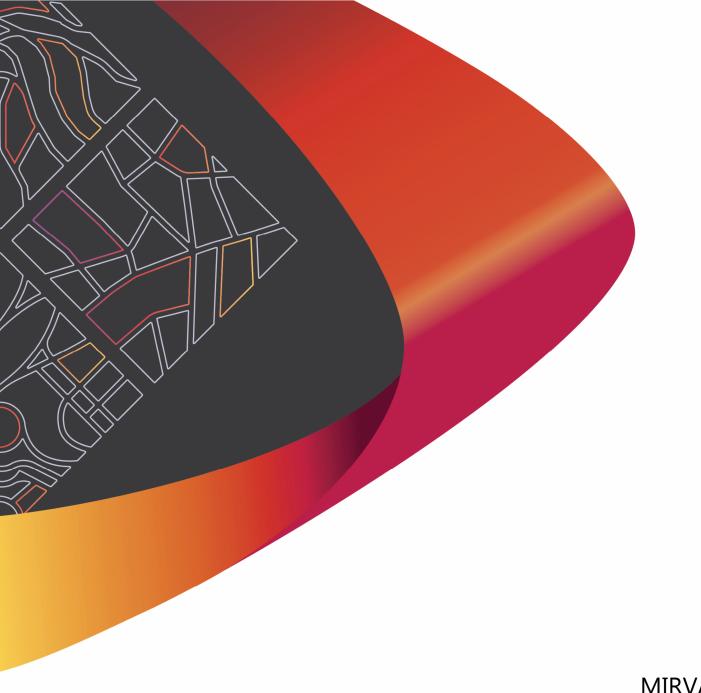
APPENDIX I ENGINEERING SERVICES REPORT



MIRVAC

ROL13 – Precincts 5, 6 & 7 Everleigh

ENGINEERING SERVICES REPORT

Report No: MIR-1300/R2403580

Rev: 0

24 May 2024





© Premise 2024

This report has been prepared by Premise Australia for MIRVAC; may only be used and relied on by MIRVAC; must not be copied to, used by, or relied on by any persons other than MIRVAC without the prior written consent of Premise. If MIRVAC wishes to provide this Report to a third party recipient to use and rely upon, the recipient agrees: to acknowledge that the basis on which this Report may be relied upon is consistent with the principles in this section of the Report; and to the maximum extent permitted by law, Premise shall not have, and the recipient forever releases Premise from, any liability to recipient for loss or damage howsoever in connection with, arising from or in the respect of this Report whether such liability arises in contract, tort including negligence.

DOCUMENT AUTHORISATION					
Revision	Revision Date	Proposal Details	S		
0	24/05/24	Issue for Approv	al		
Prepared By		Reviewed By		Authorised By	
Nicholas Somerville	Nound	Andrew Langdon	A. Lang dur	Patrick Brady	Pronj



CONTENTS

1.	INTRO	DUCTION	2
2.	SITE CH	ARACTERISTICS	3
3.	DATA		5
4.	SERVIC	ES FOR DEVELOPMENT	6
4.1	EARTHV	VORKS	6
4.2	EROSIO	N & SEDIMENT CONTROL	7
4.3	ROADW	/ORKS	7
	4.3.1	INTERNAL ROADS	7
4.4	NOISE A	ATTENUATION	8
4.5	TRAFFIC	-	8
4.6	STORM'	WATER DRAINAGE	9
4.7	STORM'	WATER QUANTITY & QUALITY	9
4.8	SEWER	RETICULATION	10
	PUMP S	STATION A	10
4.9	WATER	RETICULATION	12
5.	CONCL	USION	14
ΑP	PEND	ICES	
APP	ENDIX A	MASTERPLAN LAYOUT	15
APP	ENDIX B	PRELIMINARY EARTHWORKS PLANS	16
APP	ENDIX C	ROAD HEIRARCHY PLAN	
APP	endix d	INTERNAL ROAD FUNCTIONAL PLANS	
	ENDIX E	TRAFFIC IMPACT ASSESSMENT	-
	ENDIX F	PRELIMINARY STORMWATER DRAINAGE PLANS	
	endix G	PRELIMINARY SEWER RETICULATION PLANS	
APP	ENDIX H	PRELIMINARY WATER RETICULATION PLANS	22



1. INTRODUCTION

Premise was commissioned by Mirvac to prepare an Engineering Services Report for Precincts 5, 6 & 7, known as RoL 13, of the Everleigh development. Everleigh is located at Teviot Road, Greenbank and is part of the Priority Development Area (PDA) with EDQ being the assessing authority.

The proposed development consists of Precinct 5, Precinct 6 and Precinct 7. The deliverables of these precincts are list below with the Reconfiguration of a Lot (RoL) plan by Urbis shown in Figure 1.1.

- 354 residential lots
- A 13.4Ha super lot which will be subject to a future application for residential use.
- A 9.3Ha lot for a proposed high school.
- Delivery of a sewer pump station and associated mains (DCOP references SPS001, GM005, GM006 and RM003)
- Portion of trunk water main (DCOP reference WM005)
- Stormwater quality devices
- Neighbourhood and linear parks.

This report covers all engineering services that will be required to service the proposed development at a conceptual level for Development Approval. This report should be read in conjunction with the reports provided by Urbis (Town Planning). RoL Layouts by Urbis are included in Appendix A.

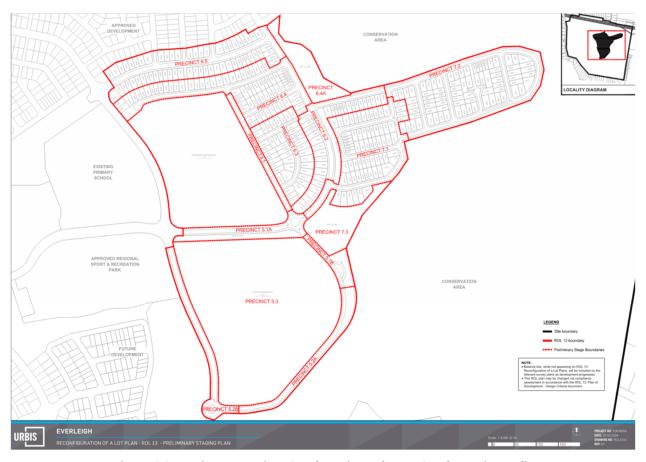


Figure 1.1: Precinct 5, Precinct 6 and Precinct 7 layout & sub-precinct split

2. SITE CHARACTERISTICS

Precincts 5, 6 and 7 have an approximate combined area of 53.4 ha and are located towards the east of the overall site. They adjoin Primary School and Central Park precincts to the west and Precincts 8 and 10 to the north.

The natural surface topography across RoL 13 includes an overland flow path running west to east, with maximum grades of up to 7% raising from this channel. The western edge of the subject area is bounded by completed earthworks and a completed road in the northern half.

Earthworks is currently being completed in the northern portions of RoL 13 to fill a shortfall of material in the approved Precincts 8 and 10. As such clearing of these borrow pits have also been completed under the Precincts 8 and 10 VCFMP.

The site is bound by conservation land to the east. The site has an active EPBC approval in place.

The proposed site location within the overall Everleigh development can be seen in Figure 2.1.

PAGE 3 | ROL13 – Precincts 5, 6 & 7 Everleigh



Figure 2.1: Site Location



3. DATA

Data for this report has been gathered from the following sources:

- Urbis Townplanners Lot layout
- Economic Development Queensland (EDQ) Greater Flagstone Priority Development Area plans and documents:
- Saunders Havill Group Detail Survey (check);
- Premise Movement Network Infrastructure Master Plan, report number P000170/R02 (approval pending);
- Premise Sewerage Infrastructure Masterplan, report number MIR-0020/R01 (approval pending);
- Premise Water Infrastructure Masterplan, report number P000196/R01 (approval pending);
- Logan City Council Existing services location (where applicable and relevant) and Planning Scheme 2015 development information;
- Detailed design and construction from DEV2018/999, DEV2020/1131 and DEV2022/1277
- Dial Before You Dig.
- ATP Consulting Engineers 'Traffic Noise Impact Assessment, Everleigh Green Bank, RoL 13 Application
- Engeny Everleigh Stormwater Masterplan, report number QC4060_005-REP-701-1
- Stormwater technical letter 'Everleigh RoL13 Stormwater Quantity And Stormwater Quality Analysis' prepared by Engeny



4. SERVICES FOR DEVELOPMENT

4.1 EARTHWORKS

Earthworks will be required to facilitate the construction of the roads, allotments and parks proposed within Precincts 5, 6 and 7. The earthworks will consist of excavations, filling, permanent batters to existing surface level with maximum slope of 1 in 4 and batters between lots with a maximum slope of 1 in 2. Retaining walls will be constructed during civil works to provide level allotments. Retaining walls will be provided to lots where the height difference is 450mm or greater to a maximum height of 2.5m.

A preliminary 'as if complete' earthworks design has been carried out over the RoL 13 area. While the target for the earthworks design was to minimise the cut and fill volumes associated with the earthworks operation along with targeting a cut to fill volume balance, there were several constraints that needed to be considered which influenced levels. These constraints included:

- Interface to natural surface levels and adjoining developed precincts
- Interface to the conservation area
- Road Gradings
- Benching of allotments
- Maintaining the maximum grade across of the school site of 5%.
- Relationship between benched allotments and retaining walls
- Coordination with landscape design in linear parks and pedestrian lanes
- Stormwater drainage outlet and channel levels

The preliminary earthworks design for the site has identified that the overall earthworks cut and fill volumes result in a slight surplus of material, however this is based on concept levels through the future residential area in Precinct 5. The aim will be to reduce the cut through this area to have a slight shortfall in material.

To maintain 1 in 4 maximum batters along the conservation edge, 600mm high sandstone retaining walls have been utilised so that earthworks does not cross the boundary. This approach has been discussed with Logan City Council who stipulated the 600mm maximum height for passive surveillance. Areas where walls are required are shown on plan.

We note that due to the location of certain pad mount transformers along the conservation edge, an Energex retaining wall be required within their normal $4.8 \text{m} \times 5.0 \text{m}$ to allow a flat surface for them to sit on.

Vegetation clearing will be required to allow earthworks operations to commence up to the conservation edge. Typically, a 100m bushfire buffer zone to maintenance as per the Bushfire Management Plan. Due to the conservation edge, this cannot be met. To achieve a suitable BAL rating, a 20m esplanade road reserve borders the entire edge. The additional 6m in this road reserve is to allow for interface earthworks to the natural surface.

PAGE 6 | ROL13 - Precincts 5, 6 & 7 Everleigh



The proposed earthworks design and extent can be seen on the Preliminary Earthworks Sketch Plans Provided in Appendix B.

4.2 EROSION & SEDIMENT CONTROL

Erosion and Sediment Control (ESC) measures will be required during all stages of development from site establishment to project completion. An Erosion and Sediment Control program will be designed and detailed during the detailed design phase.

4.3 ROADWORKS

Vehicle access to the site area will be via Anderson Drive and Ivory Parkway/Everleigh Drive through the recently completed Precinct 9 and previously completed school precinct. There will another, lower order access, through Guroman Drive once Precincts 8 and 10 are constructed which will link back up to the nearest roundabout on Anderson Drive to Teviot Road.

4.3.1 INTERNAL ROADS

The road layout has been developed in accordance with the road typologies nominated in the approval pending Movement Network Infrastructure Master Plan (MNIMP). Noting however the typologies are consistent with the existing MNIMP.

The roads servicing the Precincts 5, 6 and 7 include:

- Anderson Drive Neighbourhood Connector 1
- Unnamed Road 103 Neighbourhood Connector 1
- Guroman Drive Neighbourhood Connector 2
- All other roads Access Street (typical, park & conservation), including driveway extension.

The conservation typology of the Access Street is a new type for this application and has been included in the recently submitted MNIMP update. This road type is an Access Street pavement type within a 20m road reserve to allow for interface earthworks to the conservation area and additional bush fire management.

A Road Hierarchy Plan showing the above road typologies located within the precincts can be seen in Appendix C.

All allotments can be accessed from the proposed internal road network via direct driveway access or the dedicated driveway access reserves provided. The proposed roads will be provided with concrete kerb and channel, 1.5m minimum width concrete footpaths or shared paths and minimum 4m wide verges which accommodate necessary service corridors as required by Logan City Council. We note that certain verges are reduced to 2.2m when fronting park or open space.

Internal Road Functional plans detailing the Precinct 5, 6 and 7 internal road network can be seen in Appendix D.

PAGE 7 | ROL13 - Precincts 5, 6 & 7 Everleigh



4.4 NOISE ATTENUATION

A traffic noise impact assessment has been undertaken by ATP Consulting Engineers (ATP). ATP undertook traffic noise propagation modelling to consider the future traffic flows for a planning horizon of 2044. Based on the results of the traffic noise impact assessment for the ROL 13 (Precincts 6 and 7) of the Everleigh development, the following is concluded:

- Teviot Road does not affect the noise amenity at the allotments within ROL 13
- Residential dwellings fronting Anderson and Guroman Drive have to be designed as per AS3671 1989 to mitigate traffic noise ingress. Refer Figure 6.1 of the below mentioned report.
- A setback distance of 10m and 5m from the lot boundary facing Anderson and Guroman Drive, respectively, must be imposed to comply with the outdoor play area and outdoor learning area criterion for educational facilities.
- Acoustic upgrades are required for educational facilities located within 50m from the boundary facing Anderson and Guroman Drive.

ATP Engineers have stated within their Traffic Noise Impact Assessment Everleigh, Greenbank ROL10 Application report 'Provided the recommended planning and design noise control measures are implemented in the construction of Everleigh development ROL 13, road traffic noise will not impose any further constraints on the establishment of this stage of the development.'

Refer to ATP Consulting Engineers 'Traffic Noise Impact Assessment, Everleigh Green Bank, RoL 13 Application' report attached as part of the application documentation for further information.

4.5 TRAFFIC

A Traffic Impact Assessment has been prepared which addresses the suitability of the proposed Precincts 5, 6 and 7 site layout and road typologies, and determines traffic volumes in accordance with overall site data. The Traffic Impact Assessment provides confirmation of the above items with consideration to relevant guidelines, standards, and approved documents.

The Traffic Impact Assessment can be seen in Appendix E (supplied in separate document due to size).



4.6 STORMWATER DRAINAGE

The proposed piped roofwater drainage, underground drainage and major storm overland flow for this site will be designed in accordance with EDQ Guideline 13, Logan City Council and QUDM stormwater design guidelines. It is proposed that a network of gully pits and underground pipes will be constructed to capture and convey stormwater collected from allotments and roadways towards two new bioretention basins at a discharge point in the southeastern corner of the subject site. The area is nominated as Precinct 7.3 on the reconfiguration plans. There is a portion of the RoL 13 piped network which will discharge into the existing Anderson Drive pipe network which discharges into the future wetland.

The major storm overland flows generated from the Precincts 5, 6 and 7 catchments will be contained in the road reserves and conveyed to multiple discharge points including Anderson Drive for a portion of the north western catchment where it discharges into the interim wetland/detention arrangement, and various points along the conservation boundary for the eastern catchments. The overland flows discharging directly into the conservation area will flow through riparian revegetation zones.

Refer to the Preliminary Stormwater Drainage Plans provided in Appendix F and stormwater technical letter 'Everleigh RoL13 – Stormwater Quantity And Stormwater Quality Analysis' prepared by Engeny for further details.

4.7 STORMWATER QUANTITY & QUALITY

To allow for the multiple discharge points directly into the conversation area, the majority of flows from Precincts 5, 6, 7 are not detained. In accordance with the Everleigh Stormwater Masterplan prepared by Engeny, the central wetland area is designed to hold back major flows from that receiving catchment to allow the flows generated in this subject area first. Small catchments in the north and west of the precincts flow into the wetland area for detention.

Details on the proposed Stormwater Quantity and Quality treatments proposed for this precinct are provided within the stormwater technical letter 'Everleigh RoL13 – Stormwater Quantity And Stormwater Quality Analysis' prepared by Engeny. This stormwater technical letter outlines the water quantity and quality analysis undertaken in support of the Reconfiguration of a Lot (ROL) submission for Precincts 5, 6 and 7 of the Everleigh development.



4.8 SEWER RETICULATION

All proposed residential allotments within Precincts 5, 6 and 7 will be provided with a sewer property service. Property services will be connected to a sewer reticulation pipe network located within the road reserves.

The sewer reticulation network will be designed and installed in accordance with SEQ D&C Code, Logan City Council requirements and Premise prepared whole of site sewer design master plan.

There is one (1) internal sewer catchments within the ROL 13 area, however future Precincts 3 and 4 of the Everleigh development feed into the proposed pump station located within this application. This pump station also will also service the existing primary school and 7 lots within P10.5. There is a temporary pump station servicing the school located on the southeastern side of the Ivory Parkway/Anderson Drive roundabout. This temporary station must remain operational until the proposed pump station A is commissioned.

Sewer Pump Station A and its receiving 300mm gravity main and outgoing rising main are offsetting works under the Greater Flagstone Developer Charges and Offset Plan. Their DCOP IDs are SPS001, GM005, GM005 and RM003 respectively.

Table 4.8.1 below calculates the equivalent persons that Pump Station A will service.

1. Table 4.8.1

Catchment	Unit	EP / Unit	Total EP
Proposed RoL			
Precinct 6 & 7	354 Lots	2.8 EP per Lot	992
High School	1,800 students & 190 staff	0.1 EP per Lot	199
Total			1,191
Future RoL*			
Precinct 5.3	332 Lots	2.8 EP per Lot	930
Precinct 3 & 4	917 Lots	2.8 EP per Lot	2,565
Total			3,495
Existing			
Primary School	1,400 students & 140 staff	0.1 EP per Lot	154
Precinct 10.5	7 Lots	2.8 EP per Lot	20
Total			174
TOTAL OVERALL			4,860

Note* - The future residentials have been included for the sizing of the SPS and downstream gravity main systems. These future lots will be completed as part of a future ROL approval.

PUMP STATION A

Pump Station A (SPS001) is positioned in Precinct 5 of the RoL. This pump station services the largest catchment within the Everleigh development and considered offsetable under the DCOP. The rising main

PAGE 10 | ROL13 - Precincts 5, 6 & 7 Everleigh



is proposed to head north from the pump station, then west along the proposed new neighbourhood collector road, on the opposite side of the road to the school, where it will tunnel bore under the existing roundabout. From here, it will run parallel to the existing temporary 63mm rising main but just internal to the future southern sports park lot, within an easement. The rising main will discharge into an existing discharge manhole on Ivory Parkway (east to drain) where it gravity feeds into the regional pump station.

The demand on the SPS A is summarised in the table 4.8.2 below

2. Table 4.8.2

Category	Unit	EP / Unit	Total EP	Total ADWF	Total PWWF
Residential	1,610 Lots	2.8 EP per Lot	4,861	11.25 L/s	56.26 L/s
School	3,200 students	0.1 EP per pupil			
	& 330 staff				

Note, A residential lot average day weather flow (ADWF) of 200L/EP/Day and peak wet weather flow (PWWF) of 1000L/EP/Day were adopted in accordance with the Logan Water Alliance Desired Standards of Service (DSS) April 2014

A summary of the wet well sizing is shown in the table below. The required operational storage of the wet well was calculated as 162.03m³ and a wet well diameter of 2m was adopted.with The preliminary calculated depth of the wet well is 9.48m.

3. Table 4.8.3

Wet Well Details	Value
Capacity (PWWF) (L/s)	56.26
Operating Storage (m³)	4.22
Wet Well diameter (m)	2.0
Operating Depth (m)	1.34
Surface Level (m)	34.27
Incoming Invert Level (m)	27.53
Alarm RL (m)	27.38
Standby RL (m)	27.08
Pump TWL RL (m)	26.93
Pump BWL RL (m)	25.59
Floor Level RL (m)	25.19
Wet Well Depth (m)	9.48
Emergency Storage Time	4 hours at ADWF of 11.25L/s
Total Emergency Storage Volume Required (m³)	162.03
Emergency Storage in Wet Well (Above Alarm Level) (m³)	21.65
Additional Emergency Storage Required (m³)	140.39

A summary of the SRM sizing calculations is shown in table 4.8.4 below. An DN250 PE100 DR11 pipe will have a suitable velocity of 1.74m/s with a PWWF of 56.26L/s. The duty point of the pump station was

PAGE 11 | ROL13 - Precincts 5, 6 & 7 Everleigh



calculated as 56.26L/s at 24.42m. Preliminary design plans for the Sewage Pump Station and rising main are attached with the Preliminary Sewer Reticulation Plans in Appendix H.

4. Table 4.8.4

	Value
PWWF	56.26 L/s
Length of SRM	560
Pipe Type	PE100 DR11
Nominal Size	DN250
Internal Diameter (mm)	203
Area (m²)	0.032
Velocity (m/s)	1.74
C value	130
Friction Head (m)	8.31
Low point (Pump BWL) (m)	25.59
High point (m)	41.70
Static Head Requirement (m)	16.11
Total Pump Head (m)	24.42
Pump Duty Point	56.26 L/s at 24.42m

The detailed design submission for pumping infrastructure and the receiving system shall be accompanied by the Odour Impact Assessment Report. This Impact Assessment shall address the odour impacts at the air discharge of associated gravity mains at the SPS location, the operation of the SPS, at the rising main discharge point to the downstream gravity network, and gas release valve arrangements.

As mentioned, the system will be discharging into an existing system which has already taken these loads into the account.

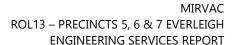
The sewer reticulation system details described above are shown on the Preliminary Sewer Reticulation Plans in Appendix H.

4.9 WATER RETICULATION

All proposed allotments in Precincts 5, 6 and 7 will be provided with a potable water service connection. A water reticulation pipe network will be provided in Precincts 5, 6 and 7 to provide service connections to each allotment. The water reticulation network will be designed and installed in accordance with the SEQ D&C Code, Logan City Council requirements and the recently resubmitted Water Infrastructure Masterplan prepared by Premise.

In the ultimate, fully developed, scenarios Precincts 5, 6 & 7 are serviced from a low-level connection on Greenbank Road. Due to how the site has been delivered, this connection will not occur until during or after the construction of these precincts, without a significant clearing and bulk earthworks operation occurring on top of what is required for the subject area. As such, to minimise the environmental exposure of the site and to ensure delivery of key pieces of infrastructure, such as the school lot and SPS, temporary pressure

PAGE 12 | ROL13 - Precincts 5, 6 & 7 Everleigh





reducing valves are proposed in similar locations to the boundary valves. The PRVs will be set to have minimal impact/pressure affect when the connection points switch.

