

YOUR REF: 1301 L01
OUR REF: OP 282/2014 (429514)

2 October 2014

Jim Papas Civil Engineering Designer Pty Ltd
P O Box 2347
MAREEBA QLD 4880

Attention: Mr Jim Papas

Dear Sir

**DECISION NOTICE FOR OPERATIONAL WORKS
OCEAN BREEZE STAGE 5B – (19 LOT SUBIVISION) -
LOT 901 ON SP264287 – BARRABAL DRIVE, COOYA BEACH**

Please find attached the relevant Decision Notice for the above Operational Works. Also find attached a 'Pre-Start' meeting template, which identifies the information that must be provided for Council approval, prior to the commencement of works.

The template also provides the Consulting Engineer with a format for conducting the meeting. An invitation to attend the meeting must be sent to Council's representative Michael Matthews on telephone number 07 4099 9475, giving at least five (5) working days notification if possible.

In addition to the Decision Notice, Council provides the following 'Advice Statement' which relates to issues that are relevant to the proposed works:

1. The design of landscape and lighting works are subject to separate agreement and must be submitted to Council, prior to the commencement of associated works; and
2. The Consulting Engineer is to present all contractors with a copy of this Decision Notice and the Council approved plans, prior to the commencement of works.

Should you require further information or assistance, please contact Michael Matthews, Project Engineer, on telephone 07 4099 9475.

Yours faithfully

Donna Graham
Manager Development and Environment

Att

Copy: Administration Officer (Water & Waste)
Manager Infrastructure Services

YOUR REF: 1301 L01
OUR REF: OP 282/2014 (429514)

24 September 2014

**DECISION NOTICE FOR OPERATIONAL WORKS
OCEAN BREEZE STAGE 5B
COOYA BEACH ROAD, BONNIE DOON**

PROPOSAL:

Operational Works (Engineering) excluding Landscape and Lighting Works

TYPE OF DEVELOPMENT:

Operational Work

REAL PROPERTY DESCRIPTION:

Lot 901 on SP264287

REFERRAL AGENCY CONDITIONS:

None applicable

FURTHER DEVELOPMENT PERMITS OR APPROVALS REQUIRED:

Water and Waste Application for a Water Service Connection

DECISION DATE:

2 October 2014

DECISION:

Approved subject to conditions

TYPE OF APPROVAL:

Development Permit

ASSESSMENT MANAGER CONDITIONS – STANDARD:

The standard conditions are shown in Appendix A and must be read in conjunction with any approved plans and project specific conditions identified below.

ASSESSMENT MANAGER CONDITIONS – PROJECT SPECIFIC:

1. General

- a. This site shall be subject to regular inspections by Douglas Shire Councils' Officers.
- b. Any proposed work to be carried on the existing Telstra Pit is to be approved by Telstra.
- c. All existing services within the development area, including **Barrabal Drive**, must be pot-holed and levels confirmed prior to commencement of works.
- d. In the event that acid sulphate soils are encountered, the applicant is to ensure the site is managed in accordance with the requirements of the Potential Acid Sulfate Soil Investigation Report prepared by C&B Consultants (now RPS) for Salson Pty Ltd.
- e. Any existing Council infrastructure or private property (including but not limited to, services, kerb, concrete structures, pits, channels, pavement, footpath, RCP, RCBC, etc.) damaged due to the proposed works is to be rectified or replaced at the applicant's expense prior to the commencement of use. The applicant must notify Douglas Shire Council of the affected infrastructure.
- f. The applicant is to implement a Traffic/Pedestrian Management Plan in accordance with the Department of Main Roads Manual of Uniform Traffic Control Devices (Section 3 – Works on Roads). A Risk Assessment is to be made taking particular account of factors such as traffic volume and speed, road geometry, width and surface conditions, and the general behaviour of road users and pedestrians. This plan is to be submitted **prior to the Pre-Start Meeting**.
- g. Considering that this area is a low wet site and may have a very poor subgrade, the applicant is to confirm with calculations based on *Austroads – Pavement Design – A Guide to the Structural Design of Road Pavements* - that the shown road pavement will be adequate for this location; otherwise, a suitable subgrade stabilisation method is to be included.
- h. The proposed 2.0m concrete footpath to be installed along Barrabal Drive is to be shown on drawing 1301-C04-Rev (A) - Typical Cross Section Detail. For consistence with previous infrastructure 1.5m concrete footpath to be extended to the intersection of Barrabal Drive and Road J.

- i. The landscaping plan is to be provided **6 weeks** after the Pre-Start Meeting for approval.

2. Site Regrading

- a. Batters fronting Cooya Beach Road Reserve are not to be steeper than 1 in 4; otherwise, a retaining structure is to be implemented subject to approval by the Council.
- b. All earthworks are to be constructed in accordance with Australian Standard 3798-2007, Guidelines on Earthworks for Commercial and Residential Developments; additionally, further certification is to occur when works are completed and test results are compiled. This information is to be provided to Council **prior to Works Acceptance**.
- c. The works must not cause, or be likely to cause, environmental harm resulting from the release of contaminants, dust, noise or sediments from the site. Appropriate Erosion and Sediment Control (ESC) measures must be installed and maintained for the duration of the works or until all exposed areas have been fully re-vegetated or stabilized.
- d. Soil used for filling or spoil from the excavation is not to be stockpiled in locations that can be viewed from adjoining premises or within the road reserve for more than **1 month**, and the storage of any machinery, material and vehicles must not cause a nuisance to surrounding properties.

3. Stormwater & Drainage

- a. All stormwater from the property must be directed to a lawful point of discharge such that it does not adversely affect surrounding properties or properties downstream from the development to the requirements and satisfaction of the Chief Executive Officer.

4. Erosion and Sediment Control

- a. In the event that dewatering is to be implemented on-site, the Contractor is to supply a dewatering plan for the project to Council prior to the commencement of dewatering operations, with the following details:
 - Preferred method
 - Proposed start / end dates of dewatering
 - Map showing the preferred site of any retention basin/s (if applicable)
 - Schedule of ongoing water quality monitoring (i.e. particularly of discharged water)
 - Proposed method of disposal and treatment (if necessary) of discharged water (including map showing discharge point)

- The pH must be between 6.5 and 8.5 prior to discharge.
- b. **Prior to the Pre-Start Meeting** the applicant is to provide for approval, the Contractor Erosion and Sediment Control Plan (ESCP) together with drawings showing measures to be implemented on-site during construction, and the defect liability period. The drawings are to show the following activities:
 - Establishment to site
 - Clear and strip
 - Earthworks and
 - Completion of all works
- c. During construction the contractor must implement a suitable **Dust Management Strategy** to minimise dust nuisance on adjacent properties. Details of the dust management strategy must be incorporated into the erosion & sediment control strategy and be noted on the contractor's ESC plan.
- d. Upon completion of earthworks and **prior to Works Acceptance** all exposed surfaces are to be treated (i.e., drill seeding, hydromulching) to prevent erosion. Temporary ESC measures must remain in place during construction and until the site is stabilised to prevent sediment entering to any adjacent drain or properties around; additional ESC protection is to be installed at existing kerb inlets located in **Barrabal Drive**.
- e. All reasonable and practicable measures must be taken to prevent pollution to the existing creek, waterways or drainage lines, as a result of silt run-off, oil and grease spills from any machinery. Wastewater for cleaning equipment must not be discharged or in-directly to any watercourses, stormwater systems or private properties.

5. Sewer

- a. The Inspection and Test Plan must be approved prior to the pre-start meeting. At project completion the completed and validated ITP must be submitted and approved prior to the issue of a Works Acceptance Certificate.
- b. Easements must be registered over sewers where the depth to invert is greater than 3m.
- c. Minimum clearances between sewer mains and other services must be in accordance with the Sewerage Code of Australia.
- d. Where a manhole is located in a batter, a flat area of 1.5m radius from the centre of the manhole must be provided. Where the manhole is located along a side or rear boundary and is on the 0.8m standard alignment then the flat area must be on at least three sides. In particular a typical detail for how the flat area will be achieved must be approved prior to commencement of construction.

- e. Where an easement is required the property connection branch must be extended at least 1m from the easement boundary.
- f. House drains are to extend 1.5m beyond the top of batters.
- g. As-constructed sewerage drawings must be approved prior to granting of Early Plan Sealing or Issue of a Works Acceptance Certificate whichever occurs first. The As-constructed sewerage submission is to include the “Statement of Compliance – As-constructed Documentation” and must be the final issue.
- h. CCTV inspection must be carried out through all sewers constructed as part of this development and the Consultant is to assess the CCTV footage and prepare a report on the condition of as-constructed sewers. The report must be submitted and approved by Water and Waste prior to issue of Works Acceptance. Rectification of sub-standard sewers shall be carried out to the satisfaction of Council.

6. Water

- a. An additional scenario of the network model must be undertaken to verify the pressures for constructed stages and proposed stage 5A comply with the Development Manual. The boundary conditions for the scenario must reflect the current supply pressure determined in consultation with Council and is in-principle the pressure available due to the interconnection of the 225ND trunk main in Bonnie Doon Road. A hydrant test at the developer’s expense must be carried out at a suitable location in consultation with Council to validate the hydraulic analysis. The report of the additional modelling must be submitted for approval prior to commencement of water reticulation construction.
- b. The Inspection and Test Plan must be approved prior to the pre-start meeting. At project completion the completed and validated ITP must be submitted and approved prior to the issue of a Works Acceptance Certificate.
- c. Minimum clearances between water mains and other services must be in accordance with the Water Supply Code of Australia in particular the minimum clearance between water mains and sewer mains must be 500mm with the sewer under the water main.
- d. As-constructed water submissions are to include the “Statement of Compliance – As-constructed Documentation” and must be the final issue. The as-constructed drawing must be approved prior to Issue of a Works Acceptance Certificate.

7. Lighting

- a. Design to be submitted to Council for agreement.

10. Vegetation

'The regrowth vegetation code clearing notification form should be forwarded to the Department of Environment and Heritage Protection prior to the clearing of any vegetation mapped as important regrowth under the *Vegetation Management Act 1999*.' 'Any clearing of important regrowth vegetation should be in accordance with the Regrowth Vegetation Code.'

Copies of the regrowth maps can be found at www.ehp.qld.gov.au .

11. Other

- a. No comments.

APPROVED PLANS AND SPECIFICATIONS:

Generally in accordance with the following drawings submitted by Jim Papas Civil Engineering Designer Pty Ltd subject to any alterations made by conditions of Development Permit for Operational Work OP 282/2014.

Drawing Description	No.	Rev.
Existing Site Plan	1301-C01	A
Typical Cross Section, Pavement Data, Set Out and Intersection Details	1301-C02	A
Bulk Earthworks Plan	1301-C03	A
Earthworks, Roadworks and Stormwater Drainage Plan	1301-C04	A
Soil and Water Management Plan	1301-C05	A
Sewer Reticulation Plan	1301-C06	A
Water Reticulation Plan	1301-C07	A
Barrabal Road - Longitudinal Section	1301-C08	A
Barrabal Road - Cross Section	1301-C09	A
Road J – Longitudinal and Cross Sections	1301-C10	A
Stormwater Drainage – Longitudinal Section, Set Out Data, Pit Schedule and Notes	1301-C11	A
Sewerage Reticulation – Longitudinal Sections, Set Out Data and Notes	1301-C12	A
Stormwater Drainage Catchment Plan	1301-C13	A
Stormwater Drainage Calculation Sheet	1301-14	A

For information relating to the *Sustainable Planning Act 2009* log on to www.dsdip.qld.gov.au.
To access the *FNQROC Development Manual*, Local Laws and other applicable Policies log on to www.douglas.qld.gov.au .

