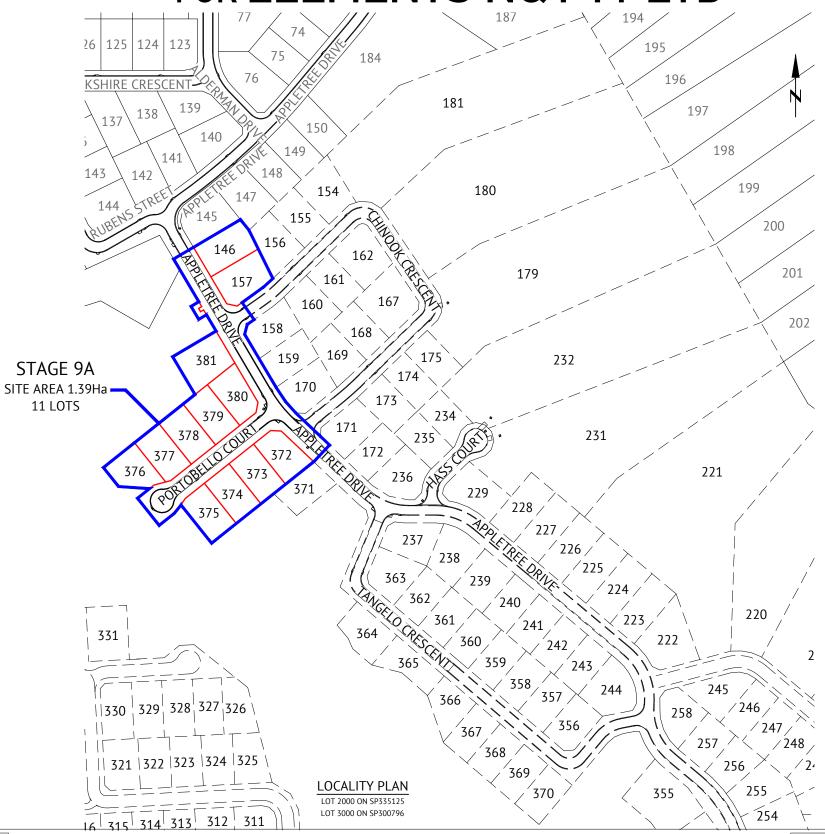
THE ORCHARD STAGE 9A & 9A1 APPLETREE DRIVE, JENSEN FOR ELEMENTS NQ PTY LTD



DRAWING SCHEDULE				
DRAWING NO.	DRAWING TITLE			
215	COVER SHEET, LOCALITY PLAN & DRAWING SCHEDULE			
216	EARTHWORKS LAYOUT PLAN SHEET			
217	ROADWORKS & STORMWATER DRAINAGE PLAN			
218	APPLETREE DRIVE LONGITUDINAL SECTION			
219	APPLETREE DRIVE CROSS SECTIONS			
220	CHINOOK CRESCENT LONGINTUDINAL AND CROSS SECTIONS			
221	PORTOBELLO COURT LONGITUDINAL AND CROSS SECTIONS			
222	ROADWORKS DETAILS PLAN SHEET			
223	MISCELLANEOUS DETAILS			
224	Q2 STORMWATER LONGITUDINAL SECTION SHEET 1 OF 2			
225	Q2 STORMWATER LONGITUDINAL SECTION SHEET 2 OF 2			
226	WATER RETICULATION PLAN			
227	TRUNK WATER MAIN LAYOUT AND LONGITUDINAL SECTION			
228	SEWERAGE RETICULATION PLAN			
229	SEWERAGE LONGITUDINAL SECTION SHEET 1 OF 3			
230	SEWERAGE LONGITUDINAL SECTION SHEET 2 OF 3			
231	SEWERAGE LONGITUDINAL SECTION SHEET 3 OF 3			
232	SEWER RISING MAIN LAYOUT AND LONGITUDINAL SECTION			