The Anderson Drive extension will carry a portion of the 250mm main which is covered by the DCOP. ID number WM005.

The details described above are shown on the Preliminary Water Reticulation Plans in Appendix K



5. **CONCLUSION**

Based on the information collected and preliminary investigations carried out it has been established that the proposed development can be adequately serviced.

All service and infrastructure layouts are generally in accordance with the relevant approved infrastructure master plans, EDQ requirements, and other relevant and appropriate design standards and guidelines.



APPENDICES

APPENDIX A MASTERPLAN LAYOUT

PAGE 15 | ROL13 – Precincts 5, 6 & 7 Everleigh

Everleigh

ROL 13:

RECONFIGURATION OF A LOT PLANS

TEVIOT ROAD, EVERLEIGH

APRIL 2024











EVERLEIGH

Scale: 1:4,000 @ A3



URBIS

DATE: 26.04.2024
DRAWING NO: ROL13-2

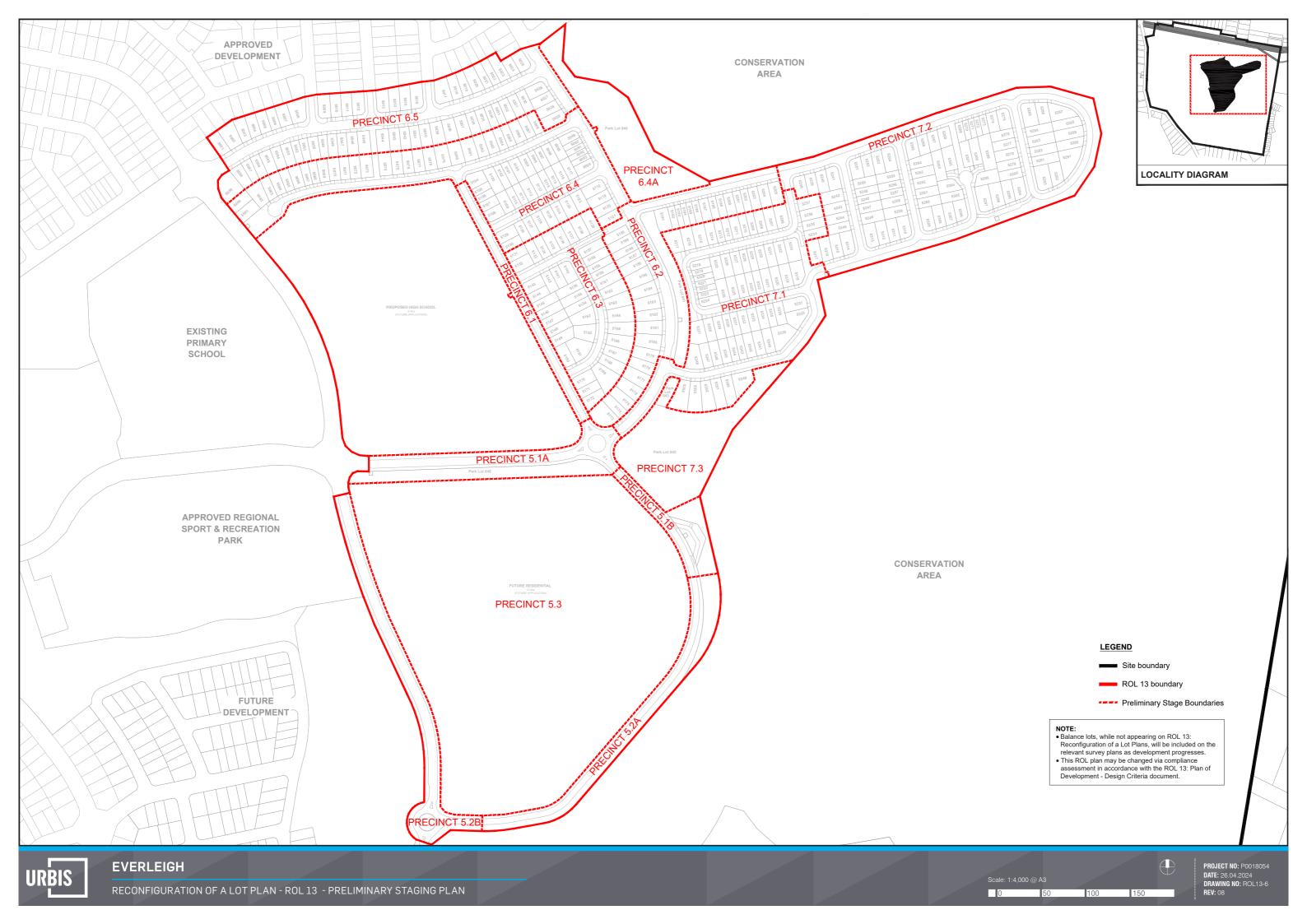




EVERLEIGH









APPENDIX B

PRELIMINARY EARTHWORKS PLANS

PAGE 16 | ROL13 – Precincts 5, 6 & 7 Everleigh

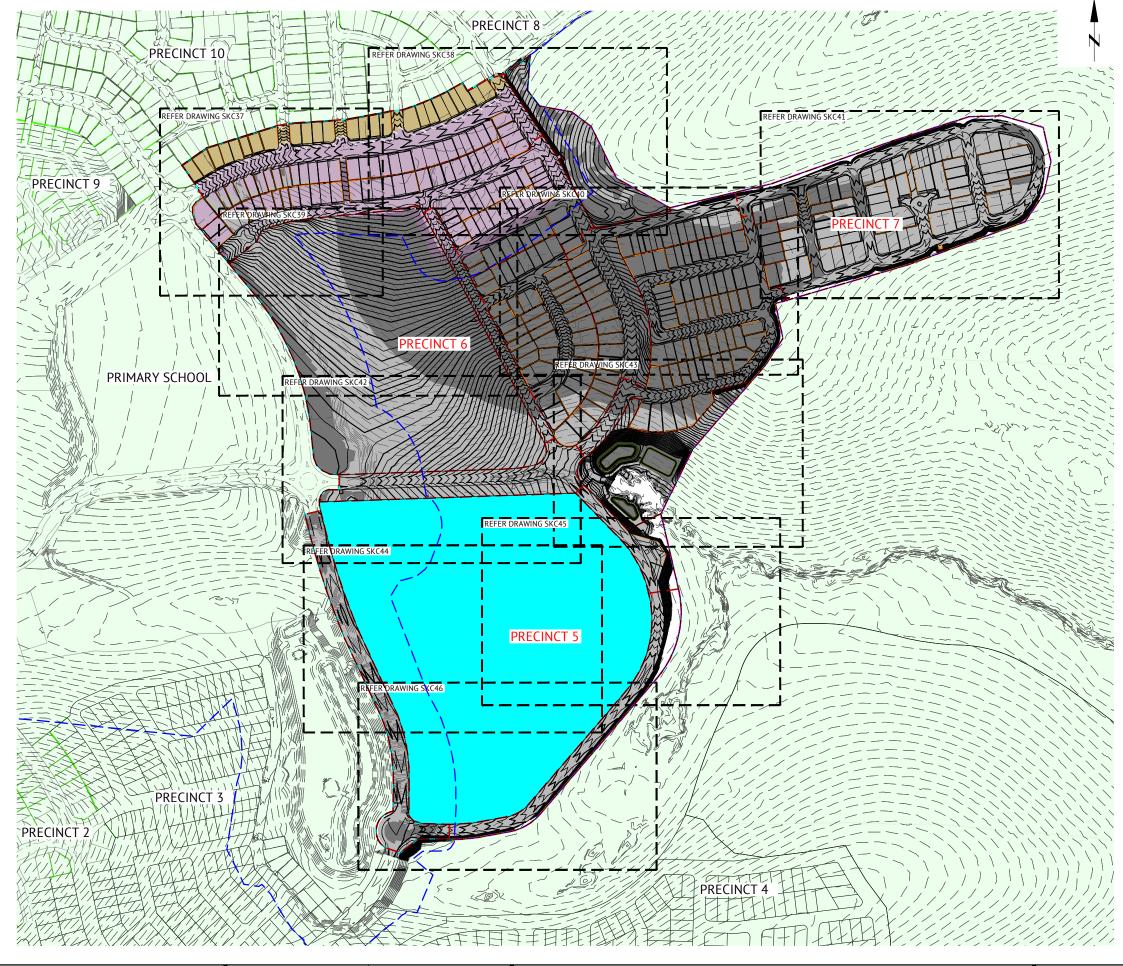


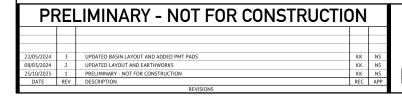
ROL13 EARTHWORKS VOLUMES				
CUT FILL		FILL		
ROL13 EARTHWORKS	407,025m ³	390,543m ³		
TOTAL VOLUMES	407,025m ³	390,543m ³		

NOTE:

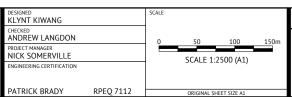
1. BULK EARTHWORKS INCLUDES ROAD BOXING.

2. ROAD BOXING DEPTHS FOR PRECINCTS 6 AND 7 ARE 335mm FOR ACCESS STREETS, OTHERWISE 450mm. NO BOXING ALLOWANCE FOR PRECINCT 5.3.

