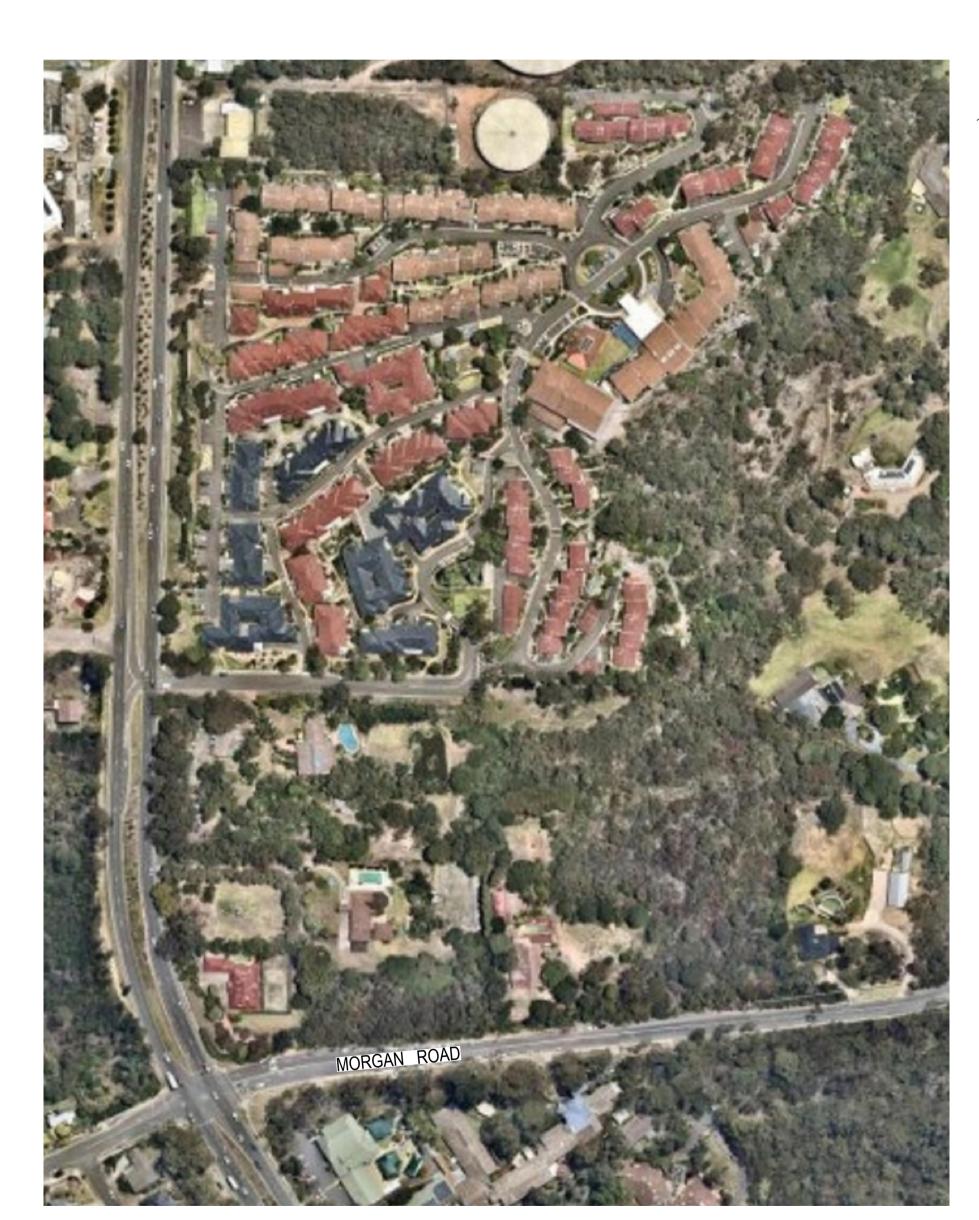


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GLENAEON RETIREMENT LIVING

PRECINCT 207 FOREST WAY
CIVIL WORKS - RENEWAL CONSTRUCTION CERTIFICATE 2 MODIFICATIONS





SCHEDULE OF DRAWINGS

 DRAWING No.
 DESCRIPTION

 256773_CDA_CC2_000_1001
 COVER SHEET AND DRAWING SCHEDULE

 256773_CDA_CC2_000_1011
 GENERAL NOTES & LEGENDS

 256773_CDA_CC2_000_1031
 GENERAL ARRANGEMENT PLAN

 256773_CDA_CC2_000_1101
 SOIL AND WATER MANAGEMENT PLAN

 256773_CDA_CC2_000_1141
 CUT/FILL PLAN

 256773_CDA_CC2_000_1201
 BULK EARTHWORKS PLAN SHEET 01

 256773_CDA_CC2_000_1202
 BULK EARTHWORKS PLAN SHEET 02

 256773_CDA_CC2_000_1301
 SITEWORKS AND STORMWATER PLAN SHEET 01

 256773_CDA_CC2_000_1302
 SITEWORKS AND STORMWATER PLAN SHEET 02

 256773_CDA_CC2_000_1701
 PAVEMENT, SIGNAGE & LINEMARKING PLAN SHEET 0

 256773_CDA_CC2_000_1702
 PAVEMENT, SIGNAGE & LINEMARKING PLAN SHEET 0

 256773_CDA_CC2_000_2001
 STORMWATER MANAGEMENT PLAN

 256773_CDA_CC2_000_2202
 STORMWATER DRAINAGE PIT DETAILS SHEET 02

 256773_CDA_CC2_000_2213
 STORMWATER DRAINAGE PIT DETAILS SHEET 03

 256773_CDA_CC2_000_2214
 STORMWATER DRAINAGE PIT DETAILS SHEET 04

 256773_CDA_CC2_000_2301
 STORMWATER CATCHMENT PLANS

 256773_CDA_CC2_000_3001
 TURN PATH PLAN SHEET 01

LOCALITY PLAN N.T.S.

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2	4	20/10/2021	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
2	3	11/11/2020	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
<u> </u>	2	15/10/2020	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
-	1	16/06/2020	ISSUED FOR CLIENT REVIEW	MLL	RFA	RFA
1	Rev.	Date	Description	Des.	Verif.	Appd.

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Drawn	Date	Status					
GJI	20/10/2021.						
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MLL	20/10/2021.		Terrentine Tree				
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GENERAL

1. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH FORMER WARRINGAH COUNCIL STANDARDS AND AUSPEC 1.

SITEWORKS NOTES

- ORIGIN OF LEVELS:- REFER SURVEY NOTES.
- . CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO CARDNO.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- 4. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- . ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- . ASPHALTIC CONCRETE SHALL CONFORM TO R.M.S. SPECIFICATION R116.
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S. FORM 3051, COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m³ OF BASECOURSE MATERIAL PLACED.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S. FORM 3051, AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m³ OF SUB-BASE COURSE MATERIAL PLACED.
- 10. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

BULK EARTHWORKS NOTES

- ORIGIN OF LEVELS: REFER SURVEY NOTES
- REFER TO GEOTECHNICAL REPORT PREPARED BY CARDNO FOR SITE PREPARATION REQUIREMENTS DATED 26 NOVEMBER 2018.
- STRIP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
- EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
- 5. COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:

LOCATION STANDARD DRY DENSITY (AS 1289 E 5.1.1.)

UNDER BUILDING SLABS ON GROUND UNDER ROADS AND CARPARKS

LANDSCAPED AREAS UNLESS NOTED OTHERWISE 95% 6. FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX.

98%

- BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 12 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm
- FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN :-(A) 1 TEST PER 500m³ OF FILL PLACED PER 300 LAYER OF FILL.
- (B) 3 TESTS PER VISIT

MOVEMENT UNDER ROLLER).

- (C) 1 TEST PER 1000m² OF EXPOSED SUBGRADE "LEVEL 1" TESTING
- . FILLING TO BE PLACED IN MAXIMUM 150mm LOOSE LAYERS AND COMPACTED AS SPECIFIED

SHALL BE TESTING IN ACCORDANCE WITH AS 3798 (2007).

0. NO FILLING SHALL TAKE PLACE TO EXPOSED SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF CARDNO AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION TO THE SATISFACTION OF COUNCIL, NSW OFFICE OF WATER AND OFFICE OF ENVIRONMENT AND HERITAGE. THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE DRAWINGS SHALL ONLY BE USED AS A GUIDE BY THE CONTRACTOR, AND SHALL REPRESENT THE MINIMUM REQUIREMENT ONLY.
- THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED OR AS OTHERWISE DIRECTED BY THE SUPERINTENDENT.
- ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
- a. LOCAL AUTHORITY REQUIREMENTS b. EPA REQUIREMENTS
- c. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN" STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
- . MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THI SUPERINTENDENT AND THE LOCAL AUTHORITY.
- . WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- . CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

- . WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END. WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
- a. INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
- CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL. INSTALL SEDIMENT BASIN AS SHOWN ON PLAN (D) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
- d. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE
- **EROSION CONTROL**
- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL

- 9. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- 10. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- 11. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- 12. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
- 13. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- 14. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:

OTHER MATTERS

- a. PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
- b. ENSURING THAT NOTHING IS NAILED TO THEM c. PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
- (I) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE
- (II) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
- (III) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT

STORMWATER DRAINAGE NOTES

STORMWATER DESIGN CRITERIA:

- A. PUBLIC STORMWATER DESIGNED TO NORTHERN BEACHES COUNCIL'S WATER MANAGEMENT POLICY, NORTHERN BEACHES COUNCIL'S ON-SITE STORMWATER DETENTION TECHNICAL SPECIFICATION AND AUSTRALIAN RAINFALL AND RUNOFF 2016.
- B. PRIVATE STORMWATER DESIGNED TO AS3500 PLUMBING AND DRAINAGE.
- PIPES 375 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- PIPES 300 DIA AND LESS SHALL BE DWV GRADE (CLASS SN8) uPVC WITH SOLVENT WELDED JOINTS.
- 4. EQUIVALENT STRENGTH FRC PIPES MAY BE USED.
- ALL PIPES ARE TO BE UNIFORMLY SUPPORTED ALONG THE LENGTH OF THE BARREL BY SUITABLE FILL MATERIAL. REFER TO BEDDING SUPPORT
- PIPES WITH SOCKETS SHALL BE LAID IN BEDDING WHERE SUITABLE RECESSES HAVE BEEN PROVIDED TO ENSURE PIPES DO NOT BEAR ON THEIR SOCKETS.
- ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN
- 8. PIPES TO BE INSTALLED TO TYPE HS1 SUPPORT IN ACCORDANCE WITH AS 3725 (2007) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).
- REFER TO AS/NZS 3725:2007 TABLE B1 FOR REQUIRED FILL DEPTHS ABOVE PIPE BARREL PRIOR TO USE OF COMPACTION MACHINERY OR TRAVERSING OF PIPES BY GENERAL SITE EQUIPMENT.
- 10. WHERE WORKING METHODS REQUIRE HIGHER CLASS PIPE, THE CONTRACTOR SHALL REFER TO AS 3725 (2007) TO DETERMINE THE APPROPRIATE PIPE CLASS. PROPOSED PIPE CLASS SHALL BE REVIEWED BY CARDNO PRIOR TO INSTALLATION.
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS/NZS 3500.3:2015.

12. PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO

- APPROVAL BY CARDNO. 13. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED
- FITTINGS WHERE PIPES ARE LESS THAN 300 DIA. 14. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR
- PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED. 15. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES
- 16. GRATES AND COVERS SHALL CONFORM TO AS 3996.

SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL

- 17. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS. ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- 18. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF UTILITY MAPPING TRACING SURVEY DATED OCTOBER 2019. SERVICE AUTHORITY INFORMATION AND ORIGINAL DEVELOPMENT PLANS. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE CONSTRUCTED OR ACCURATE.CARDNO CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY. CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS. CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

TELSTRA - DUTY OF CARE NOTE

TELSTRA'S PLANS SHOW ONLY THE PRESENCE OF CABLES AND PLANT. THEY ONLY SHOW THEIR POSITION RELATIVE TO ROAD BOUNDARIES. PROPERTY FENCES ETC. AT THE TIME OF INSTALLATION AND TELSTRA DOES NOT WARRANT OR HOLD OUT THAT SUCH PLANS ARE ACCURATE THEREAFTER DUE TO CHANGES THAT MAY OCCUR OVER TIME. DO NOT ASSUME DEPTH OR ALIGNMENT OF CABLES OR PLANT AS THESE VARY SIGNIFICANTLY. THE CONTRACTOR HAS A DUTY OF CARE WHEN EXCAVATING NEAR TELSTRA CABLES AND PLANT.

