

**NOTE TO CONTRACTOR**  
CONTRACTOR TO LOCATE, DEPTH AND SIZE  
ALL RELEVANT EXISTING SERVICES FOR  
ALL CONNECTION POINT INCLUDING ANY  
CONFLICTING SERVICES TO BE RELOCATED  
OR FOR A CLEARANCE REQUIREMENT  
PRIOR TO COMMENCEMENT OF WORKS

**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND SERVICES ARE  
APPROXIMATE ONLY AND THEIR EXACT POSITION  
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS  
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

**DETAIL PLAN**  
SCALE 1:500 (A1)  
0 5 10 20 30 40 50

**NOTES:**  
A) USE THESE SUPPORT TYPES ONLY WHERE SPECIFIED BY THE DESIGNER AND AUTHORISED BY THE WATER AGENCY.  
B) CEMENT STABILISATION GRANULAR FILL TO HAVE 6% MINIMUM CEMENT (BY VOLUME). PLACE DRY.  
C) DRAIN ALONG LENGTH OF ENCASEMENT WHERE CONTINUOUS DRAINAGE ALONG TRENCH IS REQUIRED. MIN DN100 DRAIN PIPE ON BOTH SIDES, WITH 75mm MINIMUM CLEARANCE FROM MAIN. AINS MAY BE LOCATED AT BOTTOM CORNERS OF EMBANKMENT.

Revision	Details	Date	App'd
A	Plans issued for construction	20.09.13	MC
P5	Plans Amended and Submitted to WPW and CFA	12.06.14	MC
P6	Plans Amended and Submitted to WPW	24.06.14	MC
P7	Plans Amended and Submitted to WPW	25.06.14	MC

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Drawn	M.JONES
Designed	M.JONES
Checked	M.COYNE
Date	13.05.2013
BW Ref	M4015-09-W