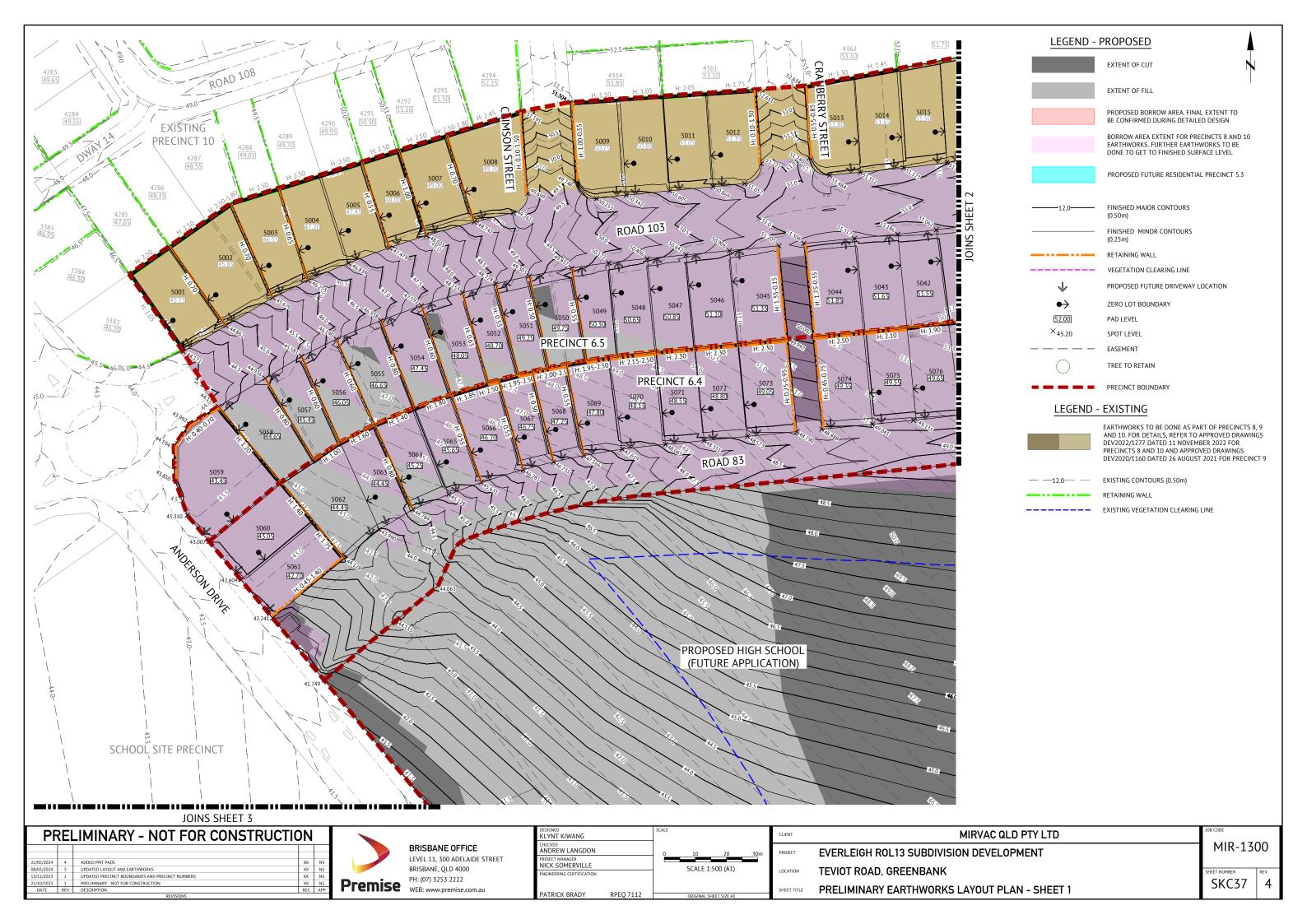


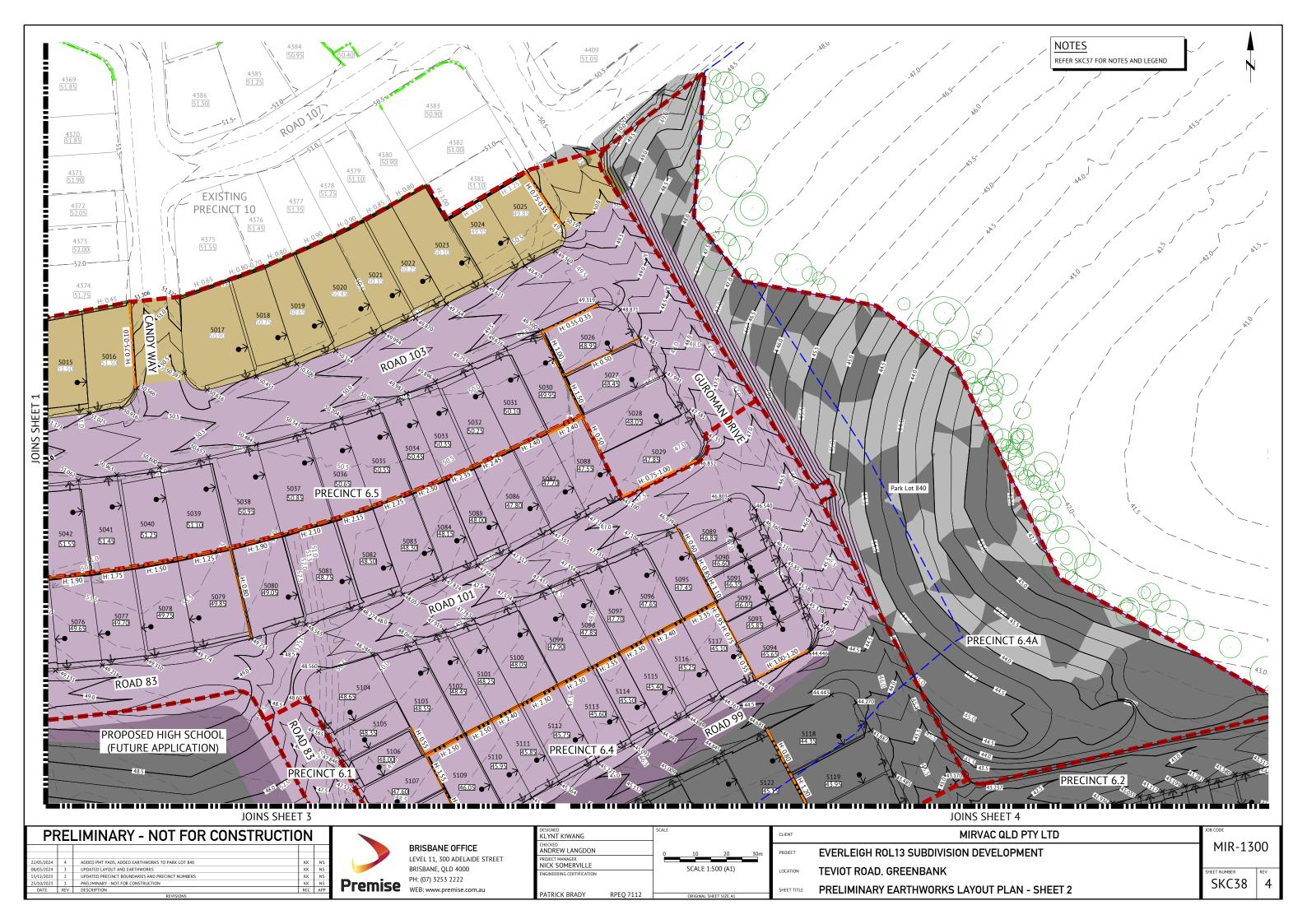


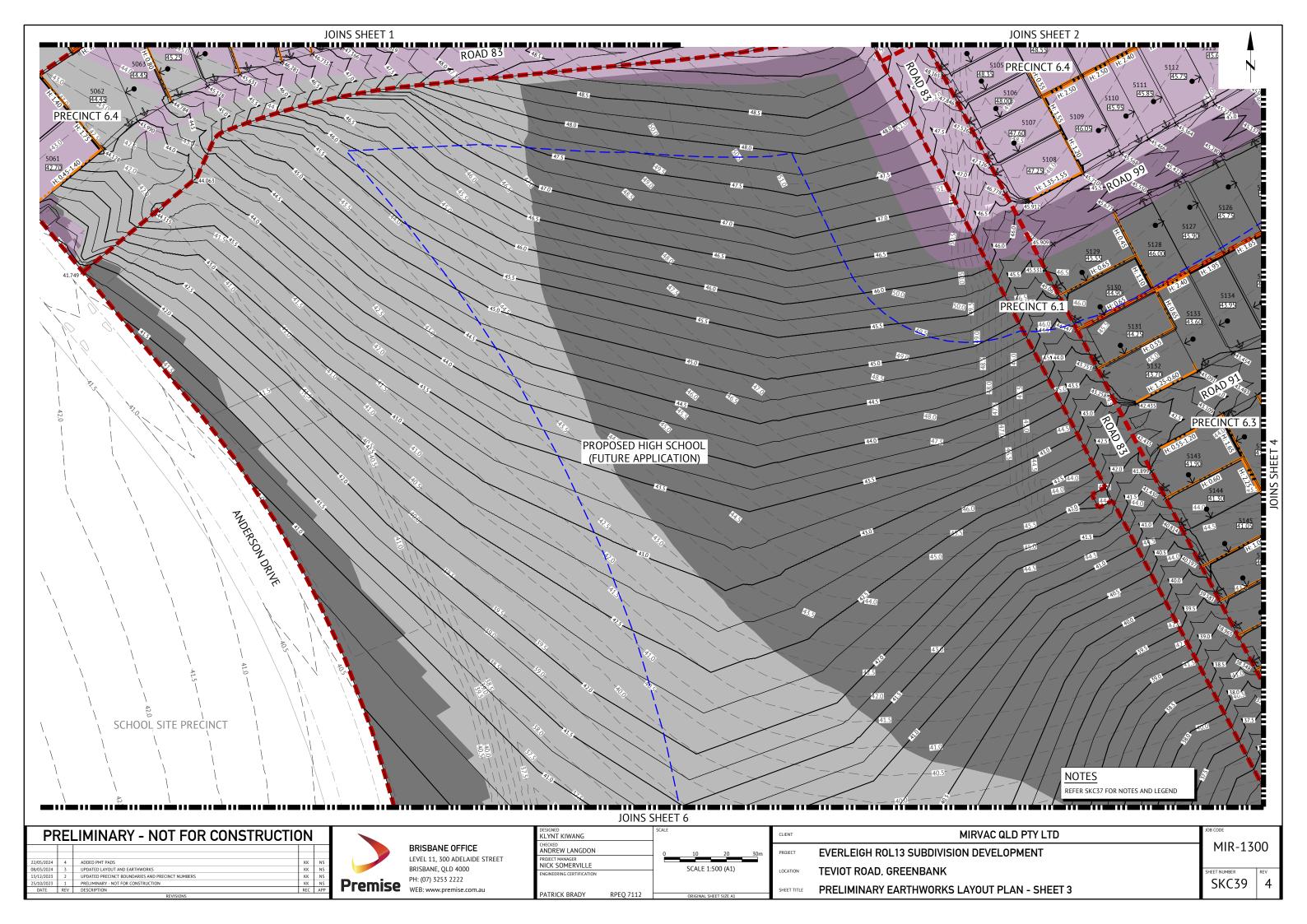


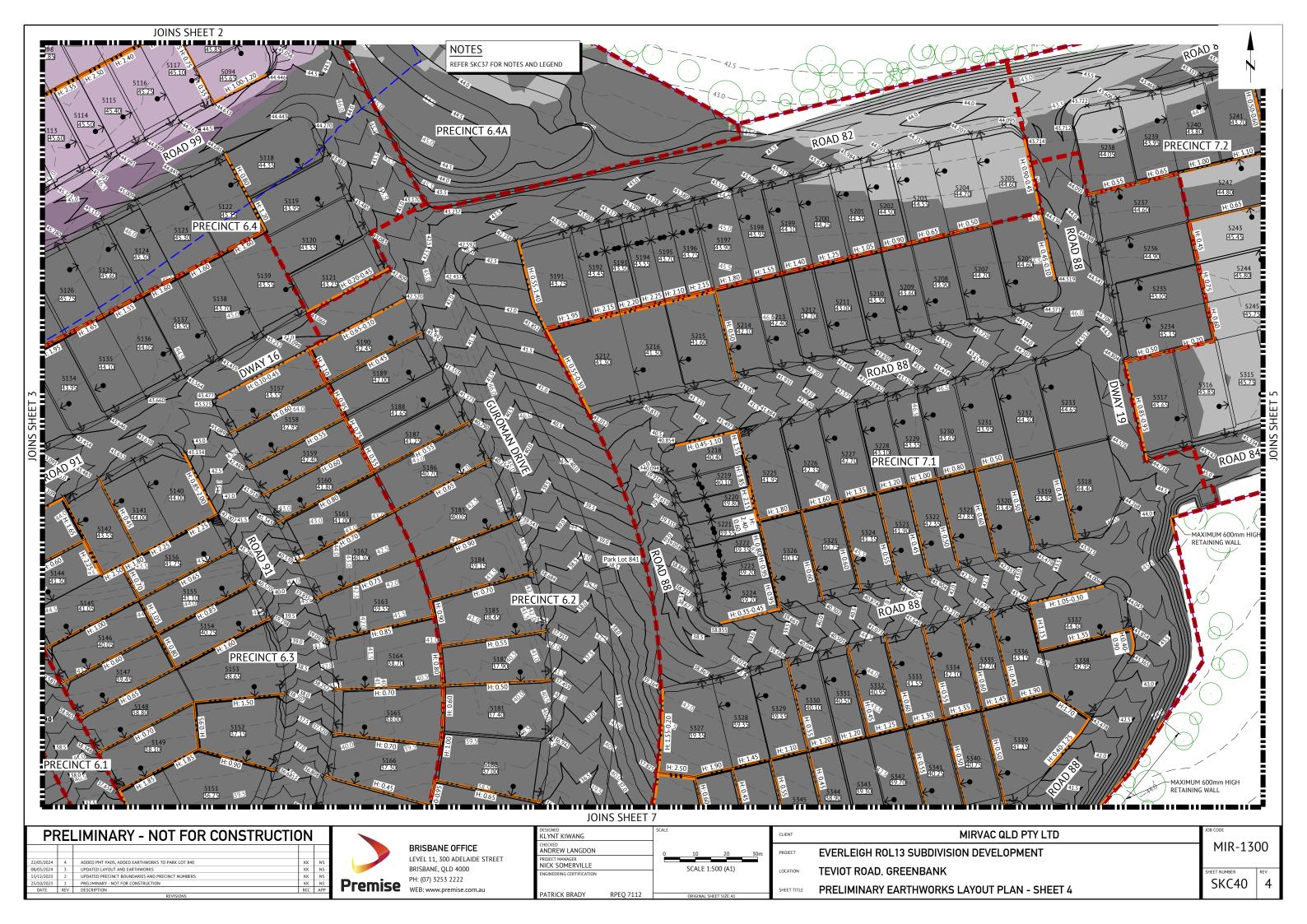


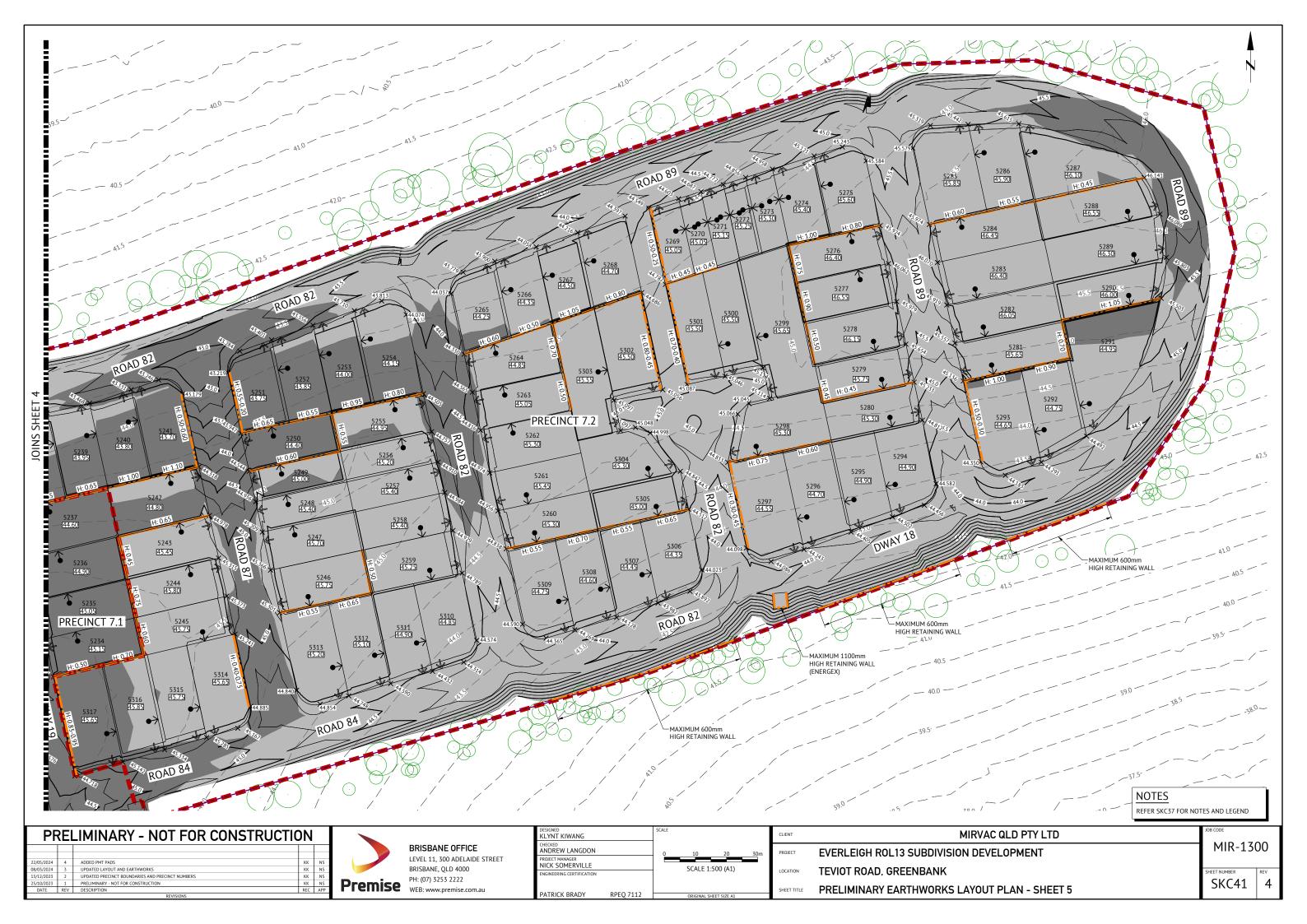
CLIENT	MIRVAC QLD PTY LTD	JOB CODE	
PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT	MIR-130	00
LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER	REV
SHEET TITLE	OVERALL PRELIMINARY EARTHWORKS LAYOUT PLAN	SKC36	3