BEFORE USING MACHINE EXCAVATORS TELSTRA PLANT MUST FIRST BE

LOCATION TELSTRA WILL SEEK COMPENSATION FOR DAMAGES CAUSED

PHYSICALLY EXPOSED BY SOFT DIG POTHOLING TO IDENTIFY IT'S

TO IT'S PROPERTY AND LOSSES CAUSED TO TELSTRA AND IT'S

SURVEY NOTES

CUSTOMERS.

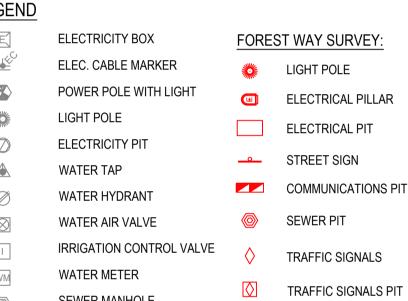
THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY CARDNO. BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT CARDNO. THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL SURVEY DOCUMENTS.

NOTES

- THIS PLAN IS PREPARED FOR LEND LEASE FROM A COMBINATION OF FIELD SURVEY AND EXISTING RECORDS FOR THE PURPOSE OF DESIGNING NEW CONSTRUCTIONS ON THE LAND AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.
- THE TITLE BOUNDARIES SHOWN HEREON WERE NOT MARKED BY THE AUTHOR AT THE TIME OF SURVEY AND HAVE BEEN DETERMINED BY PLAN DIMENSIONS ONLY AND NOT BY FIELD MEASUREMENT.
- A SERVICES SEARCH OF THE AREA SURVEYED ABOVE HAS NOT BEEN
- VISIBLE SERVICES SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

LEGEND



SEWER MANHOLE SEWER LAMPHOLE UNCLASSIFIED PIT DRAINAGE PIT COMMUNICATIONS PIT

> **BOUNDARY SUBJECT** EASEMENT **BUILDING EDGE** GUTTER / RIDGE LINE / AWNING RETAINING WALL BOTTOM RETAINING WALL TOP _____ CROWN OF ROAD EDGE OF BITUMEN/FORMATION NATURAL SURFACE STRING

___ · __ · __ · CONTOUR MAJOR

_ _ _ _ _ _ _ _ TOE OF BANK

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PROPOSED WORKS LEGEND

EXTENT OF WORK

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BK&T

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(4\2)

PROPERTY BOUNDARY _ . _ . _ . _ . _ PROPOSED CONTOUR BATTER STRUCTURAL RETAINING WALL **ROLL KERB AND GUTTER** REFER DRG 1601 FOR DETAIL ROLL KERB REFER DRG 1601 FOR DETAIL KERB AND GUTTER REFER DRG 1601 FOR DETAIL KERB AND TOE REFER DRG 1601 FOR DETAIL **ROLL KERB AND TOE REFER** DRG 1601 FOR DETAIL KERB ONLY REFER DRG 1601 FOR DETAIL MOUNTABLE KERB REFER DRG 1601 FOR DETAIL ELSHOLZ KERB REFER DRG 1601 FOR DETAIL BARRIER KERB AND GUTTER **REFER DRG 1601 FOR DETAIL** BARRIER KERB AND TOE **REFER DRG 1601 FOR DETAIL** DISH DRAIN REFER DRG 1601 FOR DETAIL VEHICLE CROSSING. REFER TO WARRINGAH COUNCIL STANDARD DETAIL (A4-2276/B) IN-LINE KERB RAMP. REFER TO AS1428.1-2009 FIGURE 24(C). INSERTED KERB RAMP. REFER TO AS1428.1-2009 FIGURE 24(A).

SUBSOIL DRAINAGE LINE TO

DETAIL (A4 - 10533)

DRAINAGE CAP

FLUSHING POINT

JUNCTION PIT

GRATED INLET PIT

DRAINAGE PIT LABEL

SCOUR PROTECTION

KERB INLET WITH LINTEL.

WARRINGAH COUNCIL STANDARD

CONCRETE NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- 2. CONCRETE QUALITY

ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

	AS 3600 F'c MPa	SPECIFIED	NOMINAL
	AT 28 DAYS	SLUMP	AGG. SIZE
VEHICULAR BASE KERBS, PATHS, AND PITS	32 25	60 80	20 20

CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL - PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH

- 3. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY CARDNO.
- CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS, BARS SHALL BE TIED AT
- ALTERNATE INTERSECTIONS. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE
- INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH R.M.S. SPECIFICATION R83.
- **REINFORCEMENT SYMBOLS:** N DENOTES GRADE 450 N BARS TO AS 1302 GRADE N
- R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS 1302 SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304

NUMBER OF BARS IN GROUP BAR GRADE AND TYPE 17 N 20 250

NOMINAL BAR SIZE IN mm ————— SPACING IN mm THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC FENCE TO LANDSCAPE TO AS 1304. ARCHITECT DETAIL FLOW DIRECTION STORMWATER PIPE PIPE DIAMETER

SERVICES NOTES

DRAWINGS HAVE BEEN PLOTTED FROM CARDNO SURVEY DATED APRIL 2017. APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION

EXISTING UNDERGROUND

THE SOIL AROUND THEM. ww.dialbeforeyoudig.com.au

ISSUED FOR CONSTRUCTION 15/10/2021 MLL RFA RFA ISSUED FOR CONSTRUCTION 21/01/2021 24/11/2020 ISSUED FOR CONSTRUCTION MLL RFA RFA 11/11/2020 ISSUED FOR CONSTRUCTION MLL RFA RFA 15/10/2020 ISSUED FOR CONSTRUCTION MLL RFA RFA ISSUED FOR CLIENT REVIEW 16/06/2020 Des. Verif. Appd. Date Description

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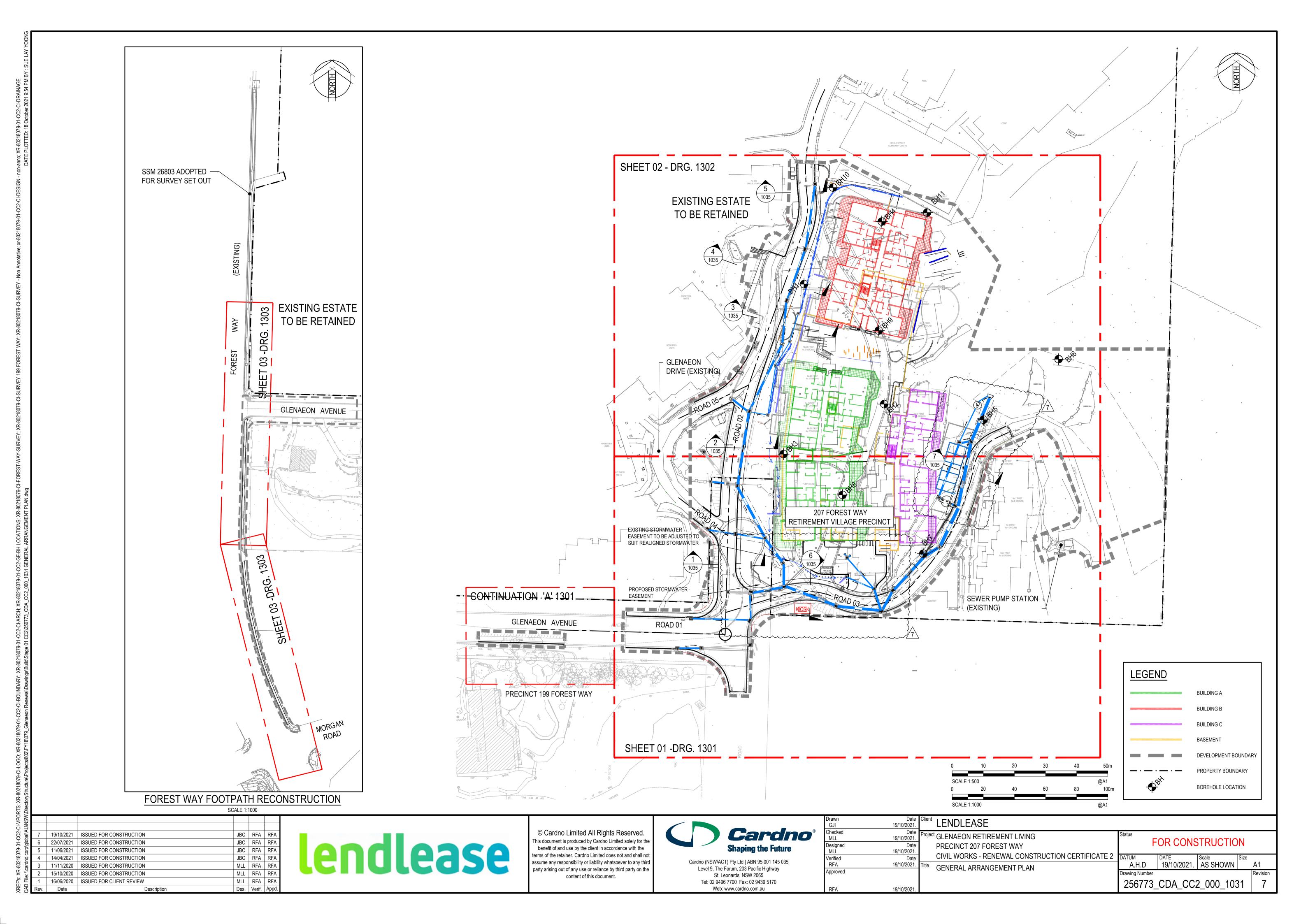