RIGHTS OF APPEAL

Attached

End of Decision Notice

Att Appeal Rights
 Pre-Start Meeting Template
 Approved Drawings, Appendix A
 Standard Conditions, Appendix B

APPENDIX A: APPROVED DRAWINGS

OCEAN BREEZE ESTATE STAGE 5B RESIDENTIAL SUBDIVISION AT COOYA BEACH ROAD COOYA BEACH

- PROJECT DRAWINGS
PROJECT No. 1201
- 3-01 - SITE PLAN
 - 3-02 - SITE PLAN WITH GROUND SURF, UT, ST AND DRAI
 - 3-03 - BUILDINGS PLAN
 - 3-04 - LIFTING, UNLOADING AND STORAGE SUBJECT PLAN
 - 3-05 - EX AND BORE HOLE/BORE PLAN
 - 3-06 - EX AND BORE HOLE/BORE PLAN
 - 3-07 - EX AND BORE HOLE/BORE PLAN
 - 3-08 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
 - 3-09 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
 - 3-10 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
 - 3-11 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
 - 3-12 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
 - 3-13 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
 - 3-14 - LIFTING, UNLOADING, AND STORAGE SUBJECT PLAN
- Plan Reg. 221 and 14 at the end of the contract (Part 1)

**RILEY
CONSULTANTS**
CONSULTING ENGINEER
By Mr. Colin RILEY
Professional Engineer No. 12345
Date: 12/31/2014

RPS
123 Street, Suite 101
PO Box 12345, 1234
Tel: 01234 56789
Fax: 01234 56789

JIM PAPAS
CIVIL ENGINEERING
DESIGNER PTY. LTD.
123 Street, Suite 101
PO Box 12345, 1234
Tel: 01234 56789
Fax: 01234 56789

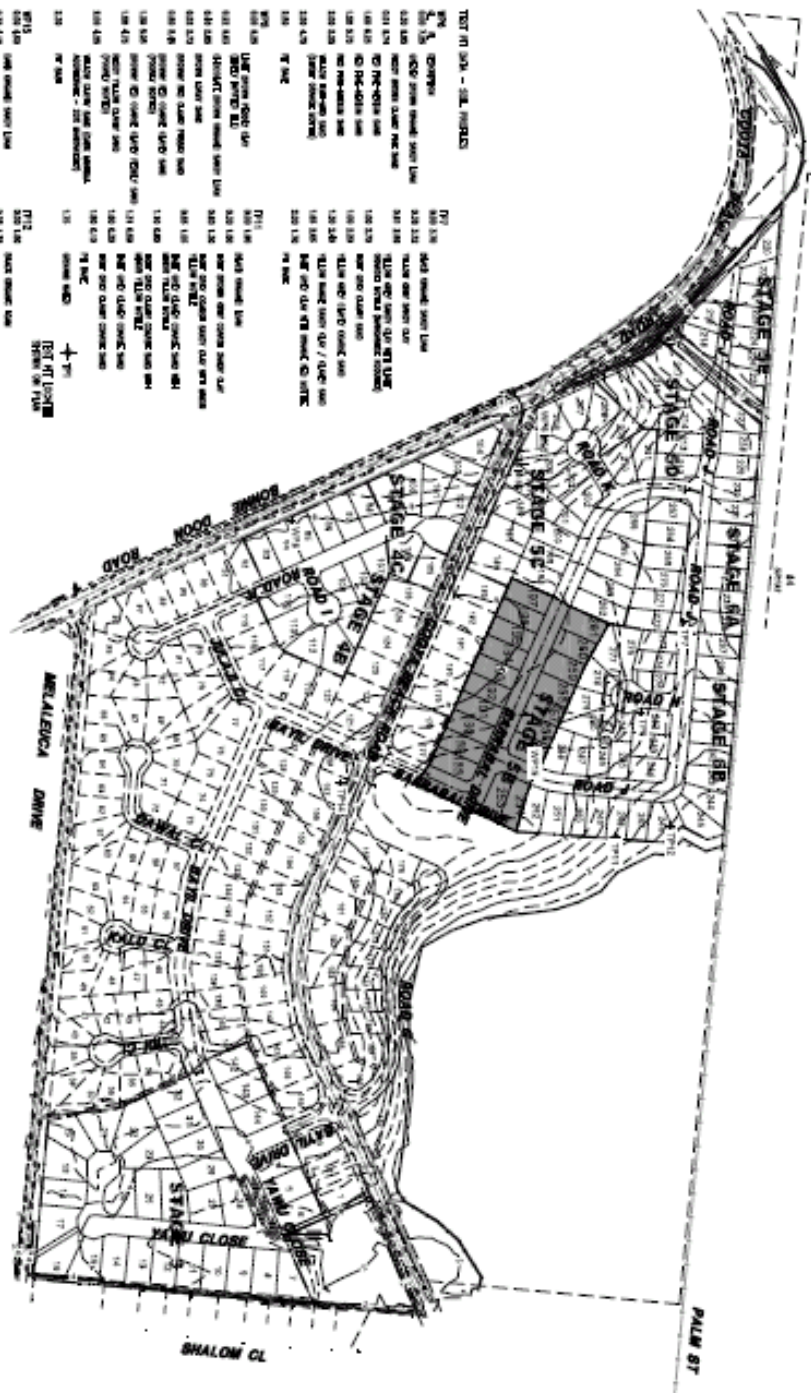
NOTES:

OWNER: CENTRAL
 STATE 58 OF LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 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.

1. THE CONTRACTOR SHALL PROVIDE THE BEST QUALITY MATERIALS AND WORKMANSHIP AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

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GENERAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE THE BEST QUALITY MATERIALS AND WORKMANSHIP AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
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PROPERTY MARKS:

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DISCLAIMER:

THE CONTRACTOR SHALL PROVIDE THE BEST QUALITY MATERIALS AND WORKMANSHIP AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

JIN PAPAS CIVIL ENGINEERING DESIGNER PTY. LTD.

DIAL BEFORE YOU DIG

"Ocean Breeze Estate" STATE 58 OF PROPOSED RESIDENTIAL SUBDIVISION AT SHEPPARD DRIVE, COVVA BEACH

DATE: 15/01/2014

SCALE: 1:500

PROJECT NO: 1501 - 001

DATE: 15/01/2014

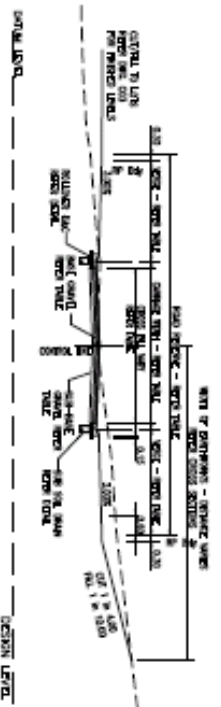
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PROJECT NO: 1501 - 001

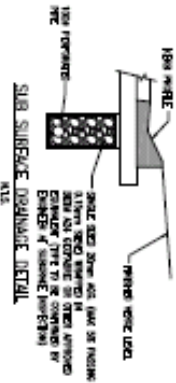
DATE: 15/01/2014

SCALE: 1:500

PROJECT NO: 1501 - 001



Typical Cross Section of Pavement - Street Edge
 BARRABA DRIVE & ROAD J
 DATE: 11/20



NO	DATE	DESCRIPTION	BY	CHECKED	SCALE
001	11/20	ISSUED FOR TENDERS	J.P.	J.P.	1:50
002	11/20	REVISED FOR COMMENTS	J.P.	J.P.	1:50
003	11/20	REVISED FOR COMMENTS	J.P.	J.P.	1:50

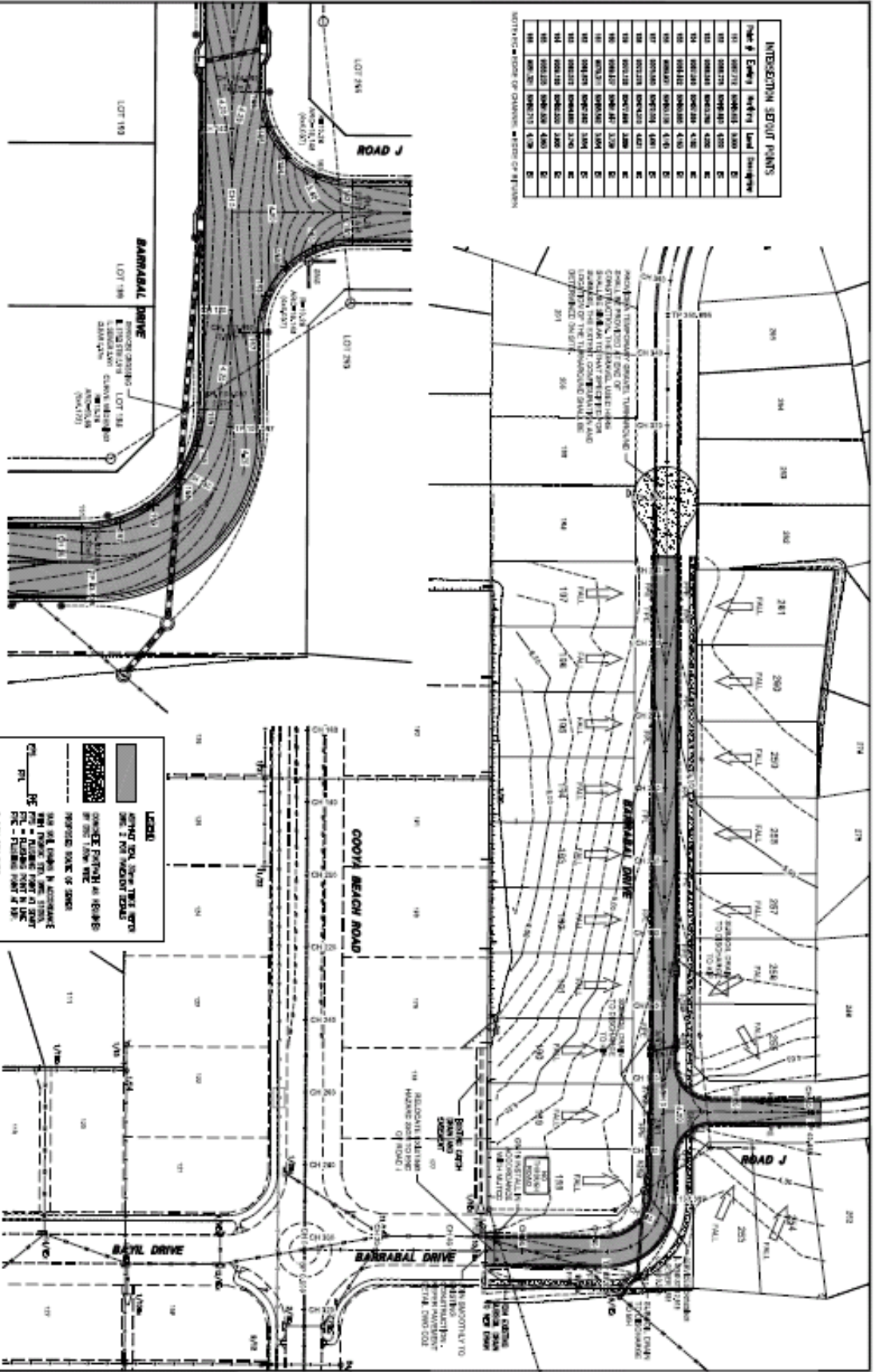


SPACING	BAYING	VERTICAL	NO.	DEPTH
4.00	0.00	0.00	100	100
4.00	0.00	0.00	200	200
4.00	0.00	0.00	300	300
4.00	0.00	0.00	400	400
4.00	0.00	0.00	500	500
4.00	0.00	0.00	600	600
4.00	0.00	0.00	700	700
4.00	0.00	0.00	800	800
4.00	0.00	0.00	900	900
4.00	0.00	0.00	1000	1000