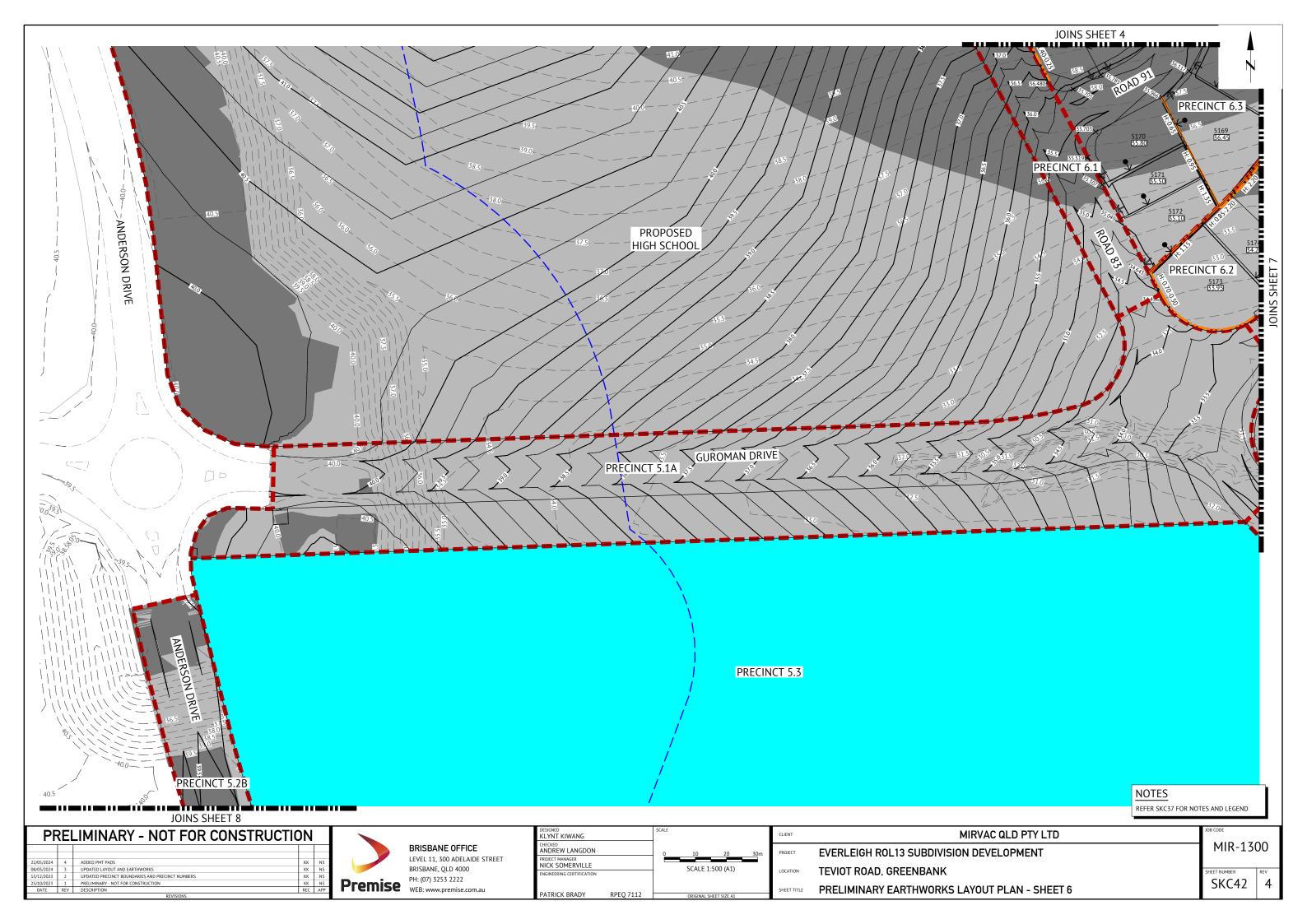


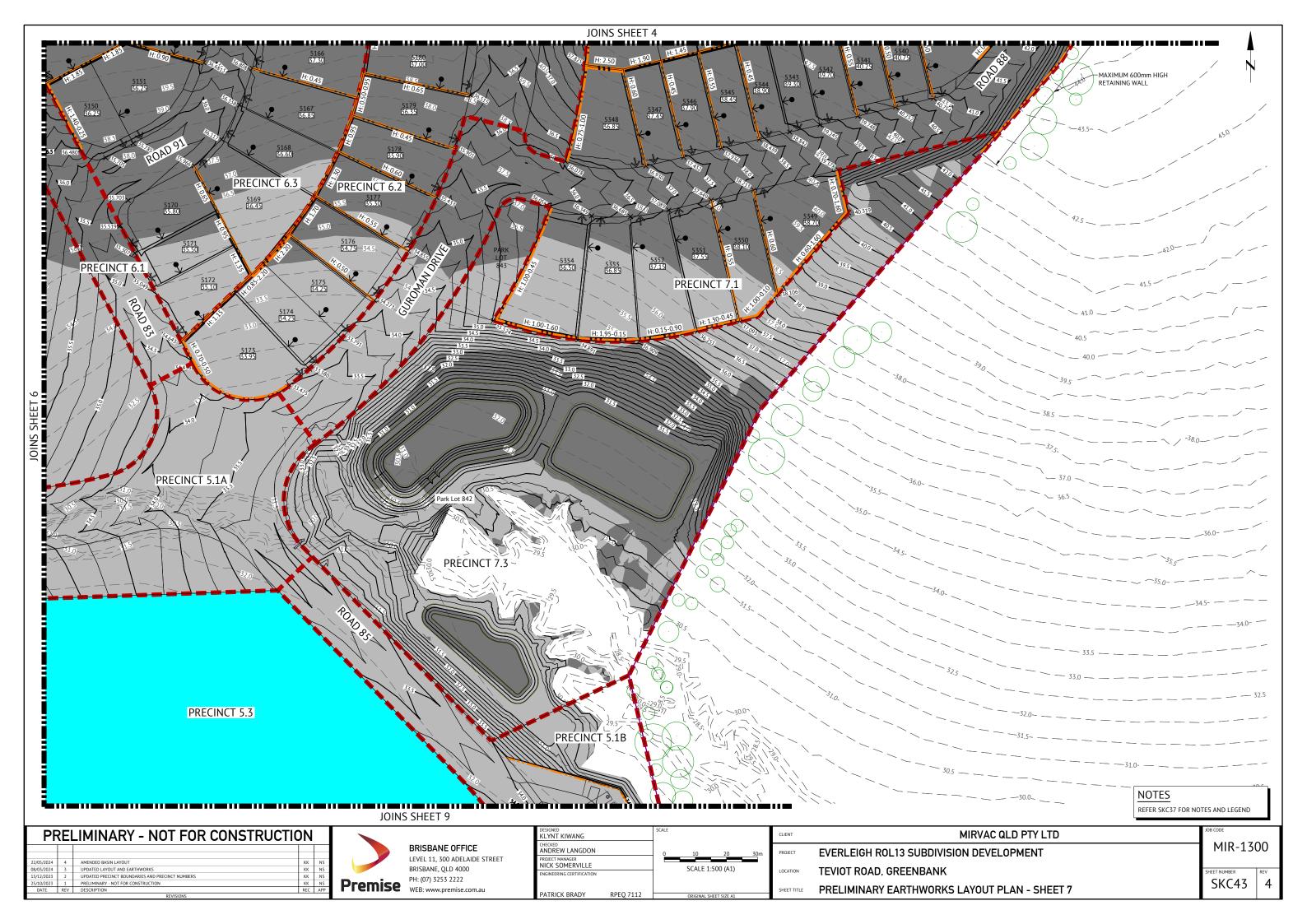


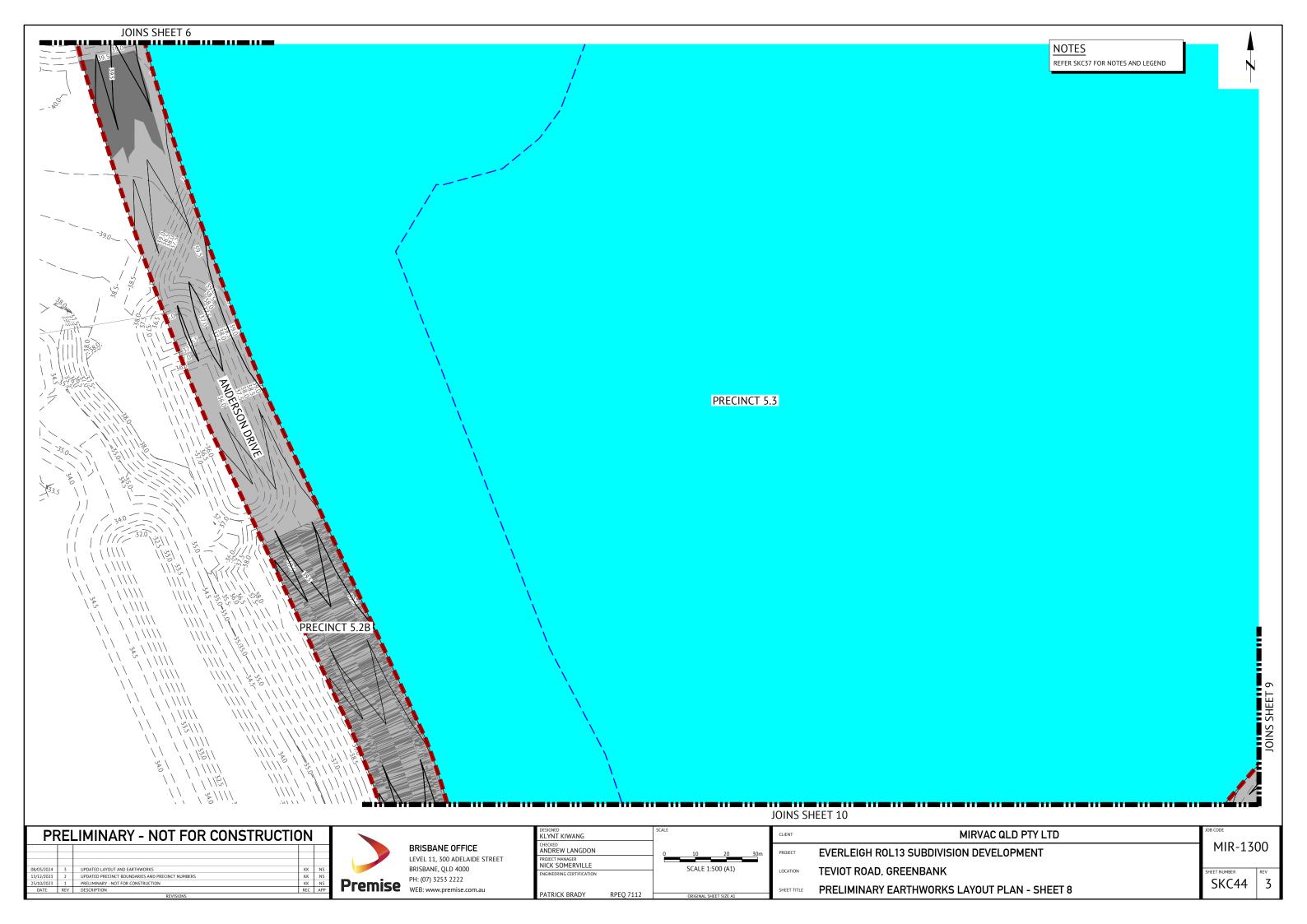


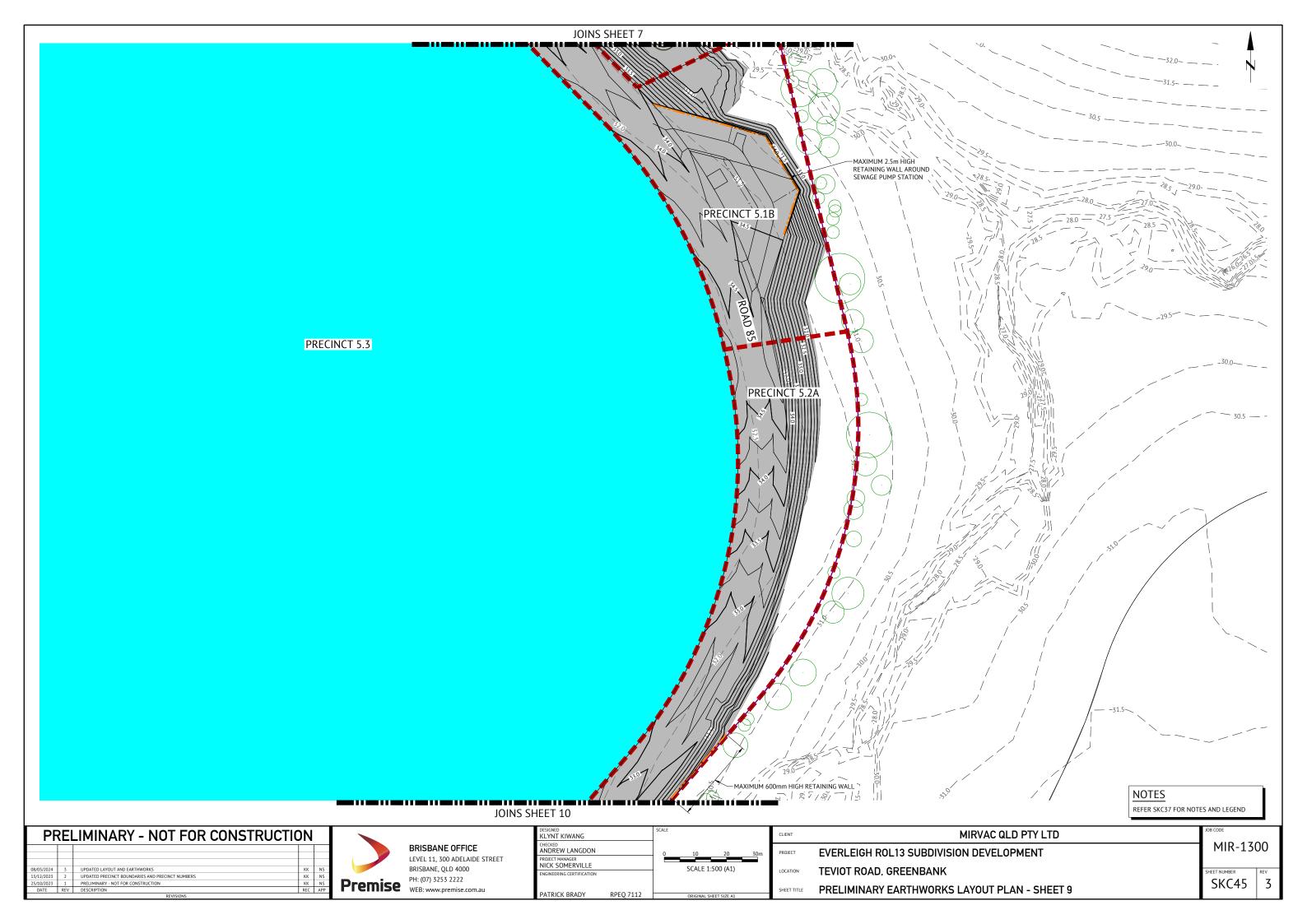


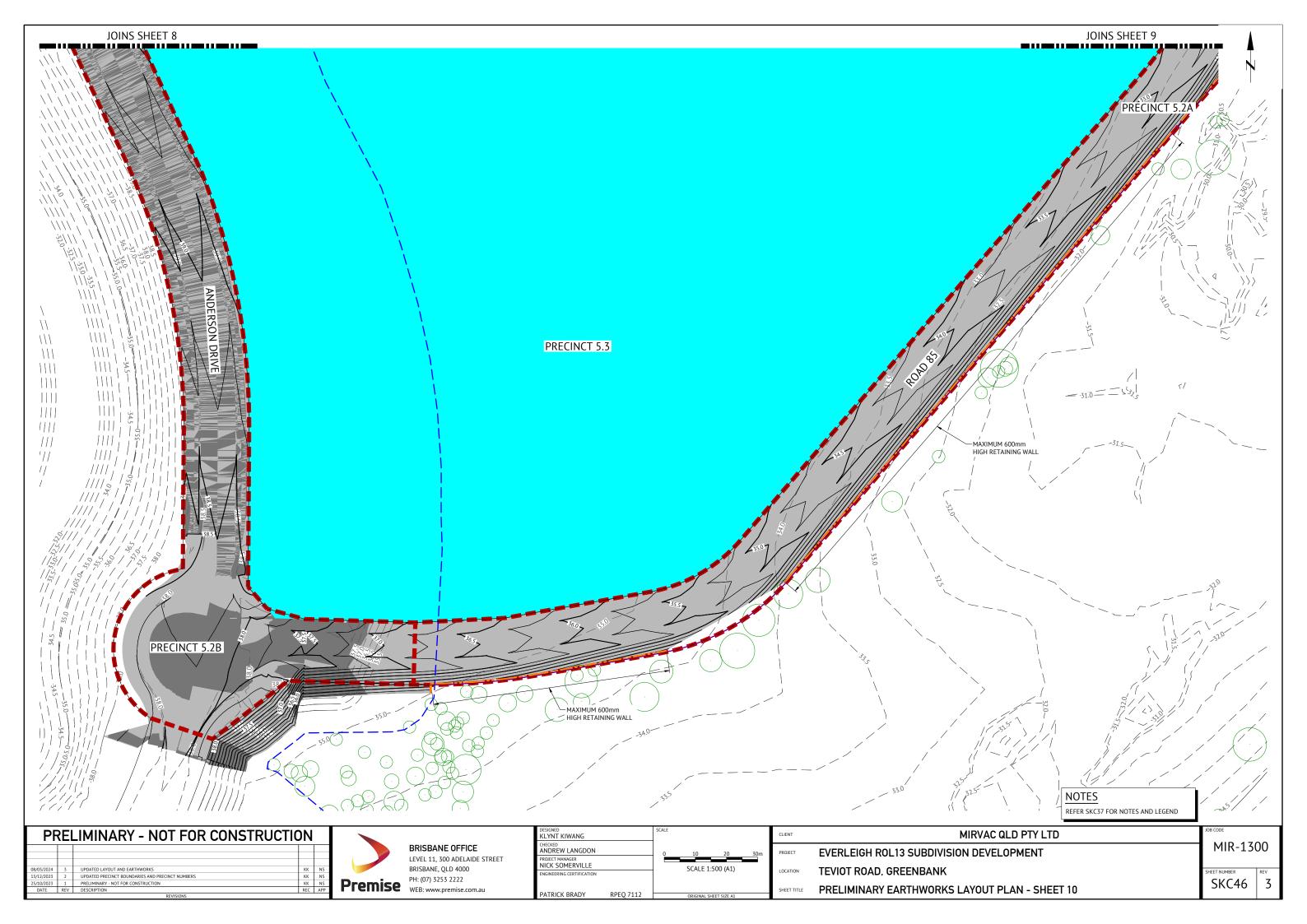








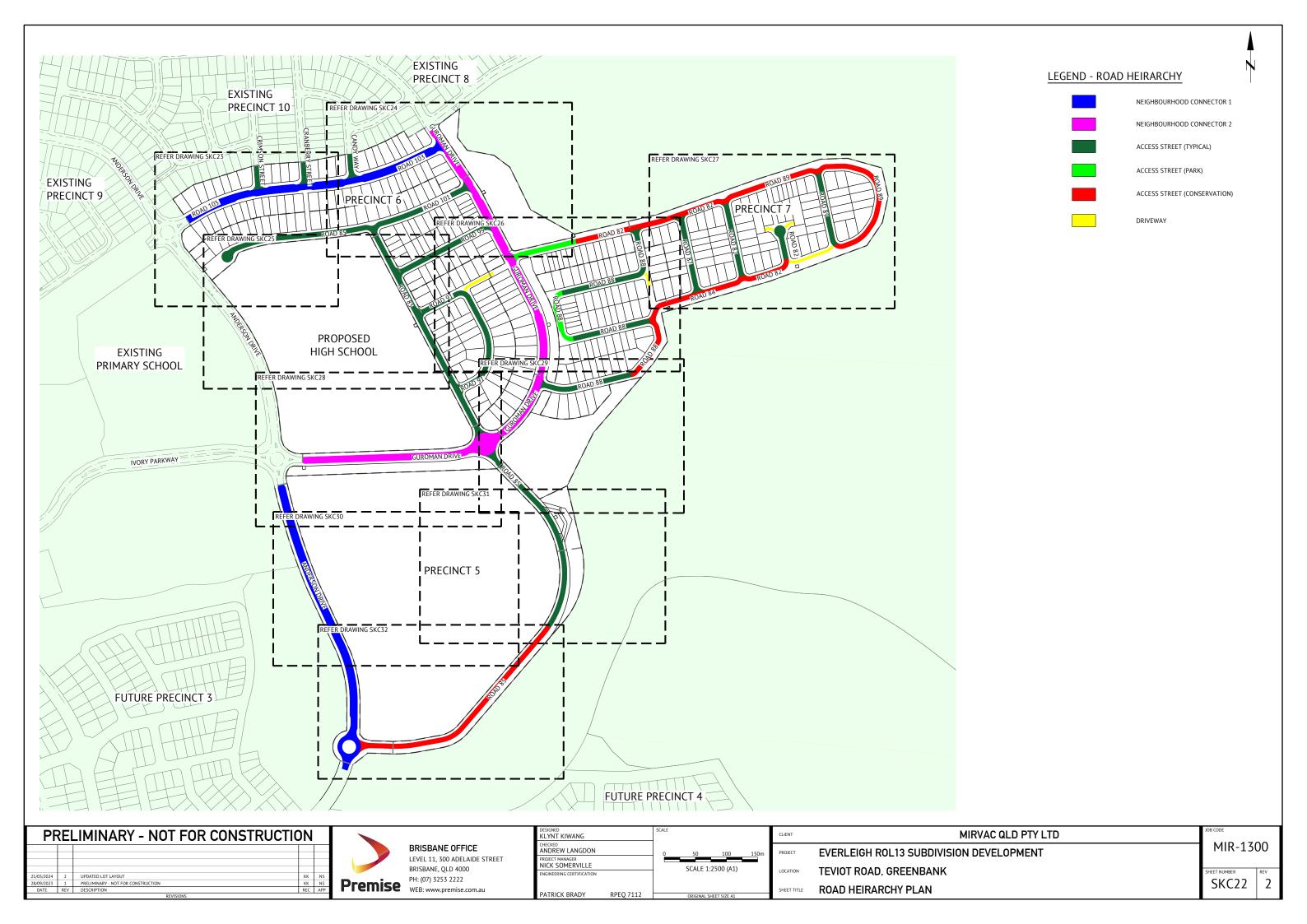






APPENDIX C ROAD HEIRARCHY PLAN

PAGE 17 | ROL13 – Precincts 5, 6 & 7 Everleigh

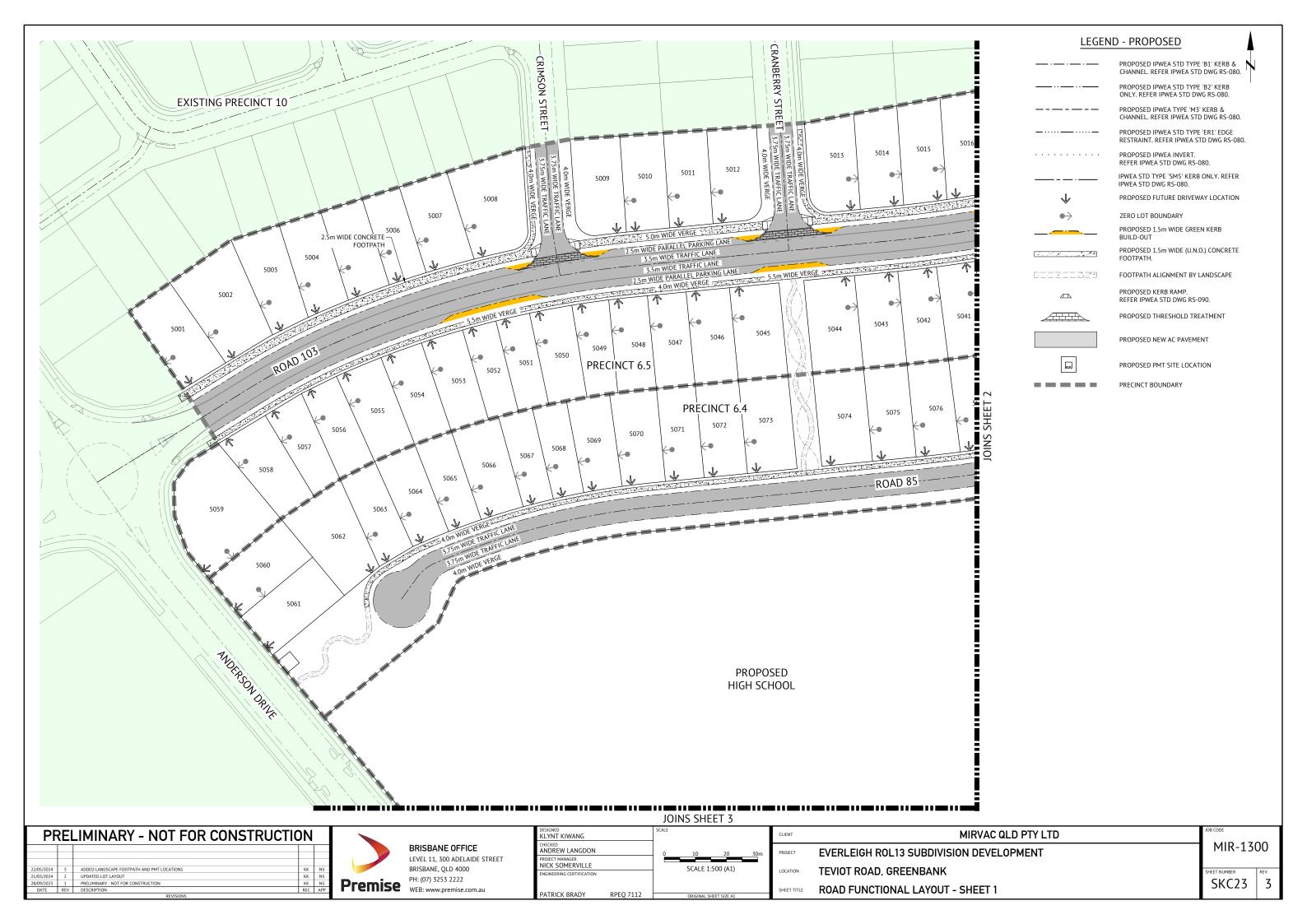


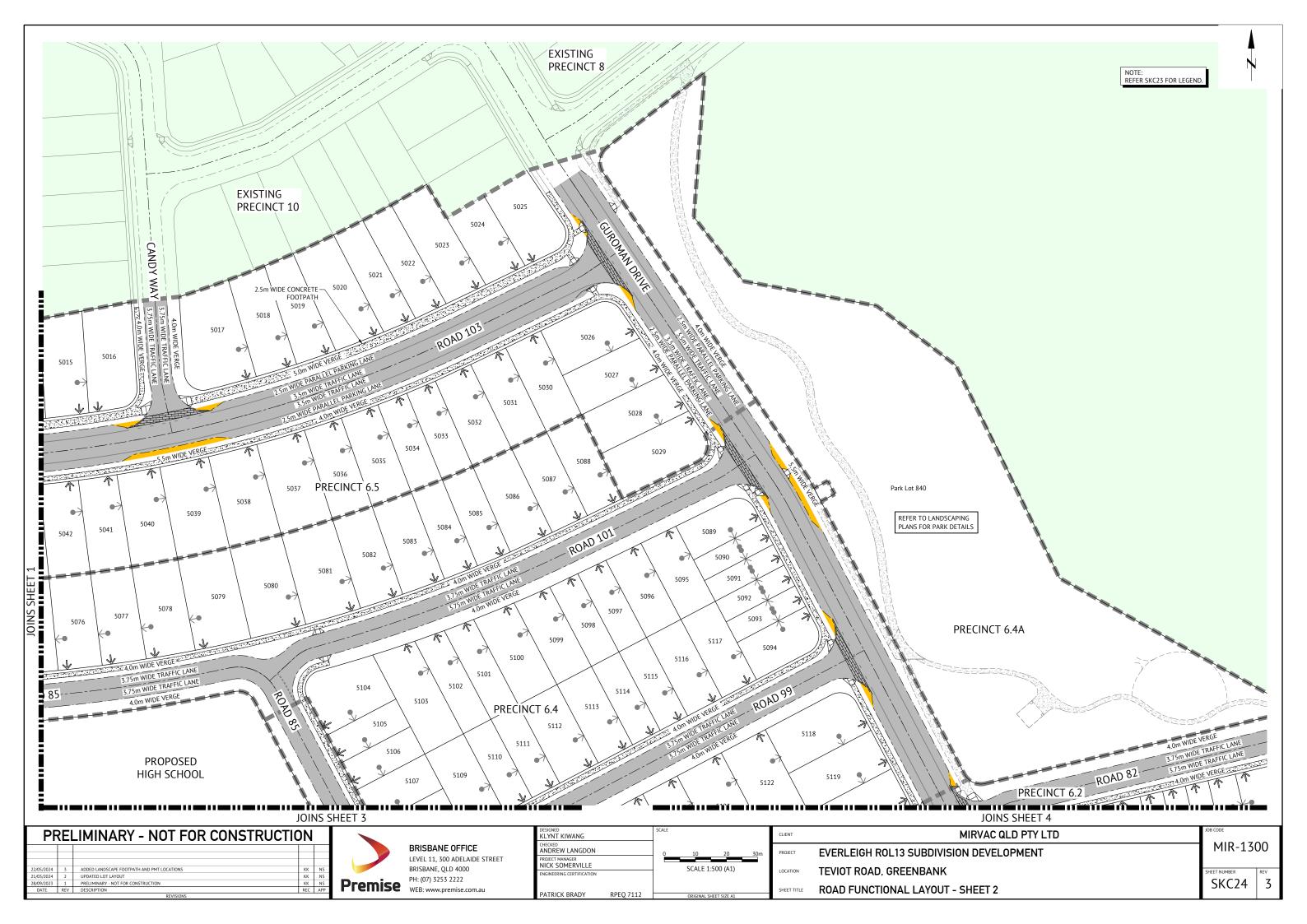


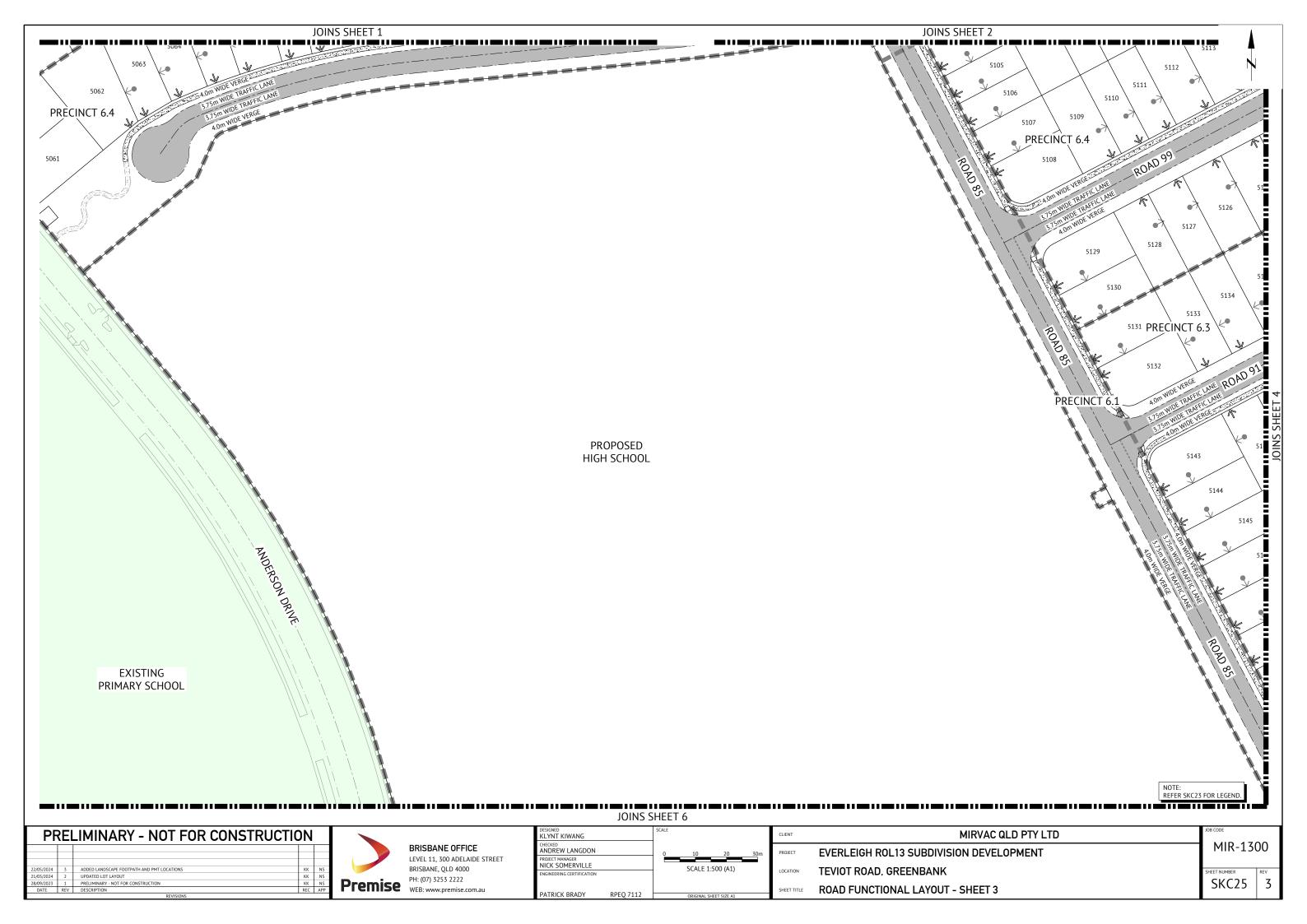
APPENDIX D

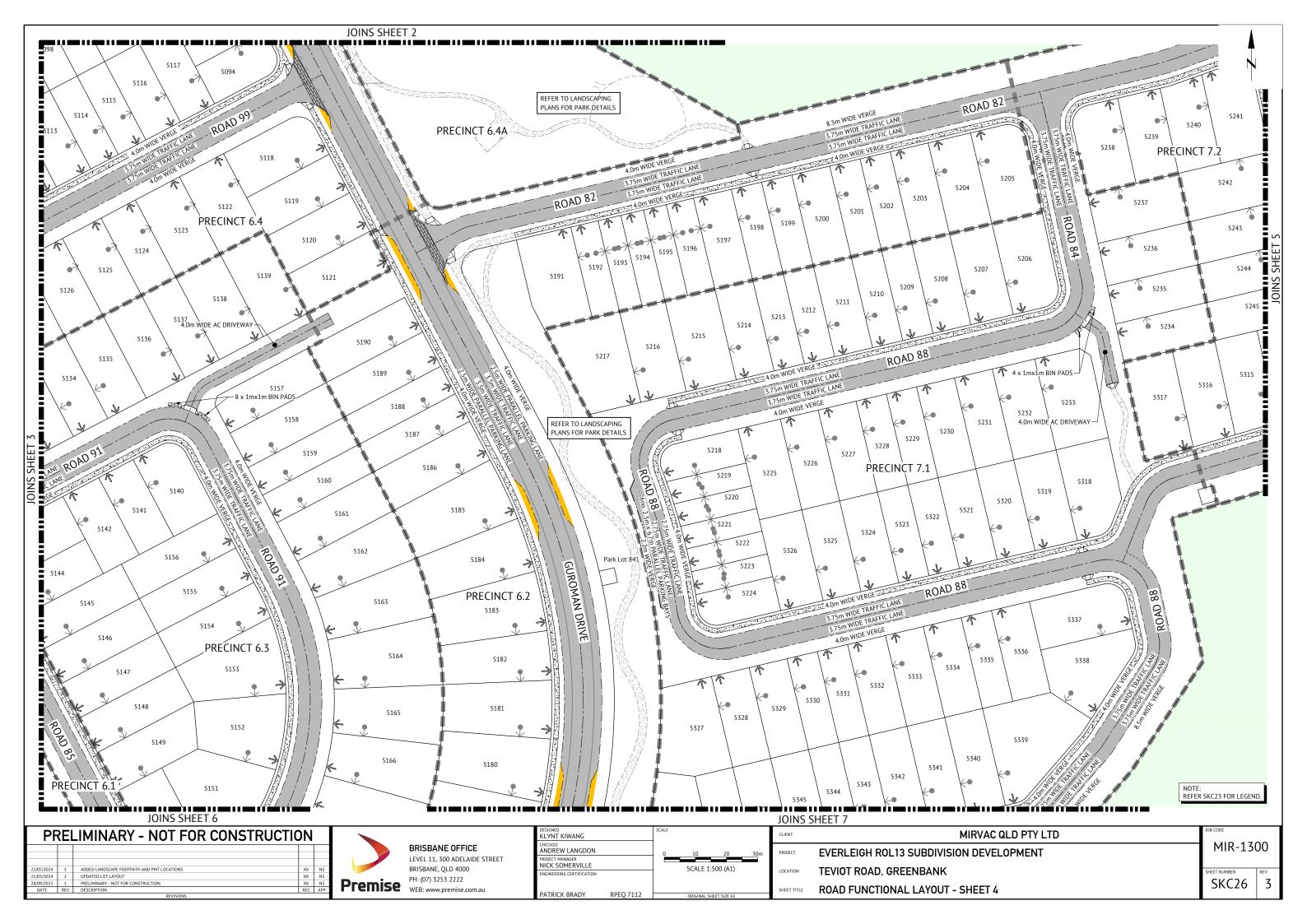
INTERNAL ROAD FUNCTIONAL PLANS

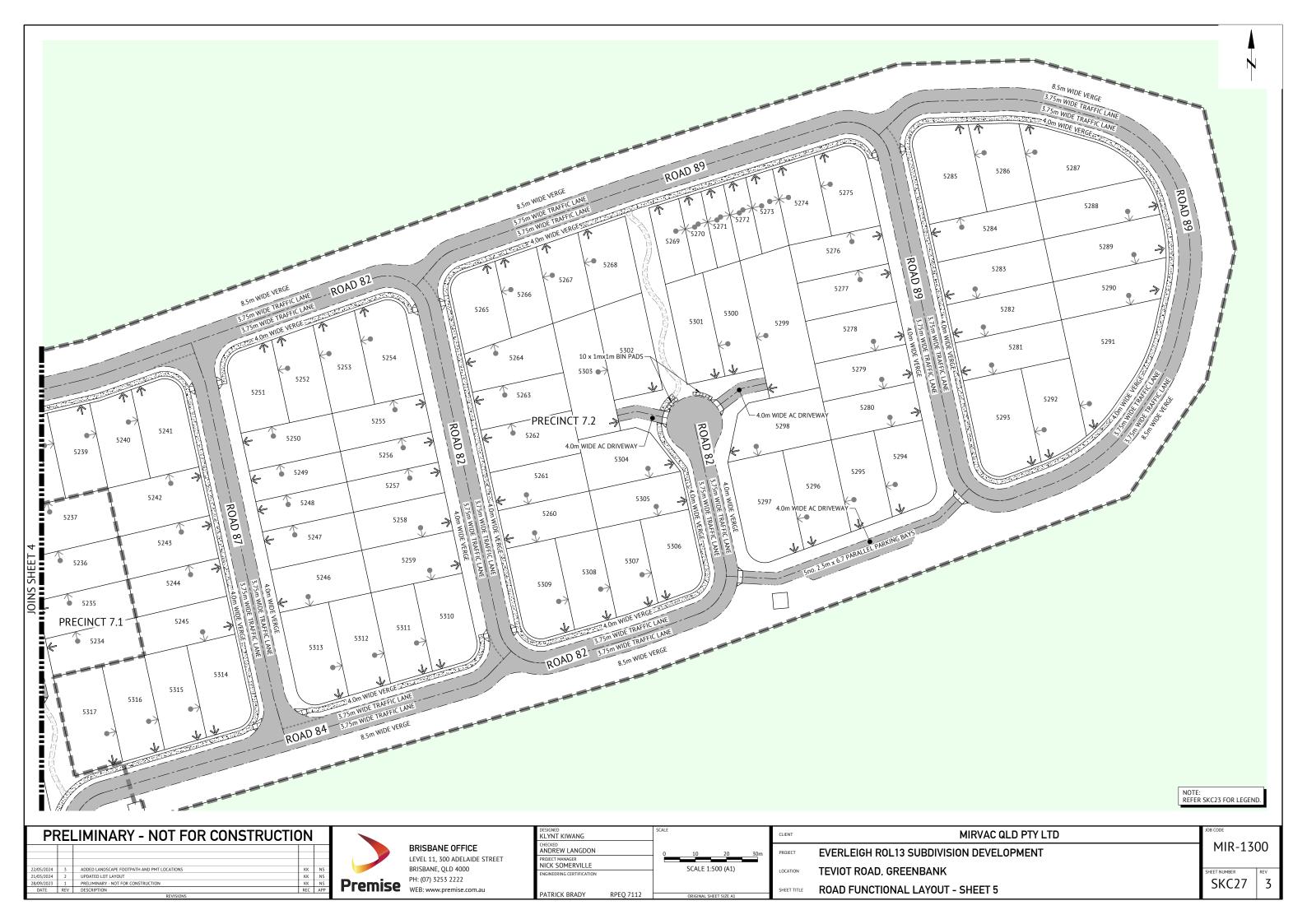
PAGE 18 | ROL13 – Precincts 5, 6 & 7 Everleigh

