

# Proposed St. Paul's Residential Development, Raheny, Dublin 5

**Client: Crekav Trading GP Ltd**

**Stage 1 Road Safety Audit (for Planning)**





**PROPOSED ST. PAUL'S RESIDENTIAL DEVELOPMENT, RAHENY,  
DUBLIN 5**

Description:

**Stage 1 Road Safety Audit (for Planning)**

Author:

**Ken Swaby**

**Mark Andrews**

Audit Brief Submitted By:

**O'Connor Sutton Cronin Consulting Engineers**

Distribution:

**O'Connor Sutton Cronin Consulting Engineers**



**1 AUDIT INFORMATION**

- 1.1 Title** RSA ST PAULS S1
- 1.2 Audit Reference Number** RSA ST PAULS S1 KS 299
- 1.3 Project Code** STPAULS
- 1.4 Date Audit Completed** 26<sup>th</sup> August 2019
- 1.5 Audit Attended By** Ken Swaby  
Mark Andrews
- 1.6 Audit Team**
  - Team Leader** Ken Swaby, ILTP
  - Team Member** Mark Andrews, ILTP

**1.7 Information Received**

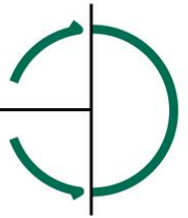
ITEM		Supplied	Comments
A	Plans	Yes	<p><u>Received from O'Connor Sutton Cronin Consulting Engineers</u></p> <p>O'Connor Sutton Cronin Consulting Engineers Drawings:</p> <ol style="list-style-type: none"> <li>1. <i>Proposed Road Layout Sheet 1 of 2</i>, ref. N251-C01, rev. P7</li> <li>2. <i>Proposed Road Layout Sheet 2 of 2</i>, ref. N251-C01, rev. P7</li> <li>3. <i>Proposed Road Longsections</i>, ref. N251-C03, rev. P6</li> <li>4. <i>Typical Cross Sections</i>, ref. N251-D01, rev. P6</li> <li>5. <i>Road Markings &amp; Traffic Signs Sheet 1 of 2</i>, ref. N251-F01, rev. P6</li> <li>6. <i>Road Markings &amp; Traffic Signs Sheet 2 of 2</i>, ref. N251-F01, rev. P6</li> </ol> <p>Brady Shipman Martin Landscape Drawings:</p> <ol style="list-style-type: none"> <li>7. <i>Landscape Masterplan</i>, ref. N251-F01, rev. P6</li> </ol>
B	Traffic Count Data	No	
C	Speed Count Data	No	
D	Accident Data	No	
E	Design Standards	No	
F	Design Brief	No	
G	Other Data	No	



## 2 INTRODUCTION

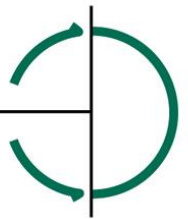
- 2.1.1 This is a Stage 1 Road Safety Audit undertaken at planning application stage which examines the road safety implications of the proposed St. Paul's residential development, Raheny, Dublin 5, and its connection to the existing road network.
- 2.1.2 The extent of this Stage 1 Road Safety Audit is the proposed main access road to the development, the proposed access junction with Sybil Hill Road, and along Sybil Hill Road approaching the proposed access. This Stage 1 RSA does not include the basement level access ramp or basement level proposals.
- 2.1.3 This Stage 1 Road Safety Audit is based upon drawings provided to the design team, as included above under paragraph 1.7.
- 2.1.4 The Feedback Form for this Stage 1 Road Safety Audit is included in **Appendix A** of this report.
- 2.1.5 This Stage 1 Road Safety Audit has been conducted in accordance with the Transport Infrastructure Ireland publication entitled *Road Safety Audit*, ref. GE-STY-01024, March 2015.
- 2.1.6 A site visit was carried out on 30<sup>th</sup> July 2015 in daylight conditions, at approximately 16:00hrs. The weather was dry. A repeat site visit was carried out on 12<sup>th</sup> March 2019 in daylight conditions, at approximately 10:30hrs. The weather was dry and overcast.
- 2.1.7 This Stage 1 Road Safety Audit specifically examines the road safety aspects of the proposed development. It is not an appraisal of policy or strategic issues associated with the planning of the development and it does not examine or verify the compliance of the design to any other design criteria or guidelines. The designer and all concerned stakeholders must therefore defend all actions taken on the basis that such care was taken, as was in all circumstances reasonably required, to ensure that the roadway was not unsafe for road users. It is important, therefore that where possible the recommendations in this report are acted upon.





**3 ITEMS RESULTING FROM PREVIOUS ROAD SAFETY AUDITS**

- 3.1.1 The ILTP audit team completed a Road Safety Audit in October 2015 of the proposed access arrangements to a previously proposed residential development on the subject lands.
- 3.1.2 The audit team are not aware of the currently proposed residential development having been previously audited.