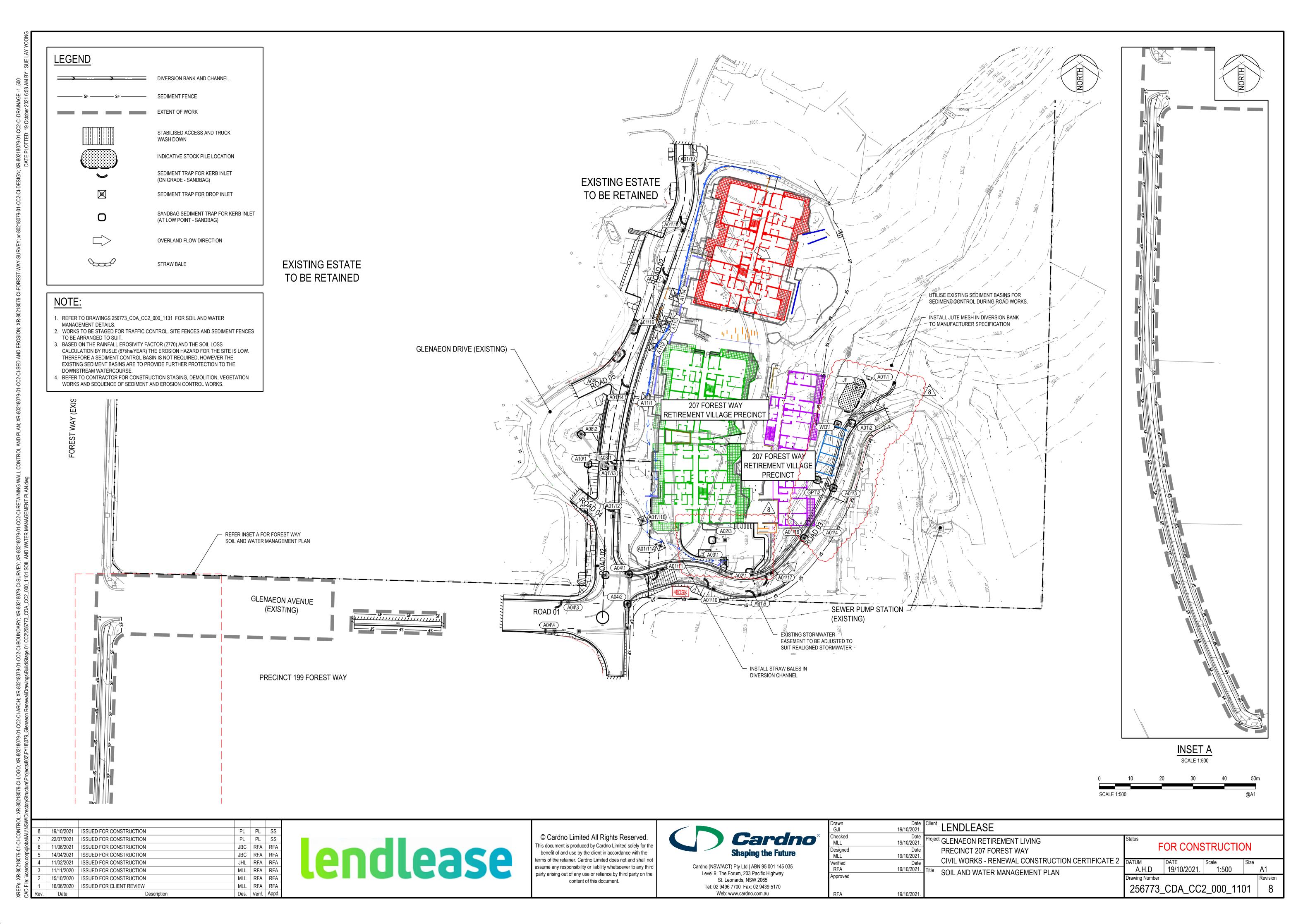
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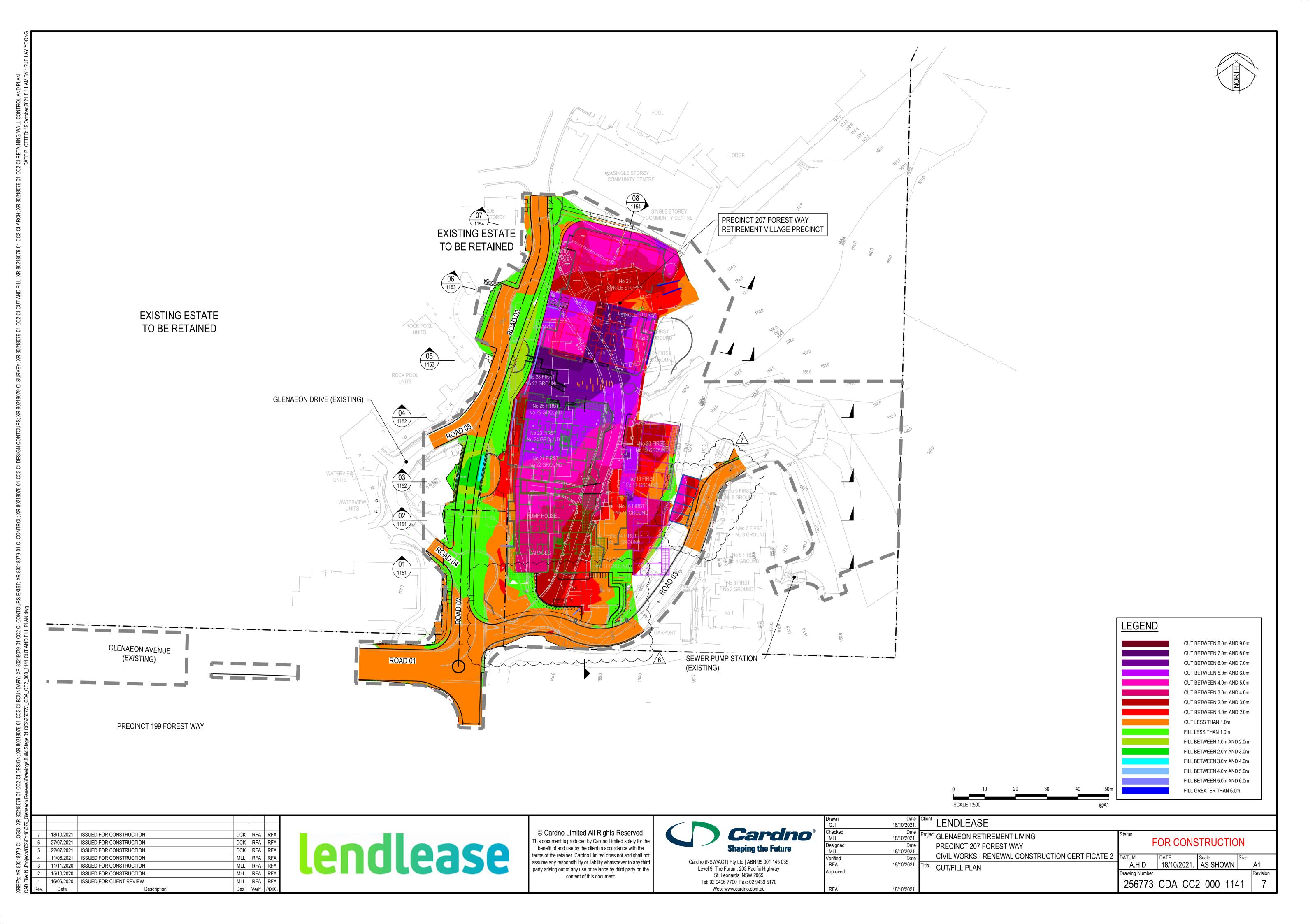
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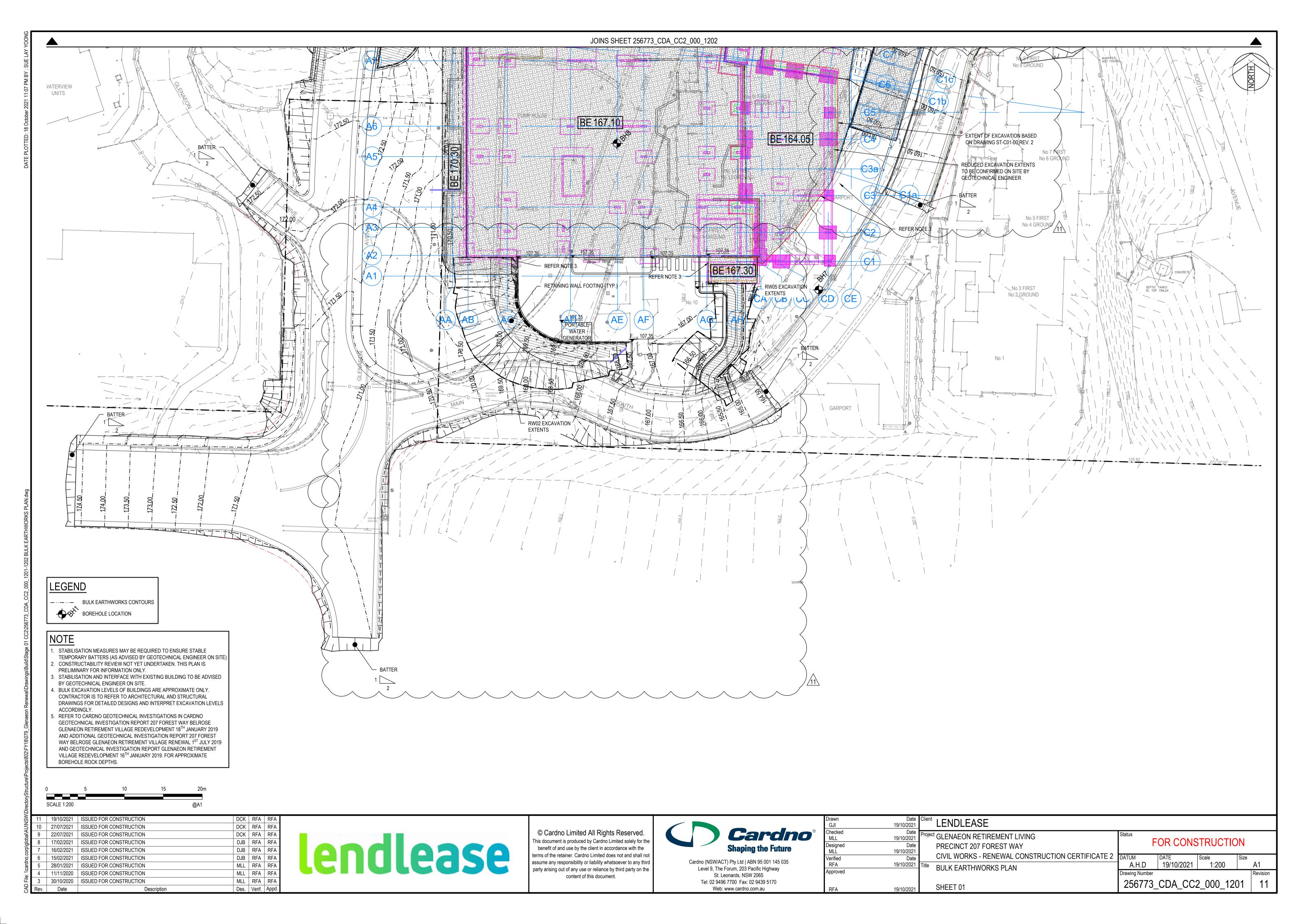
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Date		CIVIL WORKS - RENEWAL CONSTRUCTION CERTIFICATE 2
6/2020.	Title	GENERAL NOTES & LEGENDS