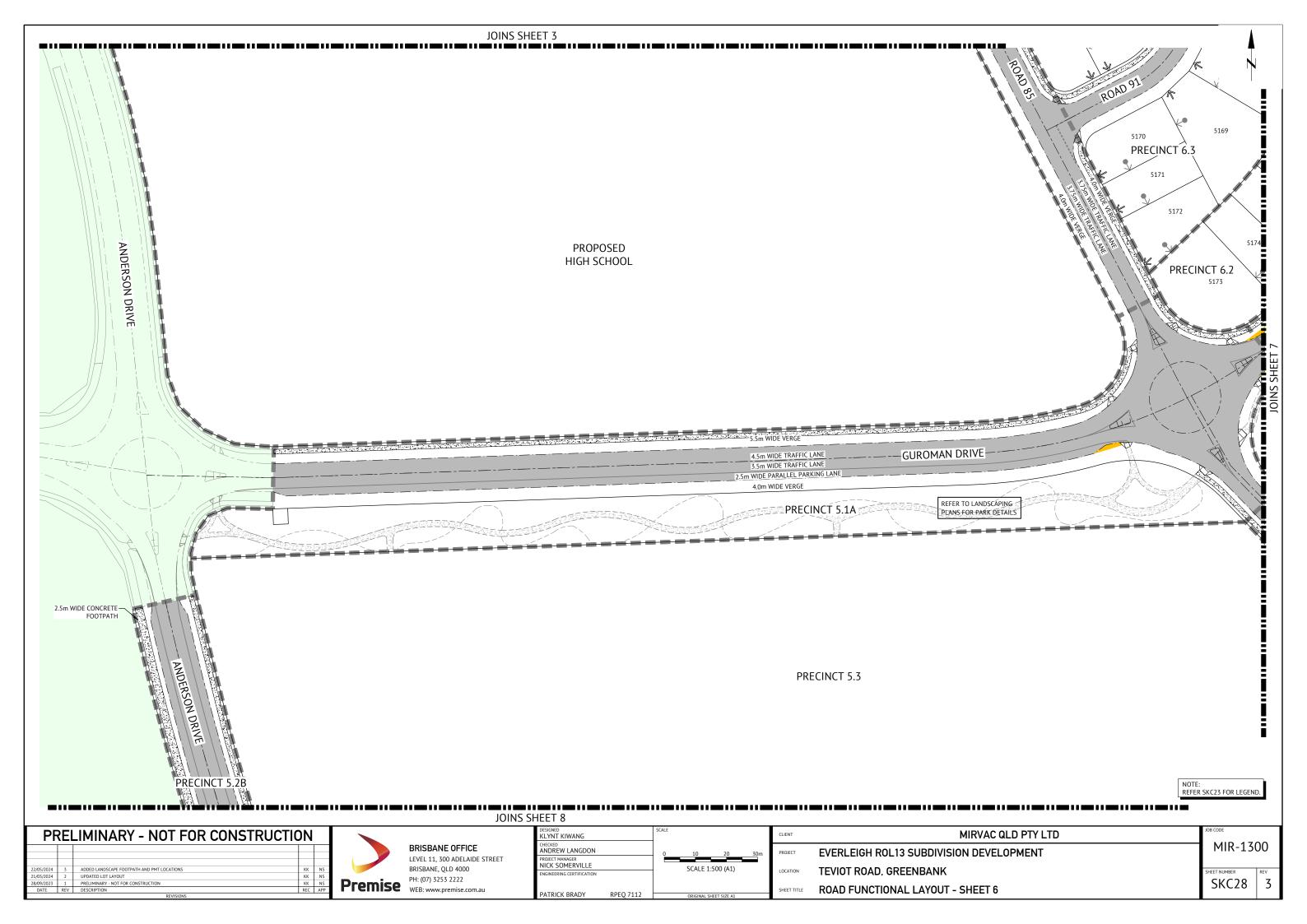


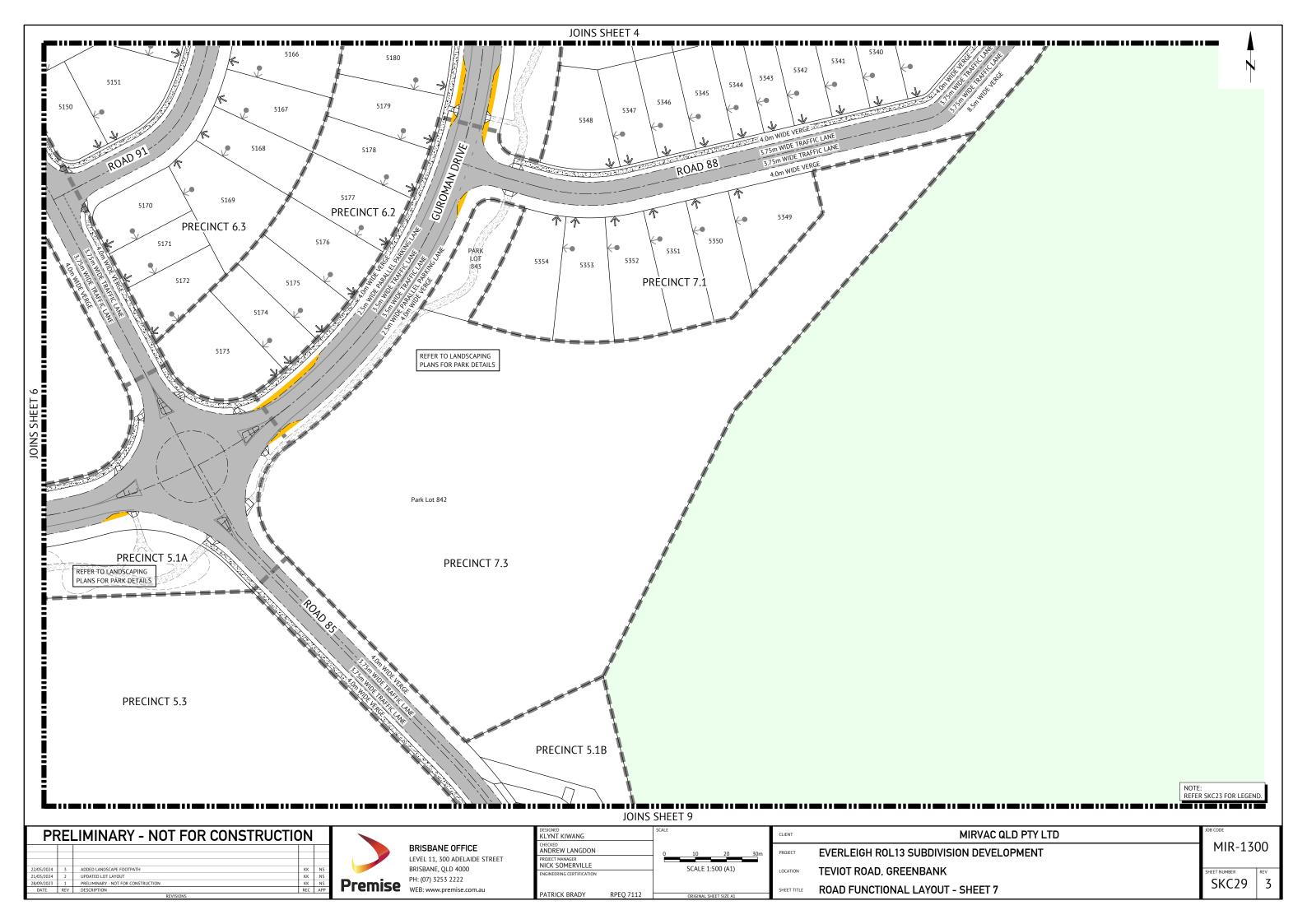


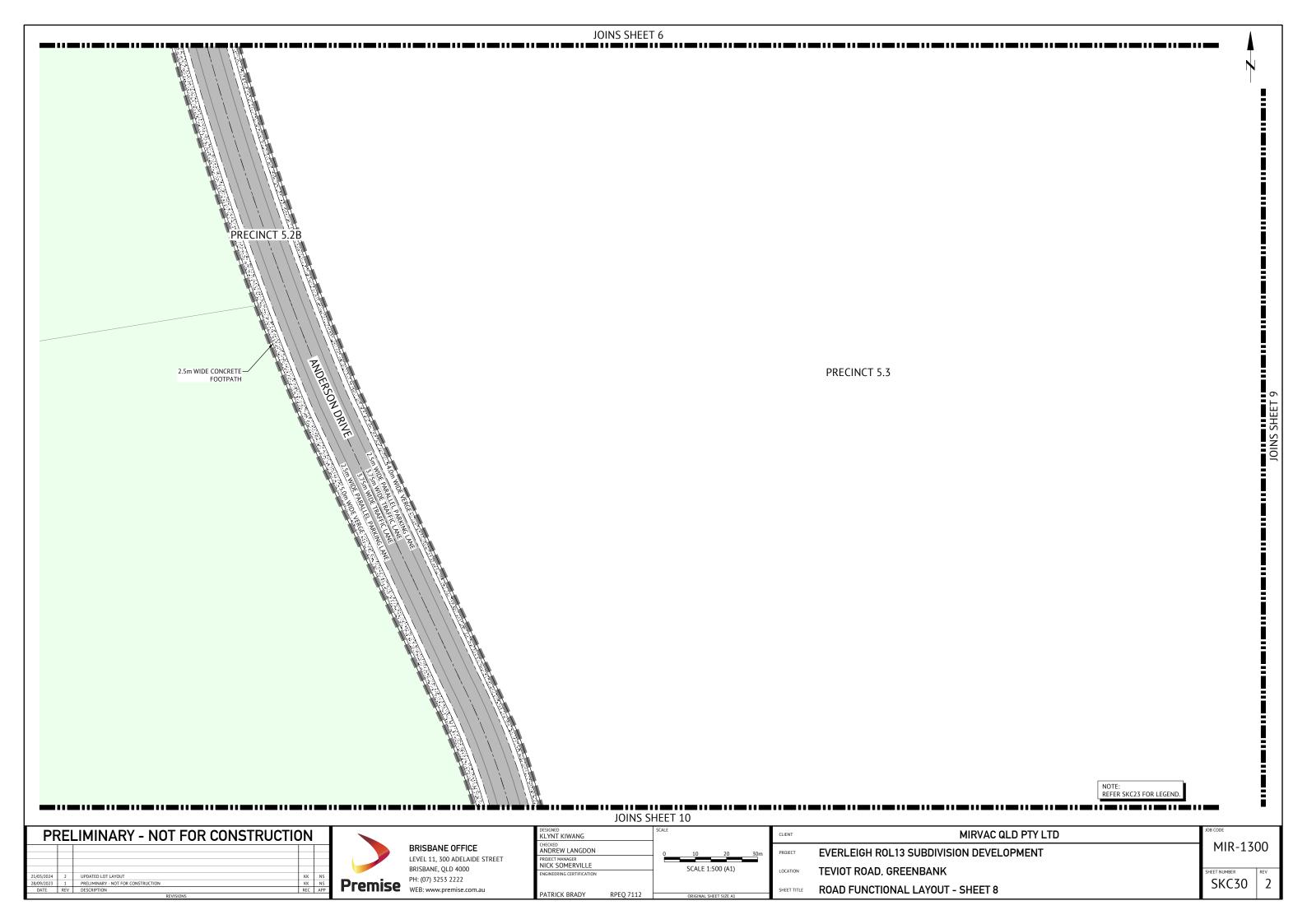


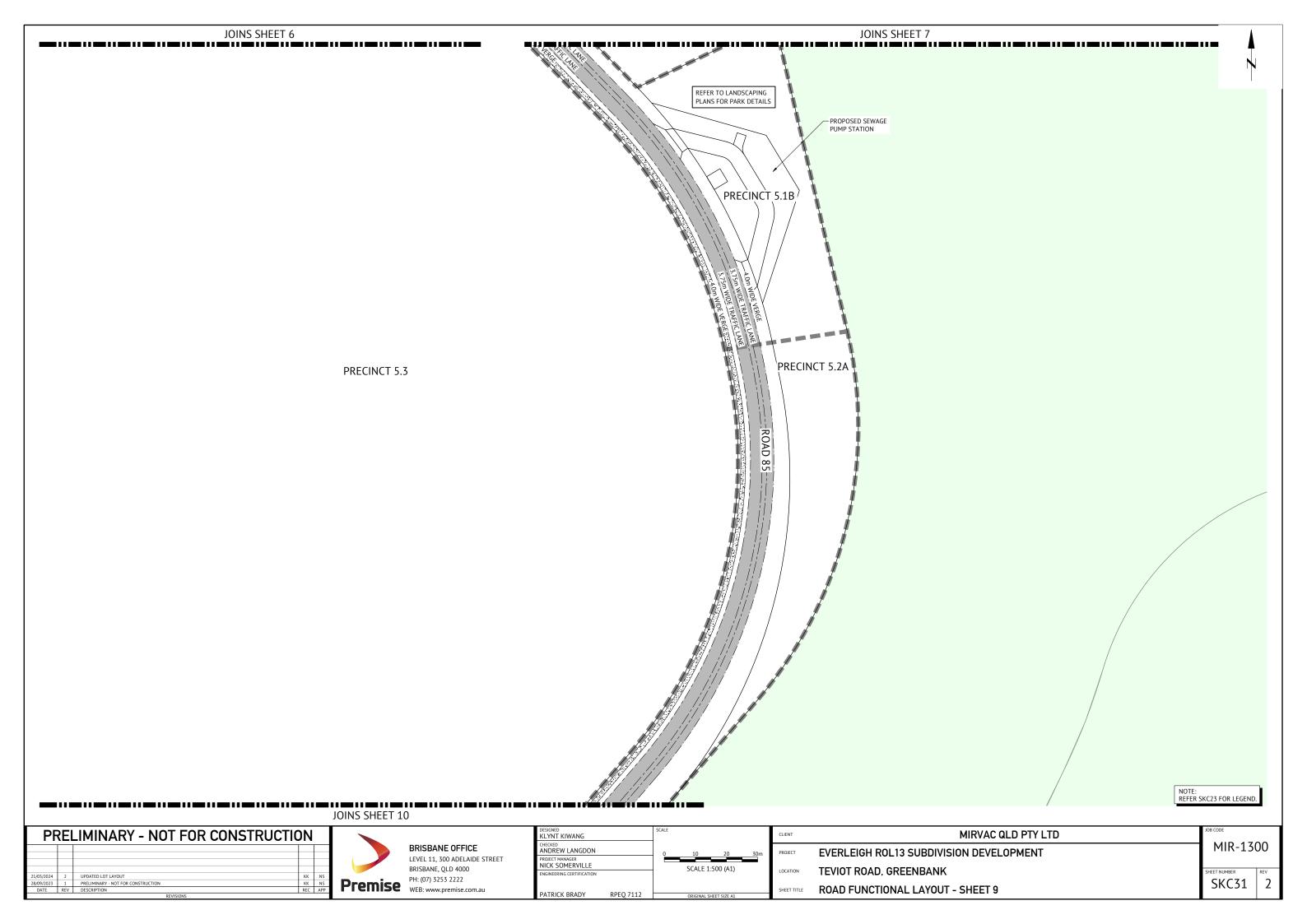


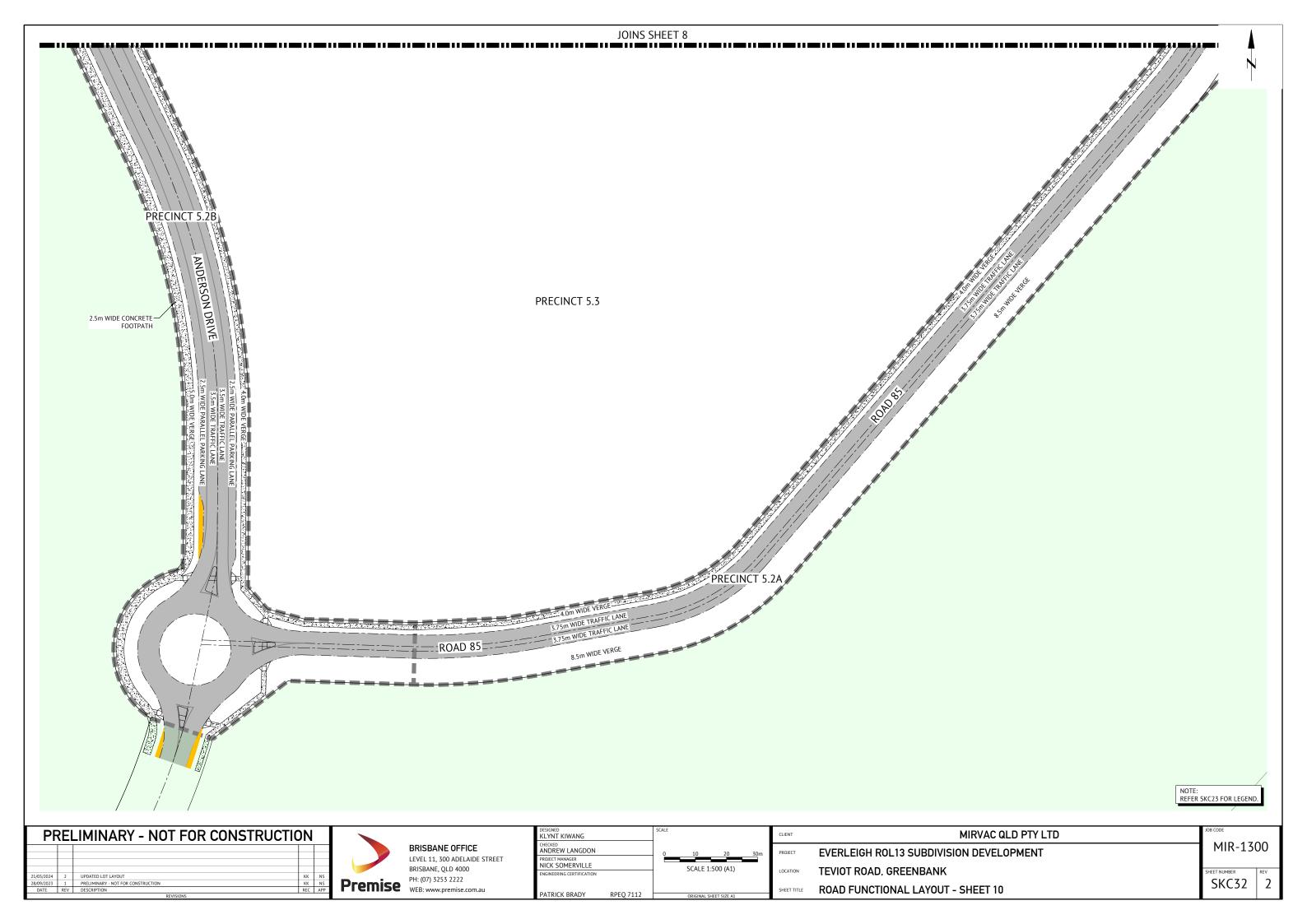


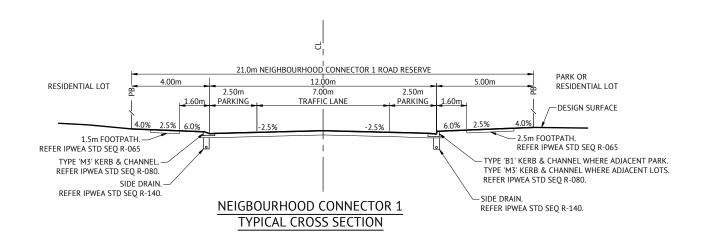


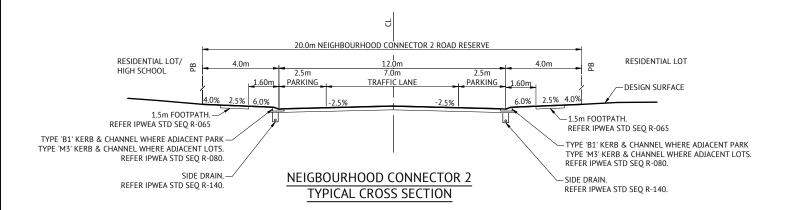


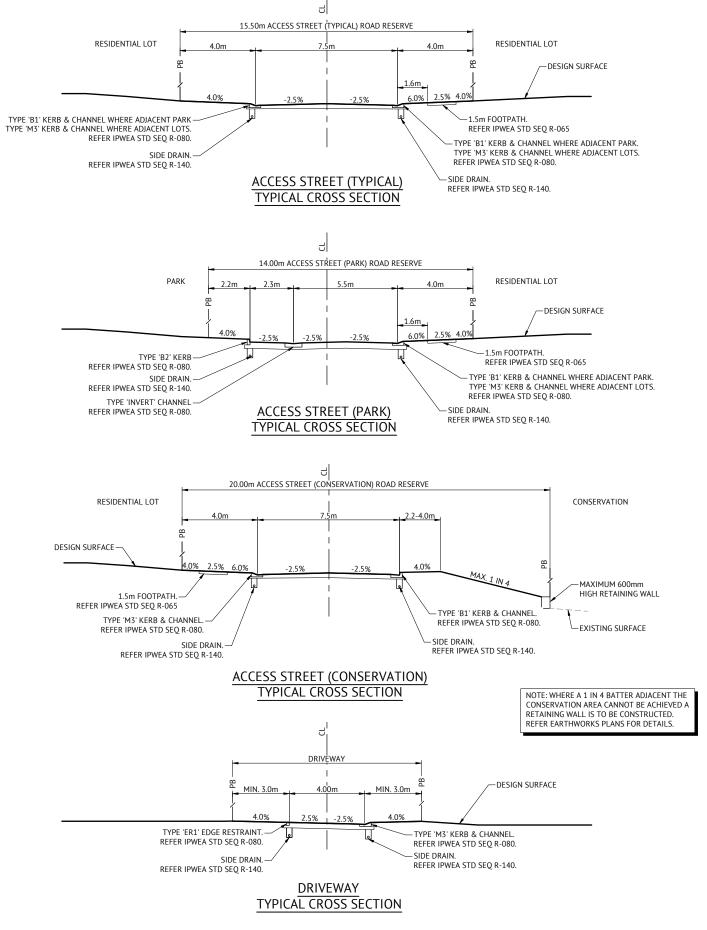


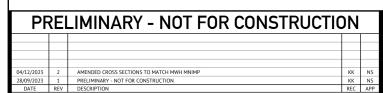














BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

I	DESIGNED		SCALE				I
L	KLYNT KIWANG						1
ı	CHECKED						ł
ı	ANDREW LANGDON		0	2	4	6m	ı
ı	PROJECT MANAGER						ı
ı	NICK SOMERVILLE			SCALE 1:	100 (Δ1)		1
	ENGINEERING CERTIFICATION			JONEE 1.	100 (/11)		1
ı							1
ı							1
1	PATRICK BRADY	RPEQ 7112		ORIGINAL SH	IEET SIZE A1		ı

