

EROSION AND SEDIMENT CONTROL.

1. THE FOLLOWING MEASURES SHALL BE READ IN CONJUNCTION WITH THE NSW PUBLICATION "MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION, FOURTH EDITION 2004 VOLUME 1 - PREPARED BY LANDCOM, PARTICULAR ATTENTION SHALL BE PAID TO CHAPTERS 6 & 8

2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR AND DURING THE CONSTRUCTION PERIOD. THESE CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED REGULARLY BY THE CONTRACTOR TO ENSURE THE EFFECTIVENESS OF THE MEASURES.

3. ALL NECESSARY WORKS SHALL BE CARRIED OUT TO PREVENT EROSION, CONTAMINATION AND SEDIMENTATION OF THE PROJECT SITE AND ADJACENT PROPERTIES AND DRAINAGE SYSTEMS.

4. MINIMISE DISTURBED AREAS COVERED WITH NATURAL VEGETATION. ONLY THOSE AREAS DIRECTLY REQUIRED FOR CONSTRUCTION ARE TO BE DISTURBED FROM UNDISTURBED AREAS AROUND THE WORKING AREAS.

5. ADOPT TEMPORARY MEASURES AS MAY BE NECESSARY FOR EROSION AND SEDIMENT CONTROL, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- DRAINS - CONSTRUCT TEMPORARY DRAINS AND CATCH DRAINS
- SILT TRAPS - CONSTRUCT TEMPORARY STRUCTURES TO DISPERSE CONCENTRATED RUN-OFF
- SILT TRAPS - CONSTRUCT AND MAINTAIN SILT TRAPS TO PREVENT DISCHARGE OF SCOURED MATERIAL TO DOWNSTREAM AREAS
- TEMPORARY FENCING - CONSTRUCT, MAINTAIN AND KEEP IN GOOD REPAIR ALL SILT AND WIND FENCES, CHECK AND CLASH
- FENCES FOLLOWING RIN AND STORMY EVENTS
- ALL DISCULCURED WATER SHALL BE TREATED TO EPA STANDARDS PRIOR TO DISCHARGE OFF SITE OR ALTERNATIVELY REMOVED BY TANKER WITH A LICENSED TRADE WASTE COLLECTOR
- ALL STORMWATER INLET PITS ARE TO BE PROTECTED FILTER FABRIC DROP INLET SEDIMENT TRAPS OR GRAVEL SAUSAGE, WHICH IS TO BE COVERED WITH A GEOTEXTILE FABRIC
- STOCKPILES OF MATERIALS SHALL BE LEFT WITHIN THE SITE BOUNDARIES IN A POSITION NOT VULNERABLE TO CONCENTRATED SURFACE RUN-OFF

THE FOLLOWING:

- DRAINS - CONSTRUCT TEMPORARY DRAINS AND CATCH DRAINS
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- ALL STORMWATER INLET PITS ARE TO BE PROTECTED FILTER FABRIC DROP INLET SEDIMENT TRAPS OR GRAVEL SAUSAGE, WHICH IS TO BE COVERED WITH A GEOTEXTILE FABRIC
- STOCKPILES OF MATERIALS SHALL BE LEFT WITHIN THE SITE BOUNDARIES IN A POSITION NOT VULNERABLE TO CONCENTRATED SURFACE RUN-OFF

1. DUST IS TO BE WELL CONTROLLED ON THE CONSTRUCTION SITE AT ALL TIMES, ESPECIALLY AT EXCAVATIONS, DEMOLITION ETC

2. WATER SPRAY TO BE USED TO CONTROL DUST ON DIRT/GRADED AREAS ONLY

3. CARE TO BE EXERCISED TO ENSURE WATER SPRAY DISPENSE ONLY SUFFICIENT WATER FOR DUST CONTROL

4. CARE TO BE EXERCISED TO ENSURE ONLY OPTIMUM MOISTURE CONTENT OF THE SOIL IS REACHED FOR COMPACTION

5. FOR CONTROLLING DUST ON PAVED FOOTPATHS, A SWEEPER IS TO BE USED WITH WATER-JET SPRAYERS

6. CARE IS TO BE EXERCISED TO ENSURE ONLY SUITABLE AMOUNTS OF WATER IS USED DURING SWEEPING

7. NO RUN-OFF FROM SPRAYERS TO FLOW INTO CATCH BASINS.

8. MINIMISE THE AREAS OF EXISTING VEGETATED AREA THAT ARE DISTURBED DURING CONSTRUCTION.

9. DUST GENERATING AREAS BEING WORKED ON FOR 30 DAYS OR MORE ARE TO BE VEGETATED OR COVERED TO AVOID DUST GENERATION

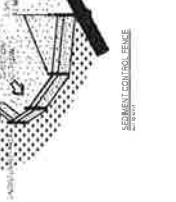
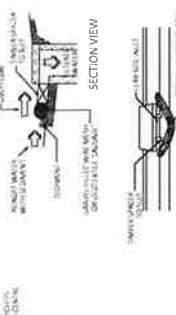
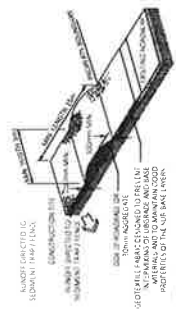
10. SAND & SOIL STOCKPILE ARE TO BE SUFFICIENTLY COVERED DURING WEEKENDS AND AT TIMES WHEN WINDY CONDITIONS PREVAIL