**4 ITEMS RESULTING FROM STAGE 1 ROAD SAFETY AUDIT**

**4.1 General**

**Problem 4.1.1**

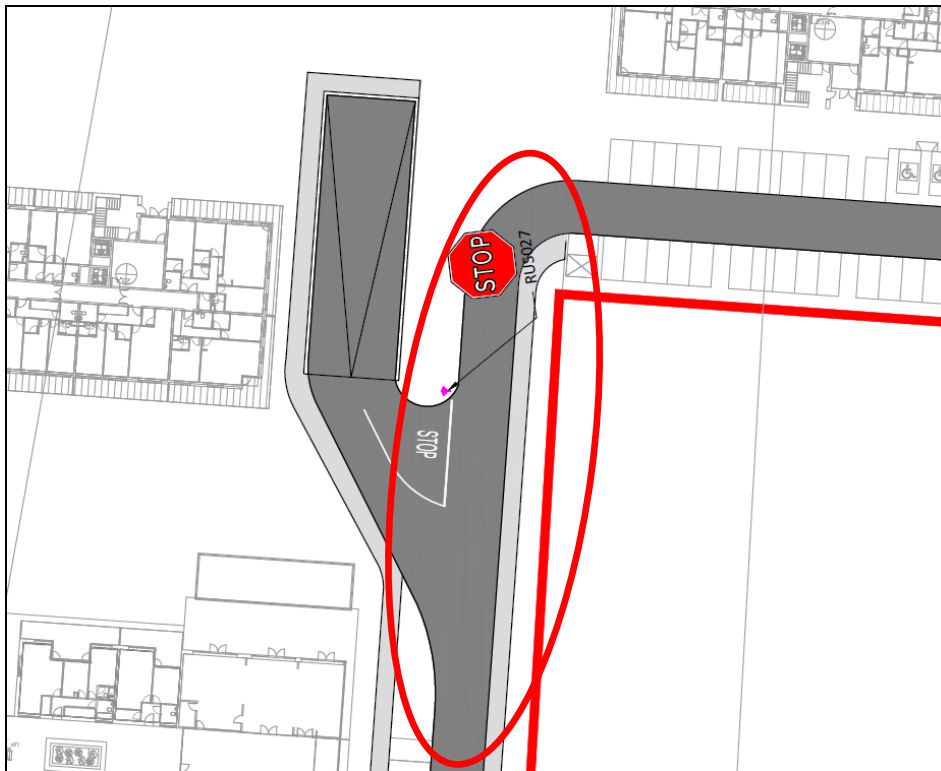
The site inspection has shown that there are a number of trees lining Sybil Hill Road immediately adjacent to the proposed vehicular access point. Should these trees encroach into visibility areas road users may emerge from the junction heedless of on-coming traffic resulting in side impacts, or approach the junction unaware of its presence and be forced to brake at the last minute resulting in shunt type collisions.

**Recommendation 4.1.1**

It is recommended that the design team ensures that adequate visibility can be attained both from and to the proposed access arrangements. Should appropriate visibility not be attainable from the proposed alignment it is recommended that the design team amends the layout of the junction or adjusts the nature of the vegetation.

**Problem 4.1.2**

The information provided for audit does not indicate pedestrian crossing facilities of the main access road to the development in the vicinity of the basement access junction and to the west of Block 7 (refer to Figure 4.1). This area may be likely to have a number of pedestrian desire lines to and from the proposed development. Without appropriate pedestrian crossing facilities vulnerable road users may enter the carriageway in inappropriate locations, coming into conflict with other road users.



**Figure 4.1: Pedestrian Crossing Facilities of Main Access road to Development not indicated in vicinity of Basement Access Junction and to West of Block 7**



**Recommendation 4.1.2**

It is recommended that the design team ensures appropriate pedestrian crossing facilities are provided along pedestrian desire lines.

**Problem 4.1.3**

It is unclear from the information provided for audit if there is appropriate space for delivery, service and emergency vehicles to safely navigate the relevant areas of the site and perform turnabout manoeuvres within the confines of the carriageway or other designated areas. Inappropriate carriageway facilities present a potential risk of such vehicles coming into conflict with non-motorised users.

**Recommendation 4.1.3**

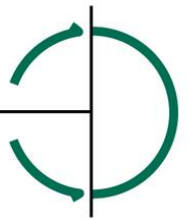
It is recommended that the design team ensures that the facilities provided are appropriate for all relevant vehicles to safely manoeuvre within the site.

**Problem 4.1.4**

The information provided for audit shows carriageway cross-sections and long-sections, however this does not indicate how the site will be drained of surface water. Without appropriate drainage the site may pond cause slip and skid hazards to all road users.

**Recommendation 4.1.4**

It is recommended that the design team ensures that appropriate drainage is provided throughout the site and its connections to the existing highway network.



**5 COMMENTS**

It is recommended that the proposals for the site are considered in terms of this Stage 1 audit, and measures, where appropriate are designed to mitigate the risks considered. The scheme proposals should be subject to a Stage 2 Road Safety Audit at Detailed Design Stage and prior to commencement of construction works on site.



## 6 CONCLUSIONS

It is recommended that the specific issues raised in this report be taken into account and that appropriate measures be put in place where practicable to mitigate the concerns raised.