SPACING	BAYING	VERTICAL	NO.	DEPTH
4.00	0.00	0.00	100	100
4.00	0.00	0.00	200	200
4.00	0.00	0.00	300	300
4.00	0.00	0.00	400	400
4.00	0.00	0.00	500	500
4.00	0.00	0.00	600	600
4.00	0.00	0.00	700	700
4.00	0.00	0.00	800	800
4.00	0.00	0.00	900	900
4.00	0.00	0.00	1000	1000

JIM PAPAS CIVIL ENGINEERING DESIGNER PTY. LTD.
 CIVIL ENGINEERING DESIGNER PTY. LTD.
 11000/11000.COM.AU
"Ocean Breeze Estate"
 STAGE 5B OF PROPOSED RESIDENTIAL SUBMISSION
 AT BARRABA DRIVE, COOVA BEACH
 DRAWING TITLE: TYPICAL CROSS SECTION, PAVEMENT CONSTRUCTION AND DETAILS
 DATE: 11/20

Point #	Category	Height	Level	Structure
101	000001	000001	1.000	0
102	000002	000002	1.000	0
103	000003	000003	1.000	0
104	000004	000004	1.000	0
105	000005	000005	1.000	0
106	000006	000006	1.000	0
107	000007	000007	1.000	0
108	000008	000008	1.000	0
109	000009	000009	1.000	0
110	000010	000010	1.000	0
111	000011	000011	1.000	0
112	000012	000012	1.000	0
113	000013	000013	1.000	0
114	000014	000014	1.000	0
115	000015	000015	1.000	0
116	000016	000016	1.000	0
117	000017	000017	1.000	0
118	000018	000018	1.000	0
119	000019	000019	1.000	0
120	000020	000020	1.000	0



INTERSECTION DETAIL
ROAD J

LEGEND

- PROPOSED ROAD SURFACE
- PROPOSED ROAD SIDEWALK
- PROPOSED ROAD CURB
- PROPOSED ROAD DRAINAGE
- PROPOSED ROAD UTILITY
- PROPOSED ROAD LIGHTING
- PROPOSED ROAD SIGNAGE
- PROPOSED ROAD FENCE
- PROPOSED ROAD LANDSCAPE
- PROPOSED ROAD TREE
- PROPOSED ROAD BENCH
- PROPOSED ROAD BIKEWAY
- PROPOSED ROAD TRAIL
- PROPOSED ROAD PATH
- PROPOSED ROAD BRIDGE
- PROPOSED ROAD TUNNEL
- PROPOSED ROAD UNDERPASS
- PROPOSED ROAD OVERPASS
- PROPOSED ROAD VIADUCT
- PROPOSED ROAD CULVERT
- PROPOSED ROAD GULLY
- PROPOSED ROAD DRAINAGE
- PROPOSED ROAD UTILITY
- PROPOSED ROAD LIGHTING
- PROPOSED ROAD SIGNAGE
- PROPOSED ROAD FENCE
- PROPOSED ROAD LANDSCAPE
- PROPOSED ROAD TREE
- PROPOSED ROAD BENCH
- PROPOSED ROAD BIKEWAY
- PROPOSED ROAD TRAIL
- PROPOSED ROAD PATH
- PROPOSED ROAD BRIDGE
- PROPOSED ROAD TUNNEL
- PROPOSED ROAD UNDERPASS
- PROPOSED ROAD OVERPASS
- PROPOSED ROAD VIADUCT
- PROPOSED ROAD CULVERT
- PROPOSED ROAD GULLY

JIM PAPAS CIVIL ENGINEERING DESIGNER PTY. LTD.
 10/100 BARRABAL DRIVE, COOVVA BEACH, QLD 4216
 PHONE: (07) 5599 1100 FAX: (07) 5599 1101
 WWW.J100.COM.AU

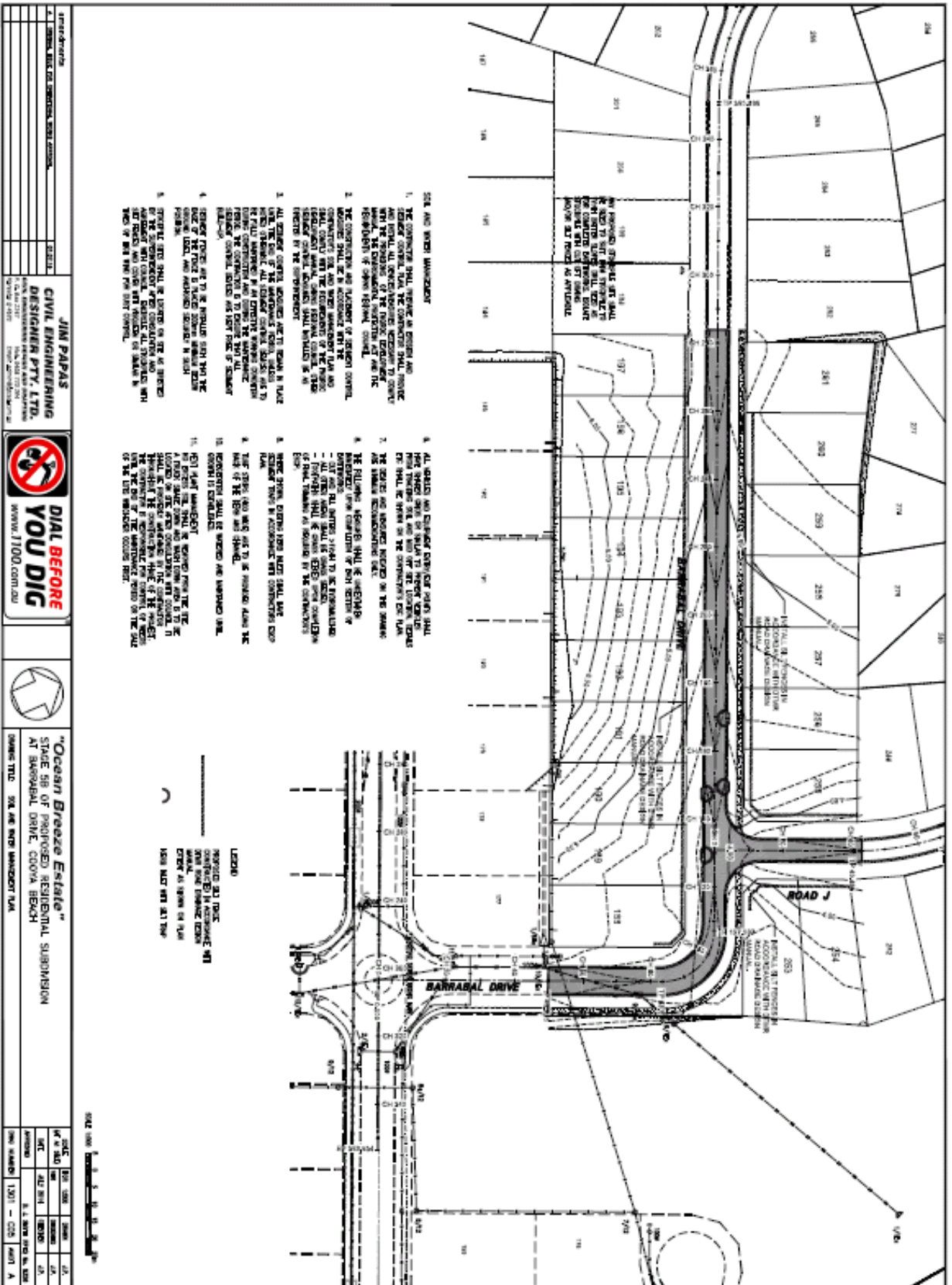
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"Ocean Breeze Estate"
 STAGE 5B OF PROPOSED RESIDENTIAL SUBMISSION
 AT BARRABAL DRIVE, COOVVA BEACH

DRAWING TITLE: DRIVEWAYS, ROADWAYS AND STRANDED DRAINAGE PLAN

NO.	DATE	BY	CHKD.	DESCRIPTION
1	12/01/2014	J.P.	J.P.	ISSUED FOR PERMIT
2	12/01/2014	J.P.	J.P.	REVISED PER PERMIT CONDITIONS
3	12/01/2014	J.P.	J.P.	REVISED PER PERMIT CONDITIONS
4	12/01/2014	J.P.	J.P.	REVISED PER PERMIT CONDITIONS