NOT FOR CONSTRUCTION



EROSION & SEDIMENT CONTROL PLAN

SCALE : 1 : 500



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D	Architectural Revisions	24 Jan. 2018	Drawn & Designed By : K. Koh	Project	Proposed Residential Development	Drawing Title	Erosion & Sediment Control Plan
C	Architectural Revisions	30 June 2017	Checked By : N. Evans	At	Lots 12 & 13 Butu Wargun Drive	Date	August 2016
B	Address Council Comments of 24 Nov 16	18 Feb. 2017	Approved By : Kenneth T. NG NIEBUT CPEng NER REQ (Reg. No. 2206332) Accredited Engineer	Client	Pemulwuy NSW 2145	Project No.	19207-01/18 / D
A	Development Application	10 Aug. 2016					
Issue	Description	Date of Drawing					

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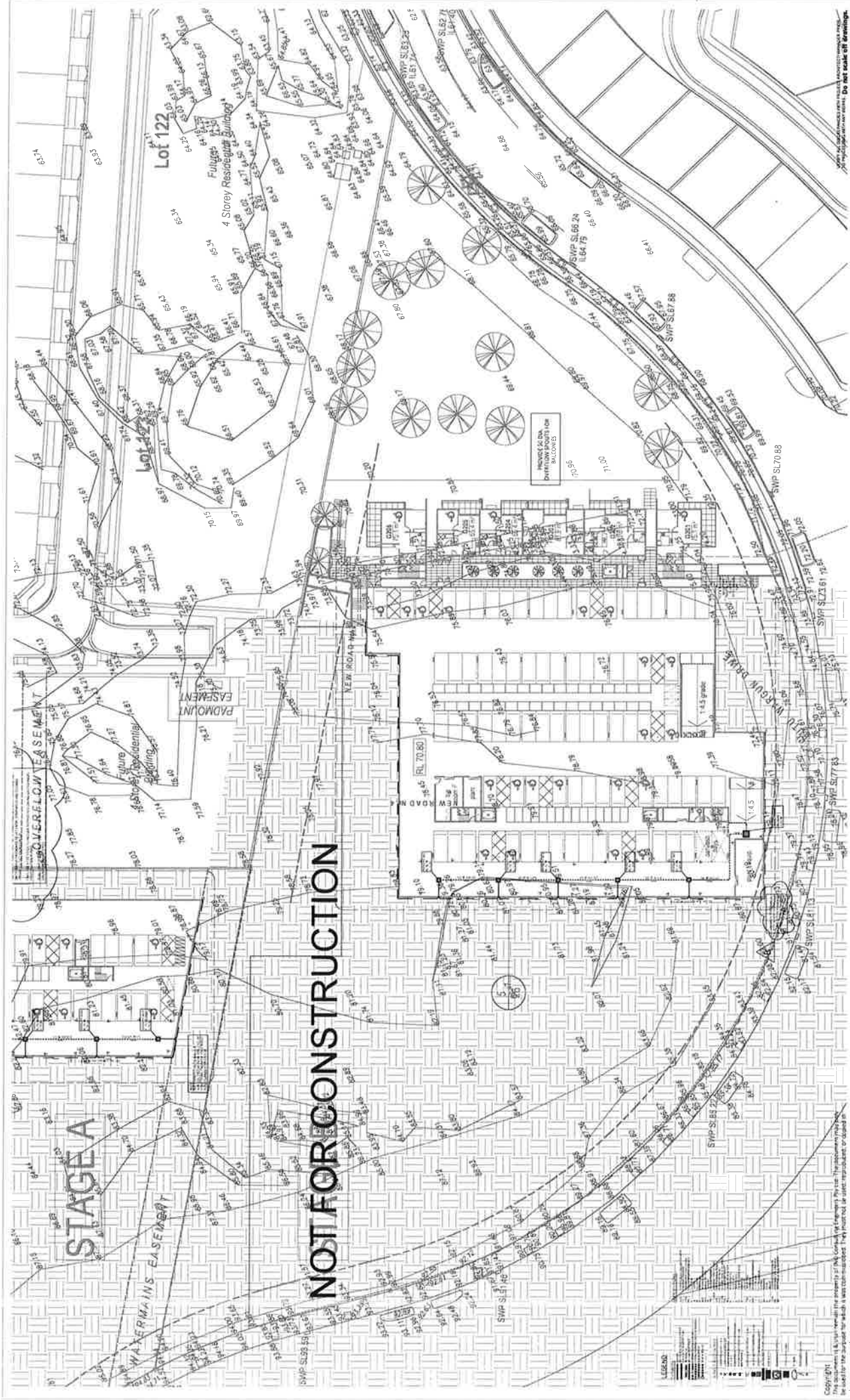
D	Architectural Revisions	24 Jan. 2018	Drawn & Designed By : K. Koh		ING CONSULTING ENGINEERS PTY LTD P O BOX 11543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M: 0433 778 109 E : ken@ingengineers.com.au	Proposed Residential Development At Lots 12 & 13 Butu Wargun Drive Permulywy NSW 2145 Client	Drawing Title Basement 3 Plan
C	Architectural Revisions	30 June 2017	Checked By : N. Evans				
B	Address Council Comments of 24 Nov 16	18 Feb. 2017	Approved By : Kenneth T. NG NIEAULT CPENG NER RPEQ (Reg. No. 22063321) Accredited Certifier (Cat. C1-C4, C6 & C15) (APR No. 0827)				
A	Development Application	10 Aug. 2016	Date of Drawing				
Issue	Description						19207-02/18 / D