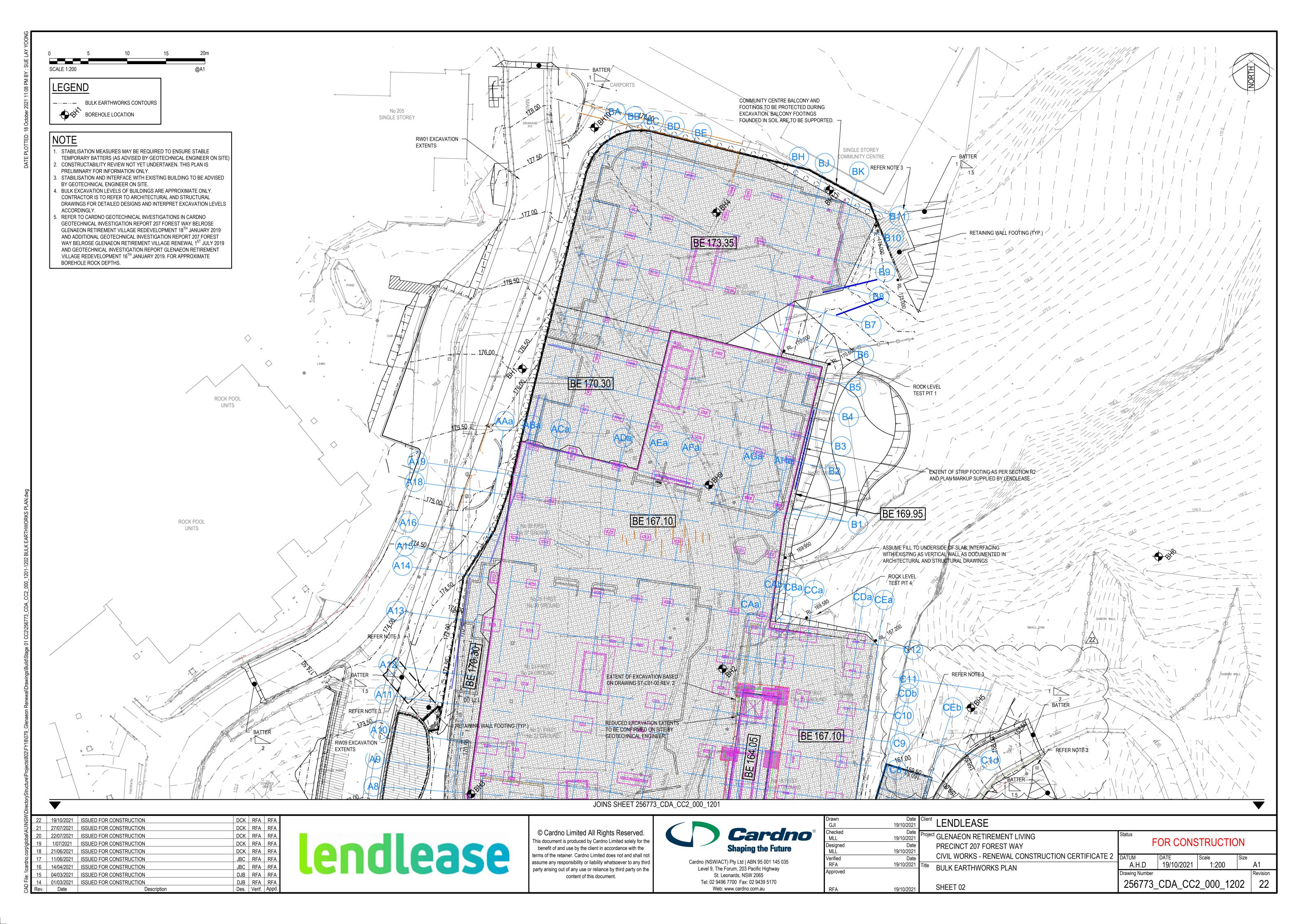
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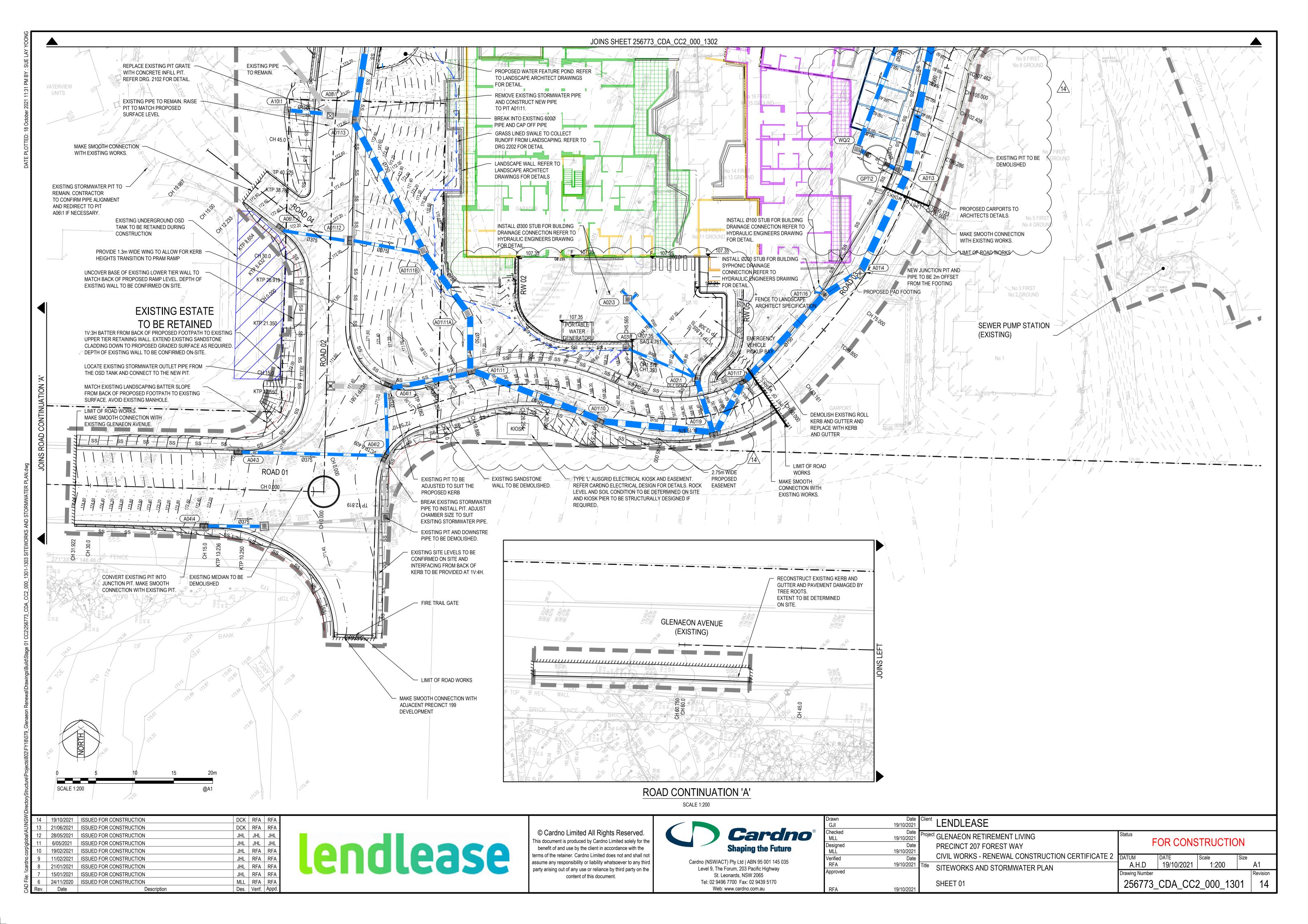


