UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SPECIFICATION OF COUNCIL AND THE UTILITIES AUTHORITY AND

AT NO COST TO THE PRINCIPAL OR NORTHROP CONSULTING ENGINEERS.

DESCRIPTION

DENOTES EXTENT OF PROPOSED SUB CATCHMENT 1.

DENOTES EXTENT OF PROPOSED SUB CATCHMENT 2.

DENOTES EXTENT OF PROPOSED SEDIMENT BASINS.

DENOTES PROPOSED SANDBAG OR GEOTEXTILE SOCK FILLED

WITH NO FINES GRAVEL PLACED IN INVERT OF GUTTER.

DETAILS TO BE PROVIDED AT CC STAGE.

- EPA GUIDELINES. 9. CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW
- 10. ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS
- REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
- 11. PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
- 12. ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL. 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION & SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL

BE UPDATED ON A DAILY BASIS & SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND

ARCHITEC1

ANY/ ALL MAINTENANCE, CLEANING & BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL

TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS. 14. WATER CAPTURED WITHIN THE SEDIMENT BASIN DURING CONSTRUCTION SHALL BE FLOCCULATED AND SETTLED BEFORE DISCHARGING TO THE CREEK AS SHOWN ON PLAN. THE DISCHARGE OF WATER SHALL OCCUR ONLY WHEN THE SUSPENDED SOLIDS (SS) CONCENTRATION DROPS BELOW 50mg/L. TESTING OF SS CONCENTRATION SHALL BE UNDERTAKEN PRIOR TO DISCHARGE WITH DISCHARGE AND TESTING BEING CONDUCTED IN ACCORDANCE WITH APPENDIX E OF THE BLUE BOOK'. PROVIDE PUMPING EQUIPMENT TO DISCHARGE WATER AS NECESSARY.

SIZING CALCULATION PARAMETERS		
SITE AREA	BASIN 1	BASIN 2
TOTAL CATCHMENT AREA (HA)	1.193	1.832
DISTURBED CATCHMENT AREA (HA)	0.640	1.649
RAINFALL DATA	•	•
DESIGN RAINFALL DEPTH (DAYS)	5	5
DESIGN RAINFALL DEPTH (PERCENTILE)	75	80
X-DAY, Y-PERCENTILE RAINFALL EVENT	24.4	30.5
RAINFALL INTENSITY: 2-YEAR, 6-HOUR STORM	10.8	10.8
RUSLE FACTORS		
RAINFALL EROSIVITY (R- FACTOR)	2540	2540
SOIL ERODIBILITY (K-FACTOR)	0.048	0.05
SLOPE LENGTH (m)	100	35
SLOPE GRADIENT (%)	10	11
LENGTH/GRADIENT (LS-FACTOR)	3.3	1.85
EROSION CONTROL PRACTICE (P-FACTOR)	1.3	1.3
GROUND COVER (C-FACTOR)	1	1
SOIL LOSS		
SOIL LOSS (T/HA/YR)	518	293
SOIL LOSS CLASS	5	3
SOIL LOSS (m³/HA/YR)	399	226
SEDIMENT BASIN STORAGE VOLUME, m³	43	63
BASIN VOLUME		
VOLUMETRIC RUNOFF COEFFICIENT (CV)	0.35	0.52
SETTING ZONE VOLUME (m³)	102	235
TOTAL BASIN VOLUME (m³)	145	298