NOT FOR CONSTRUCTION

KILGORD CITY COUNCIL - PUMP STORAGE REQUIREMENT	
Area	2.1.1
Location	Lot 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000



Project		Drawing Title	
Proposed Residential Development		Basement 2 Plan	
At		Date	
Lots 12 & 13 Butu Wargun Drive		August 2016	
Client		Project No.	
ING CONSULTING ENGINEERS PTY LTD		192072016DA	
P O BOX 1543		Scale	
BAULKHAM HILLS NSW 1755		1 : 300 @ A1	
F : (02) 8807 5656		Drawing & Sheet No. / Issue	
M : 0433 778 109		19207-03/18 / D	
E : ken@ingengineers.com.au		Do not scale off drawings.	



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Project Proposed Residential Development		At Lots 12 & 13 Butu Wargun Drive Pemulwuy NSW 2145		Client ING CONSULTING		Drawing Title Basement 2 Plan 2		Scale 1 : 300 @ A1		Date August 2016		Project No. 192072016DA		Drawing & Sheet No / Issue 19207-04/18 / D	

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STAGE A

4 Storey Residential Building

D	Architectural Revisions	24 Jan. 2018	Drawn & Designed By : K. Koh Checked By : N. Evans Approved By : Kenneth T. NG M/EAST CPENG NER IPDQ (Reg. No. 2206352) Accredited Certifier (Cat. C1, C4, C6 & C13) [SPS No. 0627]		ING CONSULTING ENGINEERS PTY LTD P.O BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M : 0433 778 109 E : ken@ingengineers.com.au	Project At Lots 12 & 13 Butu Wargun Drive Pemulway NSW 2145 Client	Proposed Residential Development	Drawing Title Basement 1 Plan
C	Architectural Revisions	30 June 2017						
B	Address Council Comments of 24 Nov 16	18 Feb. 2017						
A	Development Application	10 Aug. 2016						
Issue	Description	Date of Drawing						
								Date August 2016 Scale 1 : 300 @ A1 Project No. 192072016DA Drawing & Sheet No./ Issue 19207-05/18 / D

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BLOCK B

BLOCK A

BLOCK C

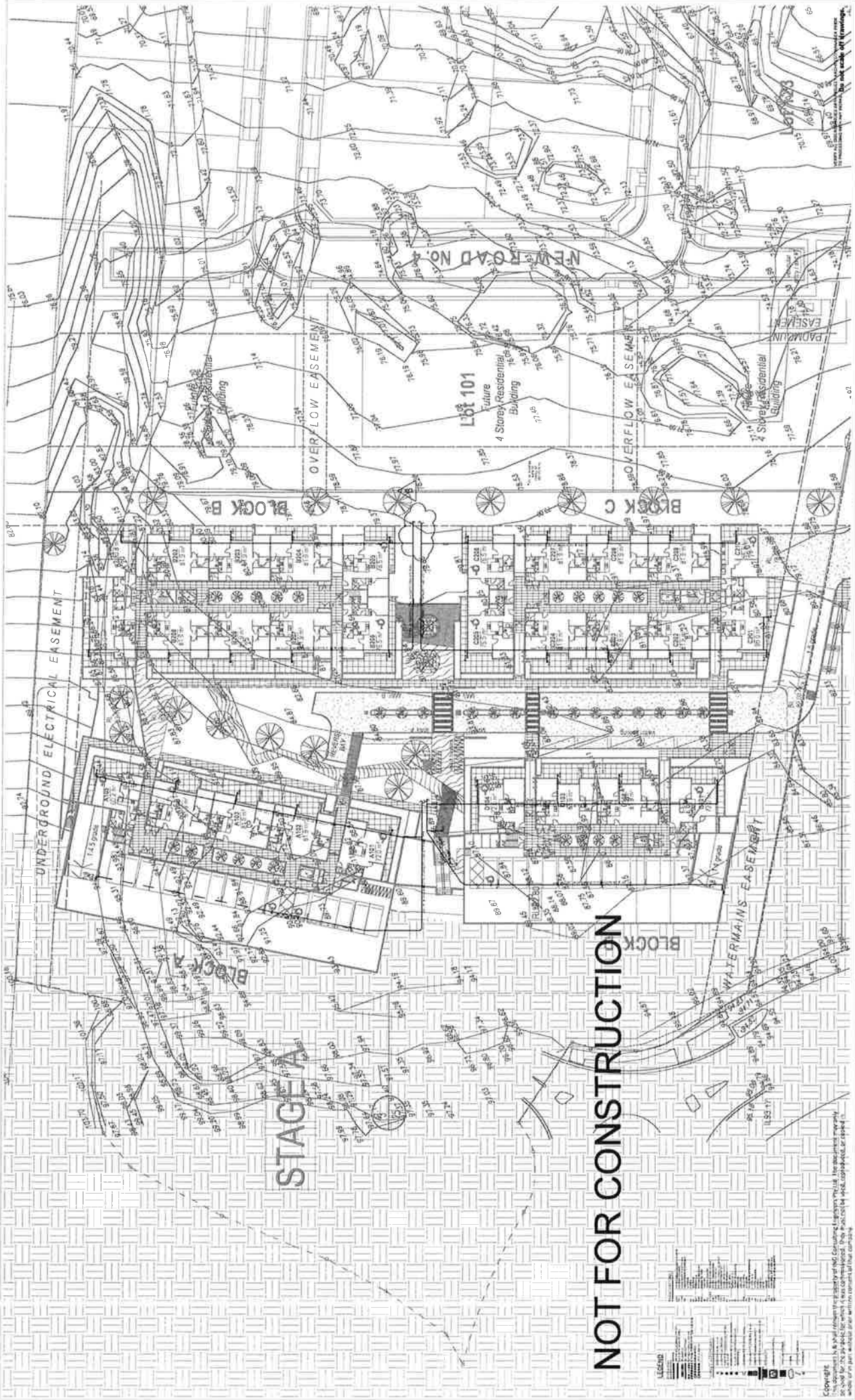
BUS TRANSIT WAY ONLY

NEW ROAD NO.