**WESTERNPORT WATER**  
**SEAGROVE ESTATE STAGE 9, COWES**  
**WATER RETICULATION EXTENSION**

DRG. NO.  
**W399**

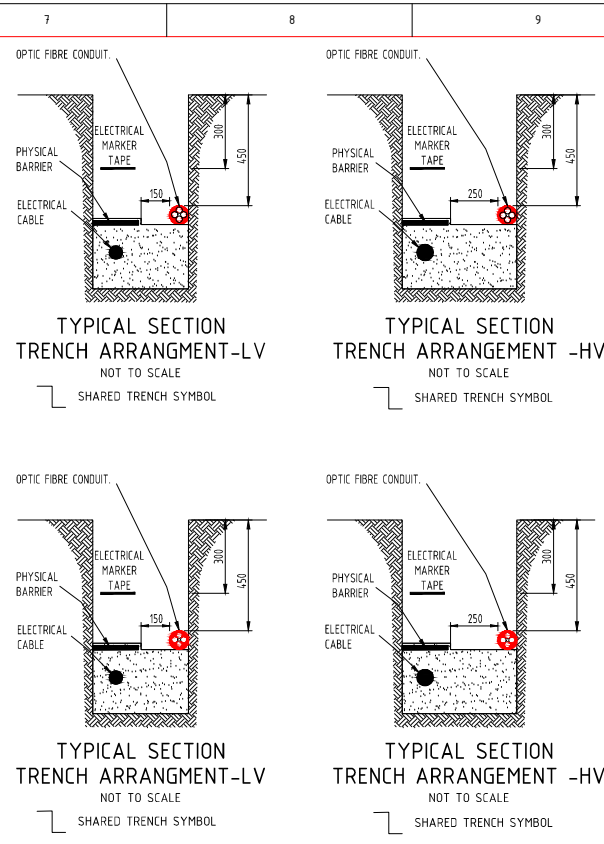
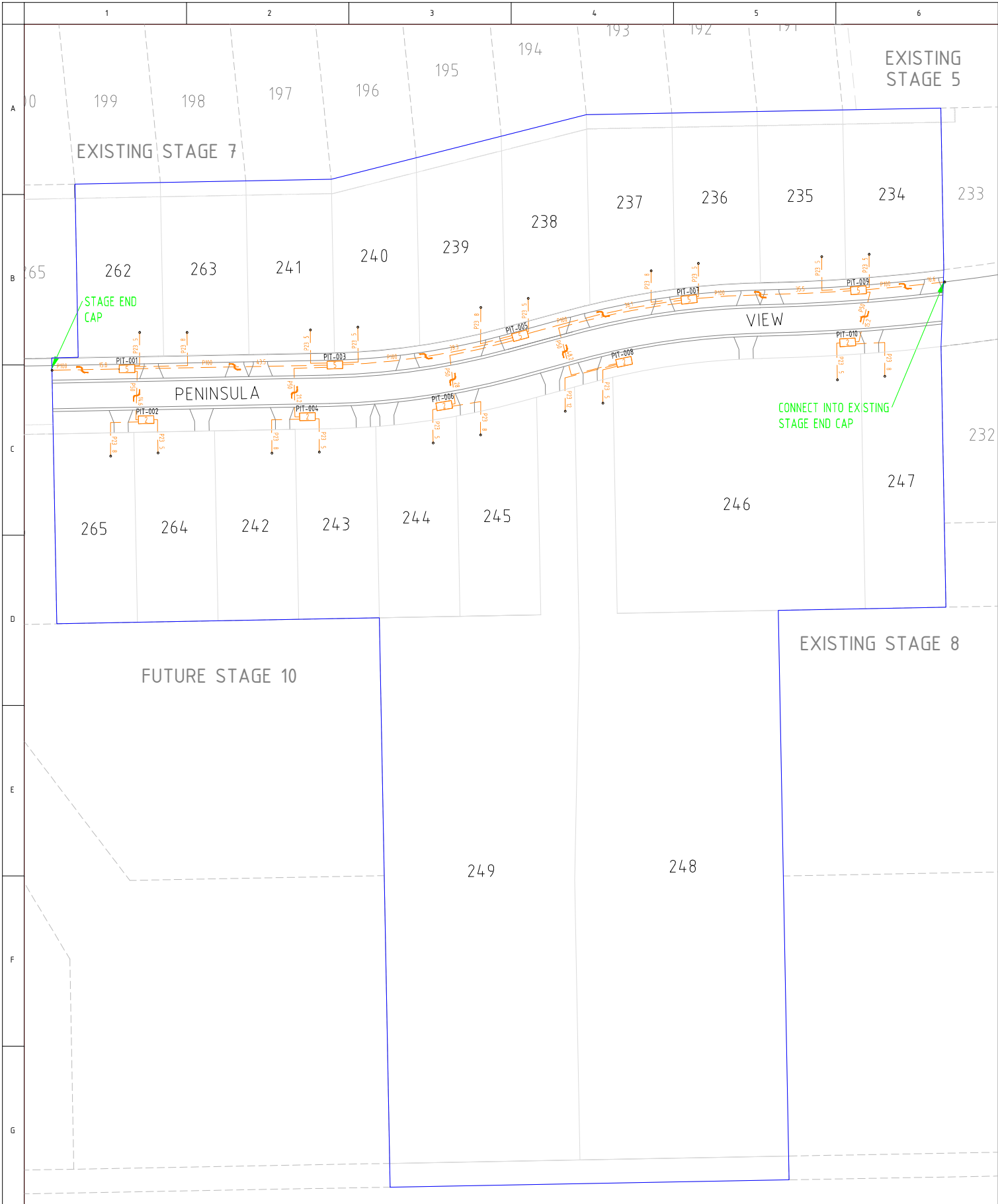
Sheet 2 of 2

**A1**









PVC PIT TYPE AND SIZE		LENGTH	WIDTH	DEPTH
P2 SERVICE DROP BOUNDARY PIT		650MM	280MM	565MM
P5 SERVICE DROP NETWORK ACCESS PIT		700MM	450MM	650MM
P8 LOCAL NETWORK CONNECTION POINT		1360MM	555MM	860MM
P8 DISTRIBUTION POINT		1360MM	555MM	860MM
P9 FIBRE DISTRIBUTION HUB		2000MM	555MM	900MM