SCALE: 1:200

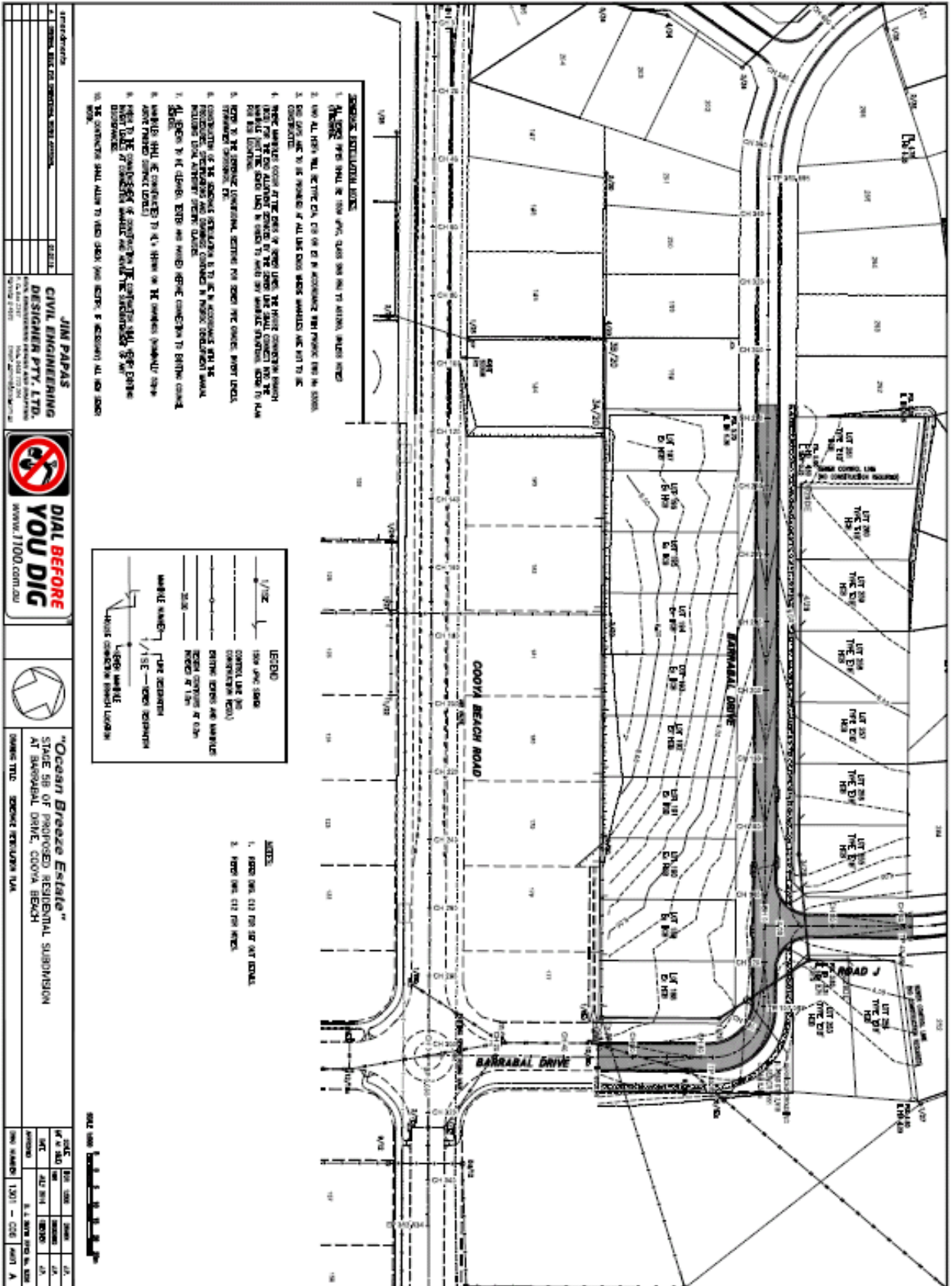


PREPARED BY: JIM PAPAS
 CIVIL ENGINEERING DESIGNER PTY. LTD.
 1100 BARRABAL DRIVE, COOMA BEACH, NSW 2569
 PHONE: (02) 6392 1100
 FAX: (02) 6392 1101
 WWW: WWW.J100.COM.AU



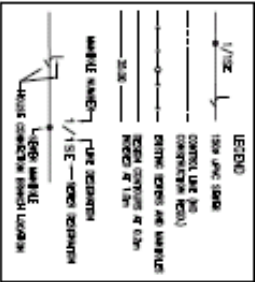
"Ocean Breeze Estate"
 STATE SP. OF PROPOSED RESIDENTIAL SUBDIVISION
 AT BARRABAL DRIVE, COOMA BEACH

NO.	DATE	DESCRIPTION
1	13/01	ISSUE FOR PERMIT
2	15/01	ISSUE FOR PERMIT
3	17/01	ISSUE FOR PERMIT
4	19/01	ISSUE FOR PERMIT
5	21/01	ISSUE FOR PERMIT
6	23/01	ISSUE FOR PERMIT
7	25/01	ISSUE FOR PERMIT
8	27/01	ISSUE FOR PERMIT
9	29/01	ISSUE FOR PERMIT
10	31/01	ISSUE FOR PERMIT



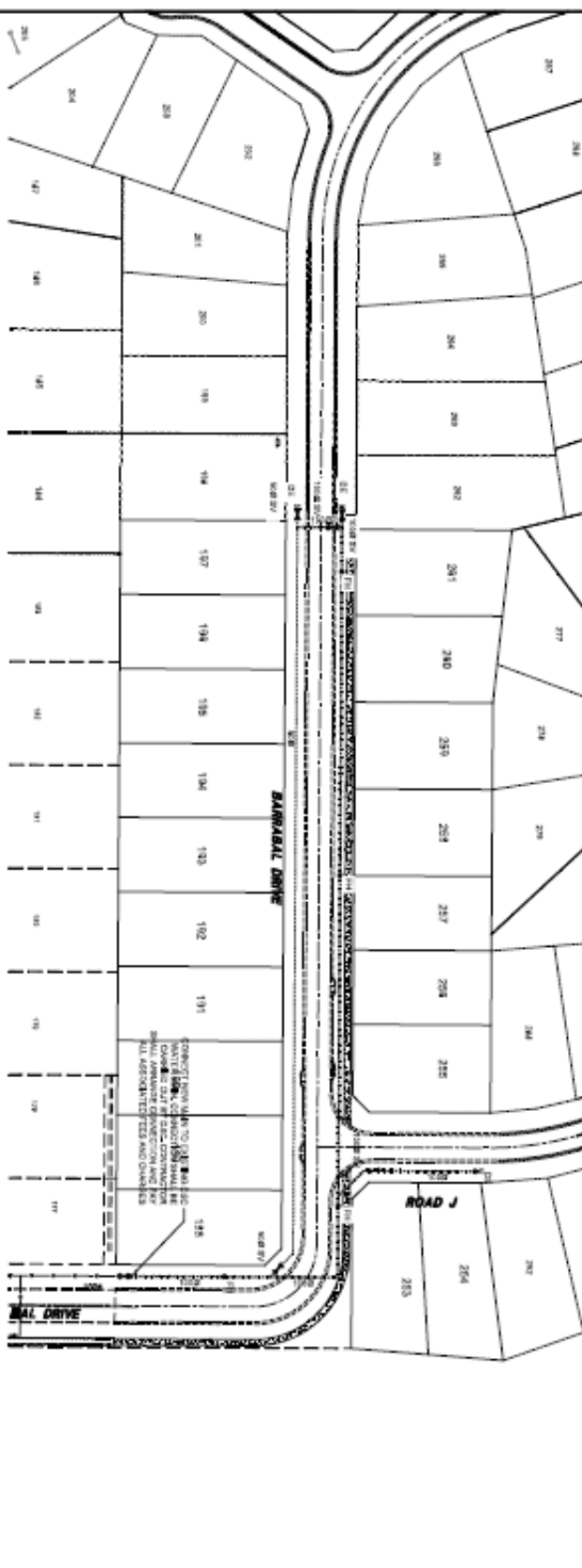
STANDARD SPECIFICATIONS

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROADWORK AND UTILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.
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8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSENTS FROM THE LOCAL AUTHORITIES.



- NOTES**
1. REFER TO THE SITE PLAN FOR THE LOCATION OF THE UTILITY LINES.
 2. REFER TO THE SITE PLAN FOR THE LOCATION OF THE UTILITY LINES.

<p>JINI PAPAS CIVIL ENGINEERING DESIGNER PTY. LTD. 1/100 BARRABAL DRIVE, COOVIA BEACH, QUEENSLAND 4216 PHONE: 07 5531 1100 FAX: 07 5531 1101 WWW.JINI.PAPAS.COM.AU</p>		<p>DIAL BEFORE YOU DIG 1300 3100 00</p>	<p>"Ocean Breeze Estate" STAGE 5B OF PROPOSED RESIDENTIAL SUBDIVISION AT BARRABAL DRIVE, COOVIA BEACH</p>	<p>DATE: 01/10/2014 DRAWN BY: J.P. CHECKED BY: J.P. SCALE: AS SHOWN SHEET NO. 1/1 TOTAL SHEETS: 1/1</p>
---	--	---	--	--



- WRITE RETURN NOTES:**
1. MONITOR - ONE IN 18, 18.5, 21 AND 21.5
 2. VALID AND HIGHER NOT BE LOST IN SEVERAL INSTANCES
 3. ALIQUOT OF LAND RESERVATION WITH STATE LAND RECORDS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY TO STATE IN ORDER TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY
 4. RESERVATION OF VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY
 5. RESERVATION SHALL BE 40% IN COMPLETION WITH PROPOSED SUBDIVISION LINE, INCLUDING PROPOSED SUBDIVISION LINE
 6. MONITOR THIS PROCESS FOR ALL NOTES MUST BE IN ORDER, THE CONTRACT SHALL BE THE NEXT STAGE FROM THE PLAN, THE CONTRACT SHALL BE THE NEXT STAGE FROM THE PLAN, THE CONTRACT SHALL BE THE NEXT STAGE FROM THE PLAN.

LEGEND

--------- TOTAL AREA TO BE SUBDIVIDED WITH A PROPOSED SUBDIVISION LINE TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY TO STATE IN ORDER TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY

--------- TOTAL AREA TO BE SUBDIVIDED WITH A PROPOSED SUBDIVISION LINE TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY TO STATE IN ORDER TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY

--------- TOTAL AREA TO BE SUBDIVIDED WITH A PROPOSED SUBDIVISION LINE TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY TO STATE IN ORDER TO BE VALID AND HIGHER TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY

JIM PAPAS
CIVIL ENGINEERING
DESIGNER PTY. LTD.
 10/111 WILSON ROAD, ROBINSON, QUEENSLAND 4114
 PH: 07 3239 1111 FAX: 07 3239 1112
 WWW.CIVILDESIGNER.COM.AU