This Stage 1 Road Safety Audit Report recommends various actions, which should be considered for inclusion in the detailed design process. Where recommendations are not incorporated into the design this should be documented in an Exception Report and forwarded to the ILTP Road Safety Audit Team. The Design Team should document and provide the rationale for incidences where the audit recommendations have not been incorporated or where alternatives are put forward.

The Design Team should respond to all issues raised in this Stage 1 Road Safety Audit Report through returning a signed copy of the Road Safety Audit Feedback Form.



**7 ROAD SAFETY AUDIT TEAM STATEMENT**

**7.1 Statement**

We certify that the drawings and documents provided with the Audit Brief have been examined. The examination has been carried out with the sole purpose of identifying any features of the scheme that could be improved or modified in order to improve the safety of the scheme. The problems that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be considered for implementation.

**7.2 Signatures**

**7.2.1** Audit Team Leader Signature

**Name:** Ken Swaby  
**Position:** Transport Engineer  
**Date:** 23 / 08 / 2019  
**Organisation:** ILTP Consulting

**Signed:**

**7.2.2** Audit Team Member Signature

**Name:** Mark Andrews  
**Position:** Transport Engineer  
**Date:** 23 / 08 / 2019  
**Organisation:** ILTP Consulting

**Signed:**





**APPENDIX A ROAD SAFETY AUDIT FEEDBACK FORM**

**Road Safety Audit Reference** RSA ST PAULS S1 KS 299  
**Audit Stage** Stage 1  
**Date Road Safety Audit Completed** 23<sup>rd</sup> August 2019

Para No. in Report	Problem Accepted (Y/N)	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
4.1.1	Y	Y	The Visibility Splay analysis performed shows that existing trees lining Sybil Hill Road are not fully inside the visibility envelope. According to DMURS, objects that would not be large enough to wholly obscure a vehicle, pedestrian or cyclist may be acceptable providing their impact on the overall visibility is not significant. Refer to drawing N251-C8 attached.	Y See Note 1 below.
4.1.2	Y	Y	Uncontrolled Pedestrian crossing will be provided with appropriate tactile paving in the area in question. For crossing details refer to drawing N251-F02 attached.	Y See Note 1 below.
4.1.3	Y	Y	Swept Path Analysis for Rigid Truck has been performed to ensure vehicles to navigate safely. For Rigid Truck Swept Path Analysis refer to drawing N251-C07 attached.	Y See Note 1 below.
4.1.4	N	N	Drainage details are provided in the drawing N251-H5.	Y See Notes 1 and 2 below.

**Note 1:** The additional drawings submitted by the Design Team with the Feedback Form response are attached. These have not been subject to a Stage 1 Road Safety Audit and have only been considered in relation to the original highlighted problem.

**Note 2:** The referenced drawing shows Drainage SUDS details, but does not show locations of gullies along the proposed access road and associated levels. This information must be submitted for Stage 2 Road Safety Audit.



Signed

*Paul R [unclear]*

Design Team Leader

Date 30/8/2019

(Please Complete and return to the Auditor)

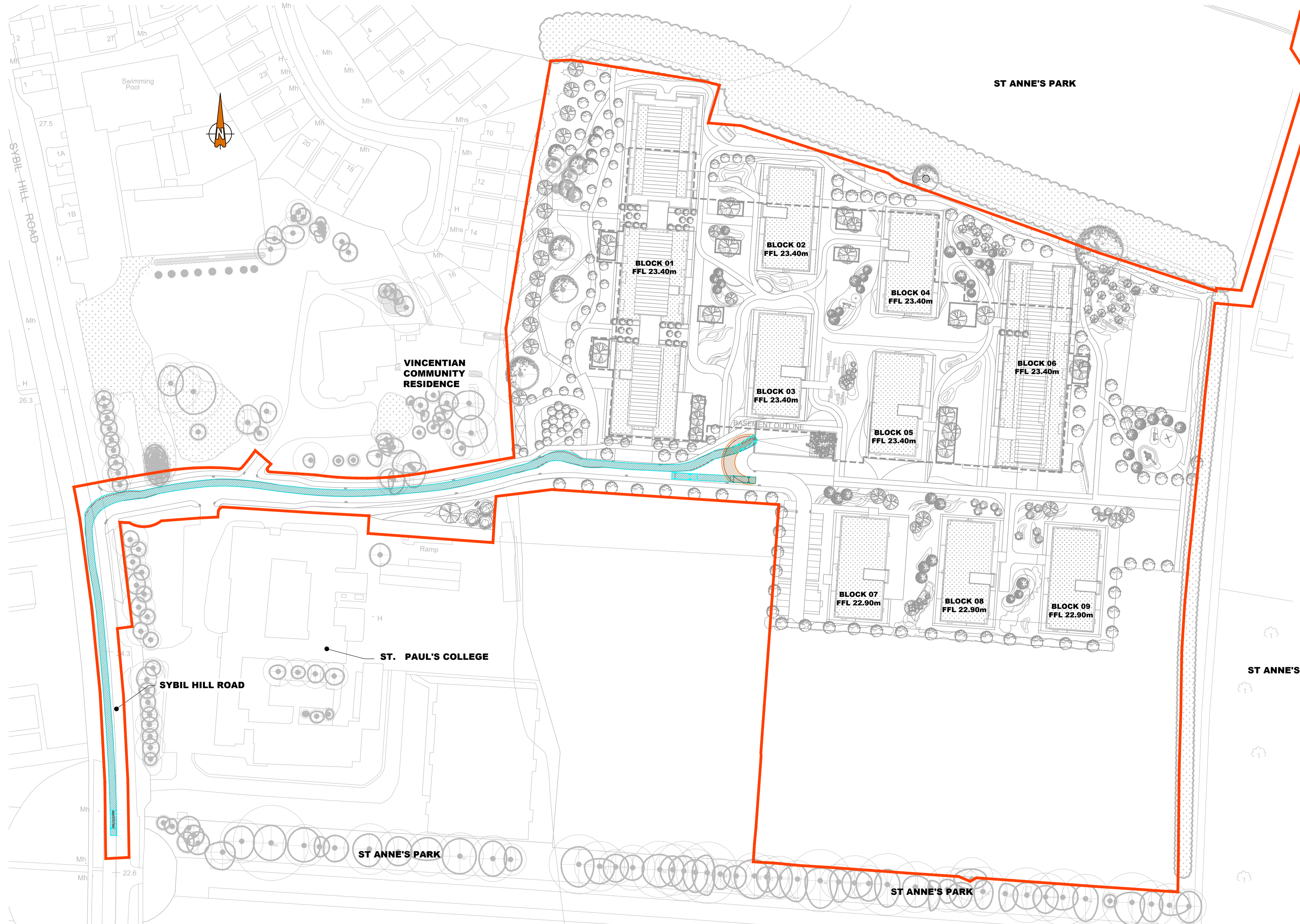
Safety Audit Signed Off;