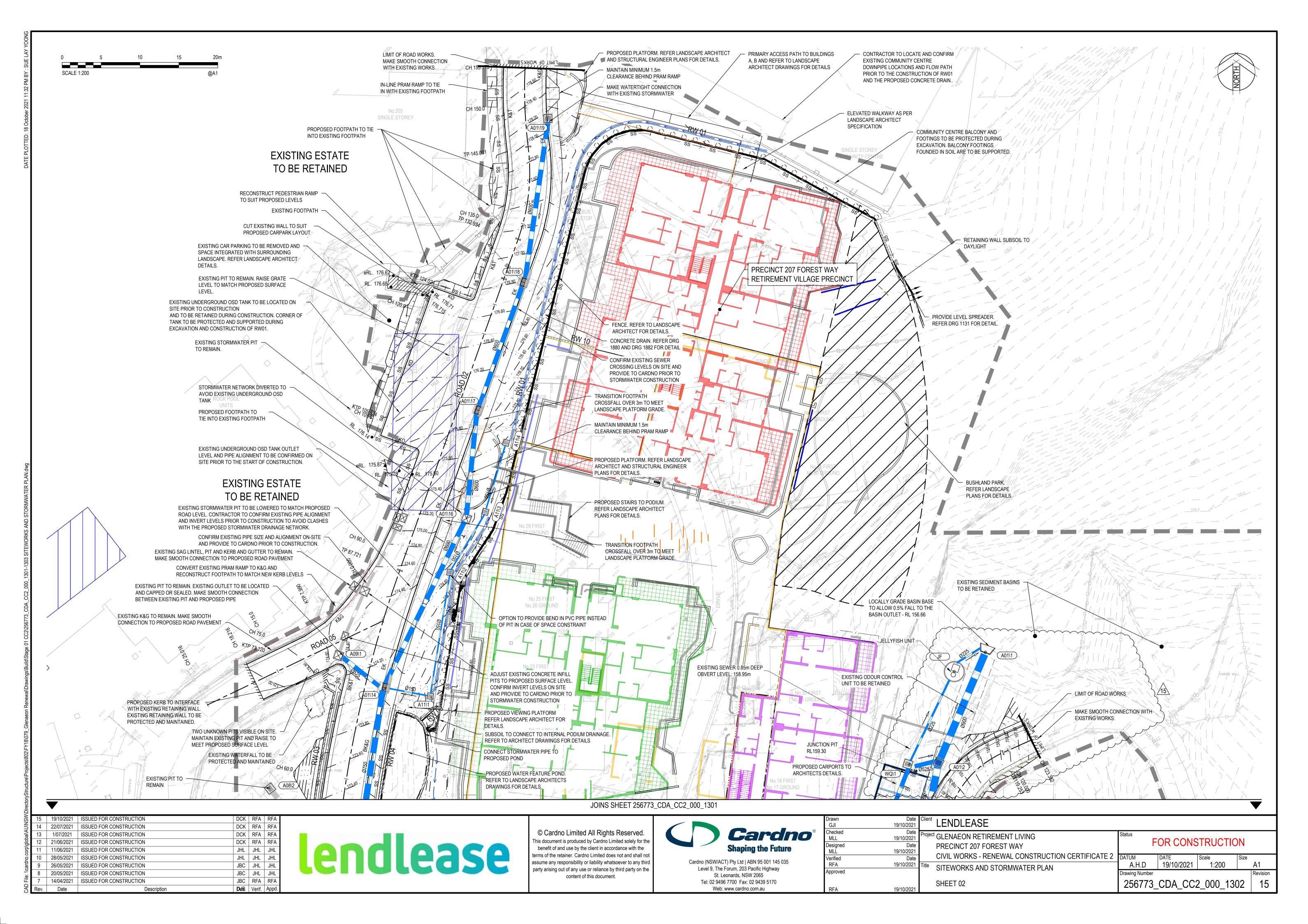


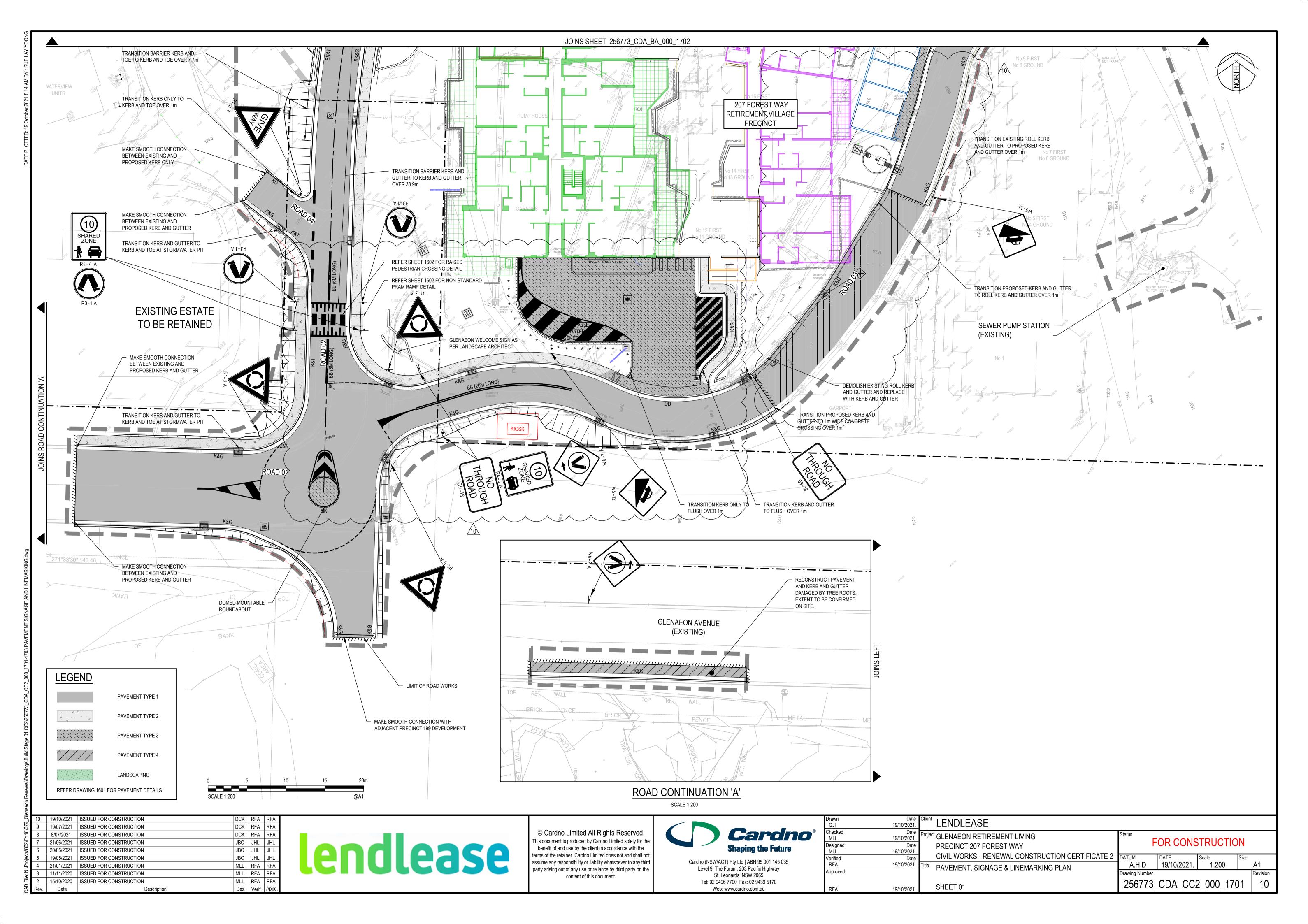


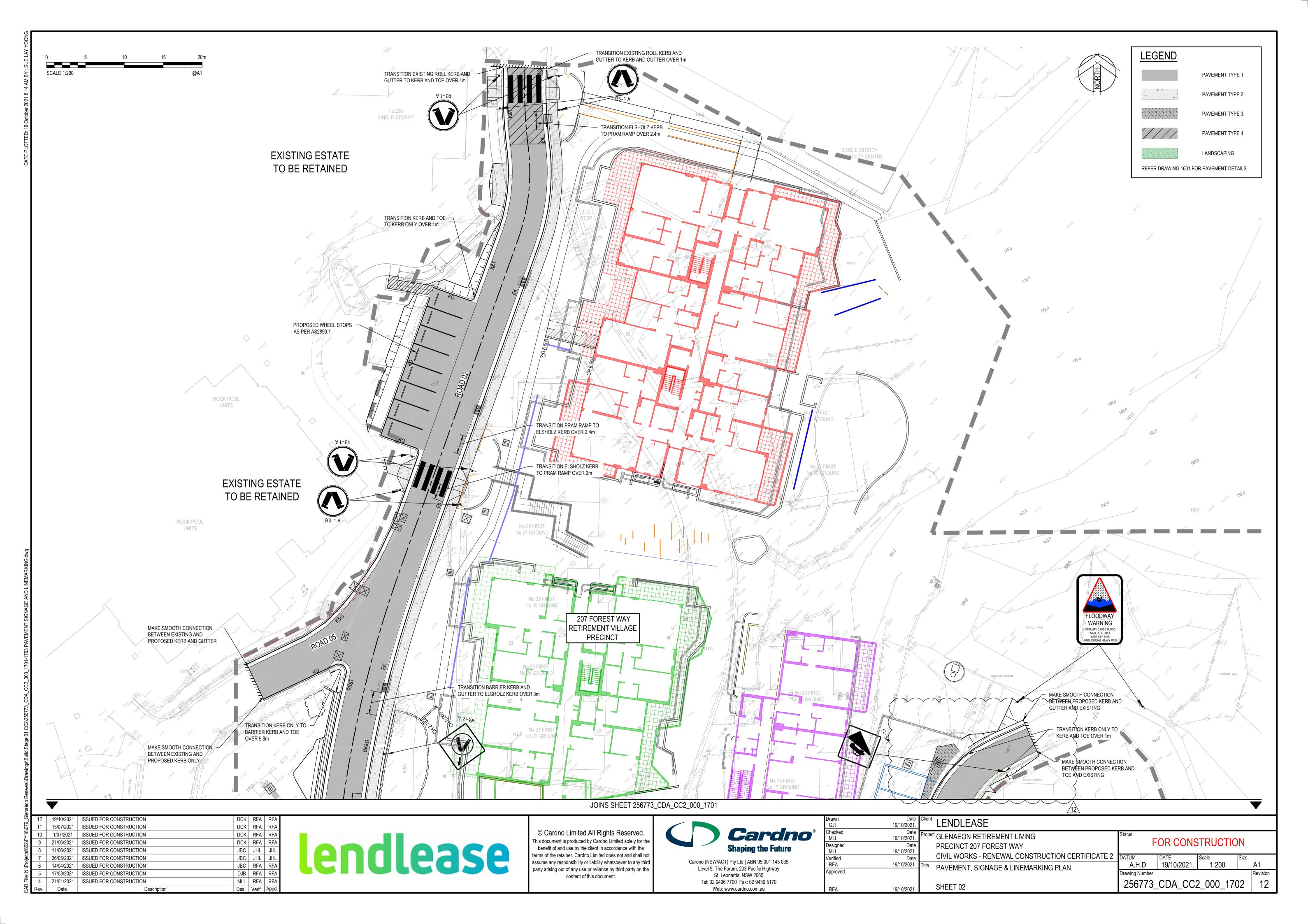


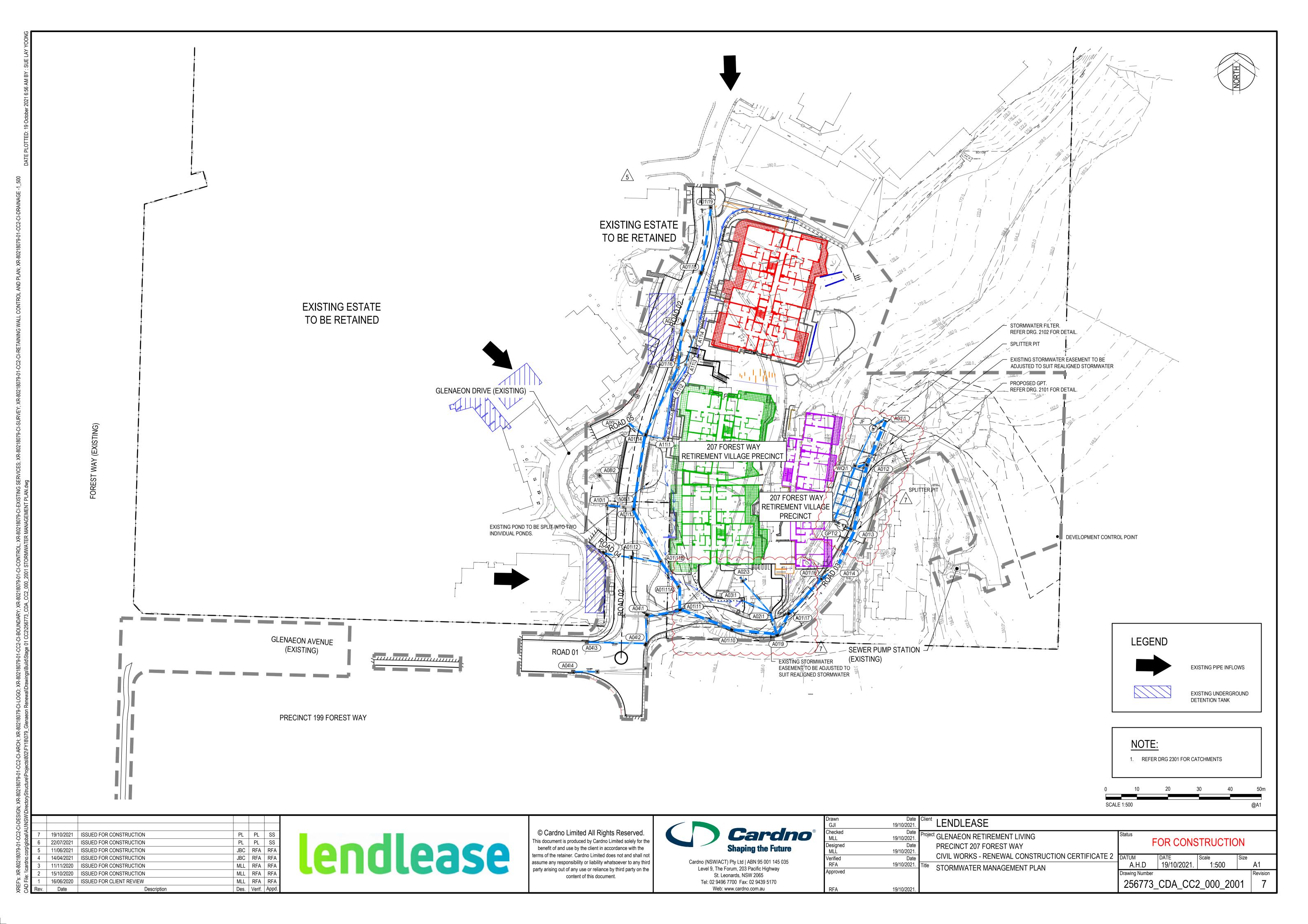


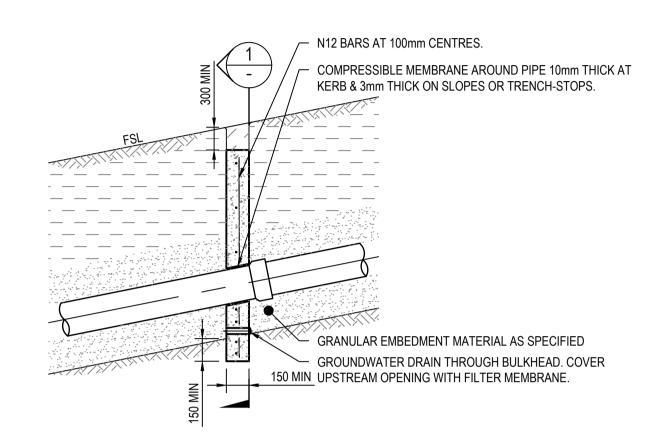




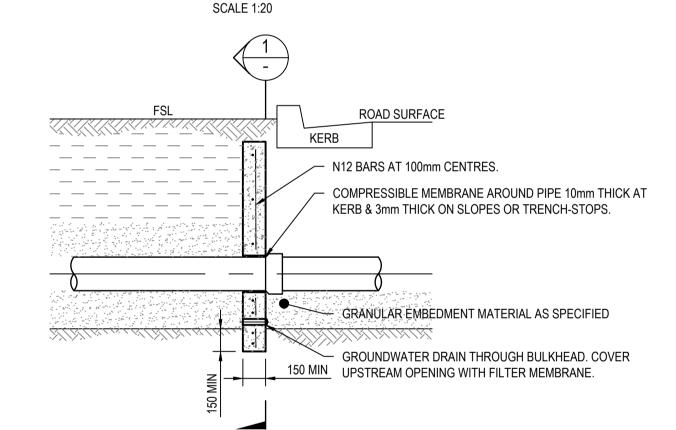




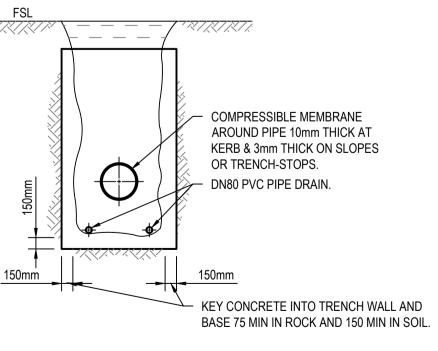


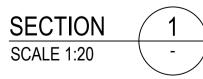


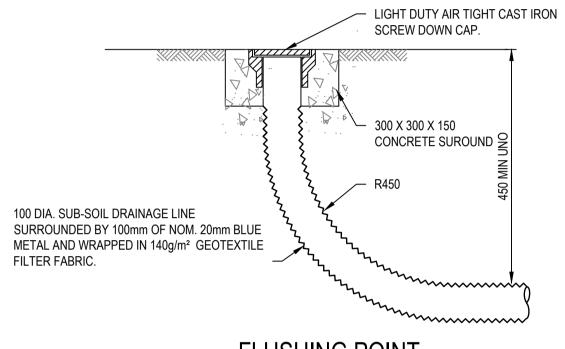
CONCRETE BULKHEAD SECTION



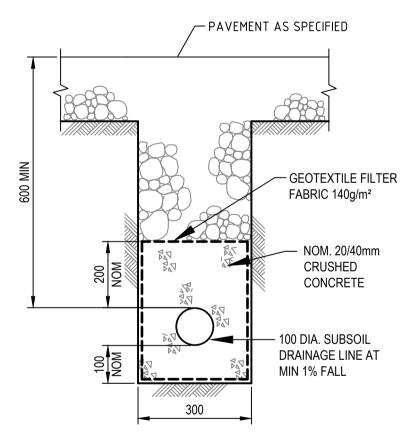
TYPICAL ROAD CROSSING BULKHEAD



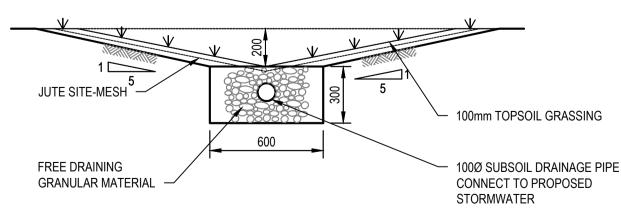




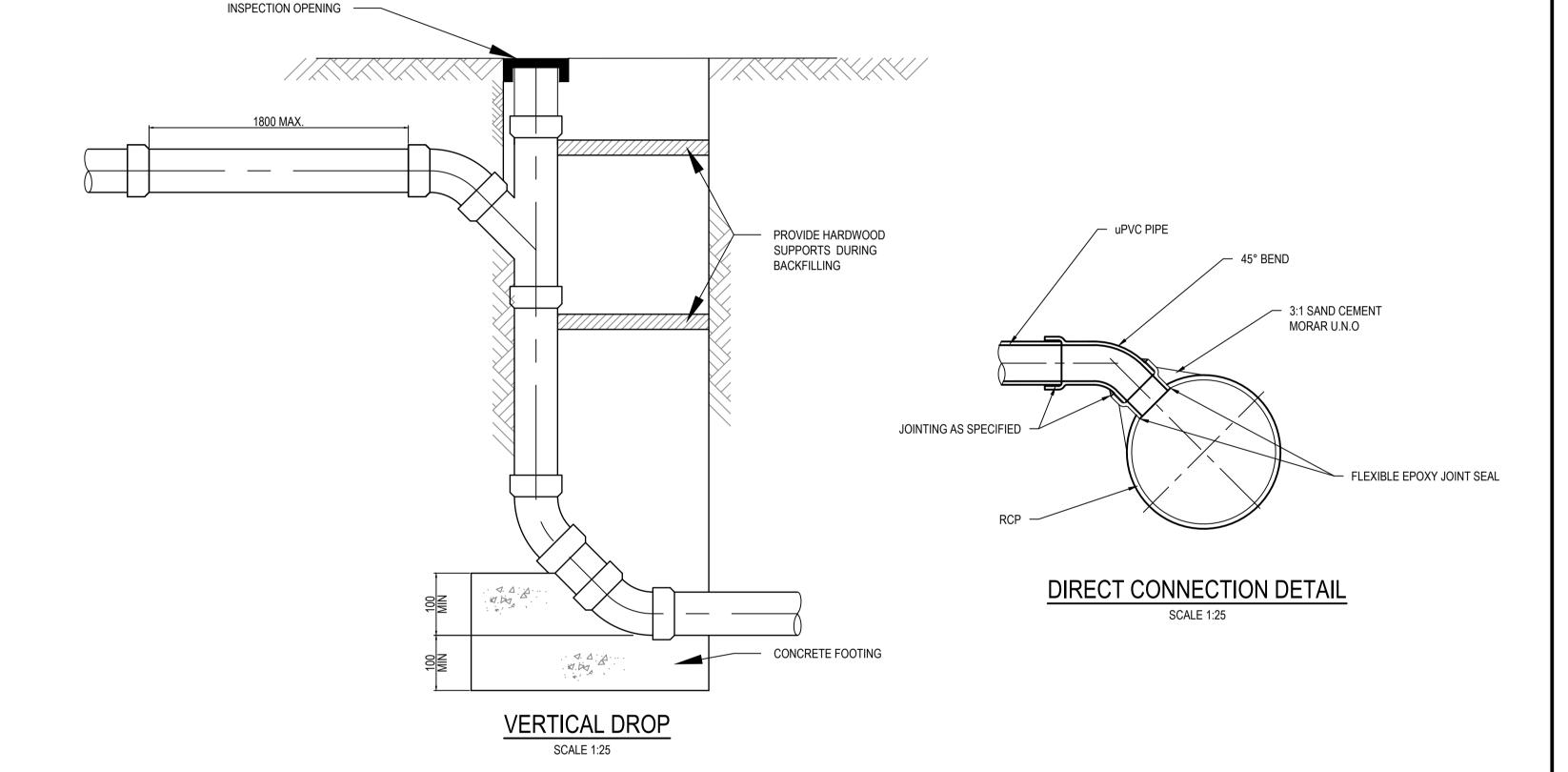
FLUSHING POINT



SUBSOIL IN PAVED AREAS
SCALE 1:10



SCALE 1:20



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JUTE SITE-MESH 98	5 100mm TOPSOIL GRASSING
FREE DRAINING GRANULAR MATERIAL	100Ø SUBSOIL DRAINAGE PIPE CONNECT TO PROPOSED STORMWATER

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St. Leonards, NSW 2065
Tel: 02 9496 7700 Fax: 02 9439 5170
Web: www.cardno.com.au