Revisions			Level Datum: AHD (DERIVED)				
No.	Date	Details	Check	B.M. Used: PM200736 RL.30.364			l
Α	05.03.24	Original Issue	GEO	Coordinate Projection: Plane			l
				Coordinate Datum: Arbitrary			l
				Origin of Coordinates: PM200736	E:	62389.14	l
				Meridian: MGA Z55 Vide SP327689	N:	94092.024	l
				Map Reference:			l
				Contour Interval:	Surv	veyed by: BM	l
				Job No: 27687-098-01	Dra	wn: MJM	
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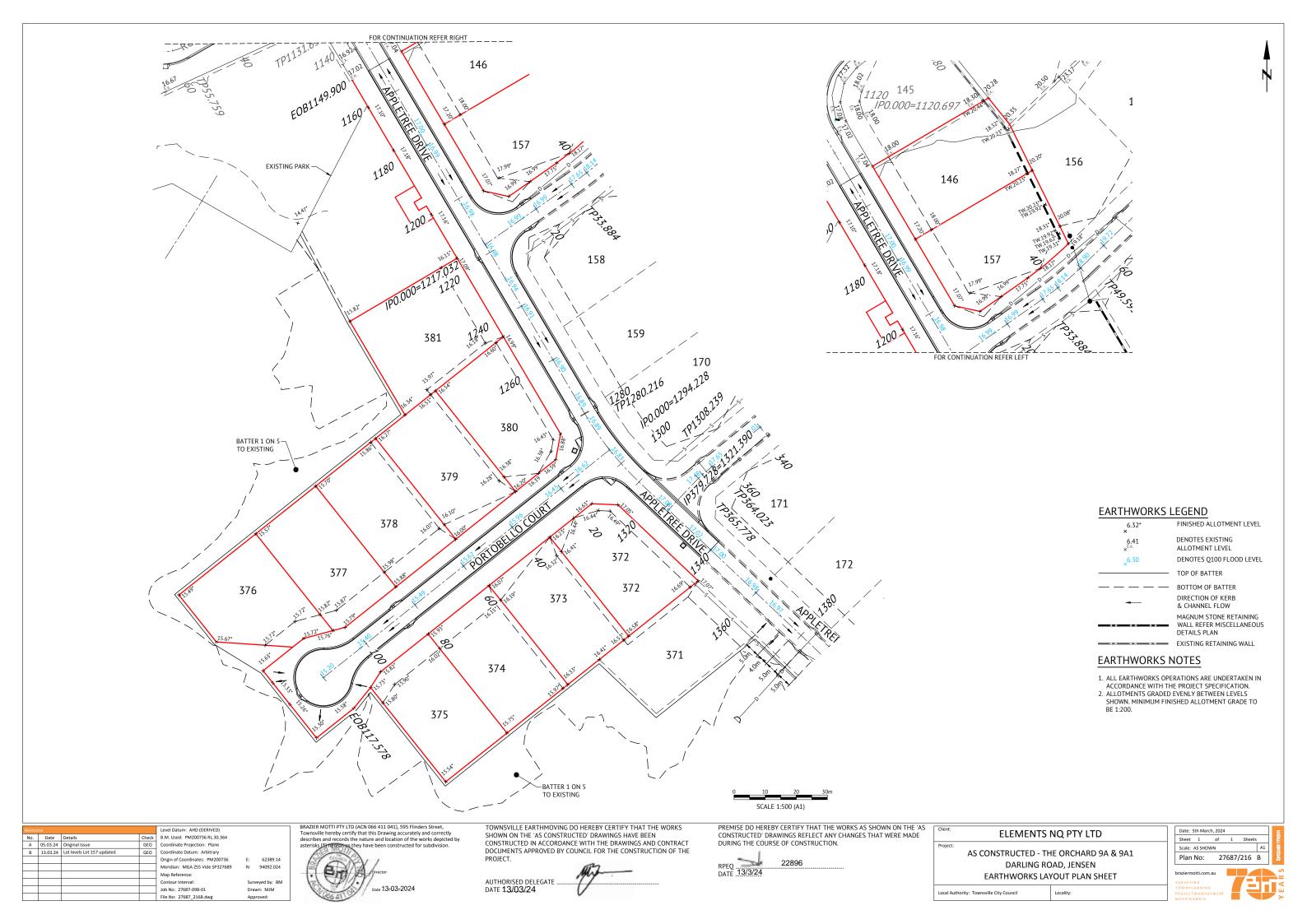
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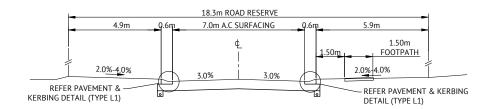
AS CONSTRUCTED - THE ORCHARD 9A & 9A1
DARLING ROAD, JENSEN