*Ken [unclear]*

Road Safety Audit Team Leader

Date 30/08/2019





9.2	
2.308	4.428
Rigid Truck 9.2 m	
Overall Length	9.200m
Overall Width	2.500m
Overall Body Height	3.933m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	11.900m

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P1	30/08/2019	ISSUED FOR INFORMATION	RB	MC					

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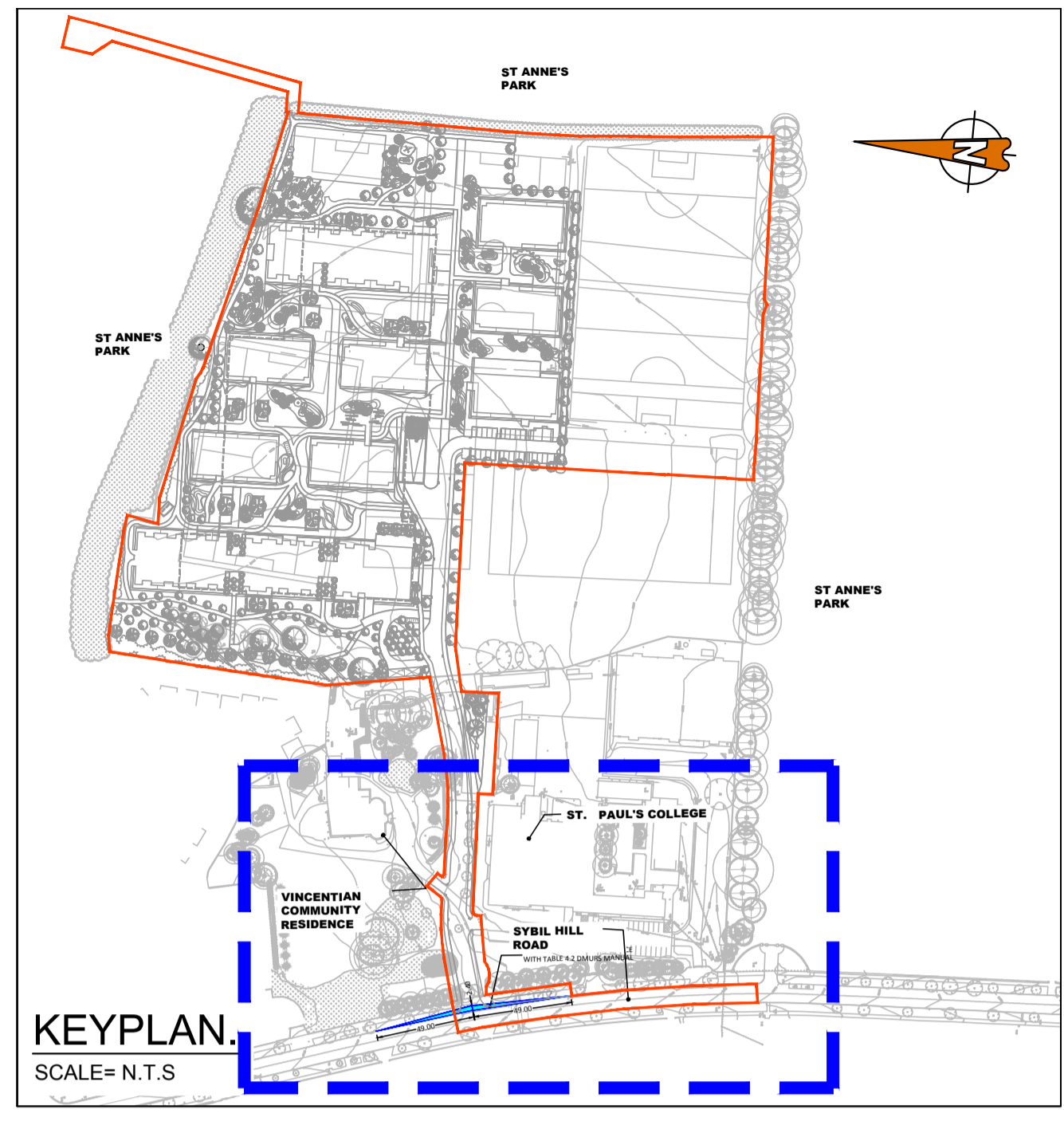
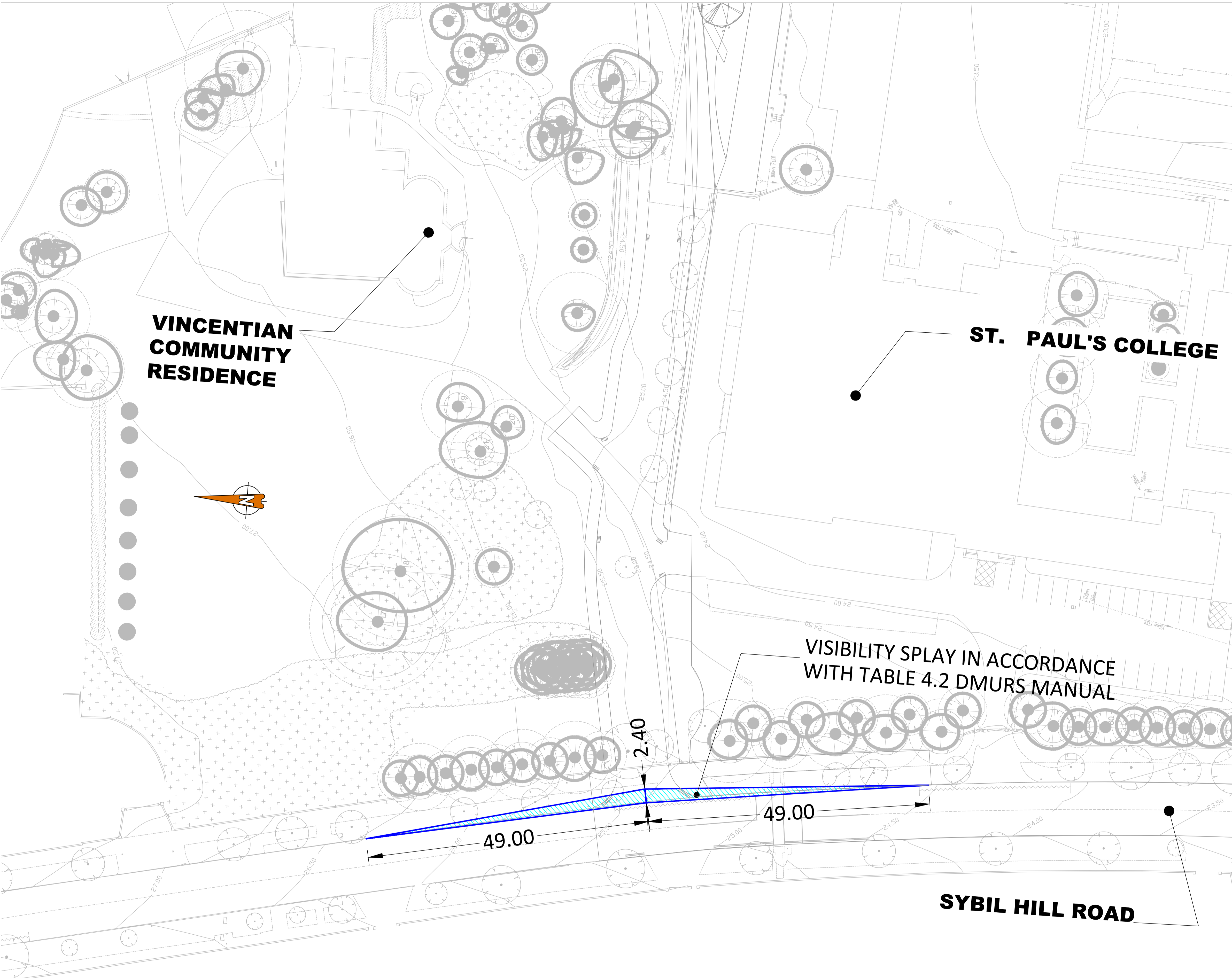
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Client	Crekav Trading GP Limited.			
Project	St. Paul's Residential Development.			
Title	SWEEP PATH ANALYSIS RIGID VEHICLE			
Drn. By	Chkd. By	Apprd. By	Dep. No.	Revision
RB	MC	AH		
Date	Scale			
30/08/19	N.T.S. @ A1		N251 -C07	P1