- 4. THE CHEMICAL/AGENT (FLOCCULATING/COAGULANTS) USED IN TYPE D AND TYPE F BASINS TO TREAT TURBID WATER CAPTURED IN THE BASIN MUST BE APPLIED IN CONCENTRATIONS SUFFICIENT TO ACHIEVE COUNCIL'S WATER QUALITY OBJECTIVES (TSS < 50mg/L, TURBIDITY < 60 NTU, 6.5 < pH < 8.5) WITHIN THE 5-DAY RAINFALL DEPTH USED TO CALCULATE THE CAPACITY OF
- THE BASIN, AFTER A RAINFALL EVENT. 5. ALL MANUFACTURERS INSTRUCTIONS MUST BE FOLLOWED FOR THE USE OF ANY CHEMICALS/AGENTS USED ON-SITE, EXCEPT WHERE APPROVED BY THE
- RESPONSIBLE PERSON OR AN APPROPRIATE COUNCIL OFFICER. 6. SUFFICIENT QUANTITIES OF CHEMICALS/AGENTS TO TREAT TURBID WATER (FLOCCULATING/COAGULANTS) MUST BE PLACED SUCH THAT WATER ENTERING THE BASINS/SEDIMENT TRAP MIXES WITH THE CHEMICALS/AGENTS
- AND IS CARRIED INTO THE BASIN/TRAP. 7. ANY BASIN MUST BE DEWATERD AS SOON AS PRACTICAL, ONCE WATER
- CAPTURED IN THE BASIN ACHIEVES COUNCIL'S WATER QUALITY OBJECTIVES. INSPECT THE SEDIMENT BASINS AFTER EACH RAINFALL EVENT AND/OR WEEKLY. ENSURE THAT ALL SEDIMENT IS REMOVED ONCE THE SEDIMENT STORAGE ZONE IS FULL. ENSURE THAT OUTLET AND EMERGENCY SPILLWAY

WORKS ARE MAINTAINED IN A FULLY OPERATIONAL CONDITION AT ALL TIMES.