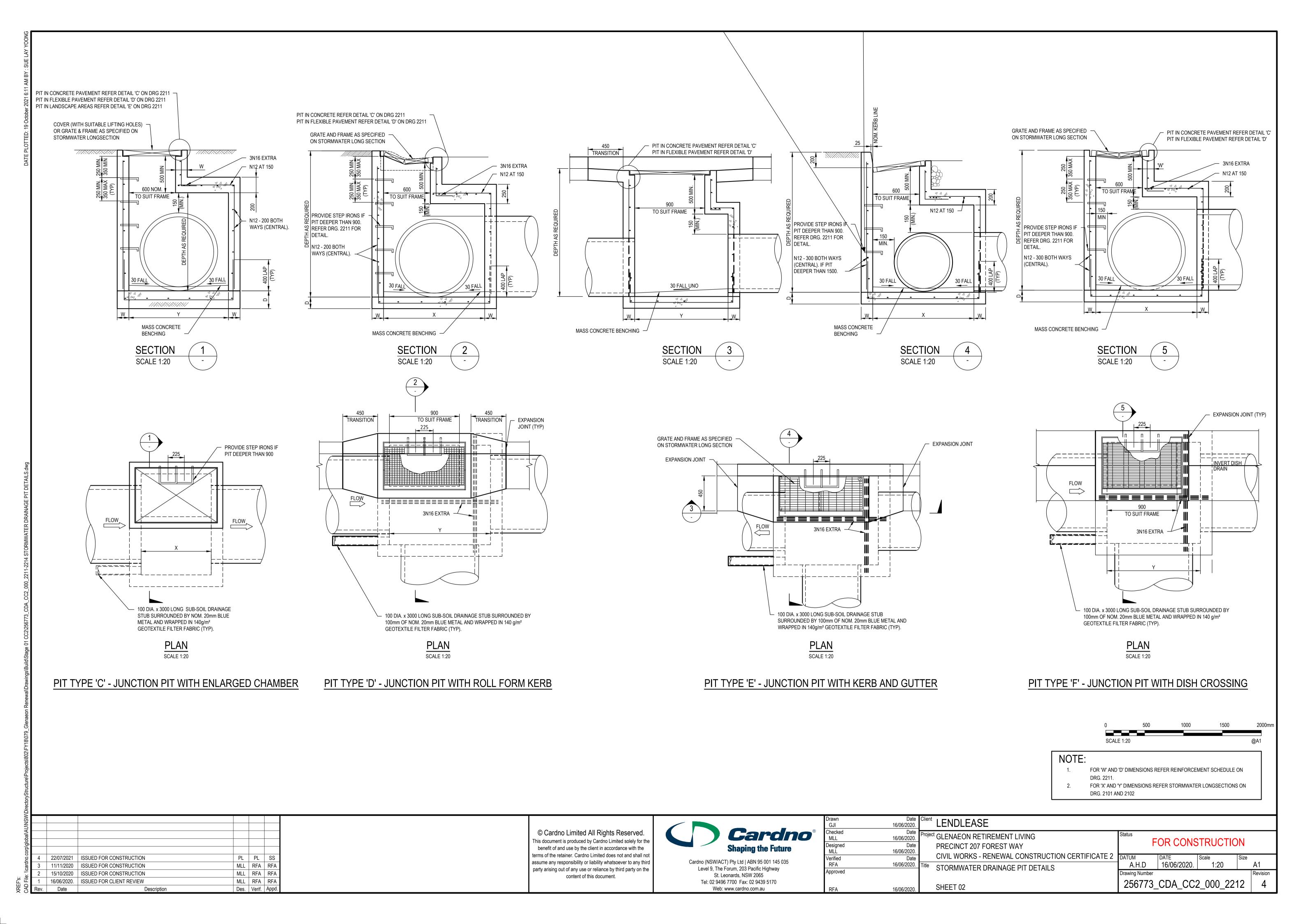
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				rawing Number		
16/06/2020	SHEET 02			256773	_CDA_CC	2_000_2

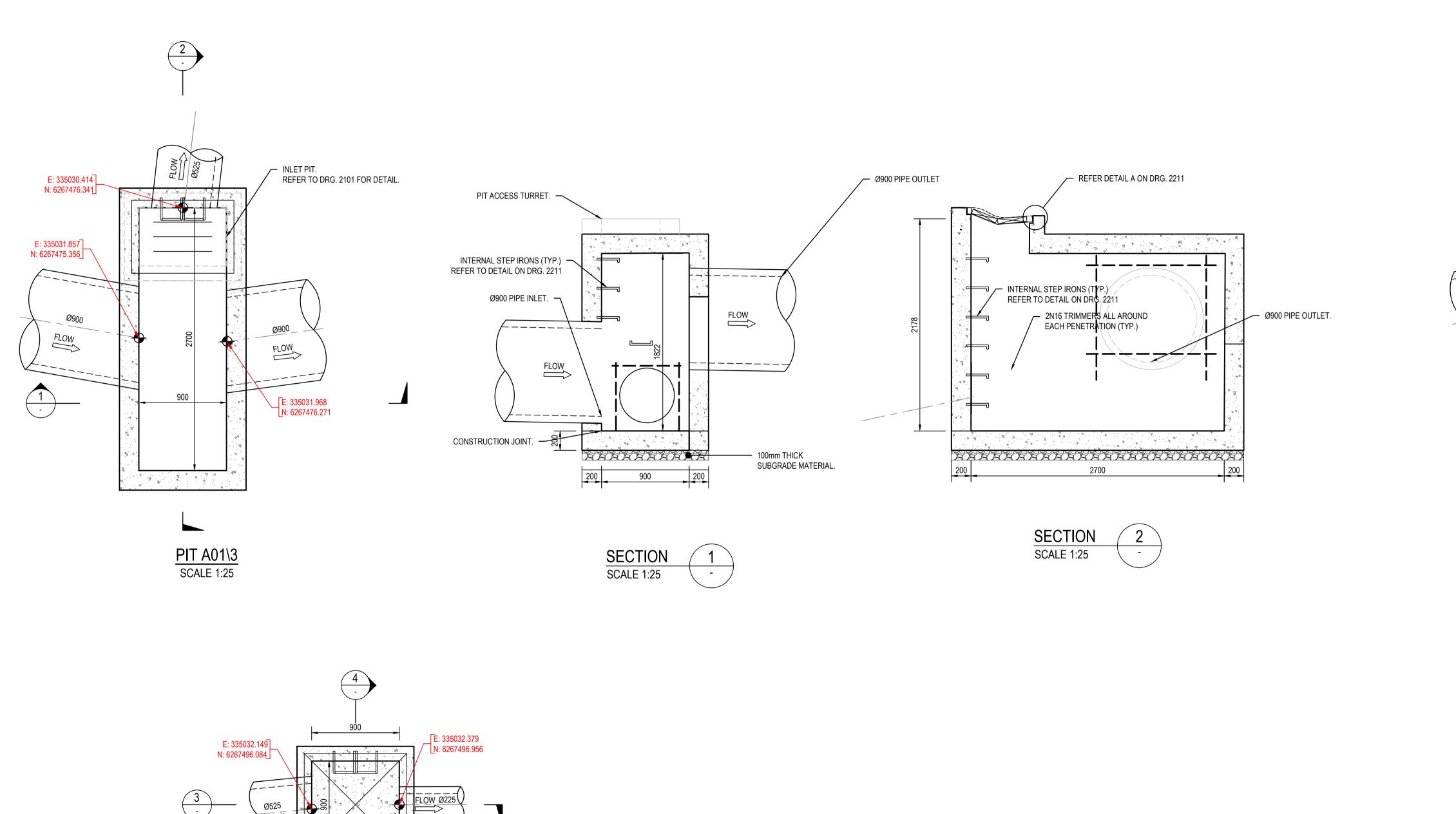
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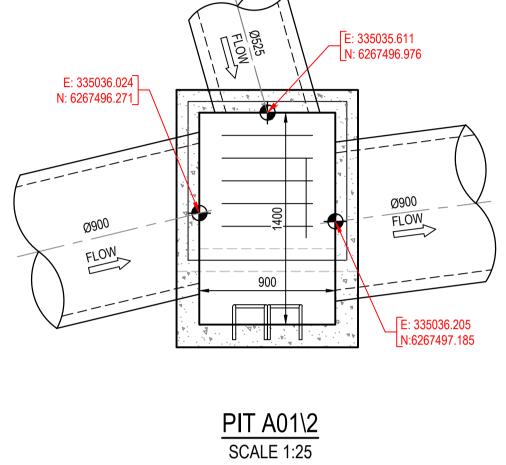
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5	21/06/2021	ISSUED FOR CONSTRUCTION	PL	PL	SS
4	21/06/2021	ISSUED FOR CONSTRUCTION	DCK	RFA	RFA
3	11/11/2020	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
2	15/10/2020	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
1	16/06/2020	ISSUED FOR CLIENT REVIEW	MLL	RFA	RFA
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SCALE 1:25

22/07/2021		PL	PL	SS
21/06/2021		PL	PL	SS
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11/11/2020	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
15/10/2020	ISSUED FOR CONSTRUCTION	MLL	RFA	RFA
16/06/2020.	ISSUED FOR CLIENT REVIEW	MLL	RFA	RFA
. Date	Description	Des.	Verif.	Appd.