MINIMUM CLEARANCE FROM UNDERGROUND SERVICES TO OPTICAL FIBRE		
GAS- LARGE MAINS (OVER 100MM DIAMETER)		300MM
SMALL MAIN (75MM DIAMETER OR LESS)		150MM
ELECTRICAL- HIGH VOLTAGE		300MM
LOW VOLTAGE		100MM
WATER- HIGH CAPACITY MAINS		300MM
LOCAL RETICULATION		150MM
SEWER- MAINS		300MM
CONNECTION PIPE		150MM
OTHER TELECOMMUNICATION		100MM

CONDUIT DEPTH AND COVER		MINIMUM COVER
SERVICE DROP CONDUIT		300MM
VERGE		450MM
ROAD CROSSING		600MM
ROAD CROSSING CONTROLLED BY STATE AUTHORITY		800MM TO 1200MM

**APPROVED**

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

**WARNING**

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THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT LOCATION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

**SAFETY FIRST**

**SAFETY STARTS WITH YOU**



- ### CONDUITS NOTES
- ALL WORKS TO BE COMPLETED TO NBN.co DOCUMENT GUIDE NBN-TE-CTO-194.
- COMMUNICATIONS CONDUITS AND ASSOCIATED FITTINGS TO BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH AS/ACIF S008: 2006/AS/ACIF 254:2004, AS/ACIF S2009:2006 AND AS/NZS 2032:2006.
  - ALL CONDUITS SHALL BE WHITE AND LABELLED AS PER AS/ACIF S008: 2006 WITH ADDED DESCRIPTOR NBN Co.
  - COMBINATIONS OF BENDS WITH ANGLES OF 15°, 22.5° AND 30° ARE USED TO CHANGE THE DIRECTION OF THE 100MM CONDUIT WHERE REQUIRED.
  - CONDUITS JOINTS ARE ACHIEVED BY SOCKET AND SPIGOT OR COUPLER AND SEALED WITH SOLVENT CEMENT.
  - THE BEND RADIUS OF THE 100MM CONDUIT IS TO BE A MINIMUM OF 8 TIMES THE NOMINAL DIAMETER OF THE CONDUIT.
  - 50MM CONDUITS BENDS TO UTILIZED FOR LOCAL LATERAL CONDUITS USE A 90° BEND WHERE REQUIRED.
  - THE BEND RADIUS OF THE 50MM CONDUIT IS TO BE A MINIMUM OF 6 TIMES THE OUTER DIAMETER OF THE CONDUIT.
  - THE BEND RADIUS OF THE 23MM CONDUIT IS TO BE A MINIMUM OF 15 TIMES THE OUTER DIAMETER OF THE CONDUIT.
  - ALL CONDUITS ARE INSTALLED IN TRENCHES WITH MINIMUM SEPARATIONS FROM OTHER UTILITIES, AS PER ANY APPLICABLE LOCAL UTILITY REQUIREMENTS, LEGISLATIVE REQUIREMENTS, SHARED TRENCHING AGREEMENTS AND NBN Co APPROVAL.
  - SERVICE DROP CONDUITS FOR SINGLE DWELLING IS A WHITE 23MM PVC CONDUIT AND LABELLED AS AS/ACIF S008: 2006 WITH ADDED DESCRIPTOR OF NBN Co.
  - SERVICE DROP CONDUIT IS NOT INSTALLED MORE THAN ONE METER INSIDE THE LOT, THE LOCATION OF THE SERVICE DROP STUB SHOULD BE MARKED FOR BUILDERS TO LOCATE OR BY INSTALLING A BEND THAT POINTS UPWARDS SO THAT IT PROTRUDES THROUGH THE SURFACE OF THE GROUND.