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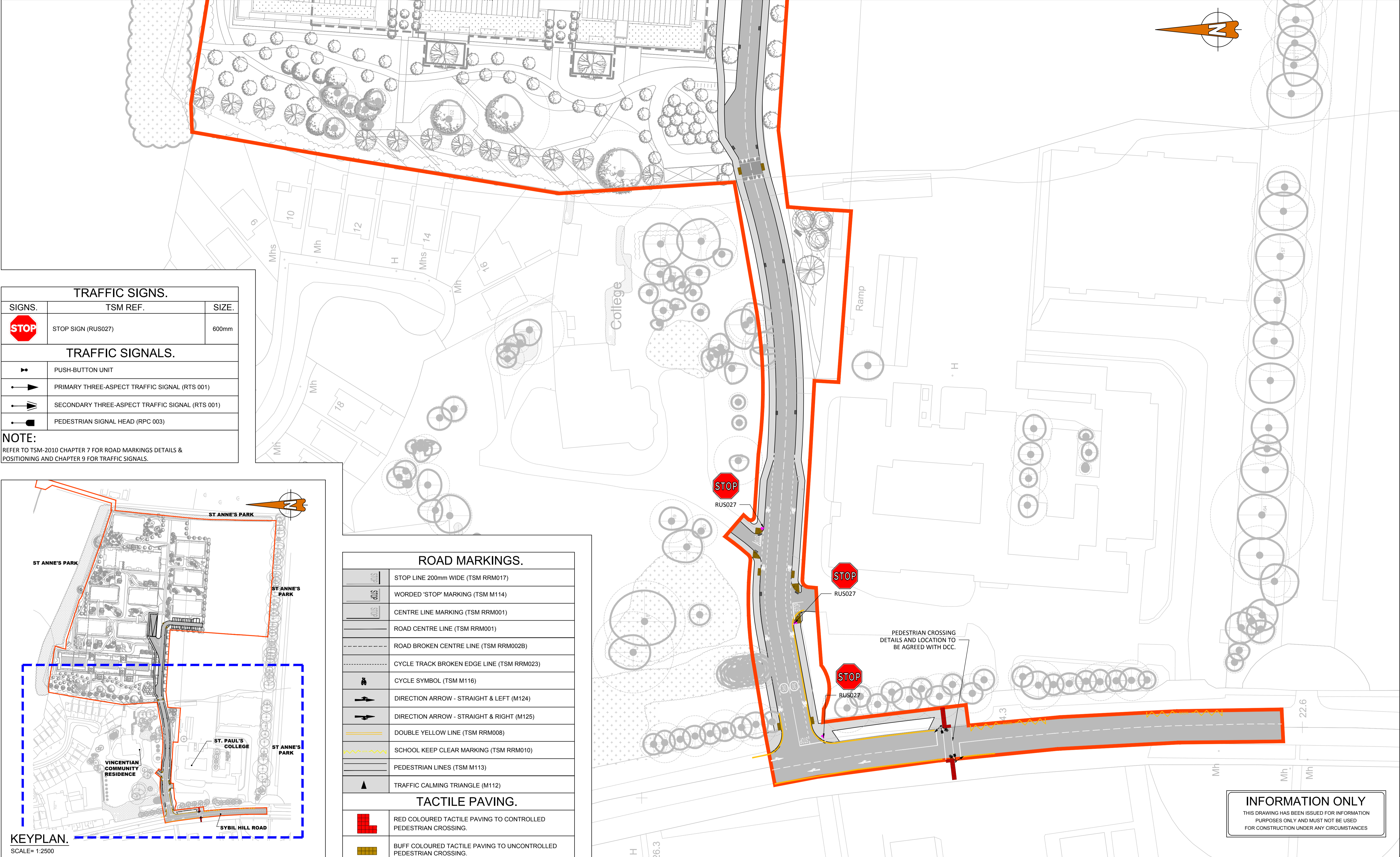
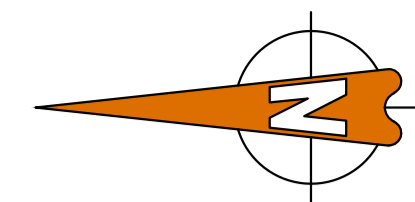
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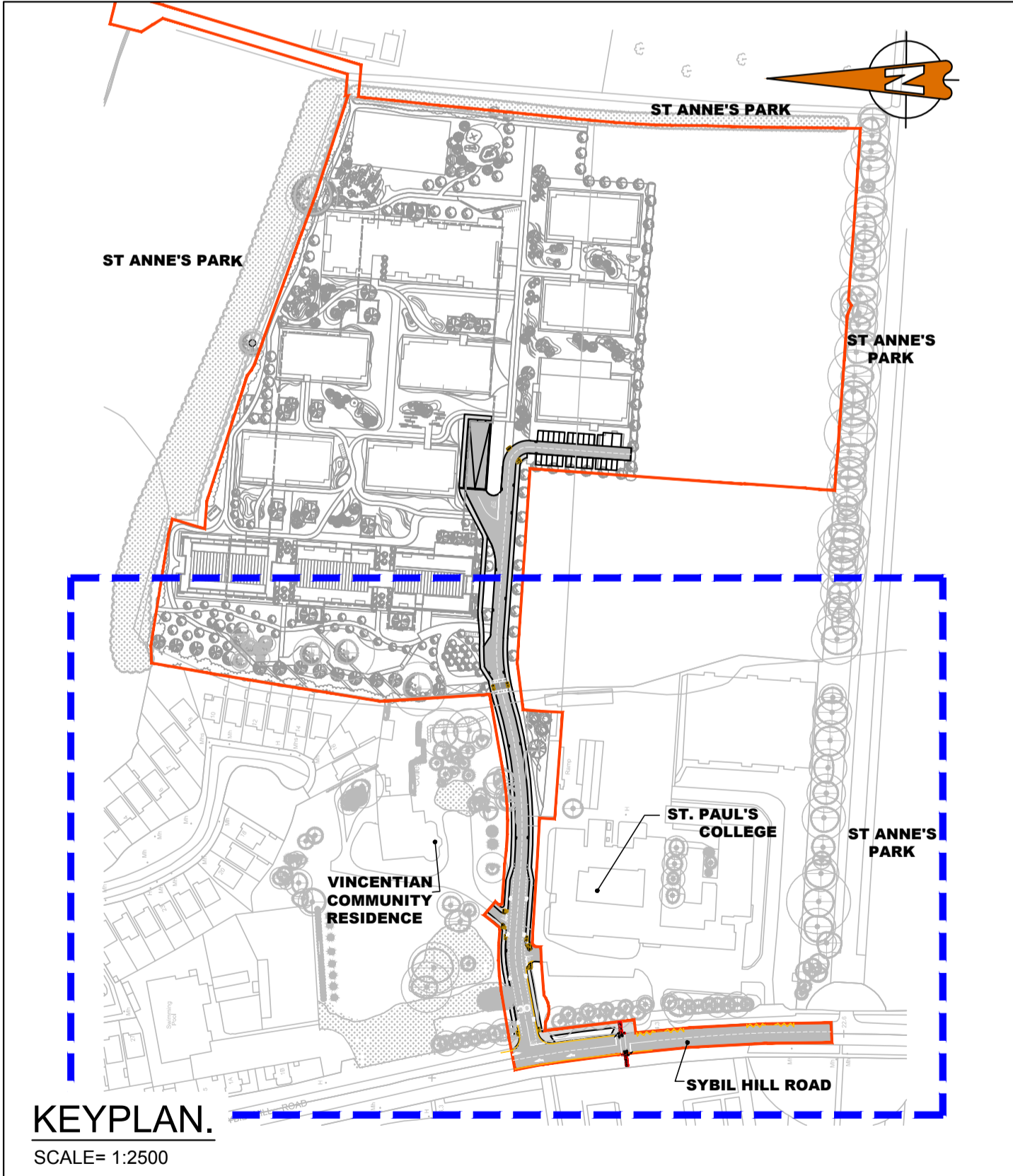
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Project	St. Paul's Residential Development.			
Title	VISIBILITY SPLAY			
Dn. By	Chkd. By	Apnd. By	Dep. No.	Revision
MC	JB	AH	N251 -C08	P1
Date	Scale			
23/08/19	N.T.S. @ A1			