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	TYPICAL ROAD CROSS SECTIONS

MIR-1300

SKC33



APPENDIX E

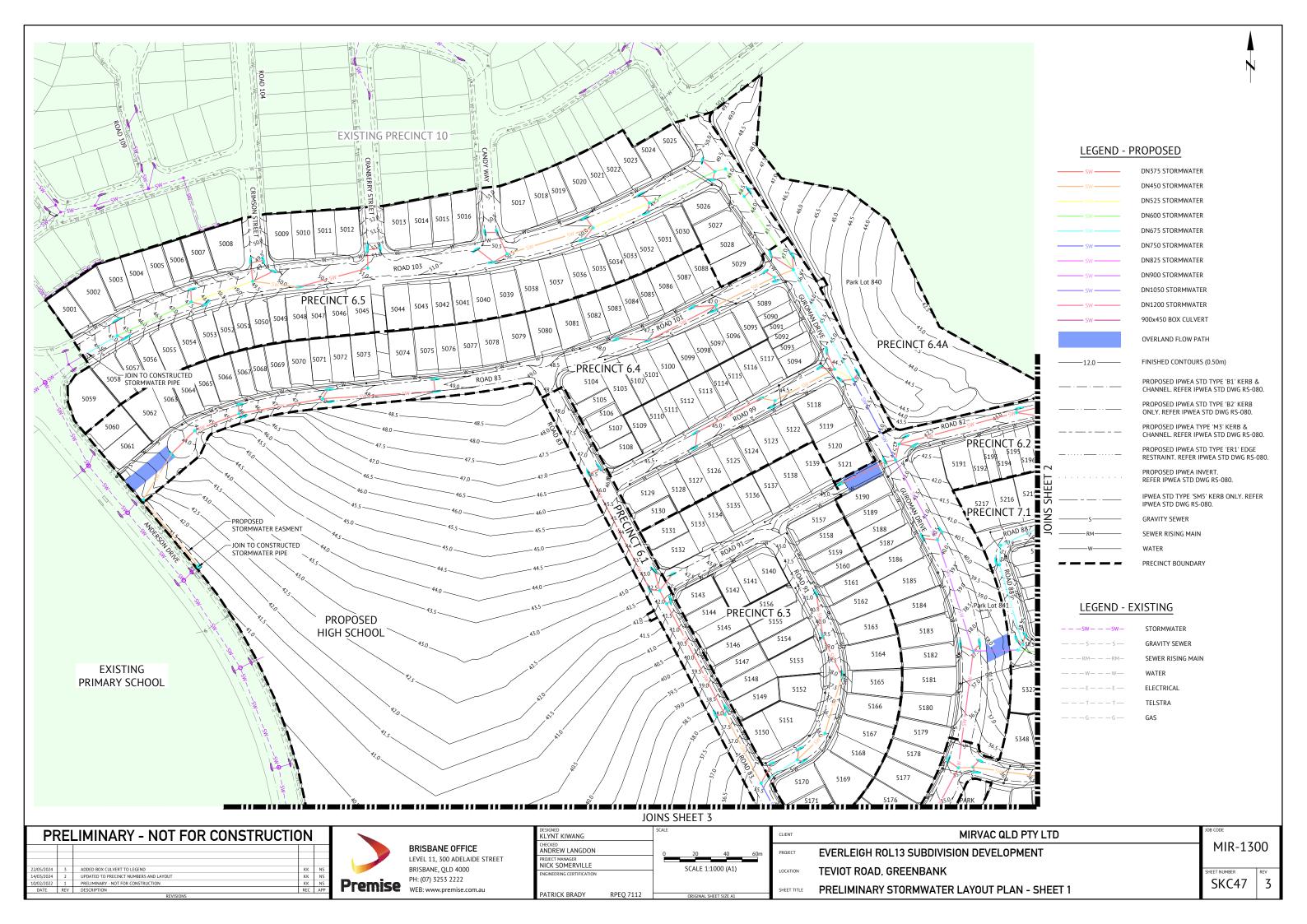
TRAFFIC IMPACT ASSESSMENT – supplied in separate document



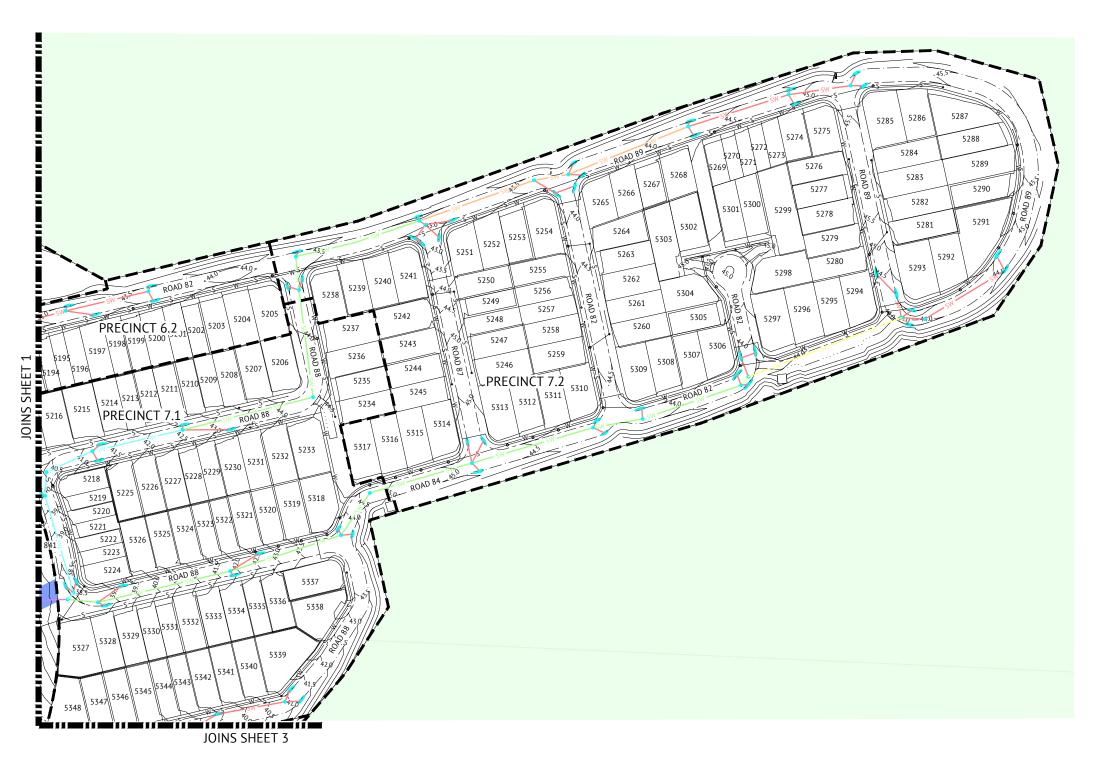
APPENDIX F

PRELIMINARY STORMWATER DRAINAGE PLANS

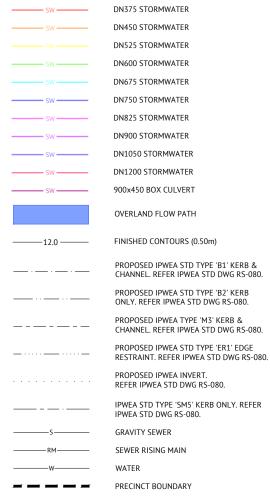
PAGE 20 | ROL13 – Precincts 5, 6 & 7 Everleigh







LEGEND - PROPOSED



LEGEND - EXISTING

SWSW-	STORMWATER
— — S — — S —	GRAVITY SEWER
RMRM-	SEWER RISING MA
w	WATER
— — — E — — — E —	ELECTRICAL
— — — T — — T —	TELSTRA
	GAS

PF	PRELIMINARY - NOT FOR CONSTRUCTION							
22/05/2024	7	ADDED BOX CULVERT TO LEGEND	KK	NS				
14/03/2024	2	LIPDATED TO PRECINCT NUMBERS AND LAYOUT	KK	NS				
10/02/2022	1	PRELIMINARY - NOT FOR CONSTRUCTION	KK	NS				
DATE	REV	DESCRIPTION	REC	APP				
		REVISIONS						

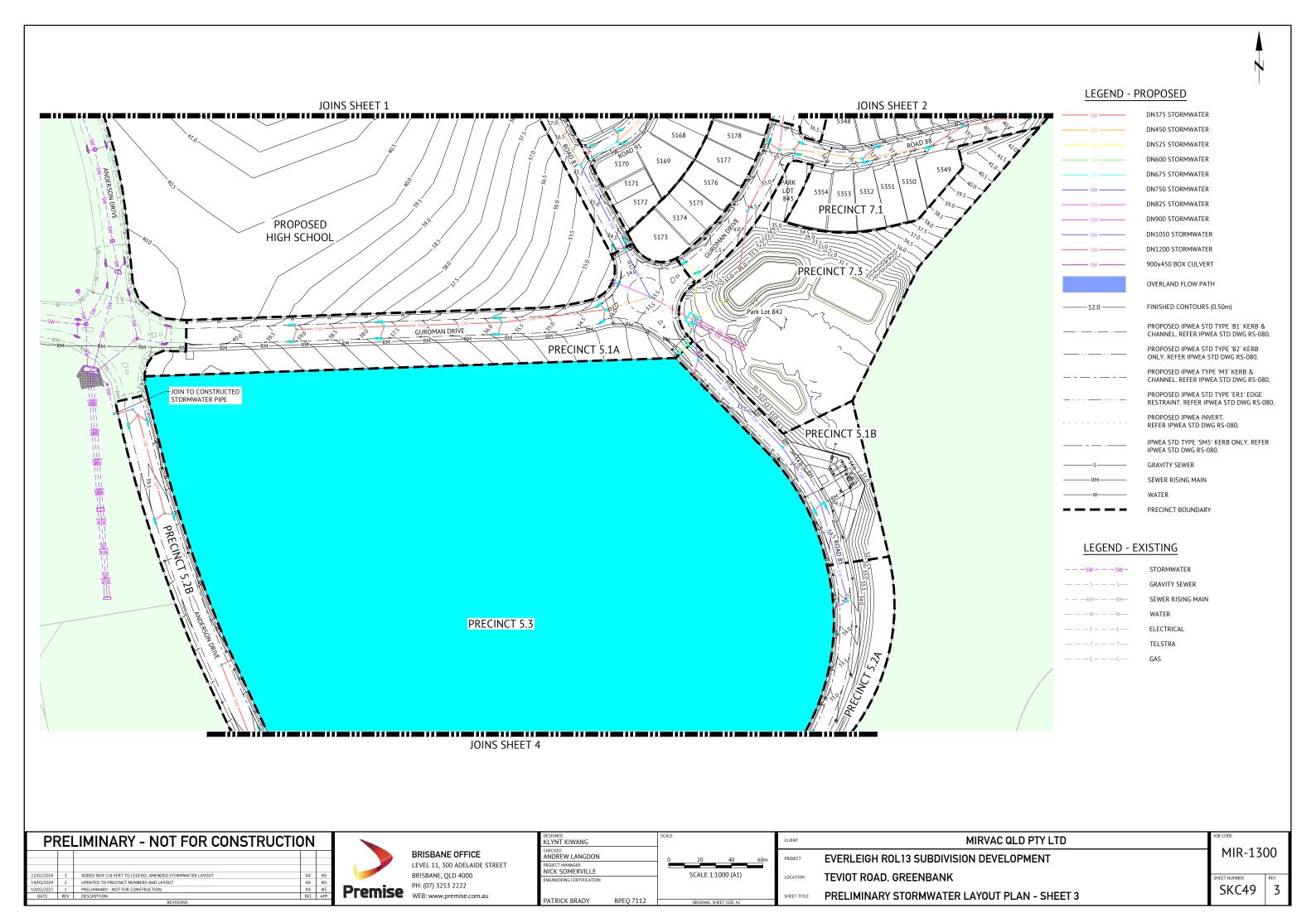


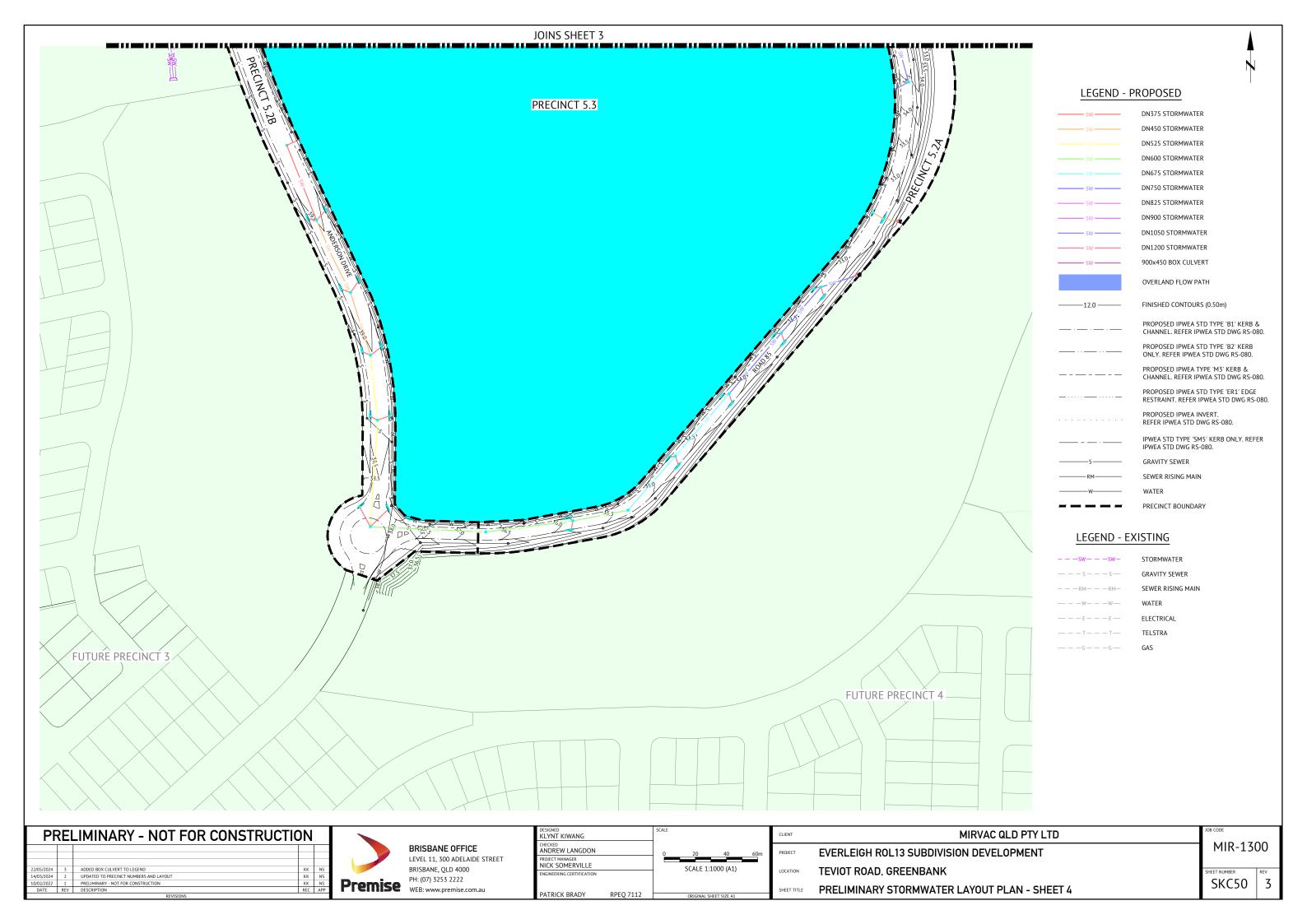
DESIGNED		SCALE			
KLYNT KIWANG					
CHECKED ANDREW LANGDON					
ANDREW LANGDON		. 0	20	40	60m
PROJECT MANAGER					
NICK SOMERVILLE			SCALE 1:1	000 (Δ1)	
ENGINEERING CERTIFICATION			JCALL 1.1	000 (711)	
PATRICK BRADY	RPEQ 7112		ORIGINAL SH	EET SIZE A1	

CLIENT	MIRVAC QLD PTY LTD	JOB
PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT	
LOCATION	TEVIOT ROAD, GREENBANK	SHE
SHEET TITLE	PRELIMINARY STORMWATER LAYOUT PLAN - SHEET 2	