  - SERVICE DROP CONDUIT IS SEALED AT BOTH ENDS USING PLASTIC DUCT COVERS AND FITTED WITH A DRAW STRING.
  - ALL INSTALLED CONDUIT ( EXCEPT THE SERVICE DROP CONDUITS ) REQUIRES TESTING VIA THE INSTALLATION OF A MANDREL WITH A DIAMETER OF NO LESS THE 80% OF THE INTERNAL DUCT DIAMETER. THIS MANDREL IS HAILED THROUGH TO CHECK FOR THE CONDUIT CONCENTRICITY AND CONTINUITY.
  - AFTER CONDUIT TESTING HAS BEEN PERFORMED, A DRAW STRING OR SIMILAR WILL BE INSTALLED WITH IN EACH CONDUIT EXCEPT FOR SERVICE DROP CONDUIT.
  - ONCE TESTING IS FINISHED AND THE CONDUIT INTEGRITY IS IDENTIFY AS ACCEPTABLE, ALL CONDUITS ARE SEALED USING PLASTIC DUCT COVERS.
  - 100MM WIDE SAFETY WARNING "COMMUNICATION" TAPE SHALL BE PLACED 300MM FROM FINAL GROUND.
- ### PIT NOTES
- ALL WORKS TO BE COMPLETED TO NBN.co DOCUMENT GUIDE NBN-TE-CTO-194.
- PITS AND PIT LIDS MUST HAVE A LOAD RATING SUITABLE FOR THE LOCATION IT IS INSTALLED IN AS PER AS3996 ACCESS COVERS AND GRATES.
  - PIT LIDS WILL BE LABELLED AS A COMMUNICATION PIT.
  - INSTALL PITS IN AN EASILY ACCESSIBLE LOCATION TO FACILITATE INSTALLATION AND OPERATIONAL TASKS.
  - POSITION PITS WITH THEIR LONG SIDE PARALLEL TO THE ADJACENT PROPERTY BOUNDARY OR ROADWAY.
  - USE PIT BEDDING AND BACKFILL AS PER SPECIFICATION.
  - CONFORM TO SLOPE AND GROUND LEVEL WHEN REINSTATING.
  - ENSURE A PIT IS INSTALLED WHERE CONDUIT CHANGE DIRECTION.
  - PITS SHOULD NOT BE INSTALLED:
    - (A) IN UNMADE SECTIONS OF CARRIAGEWAYS
    - (B) WITHIN FIVE METERS OF A CORNER OF A STREET OR IN VEHICULAR ACCESS WAYS
    - (C) WITHIN THREE METERS FROM ANY POLE
    - (D) OUTSIDE A DOOR WAY
    - (E) WITHIN ONE METER OF ANY ACCESS WAYS OR DRIVEWAYS
    - (F) IN ROADWAY AREAS
    - (G) ON ROADS EDGES
    - (H) IN A HAZARDOUS AREA
  - SEAL ALL ENTRIES BETWEEN THE CONDUITS INTO NBN Co PITS.
  - DISTRIBUTION CONDUIT ARE INSTALLED AT THE LOWEST POINT OF PIT END WALL.
  - CONDUITS THAT ARE ROAD CROSSING OR DIRECTION CHANGE TO PLACED ON ROAD SIDE OF PIT.
  - CONDUITS THAT ARE PROPERTY SERVICE CONDUITS ARE PLACES ON PROPERTY SIDE OF PITS ABOVE ALL LOCAL AND AND DISTRIBUTION CONDUITS.
  - ENTER PITS VIA THE END OF PIT ONLY.
  - ALL CONDUITS ENTERING PITS TO HAVE AT LEAST 50MM OF SPACE BETWEEN THE EXTERIOR AND BOTTOM OF PIT AND 25MM MINIMUM SPACING REQUIRED BETWEEN DUCTS.
  - ALL CONDUITS ENTERING PITS TO BE FINISHED SQUARE AND TO BE FITTED WITH BUSHES WITH THE PIT WALL END.