Lot 101
Future
4 Store Residential
Building

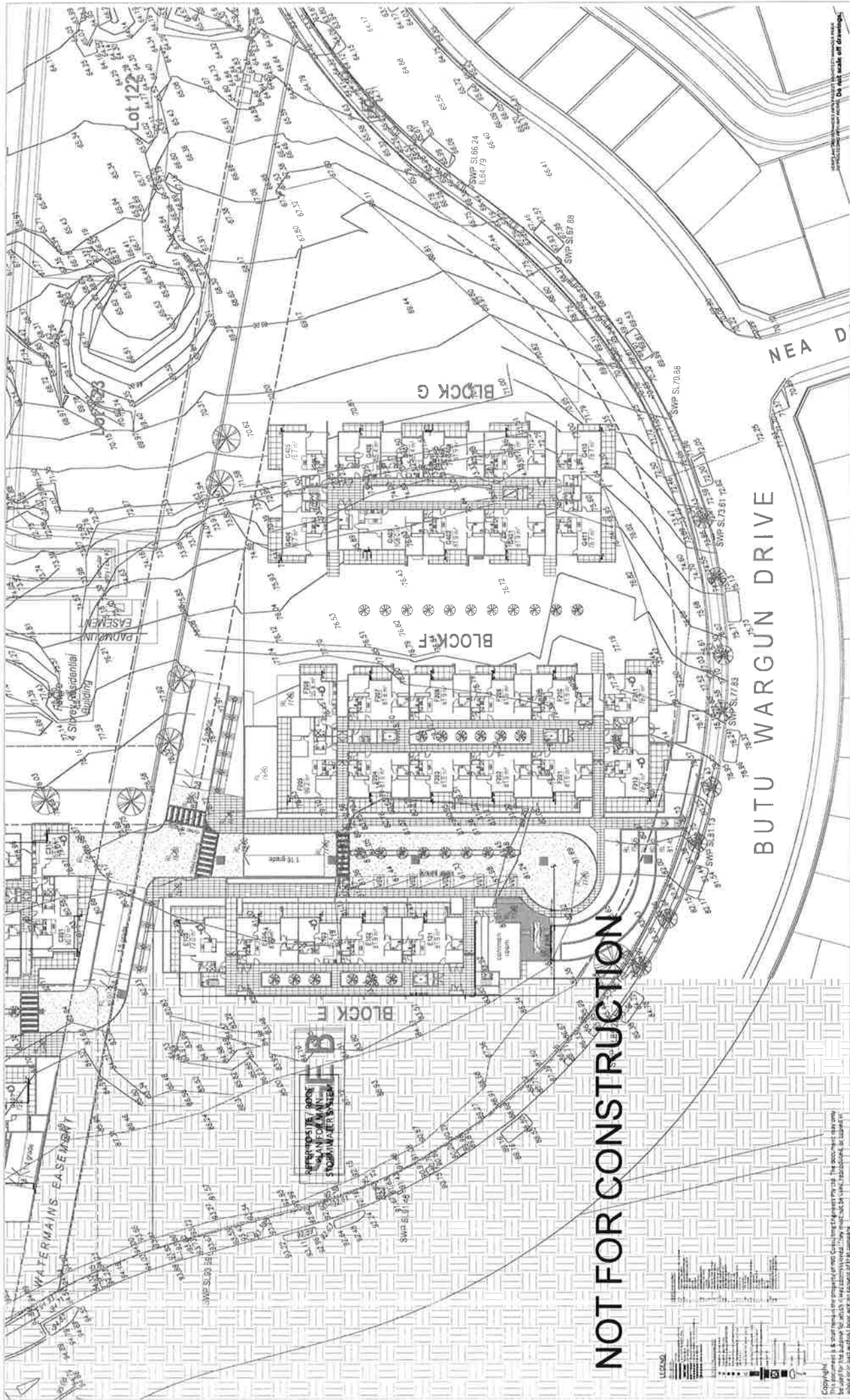
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Issue	Description	Drawn & Designed By :		Project	Drawing Title	
		24 Jan. 2018	K. Koh		Site & Roof Plan	Scale
D	Architectural Revisions	30 June 2017	N. Evans	ING CONSULTING ENGINEERS PTY LTD P.O BOX 1343 BAULKHAM HILLS NSW 1755 F : (02) 9807 5656 M : 0433 778 109 E : ken@ingengineers.com.au	Date	1: 300 @ A1
C	Architectural Revisions	18 Feb. 2017	Approved By : Kenneth T. NG M/EAST CPE/NG NER RPEQ (Reg. No. 2206352) Accredited Certifier (Cat. C1, C4, C5 & C15) (BPE No. 0827)	At	August 2016	Drawing & Sheet No. / Issue
B	Address Council Comments of 24 Nov 16	10 Aug. 2016		Client	Project No.	19207-07/18 / D
A	Development Application	Date of Drawing			192072016DA	