COVER SHEET, LOCALITY PLAN & DRAWING SCHEDULE

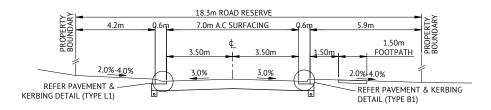
Scale: AS SHOW	N		A1
Plan No:	27687	7/215	Α



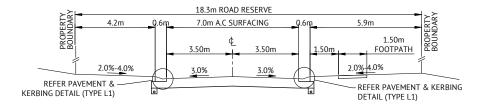




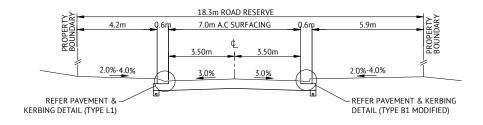
TYPICAL SECTION CH1420.079-1541.800



TYPICAL SECTION CH1369.174-1420.079

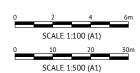


TYPICAL SECTION CH1216.246-1369.174



TYPICAL SECTION CH1149.900-1216.246

APPLETREE DRIVE CROSS SECTIONS



Revisions		Level Datum: AHD (DERIVED)				
No.	Date	Details	Check	B.M. Used: PM200736 RL.30.364		
Α	05.03.24	Original Issue	GEO	Coordinate Projection: Plane		
				Coordinate Datum: Arbitrary		
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				Meridian: MGA Z55 Vide SP327689	N:	94092.024
				Map Reference:		
				Contour Interval:	Sur	veyed by: BM
				Job No: 27687-098-01	Dra	wn: MJM
				File No: 27687_219A.dwg	App	roved:

TOWNSVILLE EARTHMOVING DO HEREBY CERTIFY THAT THE WORKS SHOWN ON THE 'AS CONSTRUCTED' DRAWINGS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS AND CONTRACT DOCUMENTS APPROVED BY COUNCIL FOR THE CONSTRUCTION OF THE PROJECT.

AUTHORISED DELEGATE DATE 12/03/24

PREMISE DO HEREBY CERTIFY THAT THE WORKS AS SHOWN ON THE 'AS CONSTRUCTED' DRAWINGS REFLECT ANY CHANGES THAT WERE MADE DURING THE COURSE OF CONSTRUCTION.



Client:	ELEMENTS NQ PTY LTD			
Project:				
	AS CONSTRUCTED - THE ORCHARD 9A & 9A1			
	DARLING ROAD, JENSEN			
	APPLETREE DRIVE CROSS SECTIONS			

Local Authority: Townsville City Council

Scale: AS SHOWN
Plan No: 27687/219 A

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PROJECTMANAGEMENT

Sheet 1 of 1 Sheets

APPROVED PAVEMENT DESIGN PORTOBELLO COURT CH.0.000-CH.60.00

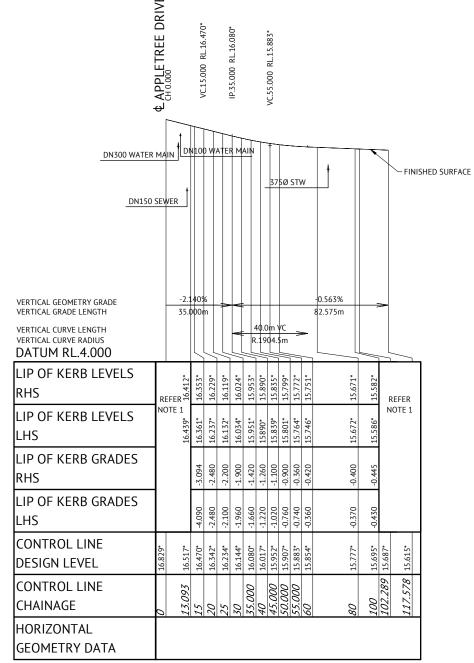
30mm ASPHALT SURFACING (AC10M)
PRIME COAT 1.1L/m² (AMC0)
125mm BASE COURSE (DMR TYPE 2.1)
205mm SUB BASE COURSE (DMR TYPE 2.3)