PIT WQ/1 SCALE 1:25

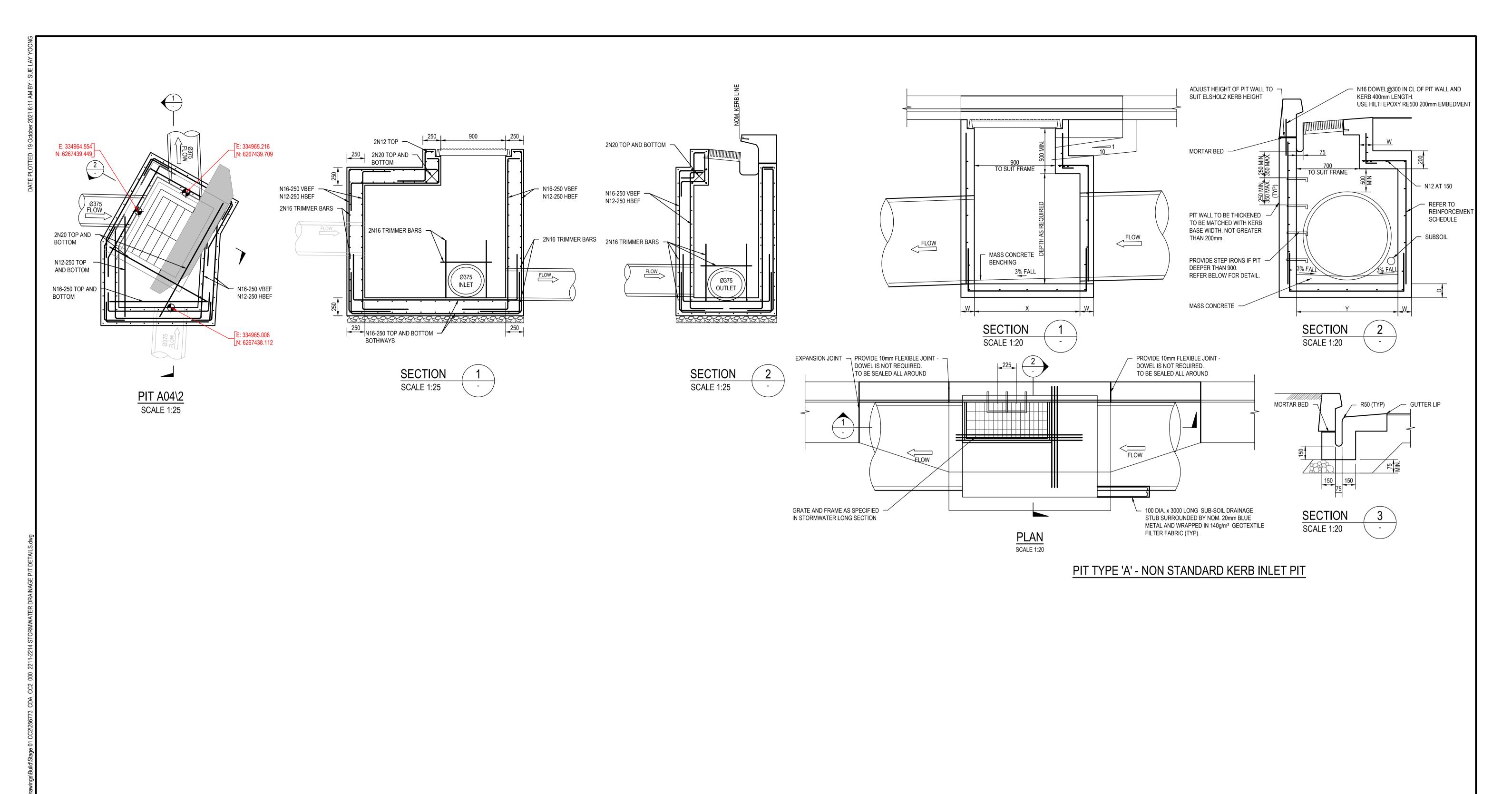
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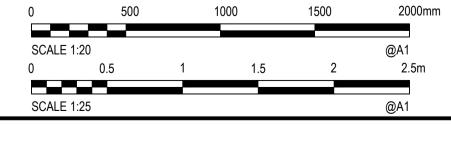
CONCRETE INFILL PIT. REFER DRG. 2101 FOR DETAIL.

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Web: www.cardno.com.au

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esigned MLL	Date 16/06/2020.	PRECINCT 207 FOREST WAY
erified RFA	Date 16/06/2020.	CIVIL WORKS - RENEWAL CONSTRUCTION CERTIFICATION CERTIFICA
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RFA	16/06/2020.	SHEET 03

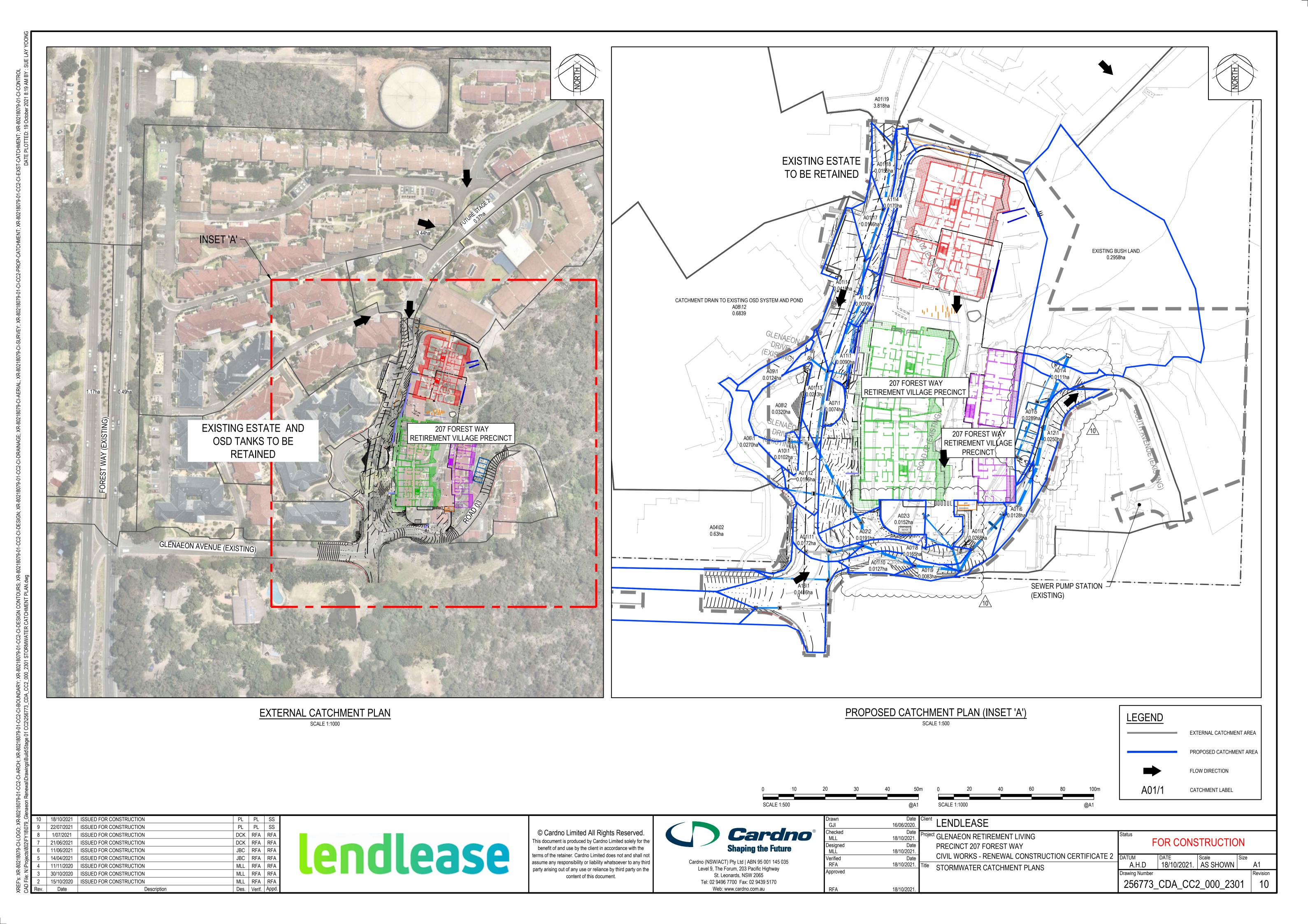
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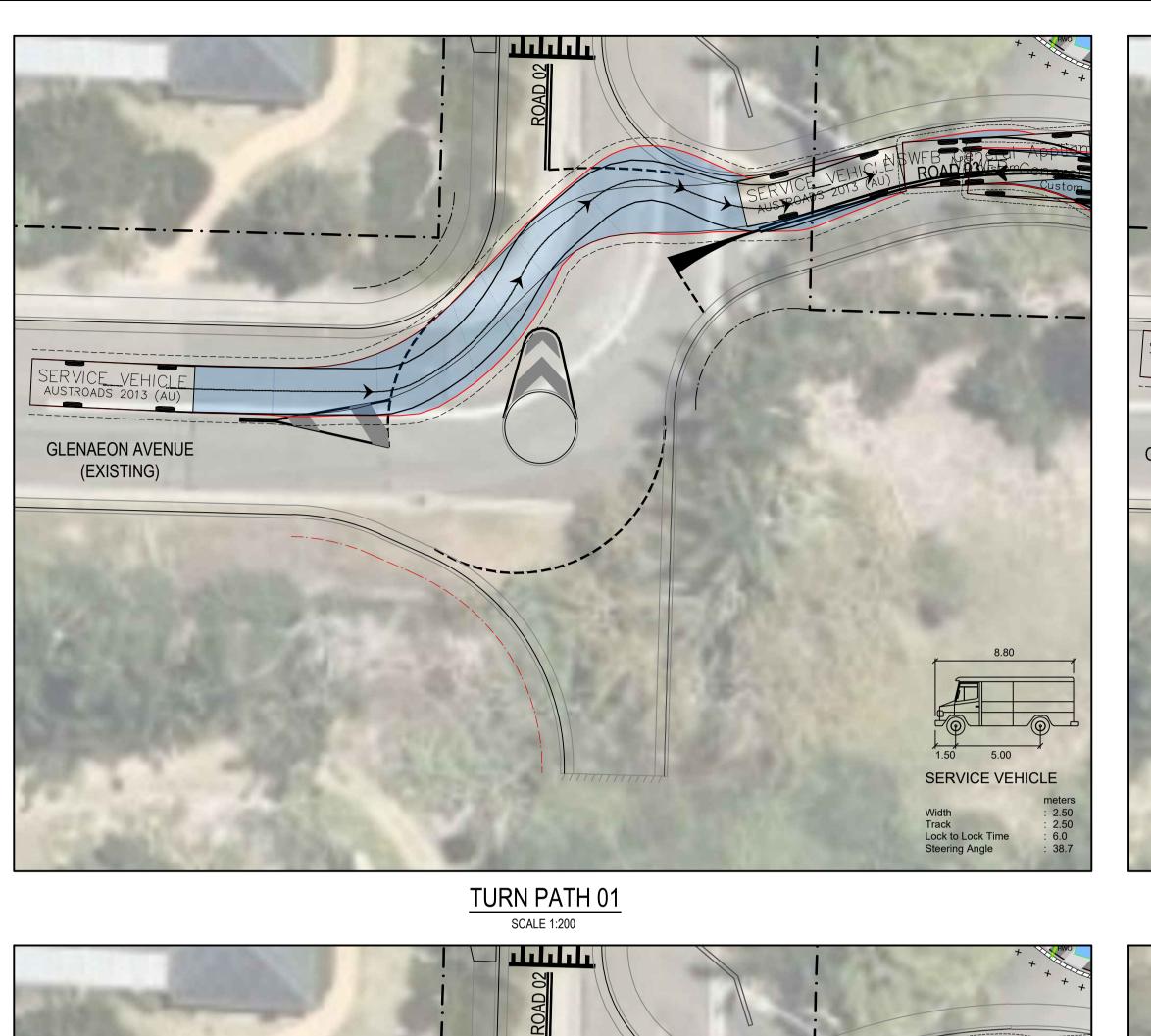