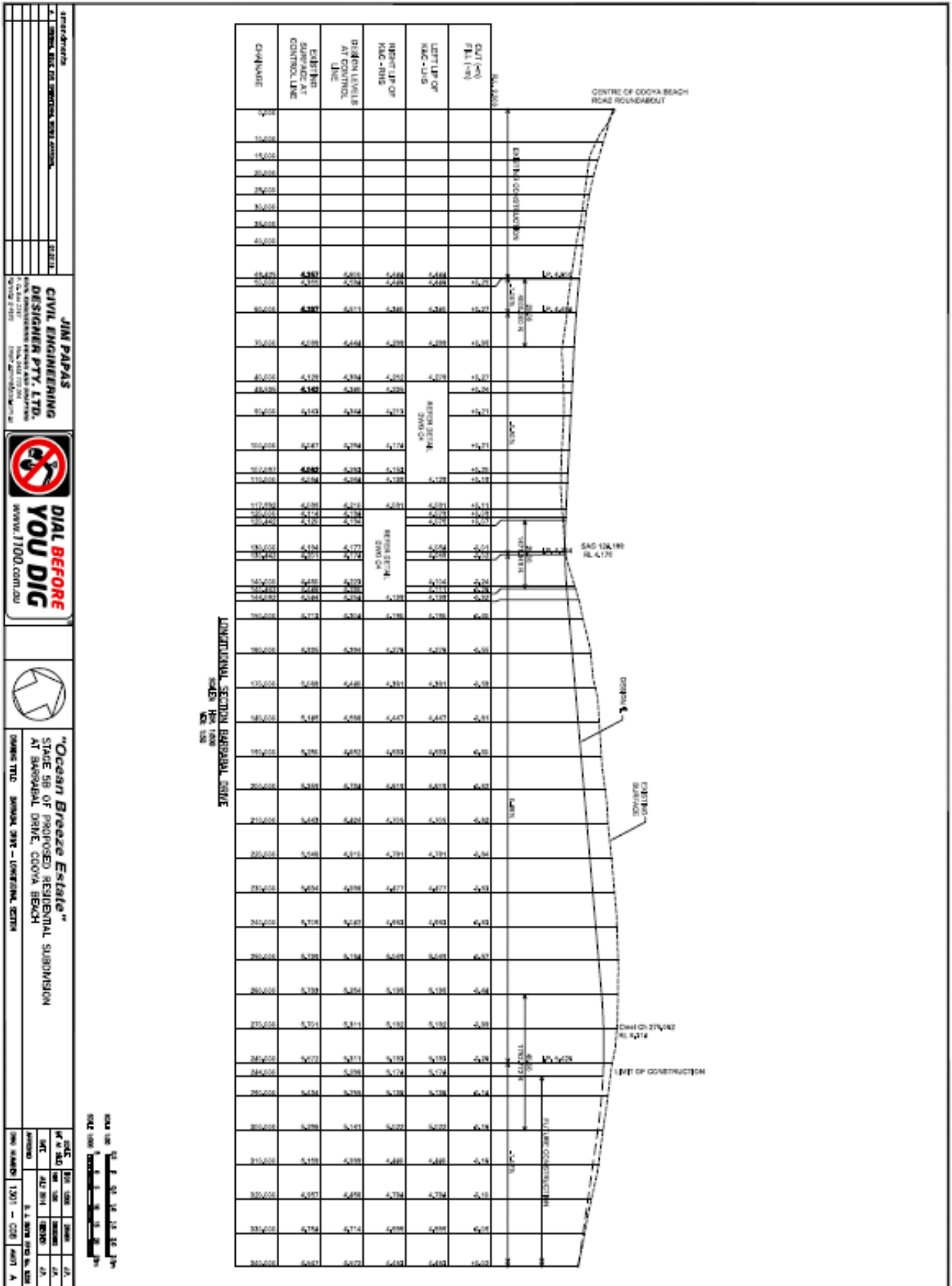


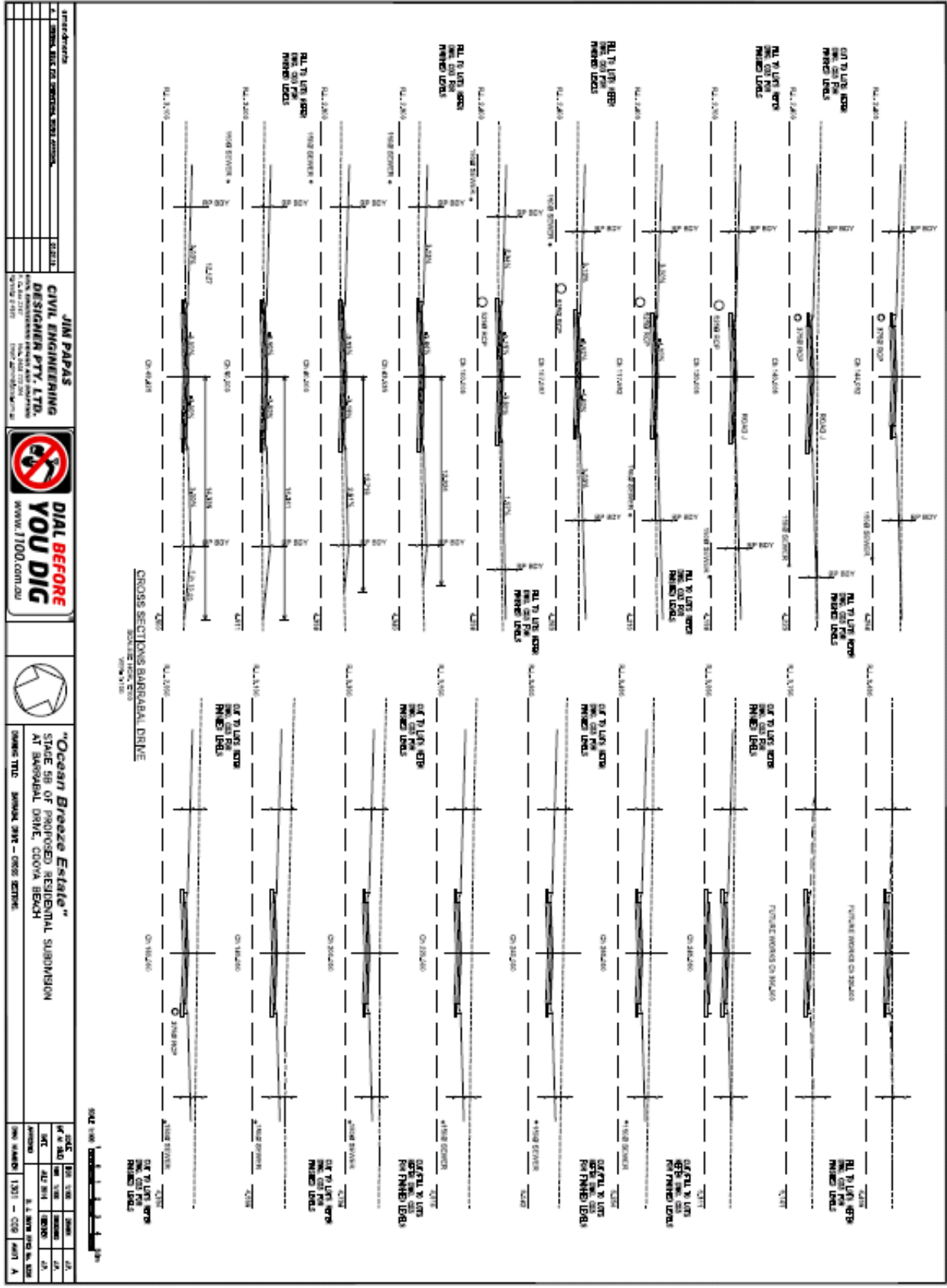
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"Ocean Breeze Estate"
 STAGE 5B OF PROPOSED RESIDENTIAL SUBDIVISION
 AT BARBOPAL DRIVE, COOVA BEACH

DATE TBC NOT RETURN PLAN

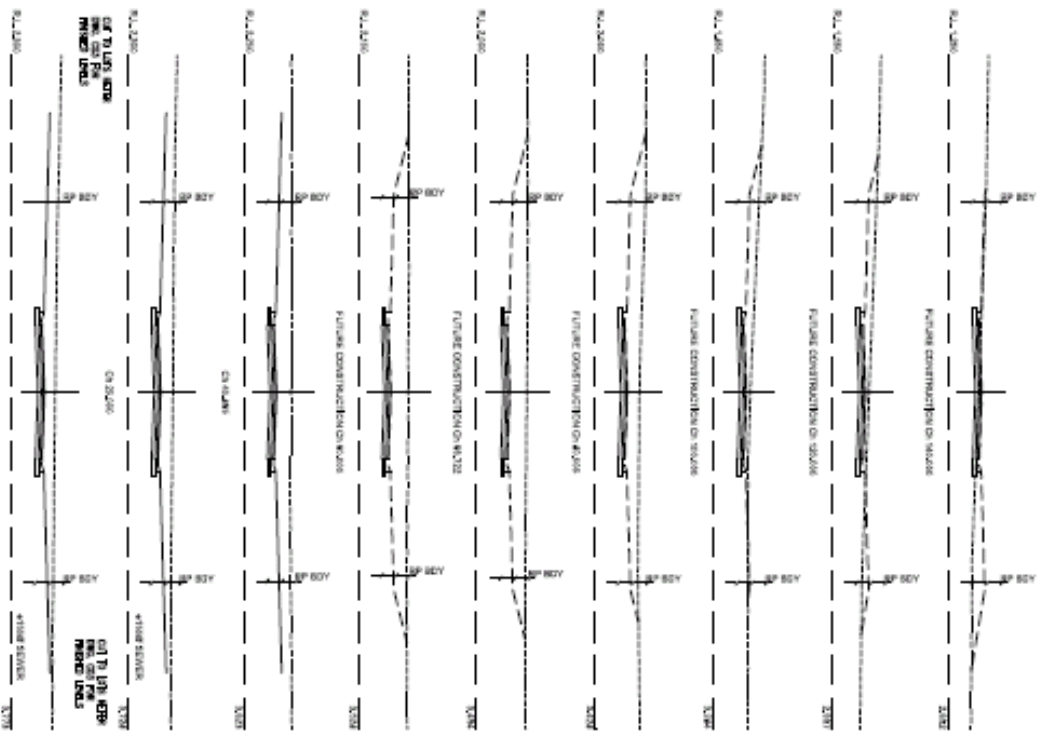
DATE	BY	REVISION
10/11/2011	0101	REVISED TO ADD ROAD H





STATION	EXISTING AT CONTROL LINE	DESIGN AT CONTROL LINE	RIGHT-OF-WAY	LEFT-OF-WAY	CUT (ft)	FILL (ft)
10+00	4.20	4.20	3.20	3.20	0.00	0.00
10+10	4.20	4.20	3.20	3.20	0.00	0.00
10+20	4.20	4.20	3.20	3.20	0.00	0.00
10+30	4.20	4.20	3.20	3.20	0.00	0.00
10+40	4.20	4.20	3.20	3.20	0.00	0.00
10+50	4.20	4.20	3.20	3.20	0.00	0.00
10+60	4.20	4.20	3.20	3.20	0.00	0.00
10+70	4.20	4.20	3.20	3.20	0.00	0.00
10+80	4.20	4.20	3.20	3.20	0.00	0.00
10+90	4.20	4.20	3.20	3.20	0.00	0.00
11+00	4.20	4.20	3.20	3.20	0.00	0.00
11+10	4.20	4.20	3.20	3.20	0.00	0.00
11+20	4.20	4.20	3.20	3.20	0.00	0.00
11+30	4.20	4.20	3.20	3.20	0.00	0.00
11+40	4.20	4.20	3.20	3.20	0.00	0.00
11+50	4.20	4.20	3.20	3.20	0.00	0.00
11+60	4.20	4.20	3.20	3.20	0.00	0.00
11+70	4.20	4.20	3.20	3.20	0.00	0.00
11+80	4.20	4.20	3.20	3.20	0.00	0.00
11+90	4.20	4.20	3.20	3.20	0.00	0.00
12+00	4.20	4.20	3.20	3.20	0.00	0.00
12+10	4.20	4.20	3.20	3.20	0.00	0.00
12+20	4.20	4.20	3.20	3.20	0.00	0.00
12+30	4.20	4.20	3.20	3.20	0.00	0.00
12+40	4.20	4.20	3.20	3.20	0.00	0.00
12+50	4.20	4.20	3.20	3.20	0.00	0.00
12+60	4.20	4.20	3.20	3.20	0.00	0.00
12+70	4.20	4.20	3.20	3.20	0.00	0.00
12+80	4.20	4.20	3.20	3.20	0.00	0.00
12+90	4.20	4.20	3.20	3.20	0.00	0.00
13+00	4.20	4.20	3.20	3.20	0.00	0.00
13+10	4.20	4.20	3.20	3.20	0.00	0.00
13+20	4.20	4.20	3.20	3.20	0.00	0.00
13+30	4.20	4.20	3.20	3.20	0.00	0.00
13+40	4.20	4.20	3.20	3.20	0.00	0.00
13+50	4.20	4.20	3.20	3.20	0.00	0.00
13+60	4.20	4.20	3.20	3.20	0.00	0.00
13+70	4.20	4.20	3.20	3.20	0.00	0.00
13+80	4.20	4.20	3.20	3.20	0.00	0.00
13+90	4.20	4.20	3.20	3.20	0.00	0.00
14+00	4.20	4.20	3.20	3.20	0.00	0.00
14+10	4.20	4.20	3.20	3.20	0.00	0.00
14+20	4.20	4.20	3.20	3.20	0.00	0.00
14+30	4.20	4.20	3.20	3.20	0.00	0.00
14+40	4.20	4.20	3.20	3.20	0.00	0.00
14+50	4.20	4.20	3.20	3.20	0.00	0.00
14+60	4.20	4.20	3.20	3.20	0.00	0.00
14+70	4.20	4.20	3.20	3.20	0.00	0.00
14+80	4.20	4.20	3.20	3.20	0.00	0.00
14+90	4.20	4.20	3.20	3.20	0.00	0.00
15+00	4.20	4.20	3.20	3.20	0.00	0.00
15+10	4.20	4.20	3.20	3.20	0.00	0.00
15+20	4.20	4.20	3.20	3.20	0.00	0.00
15+30	4.20	4.20	3.20	3.20	0.00	0.00
15+40	4.20	4.20	3.20	3.20	0.00	0.00
15+50	4.20	4.20	3.20	3.20	0.00	0.00
15+60	4.20	4.20	3.20	3.20	0.00	0.00
15+70	4.20	4.20	3.20	3.20	0.00	0.00
15+80	4.20	4.20	3.20	3.20	0.00	0.00
15+90	4.20	4.20	3.20	3.20	0.00	0.00