ROAD LONGITUDINAL SECTION NOTES

APPROVED PAVEMENT DESIGN PORTOBELLO COURT CH.60.00-CH.117.578

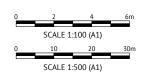
30mm ASPHALT SURFACING (AC10M)
PRIME COAT 1.1L/m² (AMC0)
125mm BASE COURSE (DMR TYPE 2.1)
140mm SUB BASE COURSE (DMR TYPE 2.3 0.8<UCS> 1.5Mpa)
200mm SUB GRADE REPLACEMENT (DMR TYPE 2.3 UCS> 1.5Mpa)

1. FOR LEVEL INFORMATION REFER ROADWORKS DETAILS PLAN.



PORTOBELLO COURT LONGITUDINAL SECTION

SCALE 1:1000 HORIZONTAL, SCALE 1:100 VERTICAL



1.50m ¢ FOOTPATH 1.50m 3.50m 3.50m 3.50m 3.50m 3.50m 3.50m 3.70m 3.50m 3.50m 3.50m 3.50m 3.50m 3.50m 3.50m 3.50m 3.50m 3.50m

THIERE SECTION

PORTOBELLO COURT CROSS SECTIONS

18.3m ROAD RESERVE

7.0m A.C SURFACING

SCALE 1:100

PREMISE DO HEREBY CERTIFY THAT THE WORKS AS SHOWN ON THE 'AS CONSTRUCTED' DRAWINGS REFLECT ANY CHANGES THAT WERE MADE DURING THE COURSE OF CONSTRUCTION.

PEQ	22896
PEQ ATE 13/3/24	22896

Project:
AS CONSTRUCTED - THE ORCHARD 9A & 9A1
DARLING ROAD, JENSEN
PORTOBELLO COURT LONGITUDINAL AND CROSS SECTIONS

ELEMENTS NQ PTY LTD

2.<u>0%-4.</u>0%

- REFER PAVEMENT &

KERBING DETAIL (TYPE L1)

Scale: AS SHOWN
Plan No: 27687/221 A

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TOW RPLAN NING
PROJECTMAN A GEMENT

Sheet 1 of 1 Sheets

Date: 5th March, 2024

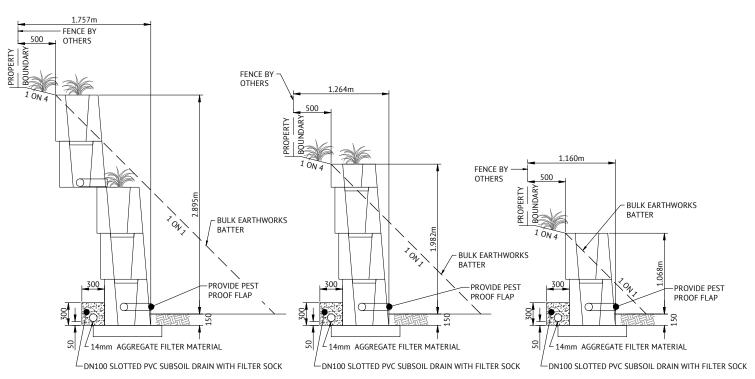
No.	Date	Details	Check	B.M. Used: PM200736 RL.30.364		
Α	05.03.24	Original Issue	GEO	Coordinate Projection: Plane		
				Coordinate Datum: Arbitrary		
				Origin of Coordinates: PM200736	E:	62389.1
				Meridian: MGA Z55 Vide SP327689	N:	94092.02
				Map Reference:		
				Contour Interval:	Sur	veyed by: B
				Job No: 27687-098-01	Dra	wn: MJM
				File No: 27687_221A.dwg	App	roved:

Level Datum: AHD (DERIVED



TOWNSVILLE EARTHMOVING DO HEREBY CERTIFY THAT THE WORKS SHOWN ON THE 'AS CONSTRUCTED' DRAWINGS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS AND CONTRACT DOCUMENTS APPROVED BY COUNCIL FOR THE CONSTRUCTION OF THE

HORISED DELEGATE F 12/03/24



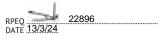
MAGNUM STONE RETAINING WALLS

Level Datum: AHD (DERIVED) B.M. Used: PM200736 RL.30.364 Coordinate Projection: Plane Coordinate Datum: Arbitrary Meridian: MGA Z55 Vide SP327689 94092.024 Surveyed by: BM Job No: 27687-098-0: File No: 27687_223A.dwg

TOWNSVILLE FARTHMOVING DO HEREBY CERTIFY THAT THE WORKS SHOWN ON THE 'AS CONSTRUCTED' DRAWINGS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS AND CONTRACT DOCUMENTS APPROVED BY COUNCIL FOR THE CONSTRUCTION OF THE

AUTHORISED DELEGATE DATE 12/03/24

PREMISE DO HEREBY CERTIFY THAT THE WORKS AS SHOWN ON THE 'AS CONSTRUCTED' DRAWINGS REFLECT ANY CHANGES THAT WERE MADE DURING THE COURSE OF CONSTRUCTION.



- 1. ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 2870 AND AS 3600.
- MASONRY WORK TO AS 3700 AND AS 4455.
- CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES:

.1. FOOTINGS	
4.1.1. CLASS & GRADE	N32
4.1.2. MAXIMUM SLUMP(mm)	80
4.1.3. AGGREGATE SIZE(mm)	20
.2. MASONRY	
4.2.1. CLASS & GRADE	S20
3.2.2. MAXIMUM SLUMP(mm)	230
4.2.2. ACCRECATE CIZE()	10

- 5. CLEAR COVER TO REINFORCEMENT BY APPROVED CHAIRS, SPACERS OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORT AS FOLLOWS:
 - 5.1. BARS 16 AND LESS AND FABRIC 1000 CRS
 - 5.2. BARS 20 AND OVER 1200 CRS
- 6. CLEAR COVER TO REINFORCEMENT SHALL BE:

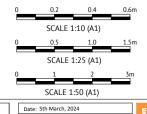
6.1. LOCATION FOOTINGS 6.2. CLASSIFICATION

- 6.3. COVER(mm) 50 CURE CONCRETE IN ACCORDANCE WITH AS 3600 FOR 7 DAYS.
 ALL N BARS TO BE N BAR GRADE 500.
- ALL MASONRY CAVITIES FULLY CORE FILLED.
- 10. POST BASE PLATES GRADE 350.
- 11. RETAINING WALLS HAVE BEEN DESIGNED FOR A MAXIMUM OF 5kPa LIVE LOAD SURCHARGE.
- 12. FOUNDATIONS HAVE A MIN 150kPa ALLOWABLE BEARING CAPACITY. CONTRACTOR TO CONFIRM ON SITE.
- 13. WIND CLASSIFICATION C2
- 14. ALL BASE SLAB STARTER BARS ARE GALVANISED.
- 15. Ø100 SUBSOIL AGG. DRAIN. SURROUND WITH 100 NOMINAL Ø20 BLUE METAL (SCREENED). WRAP IN GEOTEXTILE FILTER FABRIC.
- 16. BACK FILL WITH Ø20 WASHED, 300 WIDE COMPACTED FREE DRAINING GRANULAR FILL UP TO 300 BELOW TOP OF WALL. GEO-FABRIC SEPARATION BETWEEN IN-SITU MATERIAL AND DRAINAGE MATERIAL