BILL OF MATERIAL				
NO OF LOTS: 20				
PITS		DUCTS		
SIZE	QTY	SIZE	QTY	MTRS
2	5	P100	6	186.8
5	5	P50	5	127.2
8	0	P23	20	128
9	0			
TOTAL NUMBER OF PITS: 10				
TOTAL NUMBER OF CONDUITS: 31				
TOTAL LENGTH OF CONDUITS: 442				

STREET \ SERVICE	WATER		SEWER		TELECOM		ELECTRICITY		GAS		LIGHTING	
	OFFSET	LOCATION	OFFSET	LOCATION	OFFSET	LOCATION	OFFSET	LOCATION	OFFSET	CATEGORY	OFFSET	CATEGORY
PENINSULA VIEW	2.45	SOUTH	1.0	SOUTH	1.80	NORTH	2.60	NORTH	1.85	SOUTH	0.8 BOX	P4

NOTE: OFFSETS ARE FROM ROAD RESERVE BOUNDARY

**\*\*ATTENTION\*\***

**CONSTRUCTORS DO NOT**

**change or alter job**

**specifications unless first**

**checking with designer.**

P1	15/01/14	J.O'LOUGHLIN	PIT AND PIPE DESIGN	
REV	DATE	DRAFTER	DESCRIPTION	APPROVED

NBNCO APPROVAL RECORD:

SIGNATURE	DATE
<input type="checkbox"/> DD	_____
<input type="checkbox"/> WD	_____
<input type="checkbox"/> AB	_____

QUALITY RECORD :

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**NBNCo Limited**

**BW BEVERIDGE WILLIAMS & Co**

KEY PLAN

DRAWING TITLE:

**SOUTHERN SUSTAINABLE DEVELOPMENTS**

**SEAGROVE ESTATE**

**PENINSULA VIEW, COWES**

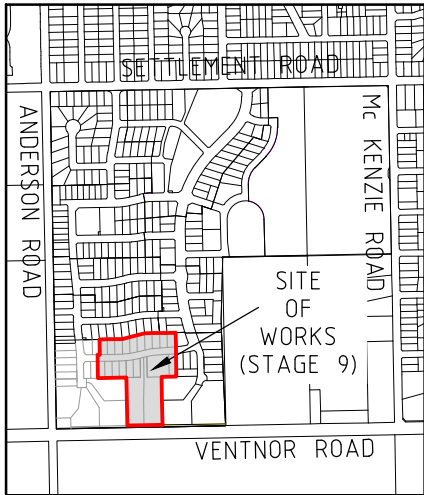
**STAGE 9 - 20 LOTS**

STATE:	VIC	REGION:	BASS COAST
FSA:		FSAM:	
FDA:			