TRAFFIC SIGNS.		
SIGNS.	TSM REF.	SIZE.
	STOP SIGN (RUS027)	600mm
TRAFFIC SIGNALS.		
	PUSH-BUTTON UNIT	
	PRIMARY THREE-ASPECT TRAFFIC SIGNAL (RTS 001)	
	SECONDARY THREE-ASPECT TRAFFIC SIGNAL (RTS 001)	
	PEDESTRIAN SIGNAL HEAD (RPC 003)	

**NOTE:**  
REFER TO TSM-2010 CHAPTER 7 FOR ROAD MARKINGS DETAILS & POSITIONING AND CHAPTER 9 FOR TRAFFIC SIGNALS.



ROAD MARKINGS.	
	STOP LINE 200mm WIDE (TSM RRM017)
	WORDED 'STOP' MARKING (TSM M114)
	CENTRE LINE MARKING (TSM RRM001)
	ROAD CENTRE LINE (TSM RRM001)
	ROAD BROKEN CENTRE LINE (TSM RRM002B)
	CYCLE TRACK BROKEN EDGE LINE (TSM RRM023)
	CYCLE SYMBOL (TSM M116)
	DIRECTION ARROW - STRAIGHT & LEFT (M124)
	DIRECTION ARROW - STRAIGHT & RIGHT (M125)
	DOUBLE YELLOW LINE (TSM RRM008)
	SCHOOL KEEP CLEAR MARKING (TSM RRM010)
	PEDESTRIAN LINES (TSM M113)
	TRAFFIC CALMING TRIANGLE (M112)
TACTILE PAVING.	
	RED COLOURED TACTILE PAVING TO CONTROLLED PEDESTRIAN CROSSING.
	BUFF COLOURED TACTILE PAVING TO UNCONTROLLED PEDESTRIAN CROSSING.