NOT FOR CONSTRUCTION

Project		Drawing Title	
ING CONSULTING ENGINEERS PTY LTD P.O. BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M : 0433 778 109 E : ken@ingengineers.com.au		Proposed Residential Development	
At		Date	
Client		Scale	
ING CONSULTING ENGINEERS PTY LTD P.O. BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M : 0433 778 109 E : ken@ingengineers.com.au		1 : 300 @ A1	
24 Jan. 2018		August 2016	
30 June 2017		Project No.	
18 Feb. 2017		192072016DA	
10 Aug. 2016		19207-09/17 / D	
Date of Drawing		Level 1 Plan	
Architectural Revisions		Drawing & Sheet No. / Issue	
Architectural Revisions		192072016DA	
Address Council Comments of 24 Nov 16		19207-09/17 / D	
Development Application		19207-09/17 / D	
Issue		19207-09/17 / D	



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D	Architectural Revisions	24 Jan. 2018
C	Architectural Revisions	30 June 2017
B	Address Council Comments of 24 Nov 16	18 Feb. 2017
A	Development Application	10 Aug. 2016
Issue	Description	Date of Drawing

A diagram of a cross-section of a cell. The cell is represented by a circle with a dashed outer boundary and a solid inner boundary. Inside the cell, there is a large, dark, oval-shaped nucleus. Within the nucleus, there is a smaller, darker, spherical nucleolus. Labels 'N' and 'E' are placed near the top of the nucleus, and 'W' is placed near the bottom left. Arrows point from the labels to the corresponding structures.

Project	Proposed Residential Development
At	Lots 12 & 13 Butu Wargun Drive Pemulwuy NSW 2145
Client	

Drawing Title	Date	Scale	Drawing & Sheet No./ Issues
Level 2 Plan	August 2016	1 : 300 @ A1	19207-11/18 / D

STAGE A



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Lot 101
Future
4 Storey Residential
Development

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Project				Date August 2016			
At Lots 12 & 13 Butu Wargun Drive				Scale 1 : 300 @ A1			
Client ING CONSULTING ENGINEERS PTY LTD P.O BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M : 0433 778 109 E : ken@ingengineers.com.au				Project No. 192072016DA			
Drawn & Designed By : K. Koh				Drawing & Sheet No. / Issue 19207-13/18 / D			
Checked By : N. Evans				Project			
Approved By : Kenneth T. AG MIEAUS CPEng NER RPEQ (Reg. No. 2205352) Accredited Certifier (Cat. C1-C4, C5 & C15) (BPE No. 0827)				Project			
24 Jan. 2018				Project			
30 June 2017				Project			
18 Feb. 2017				Project			
10 Aug. 2016				Project			
Date of Drawing				Project			
D Architectural Revisions				Project			
C Architectural Revisions				Project			
B Address Council Comments of 24 Nov 16				Project			
A Development Application				Project			
Issue				Project			

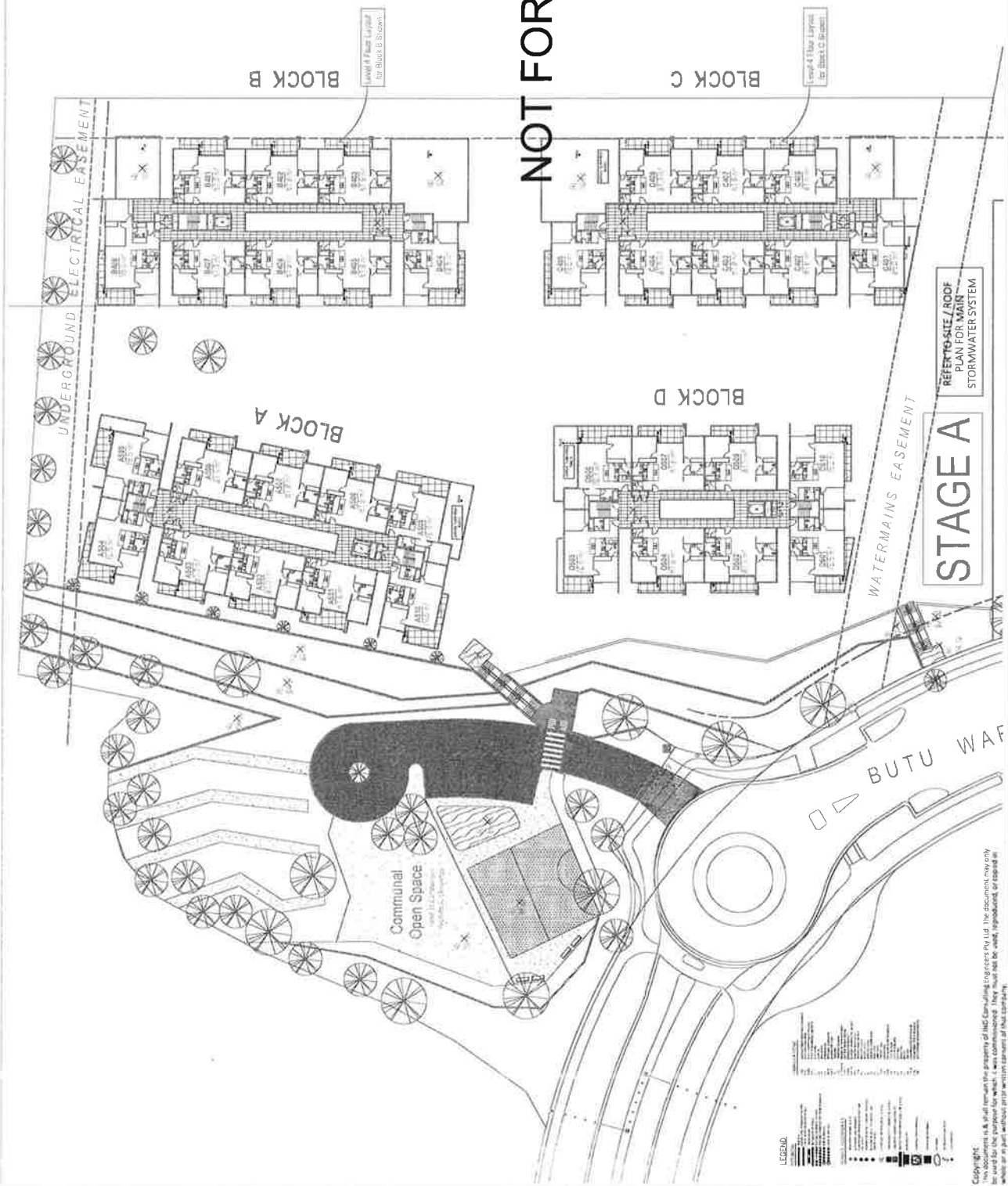
REFER TO SITE / ROOF
PLAN FOR MAIN
STORMWATER SYSTEM