RETAINING WALL NOTES

- RETAINING WALLS CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURES STANDARD DRAWINGS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE.
- MINIMUM ASSUMED BASE BEARING CAPACITY = 150kPa.
 DRAINAGE PIPE 100mm Ø PERFORATED DRAINAGE PIPE SURROUNDED BY 20mm
- BLUE METAL (SCREENED) WRAPPED IN GEOTEXTILE FABRIC AND PEST PROOF FLAT AT OUTLET. DRAIN TO DAYLIGHT.
- CONTROLLED BACKFILL IN ACCORDANCE WITH MANUFACTURES SPECIFICATION. THE DESIGN IS BASED ON RETAINING IN-SITU MATERIAL FOR AN AVERAGE SOIL
- GROUP (REFER TABLE D4, AS4678), WITH A MINIMUM INTERNAL FRICTION ANGLE OF 29° AND MAXIMUM BUILK DENSITY OF 19kNm3
- RETAINING WALLS DESIGNED AS CLASS B IN ACCORDANCE WITH AS4378.

 NO STRUCTURAL FENCE CONSTRUCTED WITHIN A DISTANCE OF HEIGHT FROM THE
- RETAINING WALL WITHOUT ENGINEERING APPROVAL
- RETAINING WALLS NOT SUITABLE FOR FLOOD PRONE AREAS. CONTACT ENGINEER IF SIGNIFICANT GROUND WATER ENCOUNTERED IN RETAINED MATERIAL DURING
- NO ROADS WITHIN HEIGHT OF RETAINING WALLS IF ROAD IS ABOVE WALL.