MIR-1300

SKC48 REV

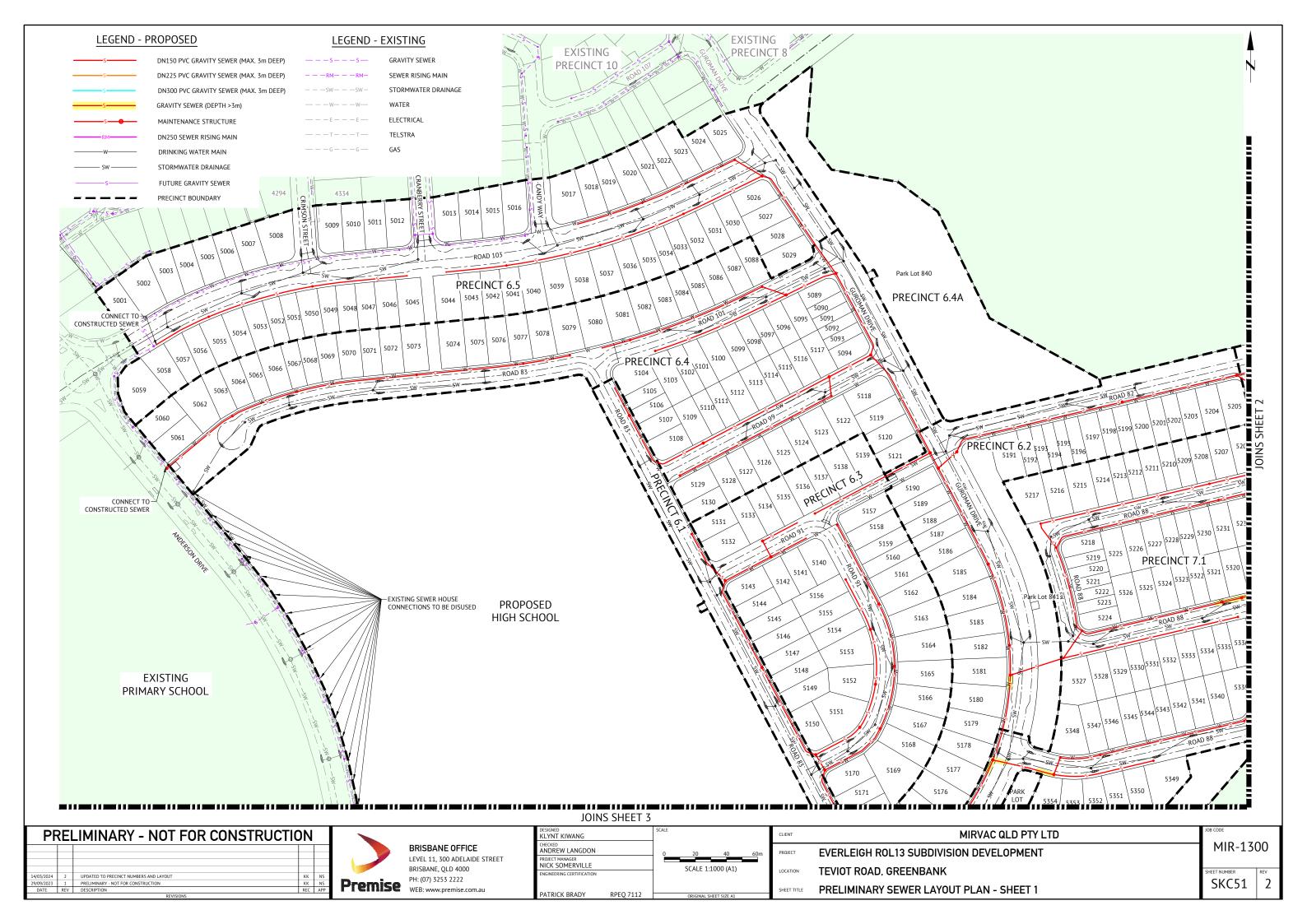




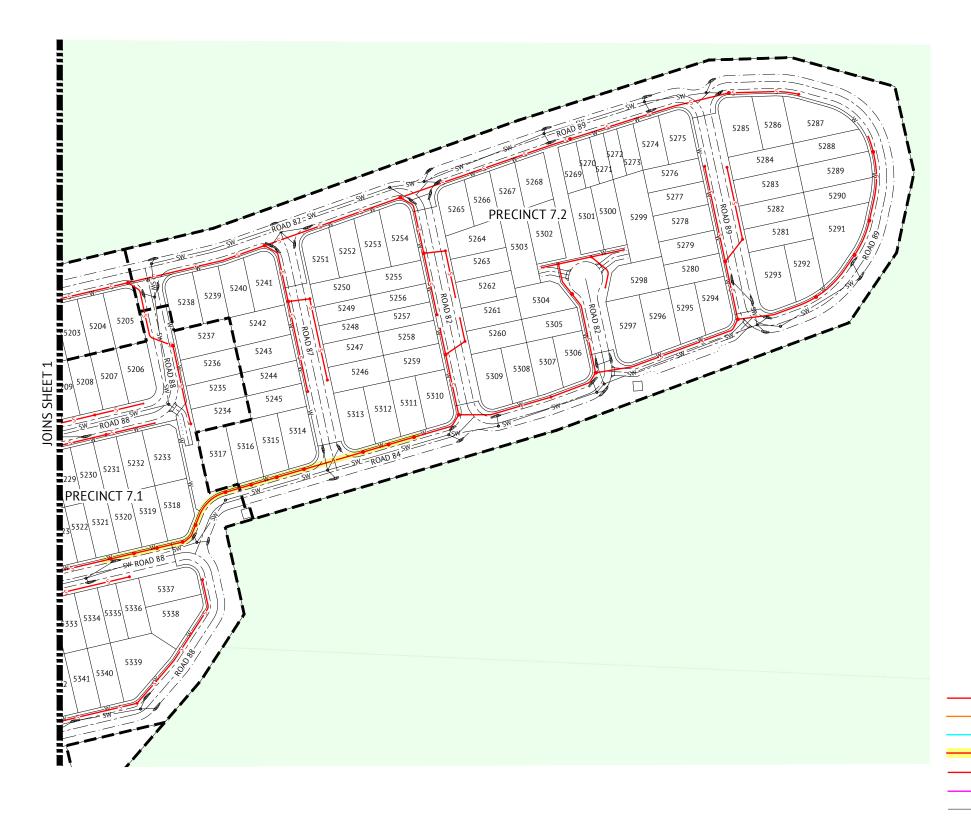


APPENDIX G

PRELIMINARY SEWER RETICULATION PLANS







NOTE:

PROPOSED SEWER WITHIN PRECINCT 7.2 TO CROSS ABOVE STORMWATER DRAINAGE TO MINIMISE LENGTH OF SEWER MAIN OVER 3m DEEP AND NUMBER OF MAINTENANCE STRUCTURES FOR HOUSE CONNECTIONS

LEGEND - PROPOSED

LEGEND - EXISTING DN150 PVC GRAVITY SEWER (MAX. 3m DEEP)

DN225 PVC GRAVITY SEWER (MAX. 3m DEEP) DN300 PVC GRAVITY SEWER (MAX. 3m DEEP) GRAVITY SEWER (DEPTH >3m) MAINTENANCE STRUCTURE

DN250 SEWER RISING MAIN

DRINKING WATER MAIN STORMWATER DRAINAGE

FUTURE GRAVITY SEWER PRECINCT BOUNDARY

GRAVITY SEWER SEWER RISING MAIN STORMWATER DRAINAGE WATER ELECTRICAL

TELSTRA

PRELIMINARY - NOT FOR CONSTRUCTION

UPDATED TO PRECINCT NUMBERS AND LAYOUT

BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 Premise PH: (07) 3253 2222
WEB: www.premise.com.au

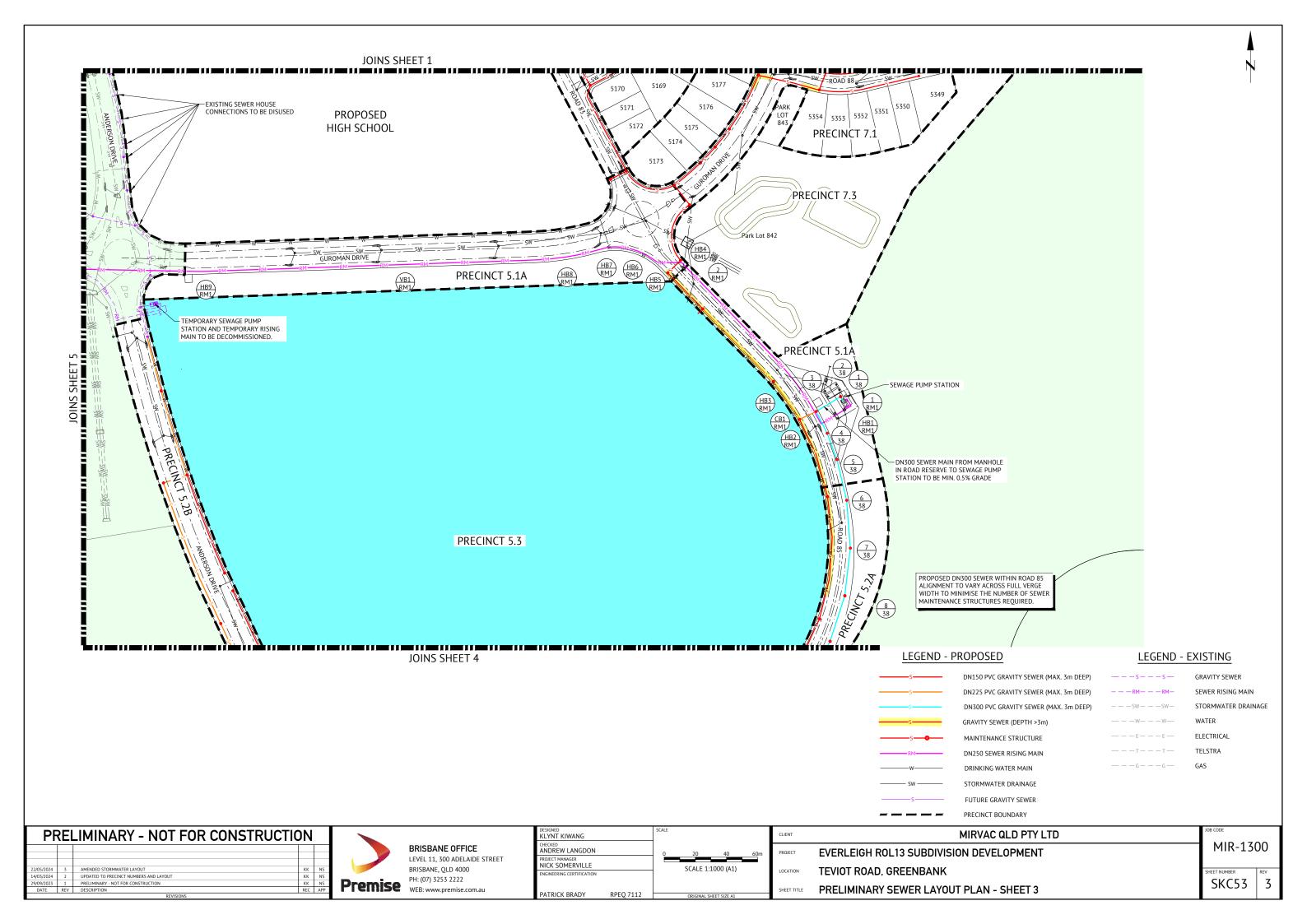
designed KLYNT KIWANG		SCALE				
THECKED ANDREW LANGDON		0	20	40	60m	l
PROJECT MANAGER						ı
NICK SOMERVILLE			SCALE 1:	ΙΩΩΩ (Δ1)		ı
NGINEERING CERTIFICATION			JC/ILL I.	1000 (711)		ı
						ı
PATRICK BRADY	RPEO 7112		ORIGINAL SE	HEET SIZE A1		1

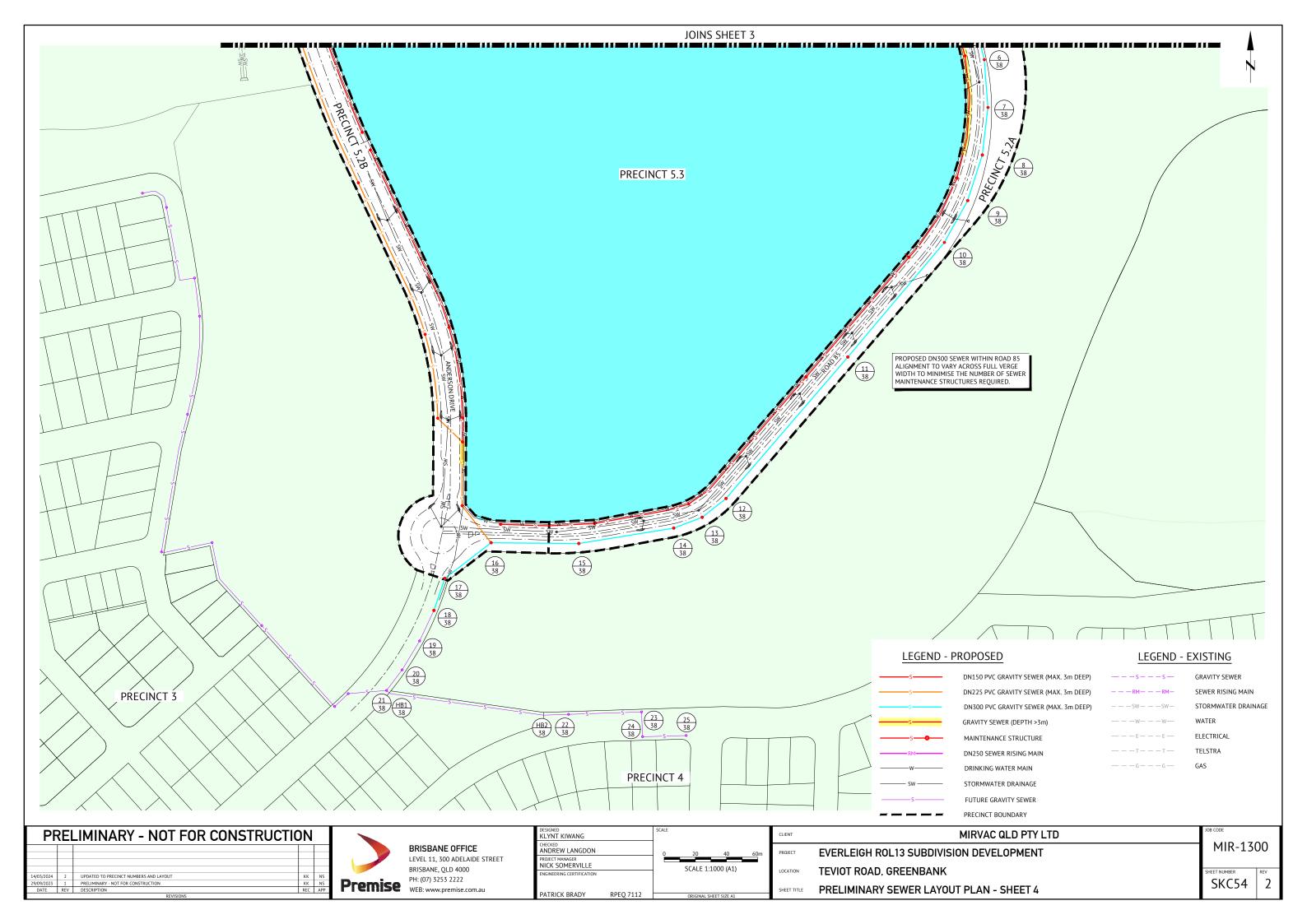
CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK

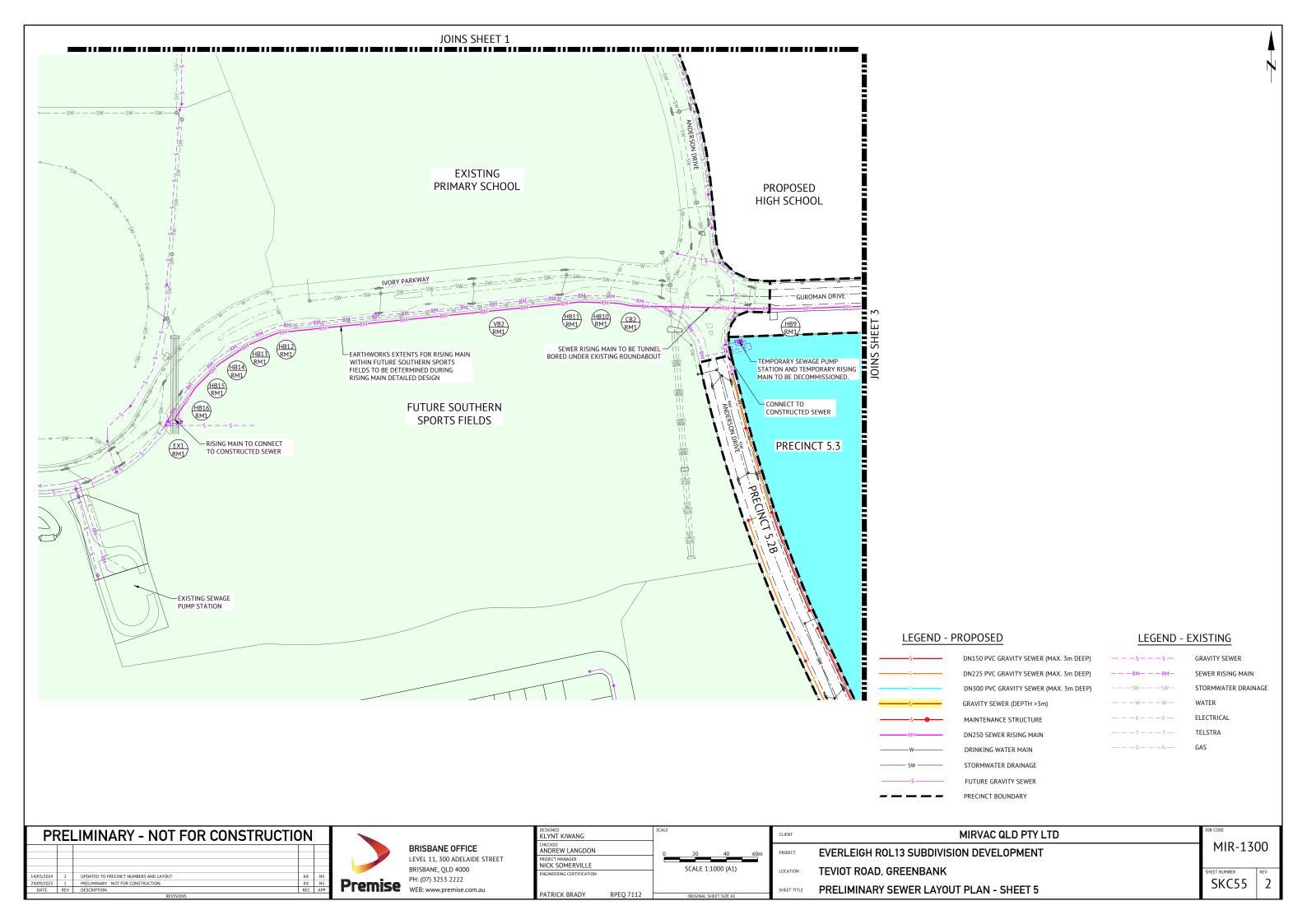
PRELIMINARY SEWER LAYOUT PLAN - SHEET 2

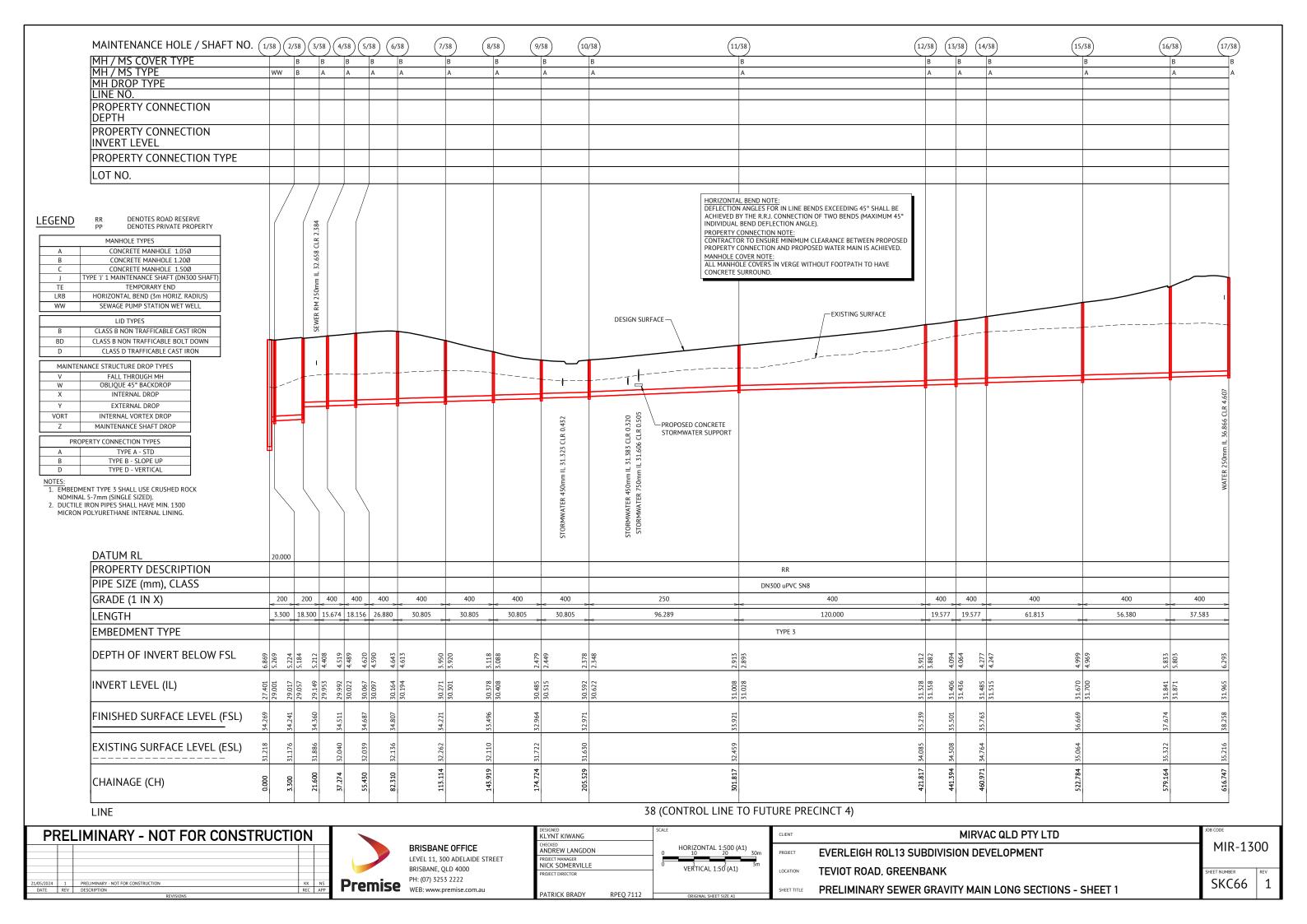
MIR-1300

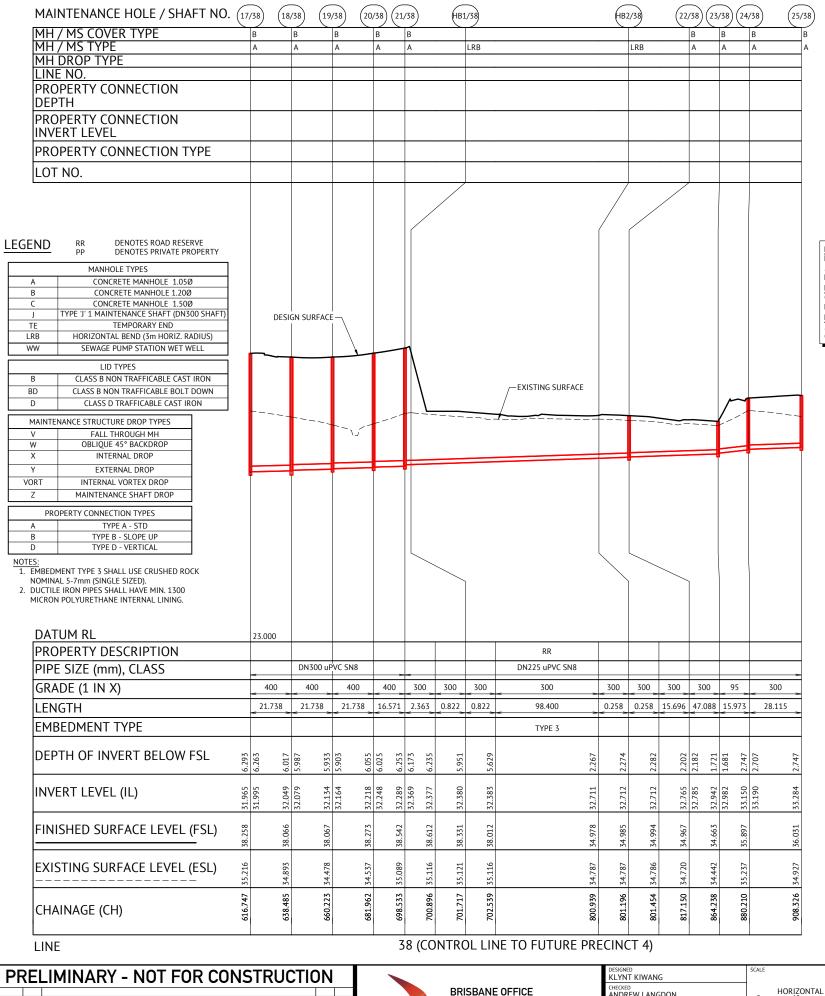
SKC52











HORIZONTAL BEND NOTE:
DEFLECTION ANGLES FOR IN LINE BENDS EXCEEDING 45° SHALL BE ACHIEVED BY THE R.R.J. CONNECTION OF TWO BENDS (MAXIMUM 45° INDIVIDUAL BEND DEFLECTION ANGLE).