LONGITUDINAL SECTION ROAD J
SCALE: HORIZ. 1"=50'
VERT. 1"=5'



CROSS SECTIONS ROAD J
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

JINI PAPAS
 CIVIL ENGINEERING
 DESIGNER PTY. LTD.
 10/150, COVVA BEACH ROAD, COVVA BEACH, QUEENSLAND 4216
 TEL: 07 5531 2327 FAX: 07 5531 2328
 WWW.1100.COM.AU

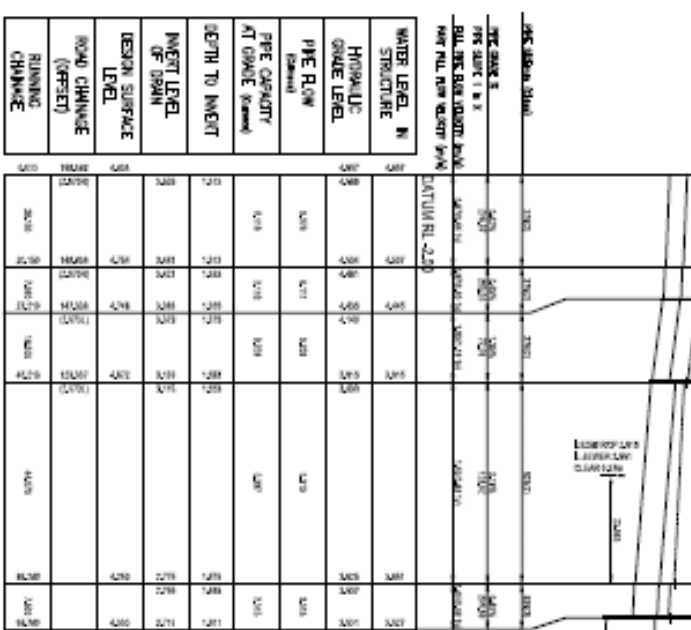


"Ocean Breeze Estate"
 STAGE 5B OF PROPOSED RESIDENTIAL SUBDIVISION
 AT SERRAVAL DRIVE, COVVA BEACH
 DRAWING TITLE: ROAD J - LONGITUDINAL AND CROSS SECTIONS

DATE	BY	CHKD	APP'D
15/03/2014	MM	MM	MM
15/03/2014	MM	MM	MM
15/03/2014	MM	MM	MM
15/03/2014	MM	MM	MM

STRUCTURE NAME	STRUCTURE DESCRIPTION	100	150	200	250	300	350	400	450	500
100	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
150	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
200	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
250	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
300	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
350	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
400	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
450	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
500	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
550	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
600	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
650	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
700	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
750	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
800	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
850	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
900	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
950	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500
1000	1000 FT ON GRADE ROAD - 12' WIDE	100	150	200	250	300	350	400	450	500

NOTE:
 1. THIS PLAN IS TO BE USED TO CONSTRUCT THE ROAD AND TO BE REFERRED TO BY THE CONTRACTOR FOR ALL DETAILS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



WATER LEVEL, IN	300	300	300	300	300	300	300	300	300	300
HIGHWATER GRADE LEVEL	300	300	300	300	300	300	300	300	300	300
Pipe Row	300	300	300	300	300	300	300	300	300	300
Pipe Capacity at Grade (inches)	300	300	300	300	300	300	300	300	300	300
DEPTH TO INVERT	300	300	300	300	300	300	300	300	300	300
INVERT LEVEL OF DRAIN	300	300	300	300	300	300	300	300	300	300
DESIGN SURFACE LEVEL	300	300	300	300	300	300	300	300	300	300
ROAD CHANGE (OFFSET)	300	300	300	300	300	300	300	300	300	300
BLINDING CHANGE	300	300	300	300	300	300	300	300	300	300

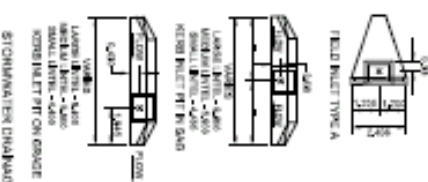
LINE 61

JIM PAPPAS CIVIL ENGINEERING DESIGNER P.T.Y. LTD.
 CIVIL ENGINEERING DESIGNER
 1000 1000 1000 1000
 WWW.1100.COM.AU

“Ocean Breeze Estate”
 STAGE 5B OF PROPOSED RESIDENTIAL SUBDIVISION
 AT SEAPOUL DRIVE, COOYA BEACH
 DRAWING TITLE: STORMWATER DRAINAGE DESIGN OF ONE (1) SIDEWALK AND ROAD

SCALE: 1:50
 DATE: 12/31/2014
 SHEET NO: 1001 - 011

Item #	Quantity	Unit	Material
101	100	m	100mm dia. pipe
102	100	m	100mm dia. manhole
103	100	m	100mm dia. trench
104	100	m	100mm dia. gravel
105	100	m	100mm dia. sand
106	100	m	100mm dia. concrete
107	100	m	100mm dia. steel
108	100	m	100mm dia. brick
109	100	m	100mm dia. stone
110	100	m	100mm dia. wood



NOTE:
 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

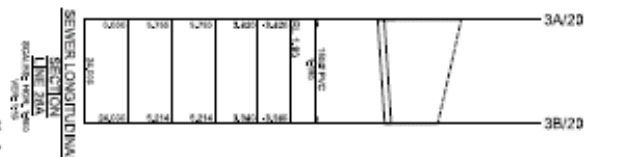
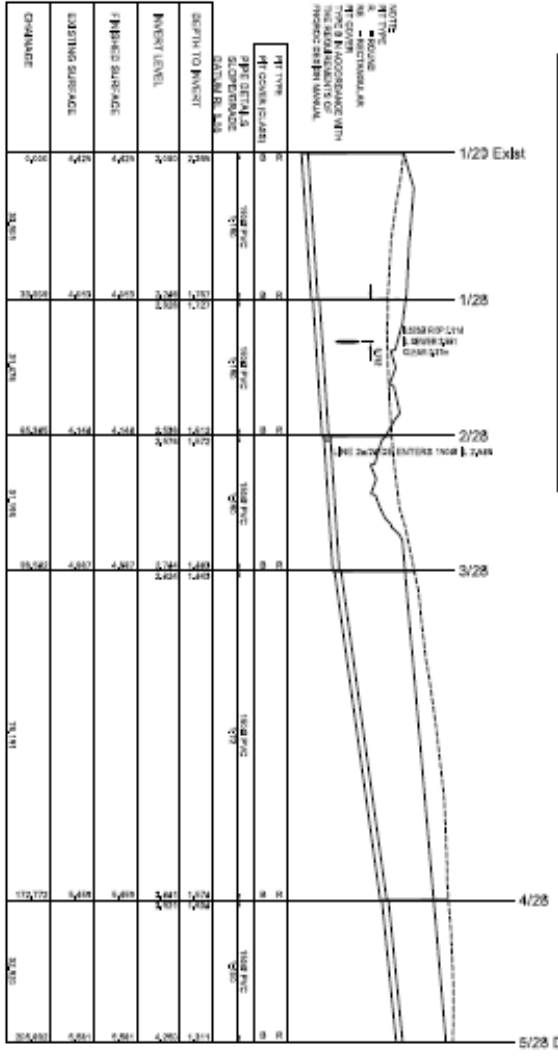
ITEM	TYPE	INTERNAL	INLET	INVERT	GRADE	DEPTH	FT
101	100mm dia. pipe	100	100	100	100	100	100
102	100mm dia. manhole	100	100	100	100	100	100
103	100mm dia. trench	100	100	100	100	100	100
104	100mm dia. gravel	100	100	100	100	100	100
105	100mm dia. sand	100	100	100	100	100	100
106	100mm dia. concrete	100	100	100	100	100	100
107	100mm dia. steel	100	100	100	100	100	100
108	100mm dia. brick	100	100	100	100	100	100
109	100mm dia. stone	100	100	100	100	100	100
110	100mm dia. wood	100	100	100	100	100	100



- GENERAL CONSTRUCTION NOTES:**
1. ALL WORK SHALL BE DONE ACCORDING TO THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, PART 100, AND THE STANDARD SPECIFICATIONS FOR STRUCTURES, PART 105, PUBLISHED BY THE TEXAS DEPARTMENT OF TRANSPORTATION.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
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 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
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 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