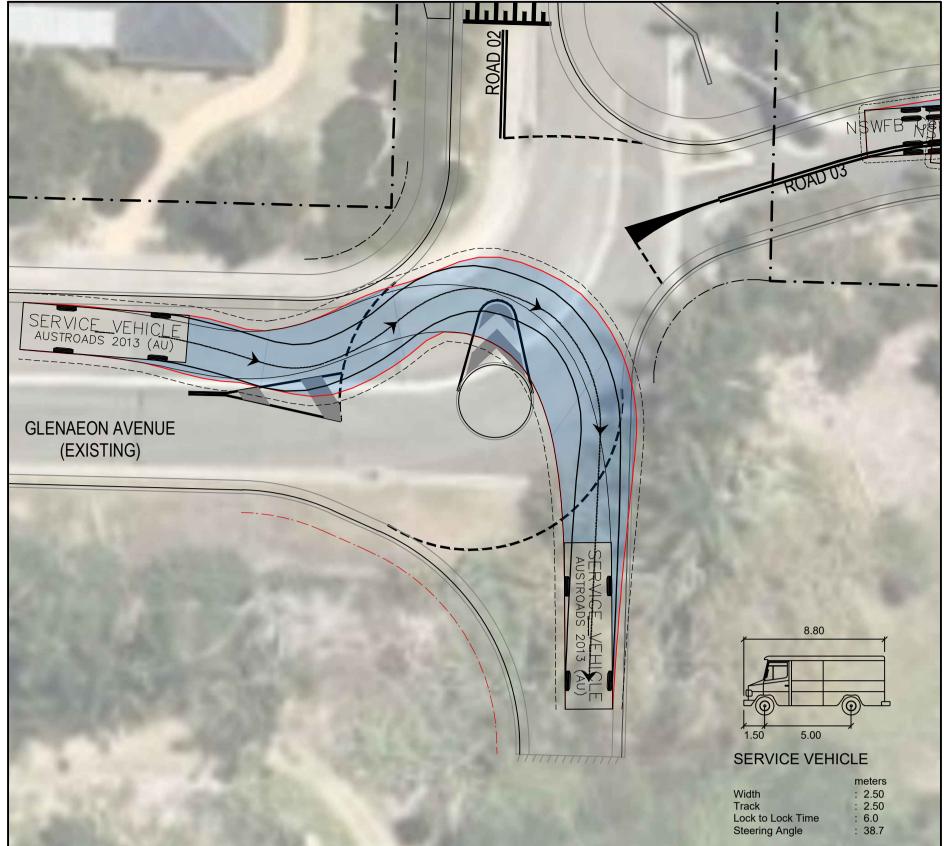


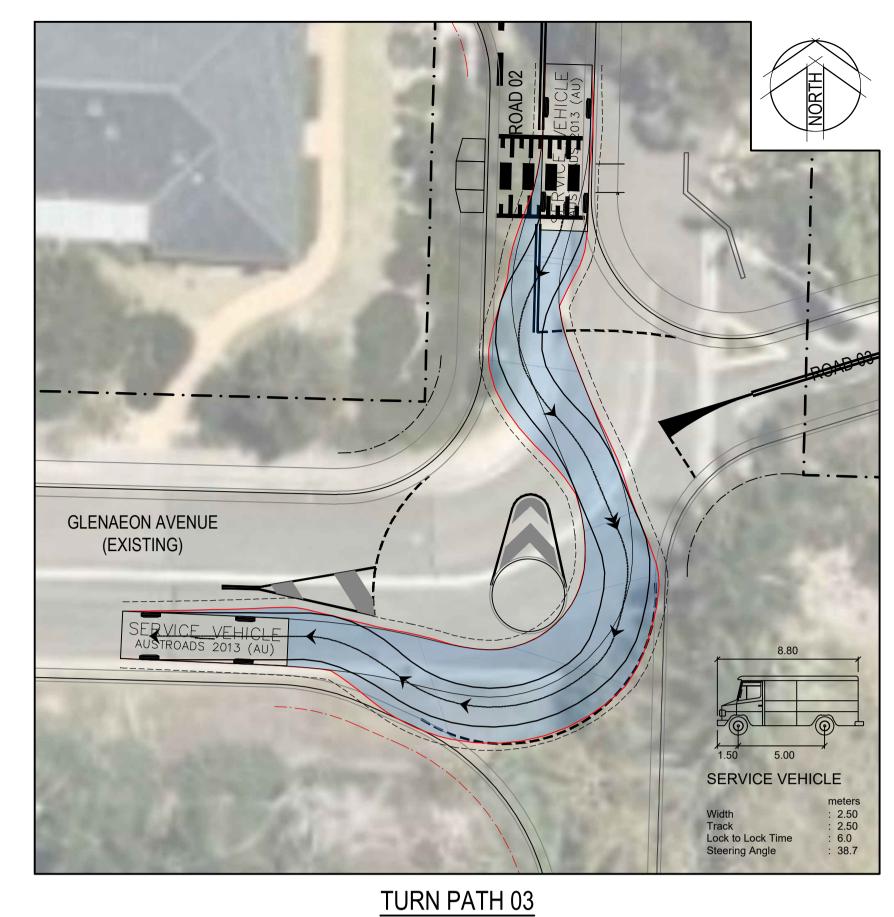
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			This document is produced by Cardno Limited solely for the		M
			benefit of and use by the client in accordance with the	Shaping the Future	Des
			terms of the retainer. Cardno Limited does not and shall not		Veri
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Verified	Date		DATUM	DATE	Scale Size	
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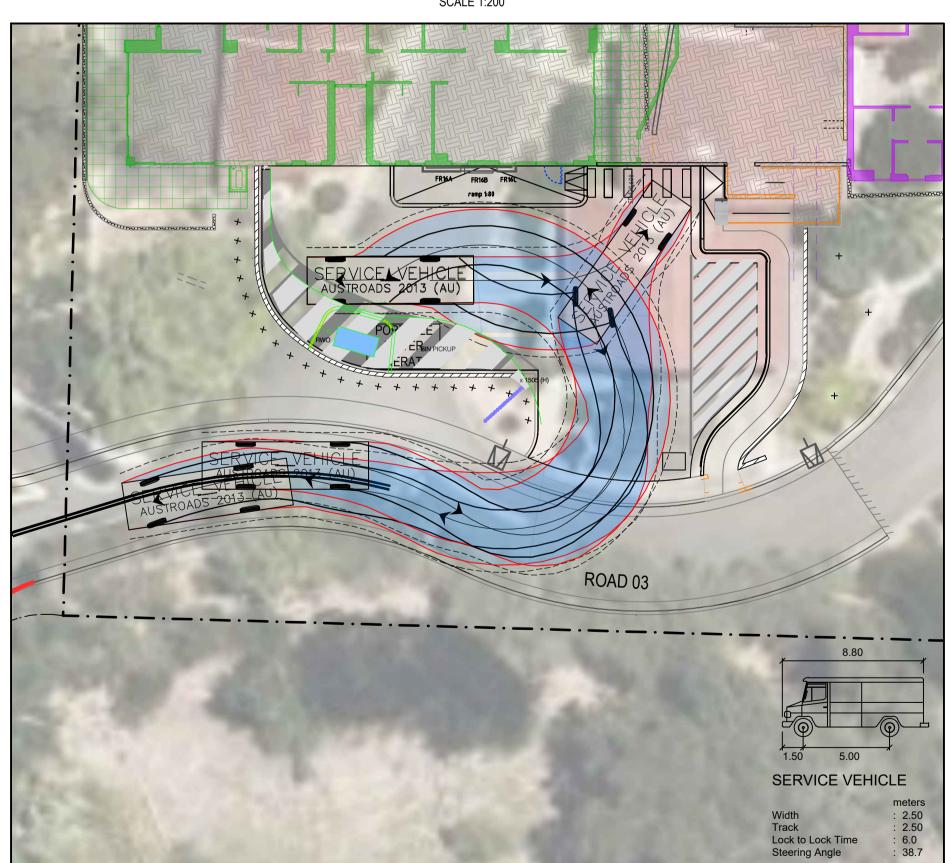




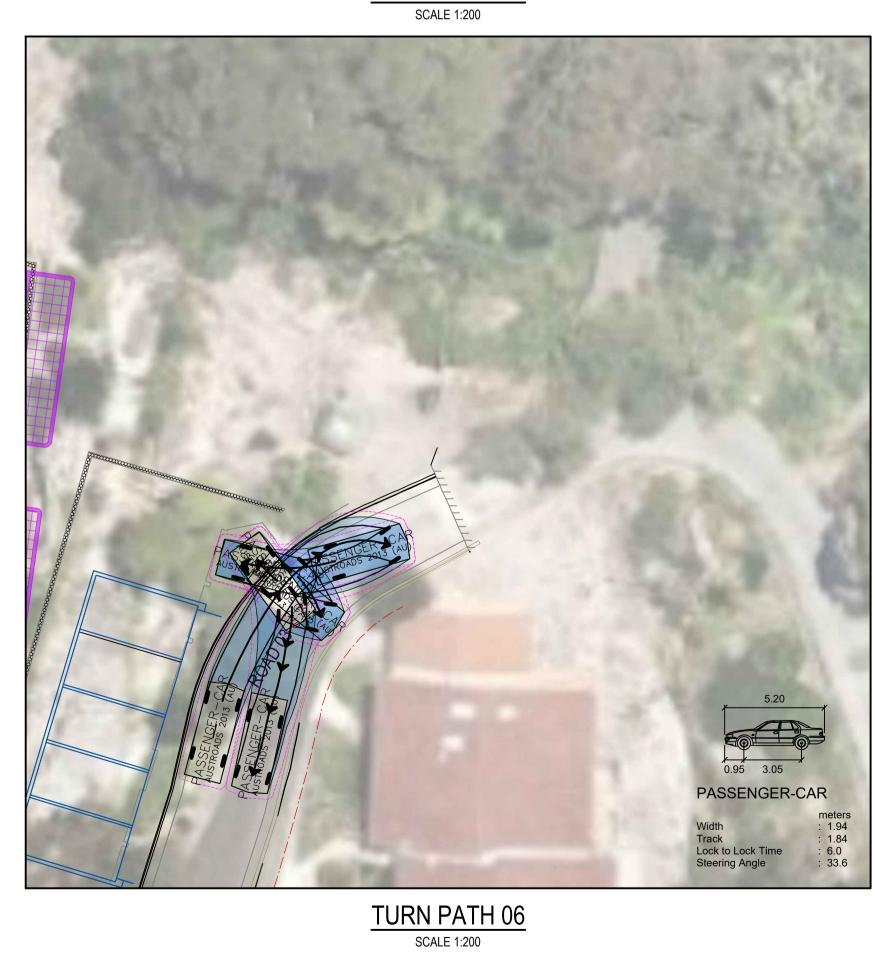




GLENAEON AVENUE (EXISTING) SERVICE VEHICLE Width Track Lock to Lock Time Steering Angle



TURN PATH 02



TURN PATH 04
SCALE 1:200 TURN PATH 05
SCALE 1:200 SCALE 1:200

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CAD	Rev.	Date	Description	Des.	Verif.	Appd.

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1	Date 16/06/2020.	Client LENDLEASE
ked	Date 16/06/2020.	Project GLENAEON RETIREMENT LIVING
ned	Date 16/06/2020.	PRECINCT 207 FOREST WAY
ed	Date	CIVIL WORKS - RENEWAL CONSTRUCTION CERTIFICATE 2
ved	16/06/2020.	Title TURN PATH PLAN
	16/06/2020	SHEET 01

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'IL WORKS - RENEWAL CONSTRUCTION CERTIFICATE 2	DATUM	DATE	Scale	Size		
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