PROPERTY CONNECTION NOTE:

CONTRACTOR TO ENSURE MINIMUM CLEARANCE BETWEEN PROPOSED PROPERTY CONNECTION AND PROPOSED WATER MAIN IS ACHIEVED.

ALL MANHOLE COVERS IN VERGE WITHOUT FOOTPATH TO HAVE CONCRETE SURROUND.

1/05/2024 1 PRELIMINARY - NOT FOR CONSTRUCTION DATE REV DESCRIPTION

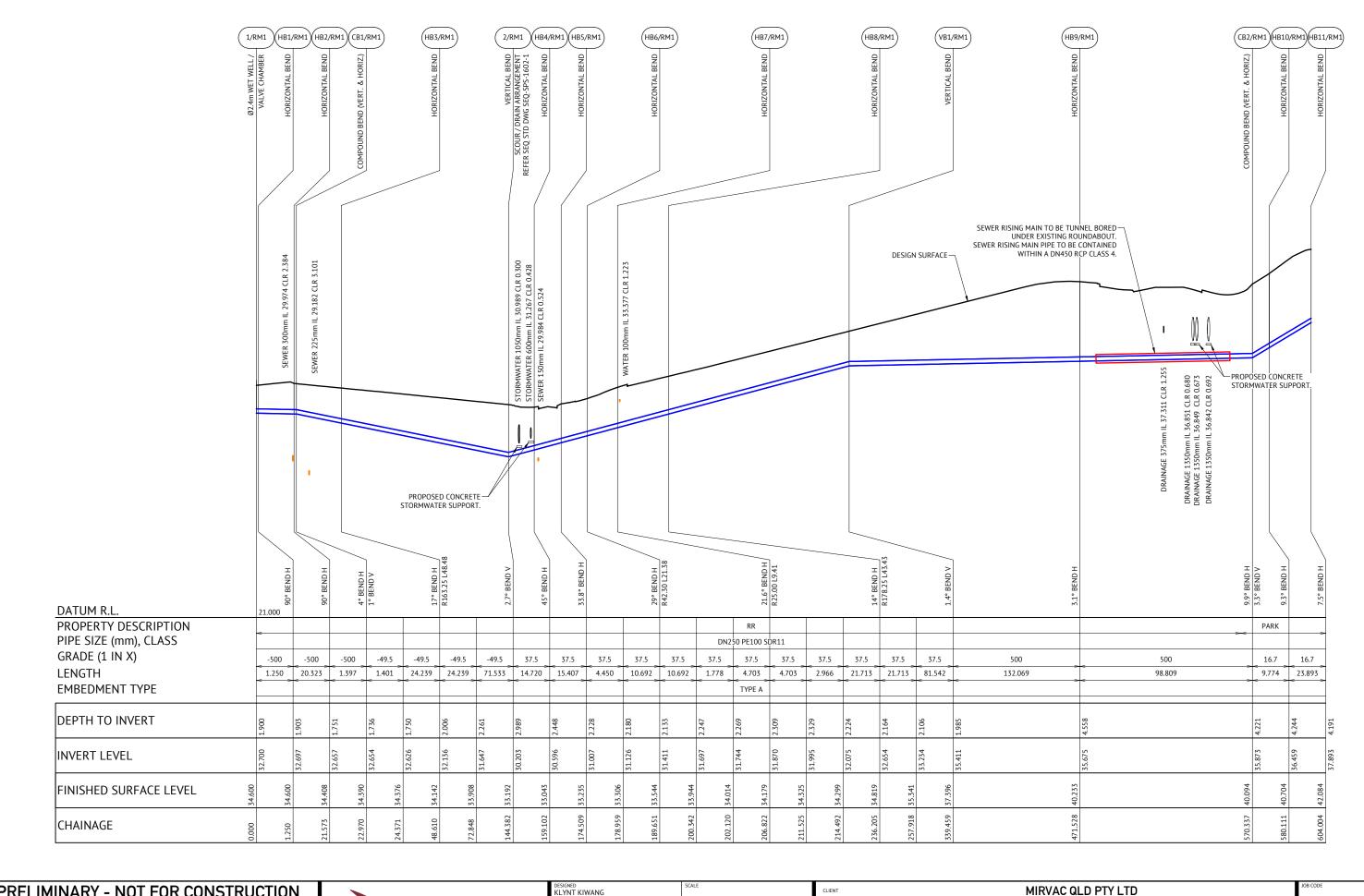


LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

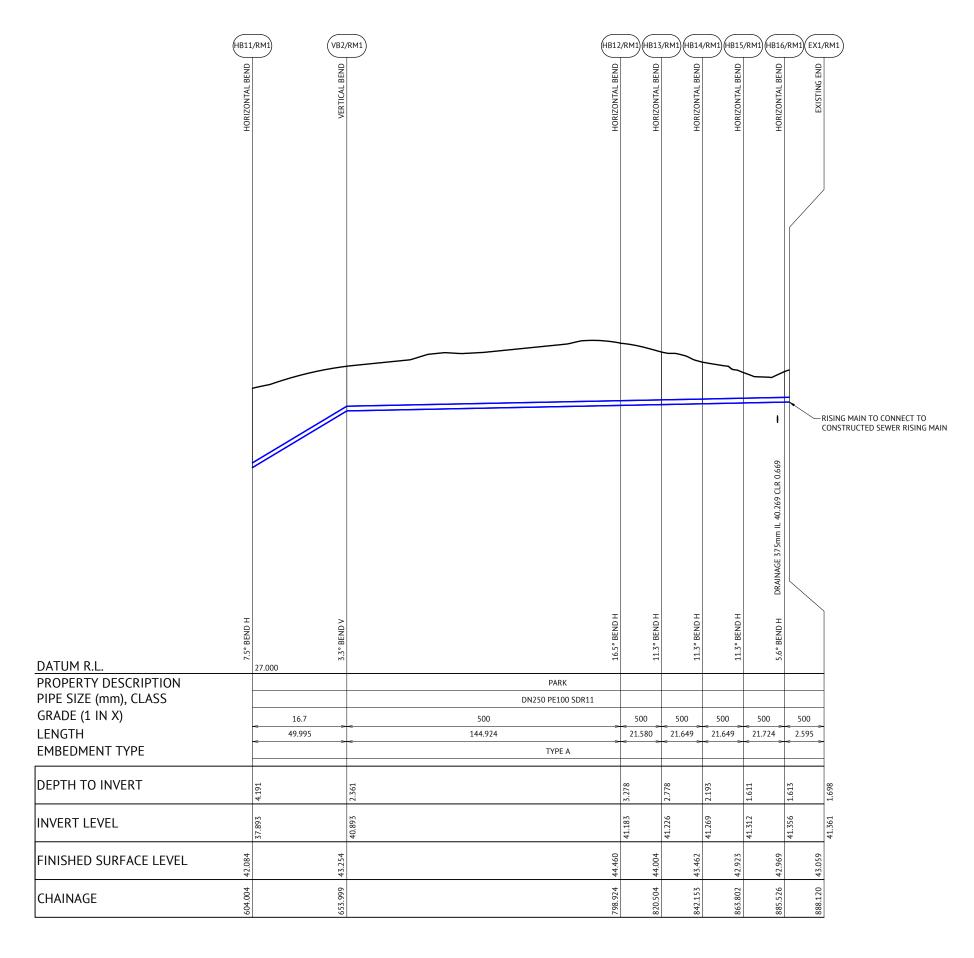
DESIGNED KLYNT KIWANG		SCALE	
CHECKED ANDREW LANGDON		0	HORIZONTAL 1:500 (A1)
PROJECT MANAGER NICK SOMERVILLE		0	1 VERTICAL 1:50 (A1)
PROJECT DIRECTOR			VERTICAL 1.50 (A1)
PATRICK BRADY	RPEQ 7112	-	ORIGINAL SHEET SIZE A1

	CLIENT	MIRVAC QLD PTY LTD
30m	PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT
3m	LOCATION	TEVIOT ROAD, GREENBANK
	SHEET TITLE	PRELIMINARY SEWER GRAVITY MAIN LONG SECTIONS - SHEET 2

MIR-1300 SKC67



PRELIMINARY - NOT FOR CONSTRUCTION			DESIGNED KLYNT KIWANG		SCALE	CLIENT	MIRVAC QLD PTY LTD	JOB CODE
		BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET	ANDREW LANGDON PROJECT MANAGER		0 HORIZONTAL 1:1000 (A1) 0 20 40 60m	PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT	MIR-1300
		BRISBANE, QLD 4000	NICK SOMERVILLE PROJECT DIRECTOR		- VERTICAL 1:100 (A1)	LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER REV
21,05,2024 1 PRELIMINARY - NOT FOR CONSTRUCTION KK NS DATE REV DESCRIPTION REC APP REVISIONS	Premise	WFB: www.premise.com.au	PATRICK BRADY	RPEQ 7112	ORIGINAL SHEET SIZE A1	SHEET TITLE	PRELIMINARY SEWER RISING MAIN LONG SECTIONS - SHEET 1	SKC68 1



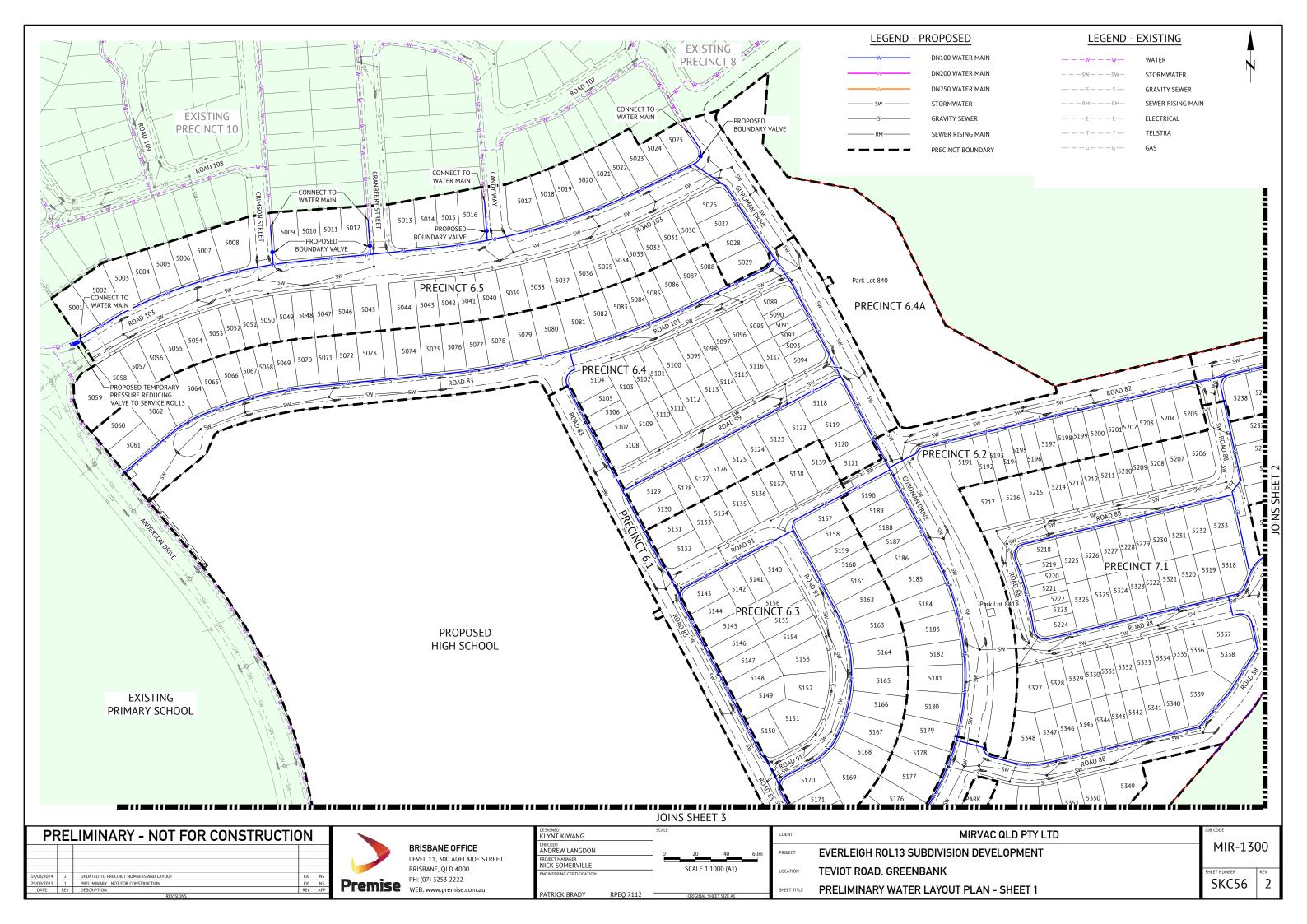
PRELIMINARY - NOT FOR CONSTRUCTION		DESIGNED SCALE KLYNT KIWANG	CLIENT	MIRVAC QLD PTY LTD	JOB CODE
	BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET	ANDREW LANGDON 0 HORIZONTAL 1:1000 (A1) 60m	PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT	MIR-1300
	BRISBANE, QLD 4000 PH: (07) 3253 2222	NICK SOMERVILLE PROJECT DIRECTOR O 2 4 6m VERTICAL 1:100 (A1)	LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER REV
21/05/2024 1 PRELIMINARY - NOT FOR CONSTRUCTION KK NS DATE REV DESCRIPTION REC APP REVISIONS	Premise Pr. (07) 3233 2222 WEB: www.premise.com.au	PATRICK BRADY RPEQ 7112 ORIGINAL SHEET SIZE A1	SHEET TITLE	PRELIMINARY SEWER RISING MAIN LONG SECTIONS - SHEET 2	SKC69 1



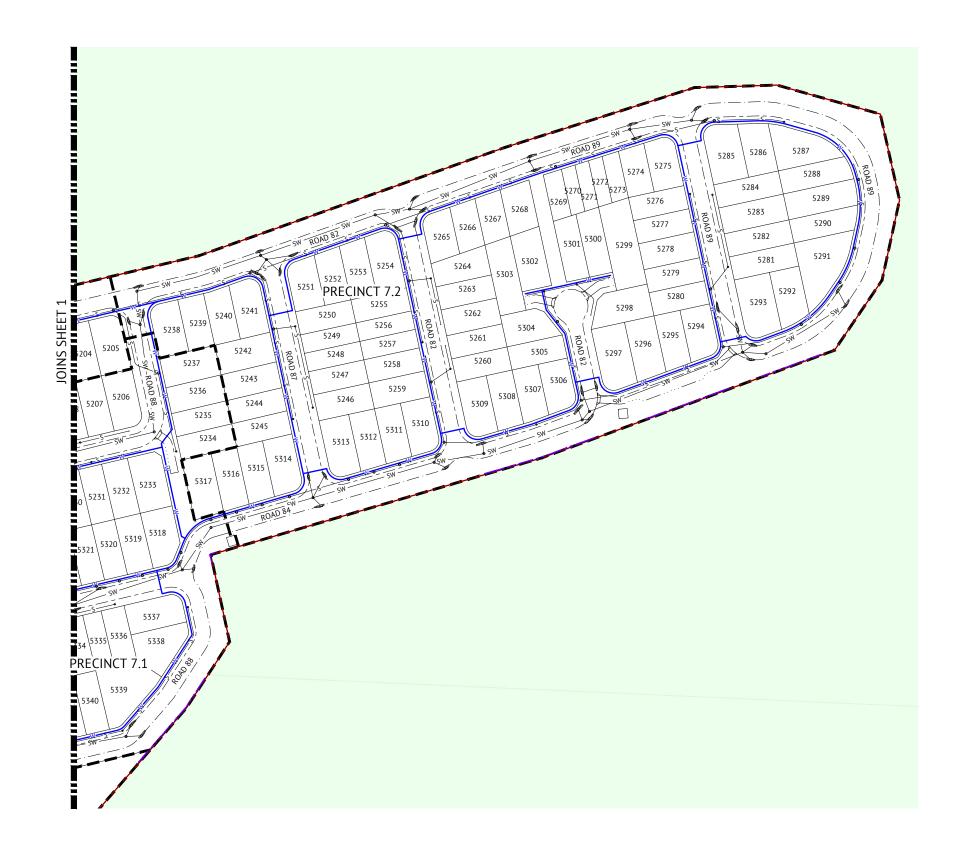
APPENDIX H

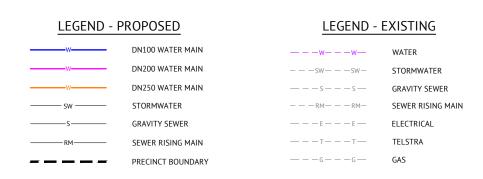
PRELIMINARY WATER RETICULATION PLANS

PAGE 22 | ROL13 – Precincts 5, 6 & 7 Everleigh









PRELIMINARY - NOT FOR CONSTRUCTION						
14/03/2024	2	UPDATED TO PRECINCT NUMBERS AND LAYOUT	KK	NS		
29/09/2023	1	PRELIMINARY - NOT FOR CONSTRUCTION	KK	NS		
DATE	REV	DESCRIPTION	REC	APP		
		REVISIONS				



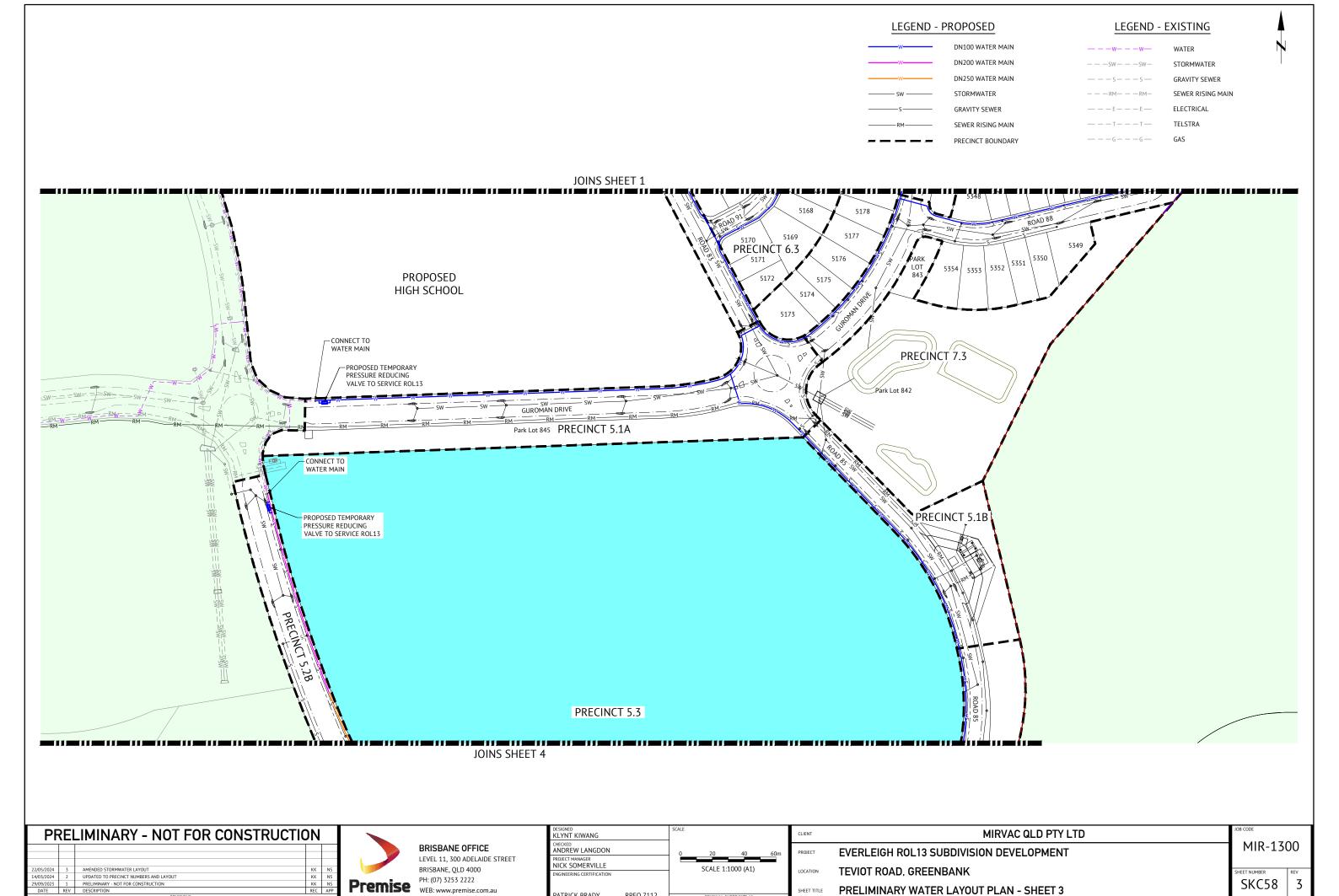
LEVEL 11, 300 ADELAIDE STREET

designed KLYNT KIWANG		SCALE				
CHECKED ANDREW LANGDON		0	20	40	60m	r
PROJECT MANAGER		Ě	صقص			ı
NICK SOMERVILLE		SCALE 1:1000 (A1)				
ENGINEERING CERTIFICATION			JC/ LEE 1.1	000 (/12)		ı
						ı
						1
PATRICK BRADY	RPEQ 7112		ORIGINAL SH	EET SIZE A1		1

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH ROL13 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	PRELIMINARY WATER LAYOUT PLAN - SHEET 2

MIR-1300

SKC57



PATRICK BRADY

RPEQ 7112

PRELIMINARY WATER LAYOUT PLAN - SHEET 3