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С	RE-ISSUED FOR DA APPROVAL	AG	ВС	ВН	05.04.16			
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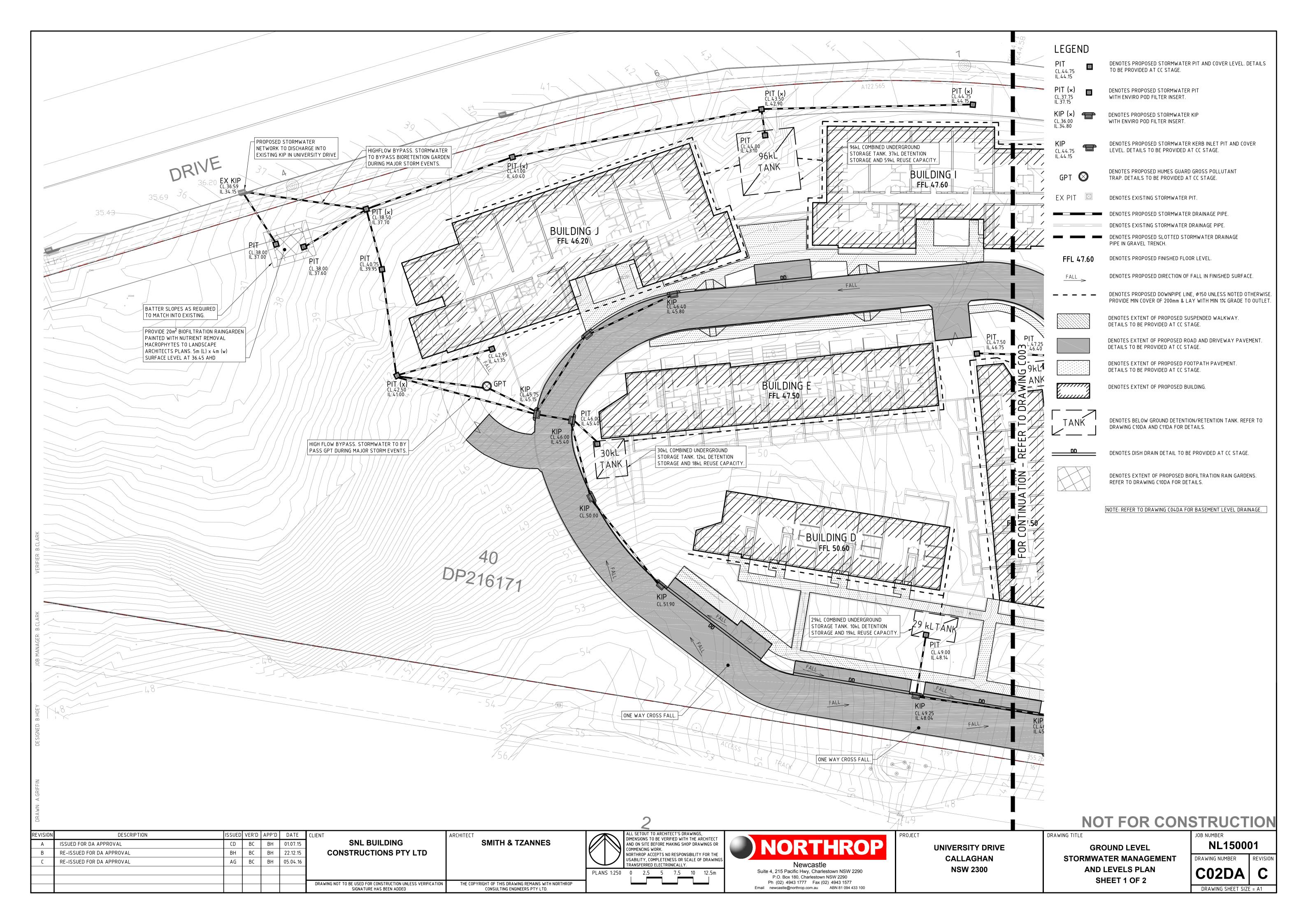