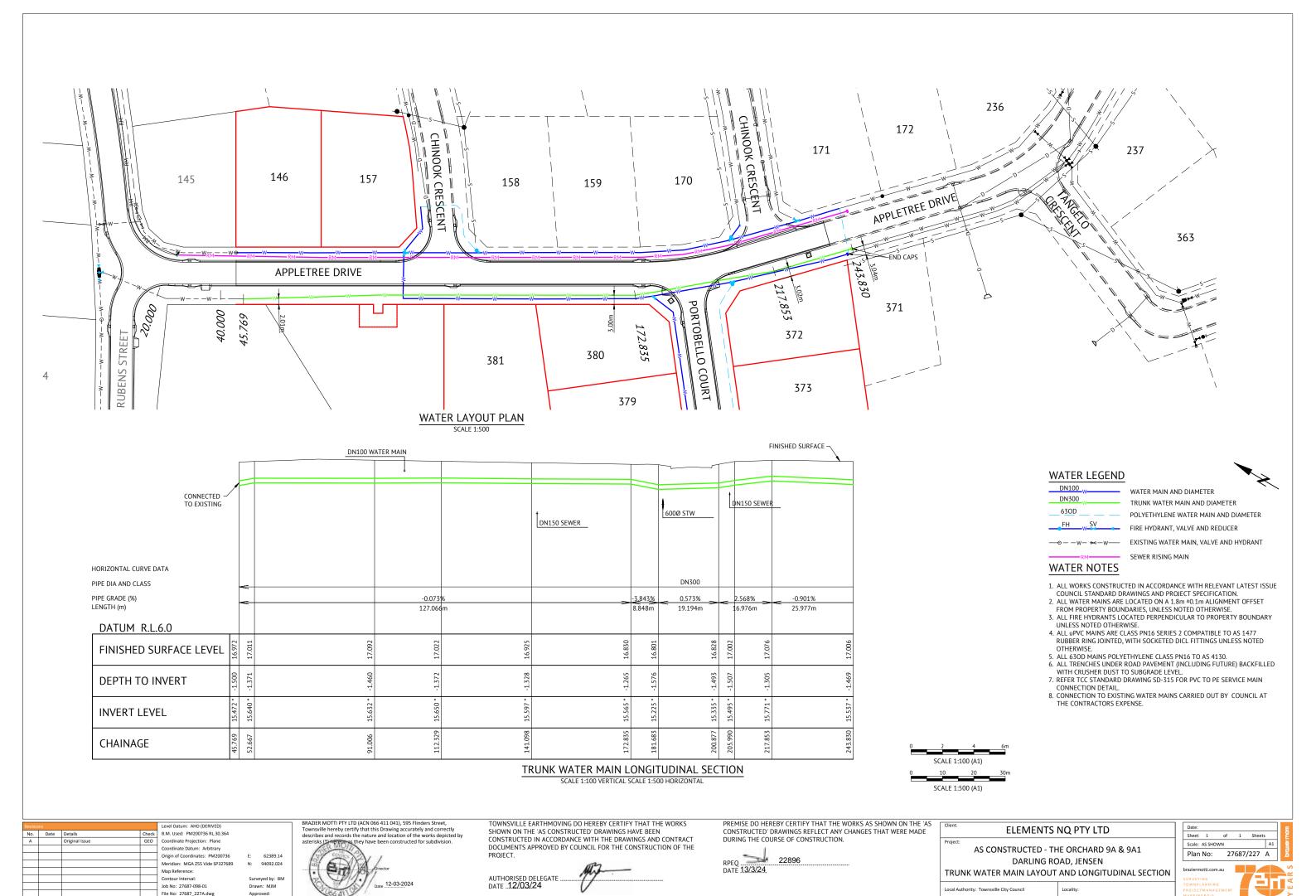


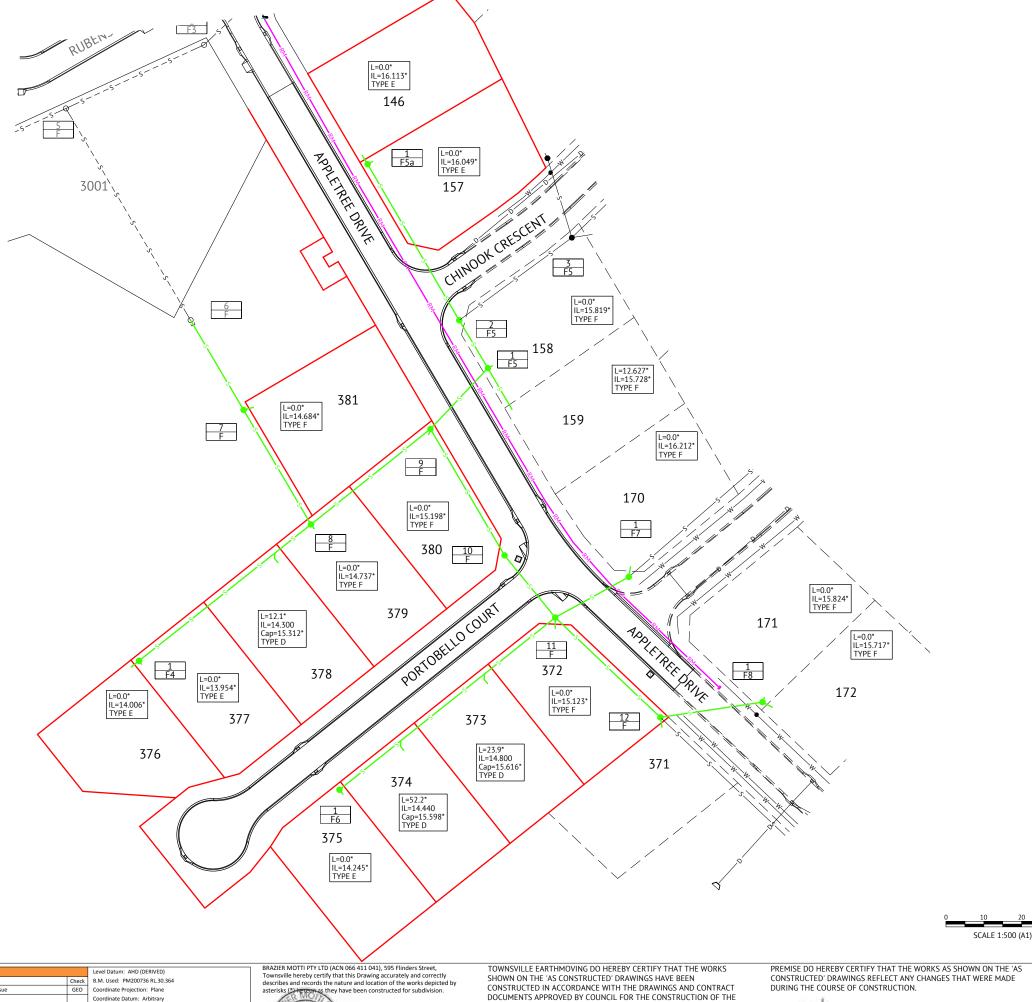
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AS CONSTRUCTED - THE ORCHARD 9A & 9A1 DARLING ROAD, JENSEN MISCELLANEOUS DETAILS