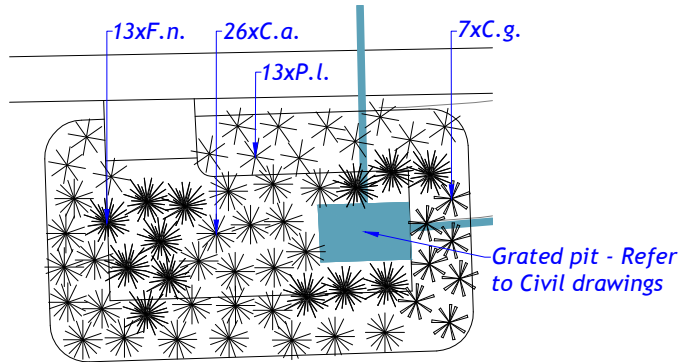
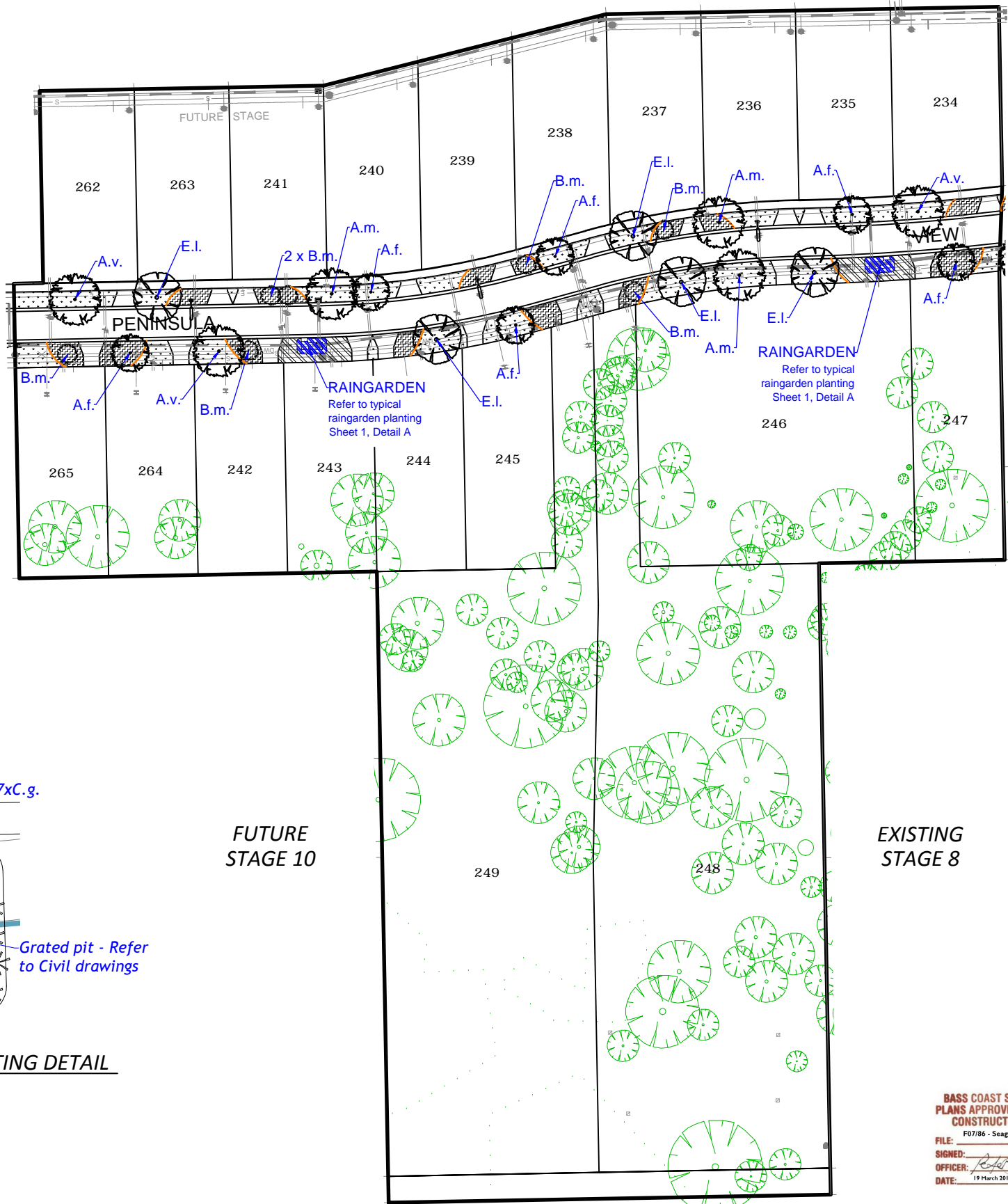
PROJECT No: AYCA-15PV7H

CADREF No: M4015-9

SCALE	SHEET No. 1	OF 2	REV. P1
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KEY PLAN (NOT TO SCALE)



A1 TYPICAL RAINGARDEN PLANTING DETAIL  
SCALE 1:10 (A3) / 1:20(A1)

FOR COUNCIL APPROVAL

LEGEND

EXISTING TREE TO BE RETAINED & PROTECTED

PROPOSED TREES & SHRUBS

TERRESTRIAL PLANTING (SHREDDED EUCAMULCH)

PLANTING IN 'TARRAWINGEE PEBBLES' GRAVEL MULCH

RAINGARDEN PLANTING IN 'TARRAWINGEE PEBBLES' GRAVEL MULCH (Ephemeral zone) Refer Detail A, Sheet 1