uniquely of the 19th century.



VERIFY ALL DISCREPANCIES WITH PROJECT ARCHITECT/ MANAGER PRIOR TO PROCEEDING WITH ANY WORK. **Do not scale off drawings.**

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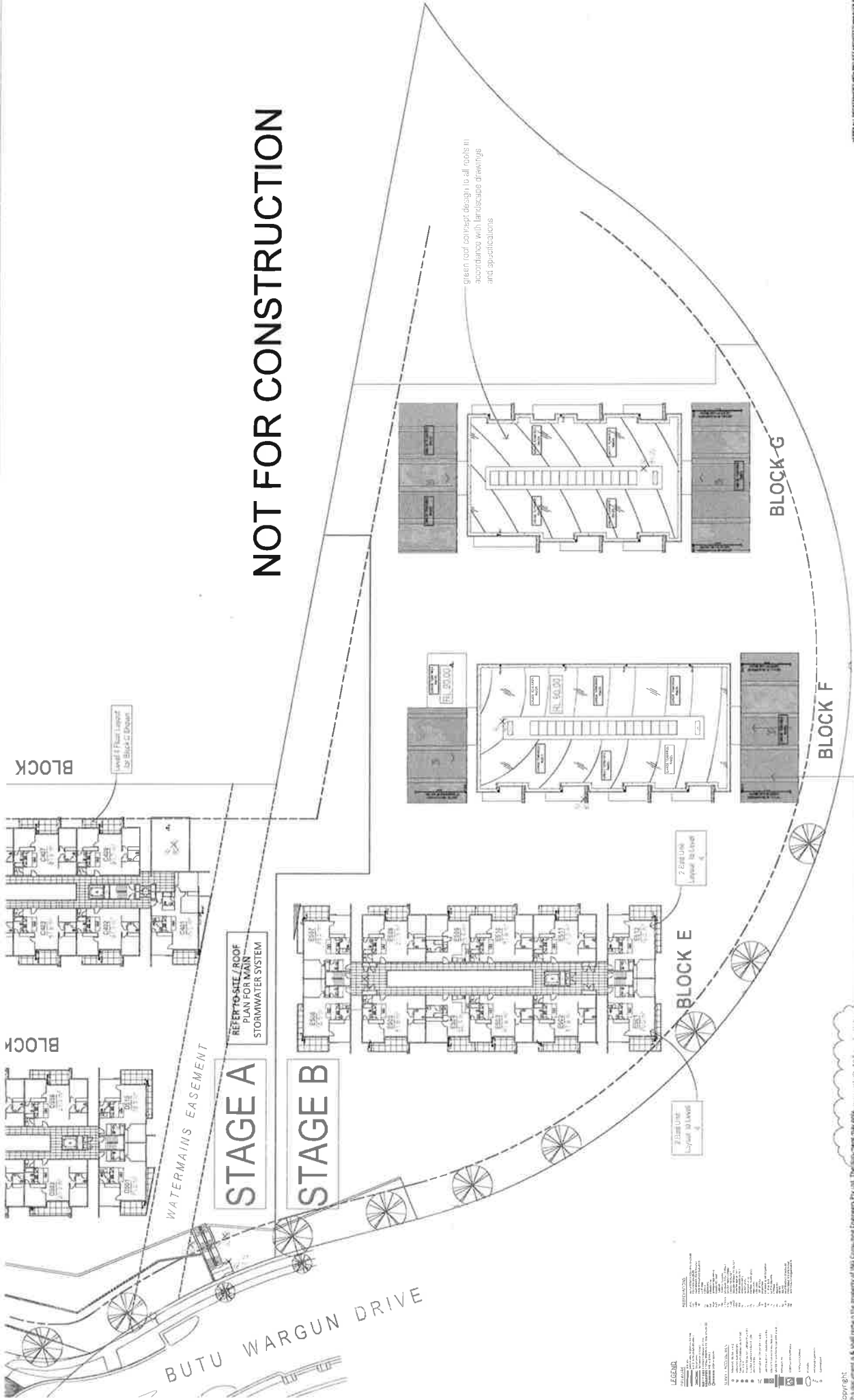
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Issue		Description	
D	Architectural Revisions	24 Jan. 2018	Drawn & Designed By : K. Koh
C	Architectural Revisions	30 June 2017	Checked By : N. Evans
B	Address Council Comments of 24 Nov 16	18 Feb. 2017	Approved By : Kenneth T. NG MIEAust CPENG NER RPEQ (Reg. No. 2208352) Accredited Certifier (Cat. C1-C4, C6 & C15)(BPA No. 0827)
A	Development Application	10 Aug. 2016	
Project		Proposed Residential Development	
At		Lots 12 & 13 Butu Wargun Drive	
Client		Pemulwuy NSW 2145	
Drawing Title		Level 5 Plan	
Date		August 2016	
Project No.		192072016DA	
Drawing & Sheet No. / Issue		1 : 300 @ A1	
		19207-15/18 / D	