Local Authority: Townsville City Council

Sheet 1 of 1 Sheets Scale: AS SHOWN Plan No: 27687/223 A





AUTHORISED DELEGATE . DATE 12/03/24

12-03-2024

Meridian: MGA Z55 Vide SP327689

Job No: 27687-098-01

File No: 27687_228A.dwg

94092.024

Surveyed by: BM

SEWER LEGEND

SEWER MAIN AND MANHOLE (MH) SEWER MAIN AND MAINTENANCE SHAFT (MS) DN100 SEWER HOUSE DRAIN SEWER RISING MAIN

STORMWATER DRAINAGE LINE

MH.6.57 ML04f

TYPE & INDICATIVE TOP OF MANHOLE LEVEL MANHOLE NUMBER

LINE NUMBER

HOUSE CONNECTION (X & Y DIMENSIONS AS PER RELEVANT COUNCIL STANDARD DRAWING U.N.O.)

L=3.0 IL=5.160 TYPE D

DISTANCE FROM DOWNSTREAM MANHOLE INVERT LEVEL OF HOUSE CONNECTION POINT HOUSE CONNECTION TYPE

TYPE A - ACROSS BOUNDARY 'SLOPE DROP' TYPE B - ACROSS BOUNDARY 'JUMP UP'

TYPE C - WITHIN LOT 'DIRECT CONNECTION'

TYPE D - WITHIN LOT 'JUMP UP'
TYPE E - MANHOLE 'DIRECT CONNECTION'

TYPE F - MANHOLE 'INTERNAL DROP'
TYPE G - MAINTENANCE SHAFT CONNECTION TYPE Ex. - EXISTING HOUSE CONNECTION

SEWER NOTES

- ALL WORKS CONSTRUCTED IN ACCORDANCE WITH RELEVANT LATEST ISSUE COUNCIL STANDARD DRAWINGS AND PROJECT SPECIFICATION
- 2. ALL SEWERAGE MAINS LOCATED ON 1.5m ±0.1m ALIGNMENT OFFSET FROM THE PROPERTY BOUNDARIES, UNLESS NOTED OTHERWISE.
- 3. ALL SEWERAGE MAINS DN150, UNLESS NOTED OTHERWISE.

 4. ALL DN150 AND DN225 SEWERAGE MAINS uPVC DWV SN8, UNLESS NOTED
- OTHERWISE.

 5. ALL DN100 HOUSE DRAINS uPVC DWV SN10, UNLESS NOTED OTHERWISE.
- (MAXIMUM LENGTH 10.0m)

 6. ALL TRENCHES UNDER ROAD PAVEMENT (INCLUDING FUTURE) BACKFILLED
- WITH CRUSHER DUST TO SUBGRADE LEVEL.

 7. CONNECTION/ALTERATIONS TO EXISTING SEWERAGE INFRASTRUCTURE
- CARRIED OUT BY COUNCIL AT THE CONTRACTORS EXPENSE.
- 8. ALL MANHOLE INTERNAL DROP 'CORES' ARE NOT LOCATED WITHIN 150mm OF PRECAST WALL JOINTS.
- OF PRECAST WALL JOINTS.

 9. TOP OF MANHOLE LEVELS PROVIDED ARE INDICATIVE.

 REFER TCC STANDARD DRAWING SD-475 FOR FINISHED LEVELS OF

MANHOLE COVERS.

ELEMENTS NQ PTY LTD

AS CONSTRUCTED - THE ORCHARD 9A & 9A1 DARLING ROAD, JENSEN

Scale: AS SHOWN Plan No: 27687/228 A

Date: 5th March, 2024

Sheet 1 of 1 Sheets

SEWERAGE RETICULATION PLAN

Local Authority: Townsville City Council