GRASS (SEEDED)

DRAINAGE

SERVICES

ELECTRICITY / STREET LIGHTS

STAGE 9 BOUNDARY

TIMBER EDGE Refer Detail C, Sheet 4

GENERAL NOTES

1. Refer to Landscape Specification by Beveridge Williams.
2. The Landscape Contractor must refer to civil engineering drawings for set out of roads and carpark and all infrastructure.
3. This plan is intended for soft landscaping and associated landscape materials and must not be used for any other purposes.
4. All survey information supplied is assumed to be correct.
5. The Landscape Contractor must verify all dimensions and areas prior to commencing any work or placing any orders for materials.
6. The Landscape Contractor must determine the location of all underground services prior to commencing any work on site and shall be liable for any damage to services or conduits.
7. The Landscape Contractor must immediately report any perceived errors or omissions in the landscape drawings to the Project Manager and Client.
8. Where any conflict occurs between proposed tree locations and infrastructure, such as light poles or powerlines, tree(s) must be relocated or removed.
9. The Landscape Contractor must confirm all plant quantities prior to ordering.
10. Grassed nature strips as specified.
11. Refer to Sheet 4 - LANDSCAPE DETAILS - for Establishment & Maintenance Notes
12. Refer to Sheets 2 & 3 - LANDSCAPE PLANS - for Driveway Crossover and Timber Garden Edge notes

PLANT SCHEDULE						
CODE	BOTANICAL NAME	COMMON NAME	HEIGHT X WIDTH	% MIX & DENSITY	POT SIZE	QTY
Street Trees						
A.f.	Agonis flexuosa	Willow Myrtle	7-9x4-5m	-	400mm	6
A.m.	Acacia melanoxylon	Blackwood	12-16x5-7m	-	45L	3
A.v.	Allocasuarina verticillata	Drooping Sheoke	5-8x4-7m	-	45L	3
B.m.	Banksia marginata	Sliver Banksia	2x1.8m	-	400mm	7
E.l.	Eucalyptus leucosylon 'Eukie Dwarf'	Dwarf Yellow Gum	9-10x7-9m	-	400mm	5
Terrestrial Planting (Street planting) - Tussocks & groundcovers						
D.r.	Dianella revoluta var brevicaulis	Black-anther Flax Lily	0.8x0.8m	-	Tube	161
F.n.	Ficinia nodosa	Knobby Club-Rush	1x0.8m	-	Tube	104
L.g.	Lepidosperma gladiatum	Coast Sword Sedge	1x1.5m	-	Tube	43
L.l.	Lomandra Tanika	Spiney Headed Mat Rush	1x1.2m	-	Tube	72
P.o.	Patersonia occidentalis	Purple Flag	0.3x0.5m	-	Tube	165
P.l.	Poa labillardieri	Common Tussock Grass	1x1m	-	Tube	167
Ephemeral Raingarden						
C.a.	Carex appressa	Tall Sedge	0.8X0.7m	22% @ 4/m²	Tube	52
C.g.	Carex gaudichaudiana	Fen Sedge	0.8X0.5m	22% @ 4/m²	Tube	14
F.n.	Ficinia nodosa	Knobby Club Rush	1x0.8m	44% @ 4/m²	Tube	26
P.l.	Poa labillardieri	Common Tussock - Grass	0.8X0.8m	12% @ 4/m²	Tube	26

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Rev	Description	Date	By	App.	Rev	Description	Date	By	App.

Client

SOUTHERN SUSTAINABLE DEVELOPMENTS PTY LTD

Project Name

SEAGROVE ESTATE- STAGE 9 COWES

Drawing Title

LANDSCAPE PLAN

Designed Date

C.BROSNAN  
21.11.13

Drawn

C.BROSNAN

Approved Date

J.GREEN  
21.11.13

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Scale

1:1000(A3)/1:500(A1)

Project Ref.

A4015-09

Drawing No.

1/4

Rev.

-

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