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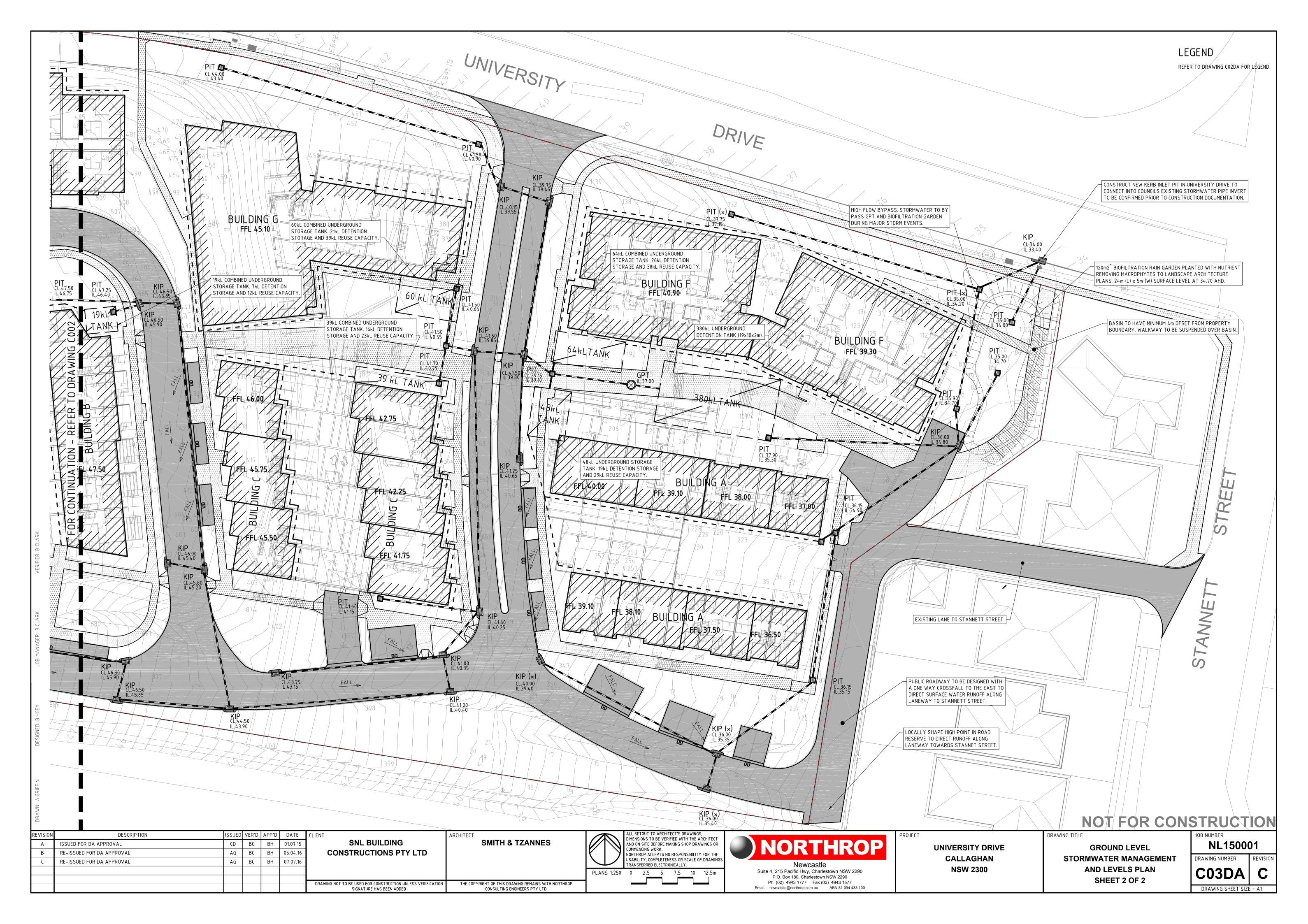
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