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Project		Drawing Title	
ING CONSULTING ENGINEERS PTY LTD P.O BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M: 0433 778 109 E : ken@ingengineers.com.au		Proposed Residential Development	
At Lots 12 & 13 Butu Wargun Drive Pemulwuy NSW 2145		Date August 2016	Level 5 Plan 2
Client		Scale 1 : 300 @ A1	
Project No. 192072016DA		Drawing & Sheet No. / Issue 19207-16/18 / D	

1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS.

8. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500 AND THE REQUIREMENTS OF THE LOCAL COUNCIL'S POLICIES AND CODES.
9. ALL PIPES TO BE 100 x 75mm PVC SEWER AND DOWNPIPES TO BE 100 x 75 (76 DIA.) UNLESS OTHERWISE NOTED.
10. ALL GUTTERS TO BE 100mm UPS MINOR GRADE UNLESS NOTED OTHERWISE.
11. ALL GRADIENTS FOR STORMWATER PIPES TO BE NOT LESS THAN 1.0% UNLESS NOTED OTHERWISE.
12. THE INVERTS OF ALL OUTLET PIPES ARE TO BE INSTALLED FLUSHED WITH THE BASE OF ALL STORMWATER/RAINWATER PIT.
13. ALL FENCES SHALL BE KEPT AT LEAST 100mm ABOVE THE GROUND LEVEL. TO FACILITATE THE FREE PASSAGE FOR STORMWATER OVERLAND FLOW.
14. MANUFACTURER'S CERTIFICATE SHALL BE OBTAINED BY THE BUILDER FOR PIPES, PRE-CAST PITS AND GRATES FOR THE STRUCTURAL ADEQUACY RELATING TO ITS LOCATION.
15. AREAS SPREAD WITH BARK SHALL BE BARRICADED TO PREVENT BARK GETTING INTO THE PITS AND STORMWATER SYSTEMS.
16. MINIMUM SLOPE FOR PAVED AREAS SHALL BE 0.5%, FOR LANDSCAPED AREAS MINIMUM SLOPE SHALL BE 3% AND GRADED TOWARDS THE GRATED PITS.
17. ALL EXCAVATIONS WITHIN THE INFLUENCE OF BUILDINGS AND SERVICES SHALL BE UNDERTAKEN WITH THE DEDICATION OF THE FRODOCK AND STRUCTURAL ENGINEER.
18. THE DESIGN OF THE FRODOCK SYSTEM SHALL BE MAINTAINED AT REGULAR INTERVALS AND THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS.
19. CONNECTION OF DISCHARGE PIPE TO EXISTING CURB AND GUTTER, PIPE OR KERB INLET PIT SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
20. PROVIDE STEP IRONS PASSED 51:104* OR SIMILAR STAGGERED TO GIVE SPACING 300 VERTICAL AND 220 HORIZONTAL TO ALL PIT DEEPER THAN 1m.
21. SUITABLE AG-LESS SHALL BE PROVIDED AND CONNECTED TO STORMWATER SYSTEM OR AS INSTRUCTED BY THE ENGINEER ON SITE PRIOR TO BACKFILLING.

8. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500 AND THE REQUIREMENTS OF THE LOCAL COUNCILS' POLICIES AND CODES.

1. PROVIDE LIGHT DUTY GRATES FOR NON-VEHICULAR TRAFFICED AREAS.
2. PROVIDE HEAVY DUTY GRATES FOR VEHICULAR TRAFFICED AREAS.
3. PROVIDE 450 CLEAR OPENING FOR PIT DEPTHS UP TO 800mm U.N.Q.
4. PROVIDE 600 CLEAR OPENING FOR PIT DEPTHS UP TO 1000mm U.N.Q.
5. PROVIDE 800 CLEAR OPENING FOR PIT DEPTHS UP TO 1200mm U.N.Q.
6. PROVIDE 1000 CLEAR OPENING FOR PIT DEPTHS GREATER THAN 1000mm U.N.Q.
7. STEP DOWN OF 300 C/C TO AUSTRALIAN STANDARDS TO BE PROVIDED FOR PIT DEPTHS GREATER THAN 1000mm U.N.Q.
8. ALL SURROUNDING WALLS SHALL HAVE A MINIMUM OF 1500mm CLEAR OPENINGS U.N.Q.
9. ALL GRADED TRENCH SHALL BE WITH A MINIMUM OF 1500mm x 2000mm U.N.Q.