SEWER SETOUT POINTS

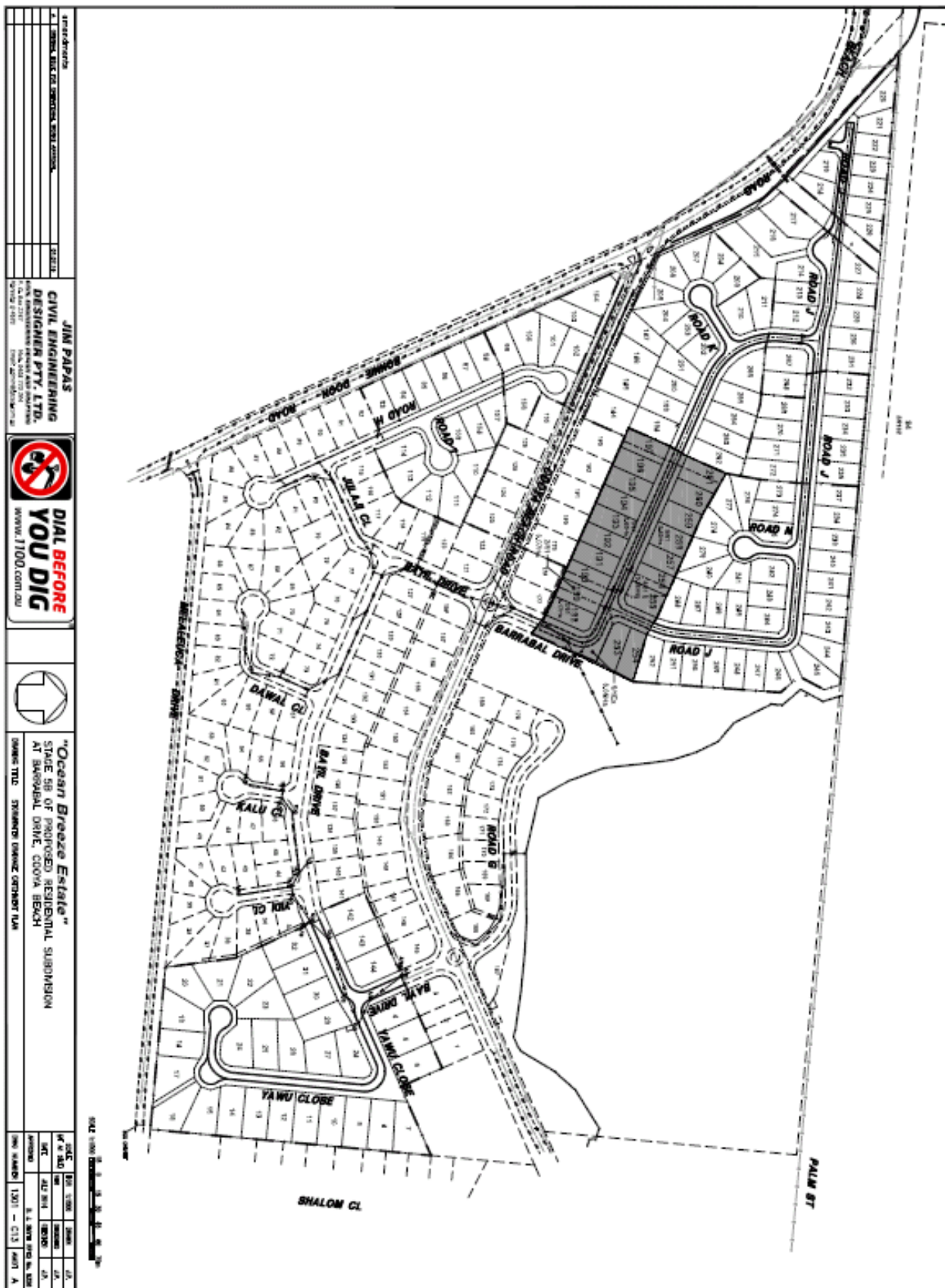
Point #	Chain	Station	Level	Remarks
101	0+00.00	85.140	1.200	2/28
102	0+00.00	85.140	1.200	2/28
103	0+00.00	85.140	1.200	2/28
104	0+00.00	85.140	1.200	2/28
105	0+00.00	85.140	1.200	2/28
106	0+00.00	85.140	1.200	2/28
107	0+00.00	85.140	1.200	2/28
108	0+00.00	85.140	1.200	2/28
109	0+00.00	85.140	1.200	2/28
110	0+00.00	85.140	1.200	2/28



JIM PAPAS CIVIL ENGINEERING DESIGNER, P.E.
CIVIL ENGINEERING DESIGNER, P.T.Y., LTD.
 11000 1100.COM.JAZZ

"Ocean Breeze Estate"
 STAGE 5B OF PROPOSED RESIDENTIAL SUBDIVISION
 AT SANDHILL DRIVE, COOKA BEACH

DATE: 13/01/2014
 TIME: 10:00 AM
 SHEET: 1301 - C12



PROJECT DATA

PROJECT NO. **2014.282** DRAWING NO. **15/32**

DATE: **13/01/14** SCALE: **AS SHOWN**

PROJECT NAME: **"Ocean Breeze Estate"**

CLIENT: **STAGE 9B OF PROPOSED RESIDENTIAL SUBDIVISION AT BANGORAL DRIVE, COOMA BEACH**

DRAWING TITLE: **STRUCTURE CHANGE CALCULATION SHEET**

DESIGNER: JIN PAPAS CIVIL ENGINEERING DESIGNER PTY. LTD.

ISSUED BY: JIMMY HAYES

DATE: 13/01/14

SCALE: AS SHOWN

PROJECT NO. 2014.282

DRAWING NO. 15/32

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DOOR IS SHOWN IN STRUCTURE CHANGE SHEET

CALCULATION TABLE

NO.	DESCRIPTION	EXISTING		PROPOSED		DIFFERENCE		REMARKS
		AREA (SQ.M)	VOLUME (CU.M)	AREA (SQ.M)	VOLUME (CU.M)	AREA (SQ.M)	VOLUME (CU.M)	
1	STRUCTURE 1	0.00	0.00	0.00	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
2	CONCRETE RETAINMENT WALL	2.34	0.00	2.34	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
3	RETAINMENT WALL	0.00	0.00	0.00	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
4	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
5	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
6	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
7	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
8	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
9	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
10	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
11	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
12	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
13	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
14	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
15	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
16	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
17	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
18	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
19	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET
20	CONCRETE RETAINMENT WALL	1.22	0.00	1.22	0.00	0.00	0.00	AS SHOWN IN STRUCTURE CHANGE SHEET

APPENDIX B: STANDARD CONDITIONS

General

1. The proposed works are permitted subject to any alterations:
 - a. found necessary by Chief Executive Officer at the time of examination of Engineering drawings or during construction of the works because of particular engineering requirements and.
 - b. to ensure the works comply in all respects with the requirements of the *FNQROC Development Manual* and good engineering practice; and
 - c. to comply with project specific conditions and the following standard conditions of approval.

All works must be carried out in accordance with the approved plans, conditions and specifications, to the requirements and satisfaction of the Chief Executive Officer.

2. The conditions of any Reconfiguration of Lot or Material Change of Use permits applicable to the subject lot or lots shall be complied with in conjunction with this development permit.
3. Council's examination of the documents should not be taken to mean that the documents have been checked in detail and Council takes no responsibility for their accuracy. If during construction, inadequacies of the design are discovered, it is the responsibility of the Principal Consulting Engineer to resubmit amended plans to Council for approval and rectify works accordingly.
4. Notwithstanding any approval given to engineering documents, where a discrepancy occurs between these documents and Council's standards, then Council's standards shall apply. All works must be performed in accordance with Council standards and Local Laws and other statutory requirements.
5. If in fact there are errors, omissions or insufficient detail on the plans for the purpose of construction, these deficiencies shall be made good during construction and Council reserves the right to withhold approval of construction until such deficiencies are made good to its satisfaction.
6. Work and or Technical Documents identified within these Development Approval Conditions are nominated as requiring Compliance Assessment under section 398 of the *Sustainable Planning Act 2009*. In particular As-Constructed Water, Stormwater and Sewerage Plans must be submitted to the Compliance Assessor (Douglas Shire Council) on the approved form (Form 32) and will be assessed against the provisions of Council's *FNQROC Development Manual*. Council must issue a Compliance Certificate for the assessable documents prior to granting Early Plan Sealing or Plan Sealing of a Subdivision Plan or the issue of a Works Acceptance Certificate, whichever occurs first.

Timing of Effect

7. The conditions of this development permit must be effected prior to the approval and dating of the survey plan, except where specified otherwise in these conditions of approval, or at Council's discretion.

Easement Documentation

8. Easement documents are to be submitted to Council's solicitors for checking in accordance with the conditions of the Reconfiguration Development Permit. Contact Council for current nominated solicitors details.

Portable Long Service Leave Notification

9. As per the QLeave – Building and Construction Industry Authority Guidelines, if the works are over \$80 000, Council must sight a copy of the receipted Portable Long Service Notification and Payment form prior to commencement of work.

Construction Security Bond

10. Lodgement of Construction Security Bond as per the *FNQROC Development Manual*, Section CP1.07, (ie, five (5) per cent of the value of the works) is required, prior to commencement of work. The bond shall be in favour of Council and in the format of cash or an unconditional bank guarantee, which must cover all aspects of the construction and have no termination date.

Third Party Agreement

11. The developer must obtain written agreement from third parties and/or Referral Agencies for any works proposed on adjacent properties. The agreement(s) must be provided prior to the associated works commencing on site. All agreements must be available for Council scrutiny, upon request.

Commencement of Works

12. Council is to receive written Notice of Intention to Commence Works and all matters relevant to the Pre-Start meeting are to be attended to in accordance with Section CP1.07, CP1.08 and Section CP1.09, of the *FNQROC Development Manual*.

Hours of Work

13. Work involving the operation of construction plant and equipment of any description, shall only be carried out on site during the following times:
 - a. 7:00 am to 6:00 pm, Monday to Friday;
 - b. 7:00 am to 1:00 pm, Saturdays; and
 - c. no work is permitted on Sundays or Public Holidays.

Any variations to the above working hours must be authorised by the Chief Executive Officer, prior to the commencement of such works.

Public Notification of the Works

14. The developer or the nominated representative must provide:
 - a. Public notification of the development in local newspapers in accordance with Section CP1.11 of the *FNQROC Development Manual*.

- b. Signage identifying the location of the project, general allotment layout, contact numbers (including out-of-office hours emergency numbers) must be provided at all entrance points to the development. All signage must be appropriately positioned, prior to the commencement of any works on the site.

Site Inspections

15. Council requires a number of major inspections to be completed as Witness and Hold Points for Consulting Engineers and Council officers during the construction of the works. Inspections undertaken during construction shall be in accordance with Section CP1.16 (Inspection and Testing) of the *FNQROC Development Manual*. These Witness and Hold points are to be included in the contractors Inspection and Test Plan (ITP) and be made available for inspection, prior to the commencement of any works on the site.

Soil and Water Management

16. All works must be in accordance with Section CP1.13 and D5 of the *FNQROC Development Manual*, and must comply with the following:
 - a. A copy of the contractor's Erosion and Sediment Control (ESC) Plan is to be submitted to Council and endorsed by the Consulting Engineer, prior to commencement of any works. In particular, the ESC Plan must address the Institution of Engineers' Australia *Guidelines for Soil Erosion and Sediment Control and the Environment Protection (Water) Policy* and Clauses CP1.06, CP1.13 and D5.10 of Council's *FNQROC Development Manual*. The ESC Plan must be relevant to all phases of the construction and be updated where necessary as works progress.
 - b. Any dewatering activities will require approval from Council's Environmental Protection Unit, telephone number 07 4099 9475 and a valid permit obtained prior to commencement.
 - c. During the construction period, the Consulting Engineer shall randomly audit and inspect ESC measures for compliance with the Engineer endorsed contractor's ESC Plan, derived from the Engineer's ESC Strategy (As per *FNQROC Development Manual* CP1 Appendix A).
 - d. It is the contractor's responsibility to ensure that the ESC Plan is updated and amended to reflect any changes in the construction methodology. All such amendments shall be approved by the Engineer and presented to Council.
 - e. The developer shall be held responsible for any rectification works required to clean up dust, pollutants and sediments that may leave the site as a result of construction activities.
 - f. The developer or their representative shall be responsible for communicating with third parties affected by any dust, pollutants or sediment leaving the site as a result of any construction activity that is associated with the project site.