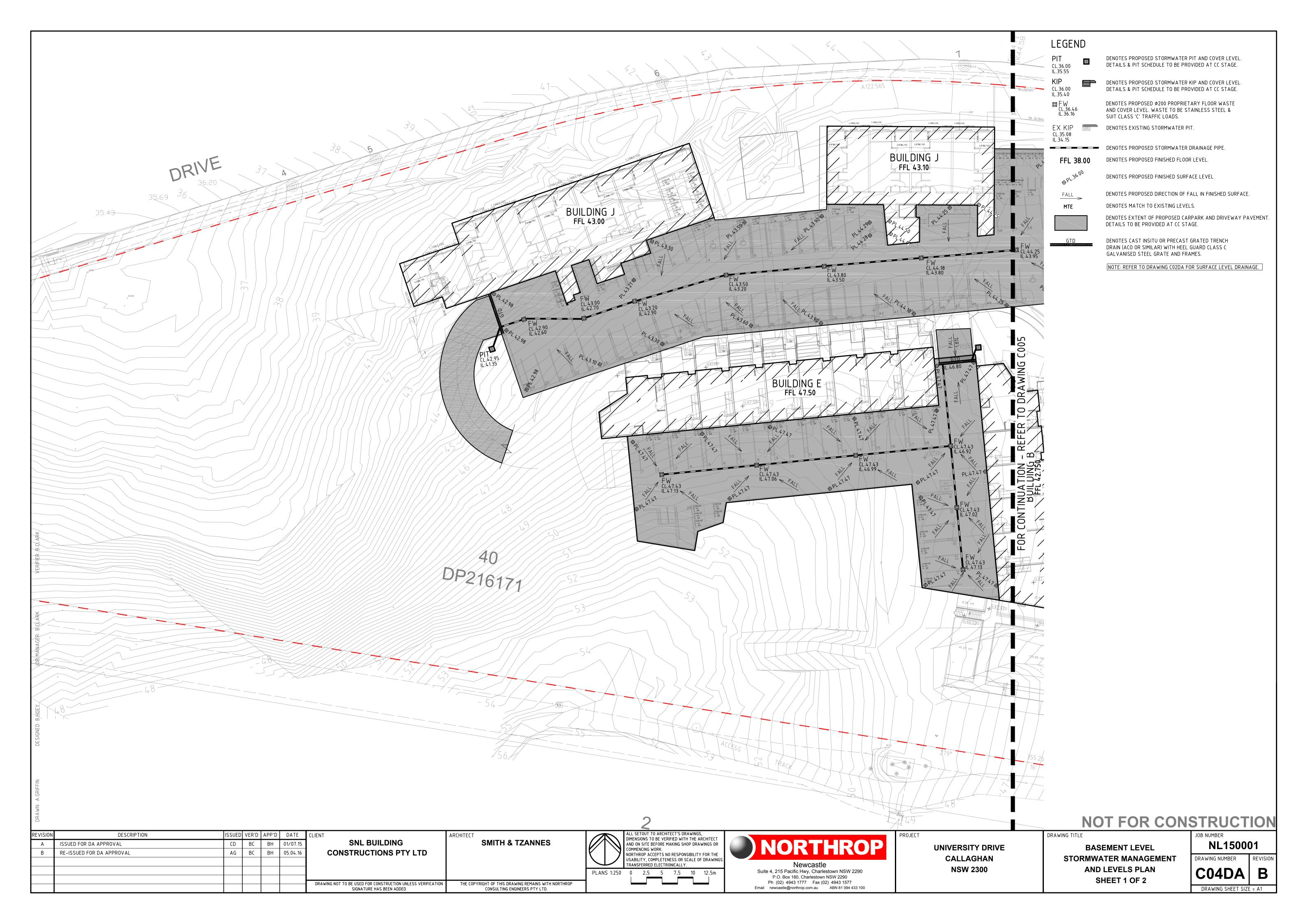
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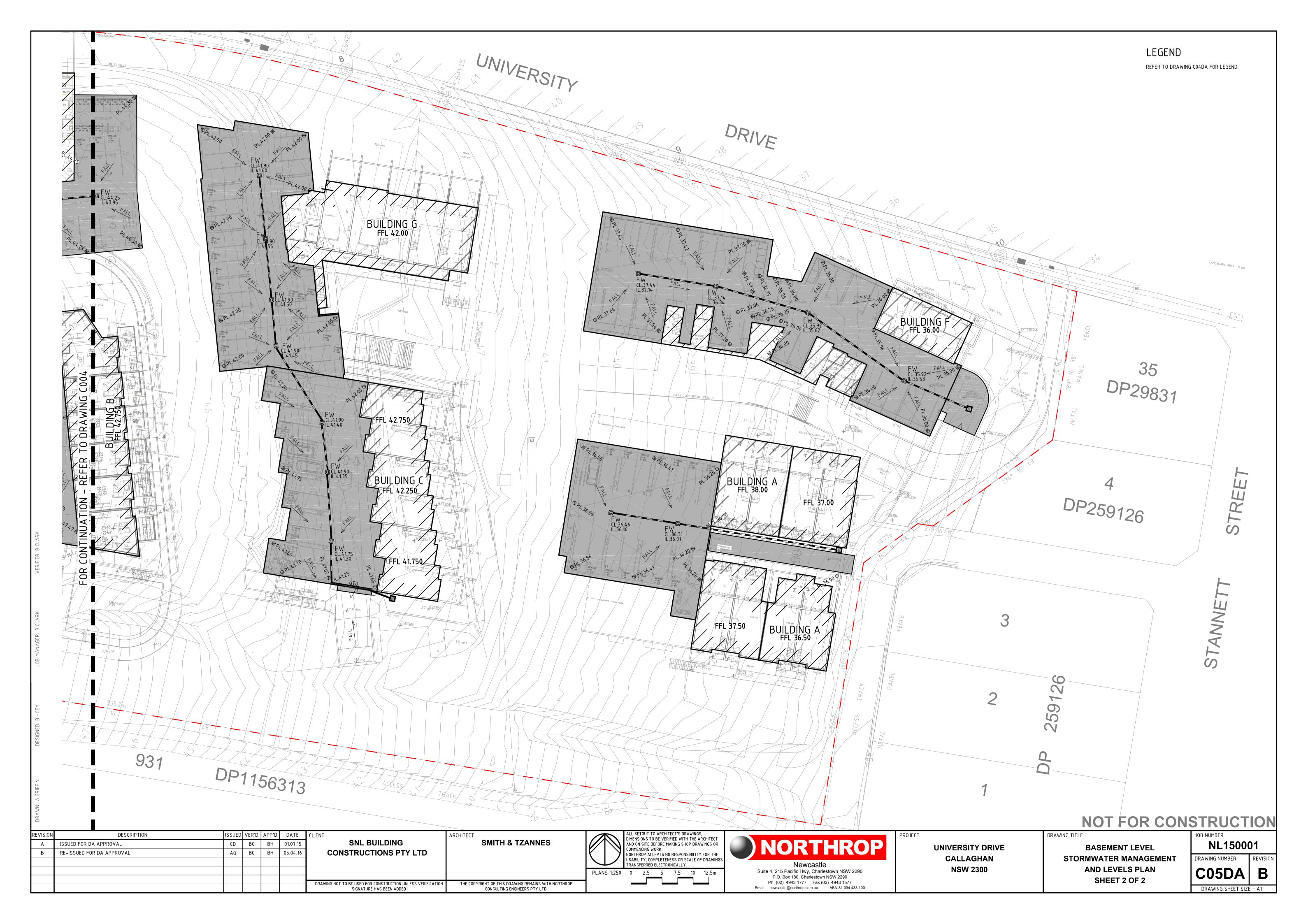
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