ROOF RAINWATER WATER OUTLET (RWO) 100 TRUFLOW
NOT TO SCALE

PLAN

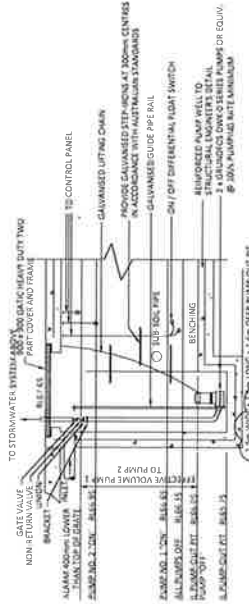
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BASEMENT PUMP-OUT SYSTEM NOTES

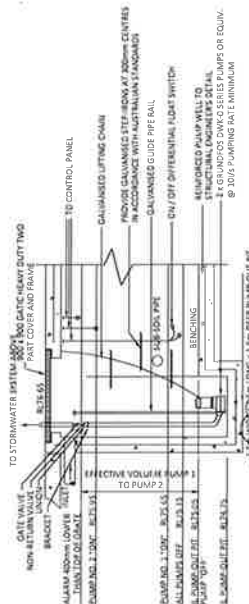
THE PUMP-OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED AS FOLLOWS:

1. A MINIMUM OF TWO PUMPS ARE TO BE PROVIDED - ONE DUTY PUMP AND ONE STAND-BY PUMP.
2. THE PUMPS SHALL BE PROGRAMMED TO OPERATE ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATIONAL LOAD AND PUMP LIFE.
3. A LOW-LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE UNDERGROUND TANK. THE FLOAT SHALL FUNCTION AS AN "OFF" SWITCH FOR THE PUMP.
4. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, WHICH IS APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, IN WHICH ONE OF THE PUMPS WILL OPERATE AND DRAIN THE UNDERGROUND TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT.
5. A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY 300mm ABOVE THE SECOND FLOAT. THIS FLOAT SHALL BE DESIGNED TO START THE STAND-BY PUMP THAT IS FLASHING STROBE LIGHT, SIREN AND A PUMP FAILURE WARNING SIGN.
6. AN ALARM WARNING SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT, SIREN AND A PUMP FAILURE WARNING SIGN WITH A BATTERY BACK-UP IN CASE OF POWER FAILURES.



SECTION A-A 3.6m² BASEMENT PUMP-OUT PIT 1 DETAIL

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SECTION B-B 3.6m² BASEMENT PUMP-OUT PIT 2 DETAIL

NOT TO SCALE

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Issue	Description	Date of Drawing
D	Architectural Revisions	24 Jan. 2018
C	Architectural Revisions	30 June 2017
B	Address Council Comments of 24 Nov 16	18 Feb. 2017
A	Development Application	10 Aug. 2016

Drawn & Designed By :	K. Koh
Checked By :	N. Evans
Approved By :	Kenneth T. NG MILWAUKEE ENGINEERING PTE. LTD. (Reg. No. 2206452) Accred. and Certified (Cat. C1-C4, C6 & C15) [S98 No. 0827]

Project	ING CONSULTING ENGINEERS PTY LTD P.O. BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M : 0433 778 109 E : ken@ingengineers.com.au
At	Lots 12 & 13 Butu Wargun Drive Pemulway NSW 2145
Client	

Proposed Residential Development	Notes & Details 2
Date	August 2016
Project No.	192072016DA
Scale	As Shown @ A1
Drawing & Sheet No. / Issue	19207-18/18 / D

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STORMFILTER VAULT - 46 CATRIDGE STORMFILTER SYSTEM BY STORM360 (FIRST FLUSH GENERAL ARRANGEMENT)

NOT TO SCALE



CONFINED SPACE SIGNAGE
NOT TO SCALE



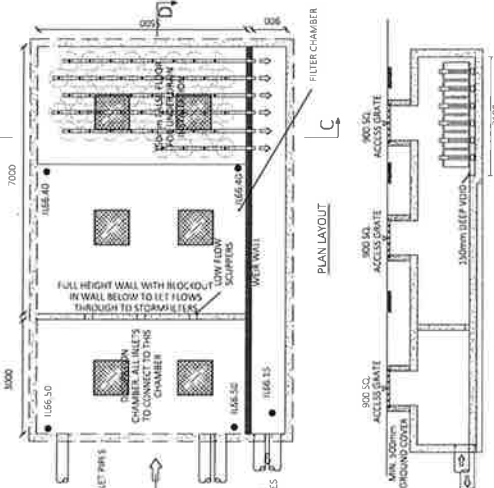
BASEMENT PUMP-OUT FAILURE WARNING SIGN
NOT TO SCALE

STORMFILTER DESIGN TABLE

1. THE SUBMITTAL MUST INCLUDE THE FOLLOWING INFORMATION:
 - 1. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 2. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 3. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 4. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 5. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 6. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 7. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 8. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 9. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.
 - 10. THE PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM.

ITEM	UNIT	VALUE
1. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
2. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
3. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
4. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
5. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
6. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
7. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
8. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
9. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2
10. PEAK HYDRAULIC CAPACITY OF THE PUMP-OUT SYSTEM	L/S	1.2

NOT TO SCALE



SECTION D - D

NOT TO SCALE