Street Lighting

17. The provision of street lighting is to be in accordance with the *FNQROC Development Manual* D8 and designed to comply with the Road Lighting Standard AS/NZS 1158, a compliance certificate that has been certified by an appropriate Registered Professional Engineer of Queensland (RPEQ) must be provided to demonstrate the lighting design

complies to the requirements of the Road Lighting Standard AS/NZS 1158. New street lighting is to be erected as a Rate 2 public lighting installation, Rate 1 will only be considered where an overhead electricity reticulation exists:

- a. Lighting columns, luminaires and lamps are to be of a type specified in Ergon Energy's *Lighting Construction Manual*, unless approved otherwise by Council.
- b. The applicable lighting category for roads associated with this project having a road hierarchy of residential access and above is identified in Table D8.1 of the *FNQROC Development Manual*.
- c. Local Area Traffic Management (LATM) devices including roundabouts, must be provided with an illumination of not less than 3.5 Lux as specified in the Road Lighting Standard AS/NZS 1158.
- d. Street lighting located adjacent to the development frontage must be located behind the kerb (usually a minimum of 820 mm from the invert of the kerb) and spaced to meet the required lighting category for the road.

Infrastructure Plans for Utility Services

18. Approved infrastructure plans for gas, electrical and telecommunications services must be endorsed by Council, prior to the commencement of associated works.

Landscaping General

19. Landscaping shall be provided in accordance with Part D9 and Part S8 of the *FNQROC Development Manual*, unless approved otherwise by Council.
20. The landscaping works must be constructed in accordance with the approved plans and conditions. The developer must seek approval in writing from the Council for any changes to the plan or the landscaping works on the site. This approval must be obtained prior to commencement of these works on site.
21. The landscape must be maintained in good order by the developer for at least three (3) months during the Works Acceptance period, and generally timed to coincide with the Final Works Acceptance Inspection, when all landscaping works must be in a condition suitable for Council to commence regular maintenance.

Trees

22. Any trees must be planted and staked in accordance with the *FNQROC Development Manual* drawing S4210, with root barriers installed such that they are just visible at the finished surface level. Note that where footpaths are to be provided, a root barrier must also be provided between the tree and the path. Root barriers must be installed and appropriate topsoil, level of compaction and drainage provided, as specified by the manufacturer.
23. Street tree planting locations must be in compliance with *FNQROC Development Manual* D9.07.6 'Alignment and placement of Street Trees'. Trees shall be positioned a minimum of:
 - a. 7.5 metres from streetlights;
 - b. two (2) metres from the inlet or outlet of stormwater pipes;

- c. three (3) metres from any driveways;
 - d. ten (10) metres back from the apex of both boundaries of a corner lot;
 - e. 0.8 metres – one (1) metres from the back of kerbs.
24. All trees must be watered directly after planting and prior to laying mulch. The mulch must be left clear of the trunk and be laid in accordance with *FNQROC Development Manual* drawing S4210 and S8.14, at a radius of 0.5 metre around the base of the tree and out to the back of kerb.
 25. All trees must be of good vigour and health and must not be root-bound at the time of planting. They should be approximately 1.5 metres – two (2) metres tall with well-established root and branch formation. Trees should have a clear dominant central leader.
 26. A joint site inspection is to be held with Council officers and developer's representative to assess the general condition of any existing trees and shrubs within six (6) metres of any property boundary abutting the road reserve, or other Council land. If any dead, dying or dangerous trees are identified during the meeting, with the landowner's consent, they are to be removed to the satisfaction of Council officers, prior to the sealing of plans for the associated lot.
 27. Any trees identified on drawings to be retained, are to be protected in accordance with approved plans. This must include, but is not limited to, the erection and continued maintenance of suitable physical barrier(s) placed around the tree to protect the tree and the root system. Additional protection of tree trunks by the fixing of timber planks using wire loops is also required unless approved otherwise by Council. Any damage caused to nominated trees as a result of construction activity, will require inspection by Council and will require a specified number of suitable replacements trees of suitable maturity to be provided to replace the loss in amenity.

Verges

28. All verges are to be covered full-width with topsoil (AS 4419/Soils for Landscaping and Garden Use) to a depth of not less than 40 mm, lightly compacted and grassed in accordance with Council's Guidelines and Specifications.
29. Any island beds or any shrub beds must have a permanent irrigation system installed, which must be connected to the Douglas Water Network. An Application for a Water Service Connection must be presented to Douglas Water & Waste to facilitate the connection, and must include the installation of a flow meter and associated valves.
30. All water reticulation, including permanent irrigation systems, are to be identified in as-constructed plans which must be submitted to Council for approval prior to the Works Acceptance (On Maintenance) meeting for landscaping.

Structures and Retaining Walls

31. Separate building certification and/or structural certification is required for any works to alter existing structures, provide new structures or construct retaining walls that are over 900 mm high. Certification by a suitably qualified engineer must be provided, prior to opening the work site to the public.

The Location of Stormwater Quality Interception Devices (SQIDs)

32. Council must approve the location of any SQIDs prior to installation. They shall be positioned to allow for economic and efficient maintenance operations, and will require a reinforced concrete hard standing area to be provided from the edge of the carriageway to the SQID location. Vehicular access from the public road reserve to the SQID must remain unrestricted.

Sewer and Water

33. All water and sewerage works must be in accordance with Sections D6 and D7 of the *FNQROC Development Manual*, and must comply with the following:

- a. Douglas Shire Council requires a minimum of five (5) working days notice of intention to commence water and sewerage related works. The notice shall be given to the Senior Plumbing Inspector at Douglas Shire Council either in writing, by telephone 07 4099 9479, fax 07 4098 2902 or email to enquiries@douglas.qld.gov.au prior to the commencement of works.
- b. The developer shall be responsible for confirming the location of all existing sewer, water and utility service infrastructure prior to the commencement of works on site. Any permits necessary to alter/interfere with such services must be obtained prior to the commencement of work and be available for Council inspection if required.
- c. Any works over or within the zone of influence of Council's existing water and sewerage infrastructure must be approved by Douglas Shire Council prior to the commencement of the proposed works. Unless otherwise approved in writing, existing infrastructure impacted by the development shall be subject to the maintenance period provisions contained in this Decision Notice.

Construction works shall include any works that may impact on existing infrastructure such as, but not limited to, mobilisation of heavy earthmoving equipment, stripping and grubbing, site filling, stockpiling of materials and installation of erosion and sediment control measures.

- d. All testing and acceptance of water and sewerage works shall be in accordance with CP1 Construction Procedures of the *FNQROC Development Manual*. Works are to be certified as acceptable by Douglas Water & Waste, and any operating manuals etc be provided to Council, prior to making an application for the acceptance of the works.

Sewer

34. Douglas Water & Waste must be contacted to perform any direct connection to live sewer mains. Unless otherwise approved in writing, separate applications for approval on the prescribed forms shall be made to Douglas Water & Waste for each connection together with payment of the relevant fee. All connections are to be provided subject to the terms and conditions of Douglas Shire Council's 'Application for Plumbing Works'.

- a. Amended drawings in accordance with these conditions must be approved prior to the pre-start meeting.
- b. The Inspection and Test Plan (ITP) must be approved prior to the pre-start meeting. At project completion the completed and validated ITP must be submitted and approved prior to the issue of a Works Acceptance Certificate.
- c. Where retaining walls are located within the zone of influence of a sewer the footings must be 1000 mm clear of the sewer and designed in accordance with the

- Queensland Development Code*. Full design details and structural certification must be approved prior to commencement of works.
- d. Minimum clearances between sewer mains and other services must be in accordance with the *Sewerage Code of Australia*. Clearances must be included on the long-section drawing.
 - e. Where a manhole is located in a batter, a flat area of 1.5 metres radius from the centre of the manhole must be provided. Where the manhole is located along a side or rear boundary and is on the 0.8 metre standard alignment then the flat area must be on at least three (3) sides.
 - f. Where an easement is required the property connection branch must be extended at least one (1) metre from the easement boundary.
 - g. House drains are to extend one (1) metre past the end of the driveway on hatchet blocks and 1.5 metres beyond the top of batters. An I.O. is to be provided at the downstream end of the house drain within one (1) metre of the boundary to delineate the end of the property connection branch.
 - h. As-constructed sewerage drawings must be approved prior to granting of Early Plan Sealing or Issue of a Works Acceptance Certificate whichever occurs first. The as-constructed submission is to include the 'Statement of Compliance – As-constructed Documentation' and must be the final issue.

Water

35. Douglas Shire Council must be contacted to perform any direct connection to live water mains whether being as a permanent connection, a connection for irrigation purposes or for construction water. Unless otherwise approved in writing, separate applications on the prescribed forms shall be made to Douglas Shire Council for connections, together with payment of the relevant fee. All connections are to be provided subject to the terms and conditions of Douglas Shire Council's 'Application for a Water Service Connection'.
- a. Amended drawings in accordance with these conditions must be approved prior to the pre-start meeting.
 - b. The Inspection and Test Plan (ITP) must be approved prior to the pre-start meeting. At project completion the completed and validated ITP must be submitted and approved prior to the issue of a Works Acceptance Certificate.
 - c. Minimum clearances between water mains and other services must be in accordance with the *Water Supply Code of Australia* in particular the minimum clearance between water mains and sewer mains must be 500 mm with the sewer under the water main.
 - d. As-constructed water drawings must be approved prior to Issue of a Works Acceptance Certificate. The as-constructed submission is to include the 'Statement of Compliance – As-constructed Documentation' and must be the final issue.

Roads and Footpaths

36. All works are to be designed and constructed in accordance with AS 1428.1-2001: '*Design for access and mobility*' – General requirements for access – New building work, and associated standard AS/NZS 1428.4 2002, '*Design for Access and Mobility*' –

Tactile Indicators. The design is required to provide equal access for people with disability and include the provision of suitable ramps and landing areas and the installation of Tactile Ground Surface Indicators (TGSIs) where required.

Cultural Heritage

37. The *Aboriginal Cultural Heritage Act 2003* (the Act) seeks to protect artefacts and cultural sites that are of significance to Aboriginal people. The Act requires anyone carrying out an activity to exercise a Duty of Care. Guidelines have been produced to enable assessment of sites under the Act. These are available from Department of Environment Heritage Protection and can be downloaded from their website at www.ehp.qld.gov.au. The work identified in the project documentation is likely to require assessment of the site under the Act.