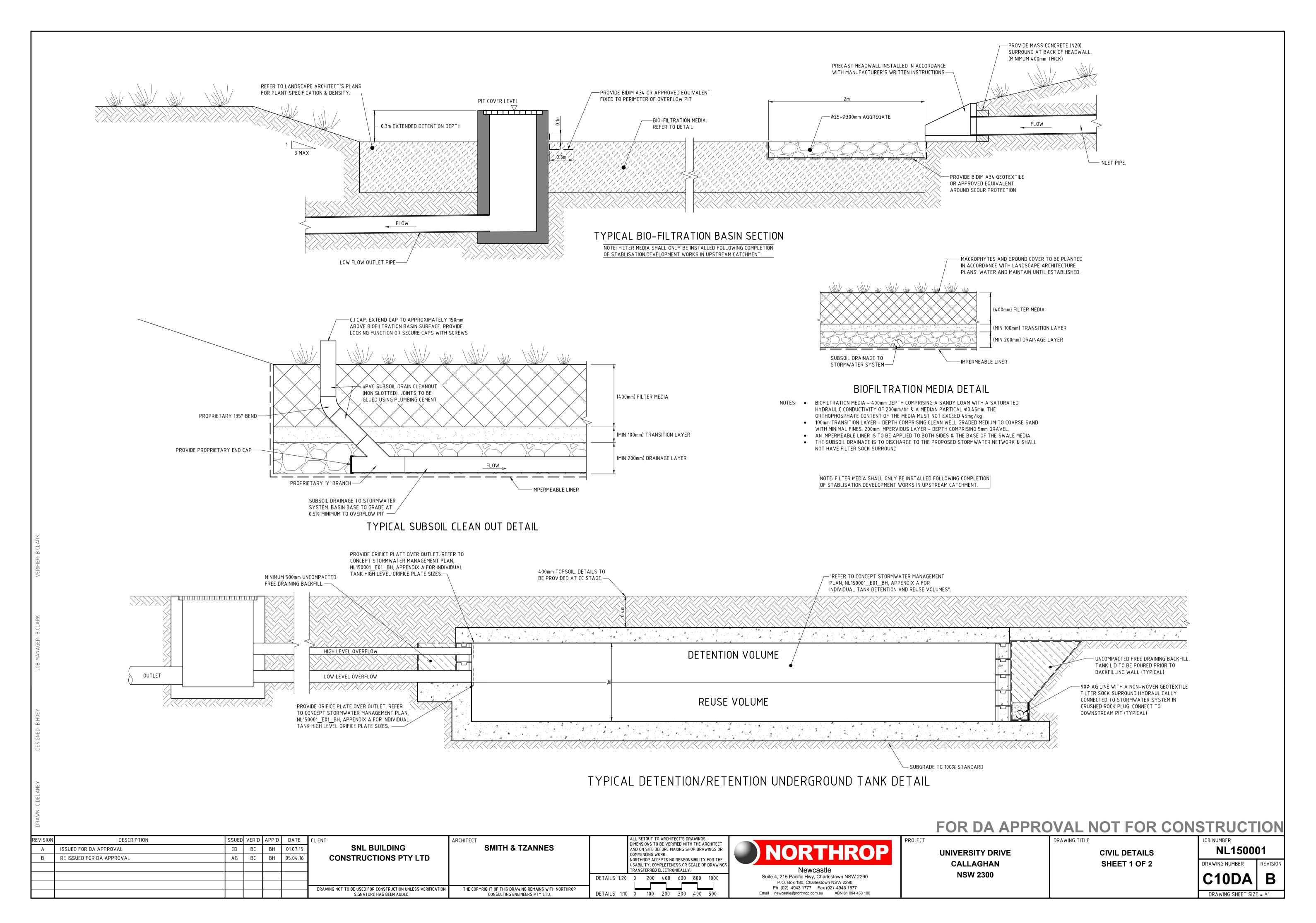
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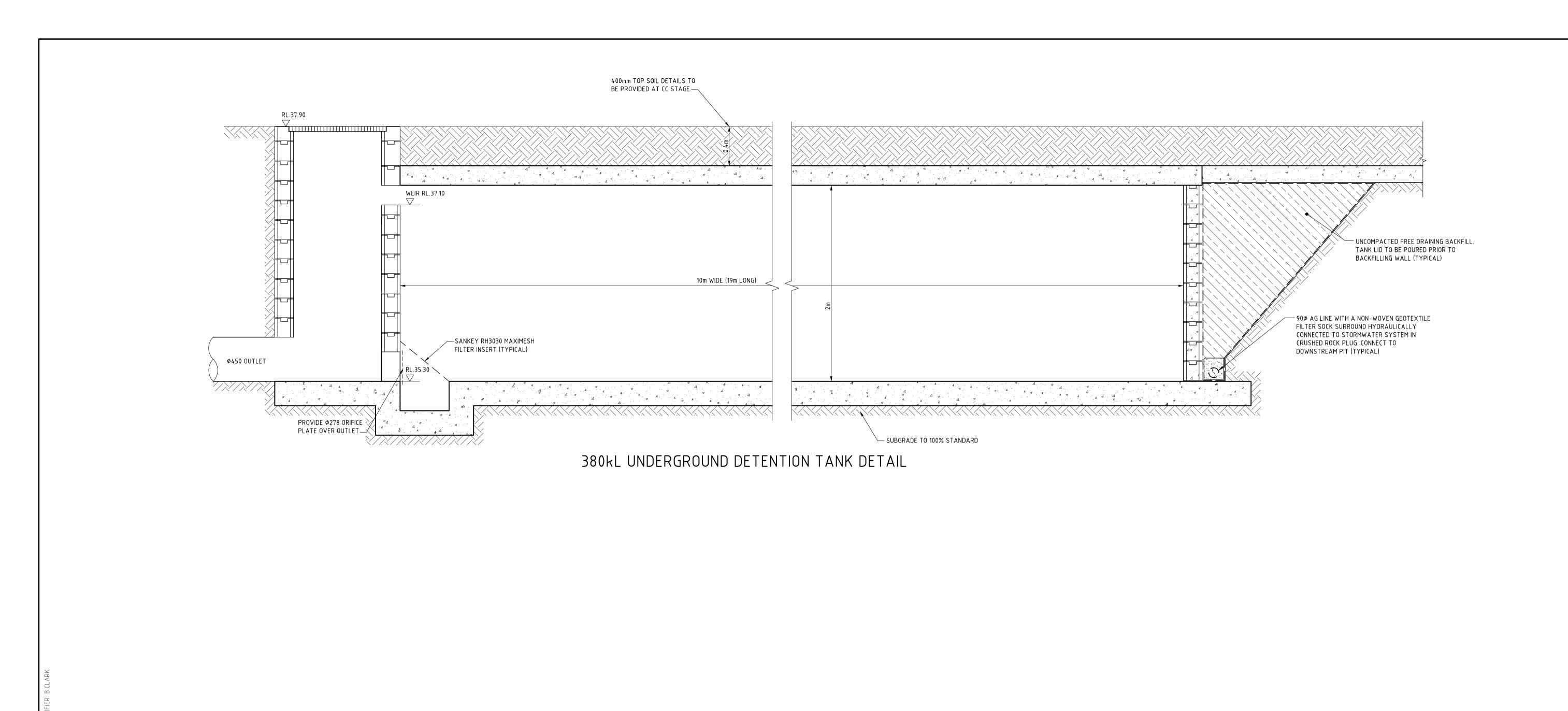






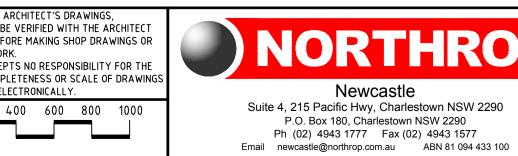






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**CIVIL DETAILS** SHEET 2 OF 2

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