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P2	15/12/2017	ISSUED FOR PLANNING	JS	JB
P3	16/03/2018	ISSUED FOR COMPLIANCE	SWG	PR
P4	12/04/2019	ISSUED FOR COMPLIANCE	AF	JS
P5	23/05/2019	ISSUED FOR PLANNING	AF	JB
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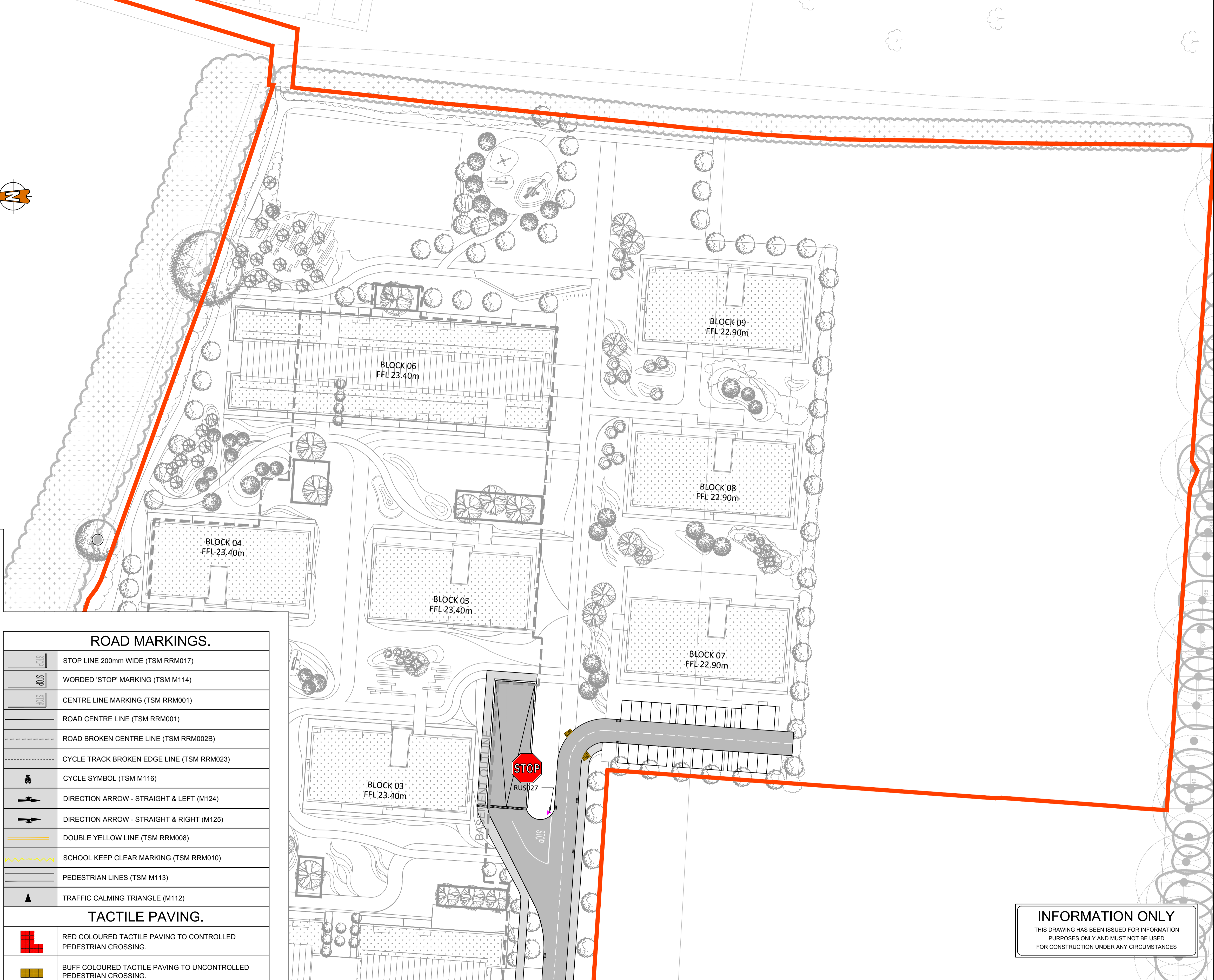
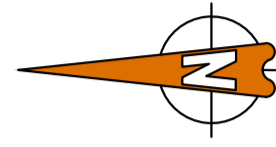
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Client	Crekav Trading GP Limited.		
Project	St. Paul's Residential Development.		
Title	ROAD MARKINGS & TRAFFIC SIGNS SHEET 1 OF 2		
Drn. by	Chkd. by	Appr. by	Dep. No.
JS	AL	TH	
Date	Scale		Revision
15.12.17	1:500 @ A1		N251 -F01 P7

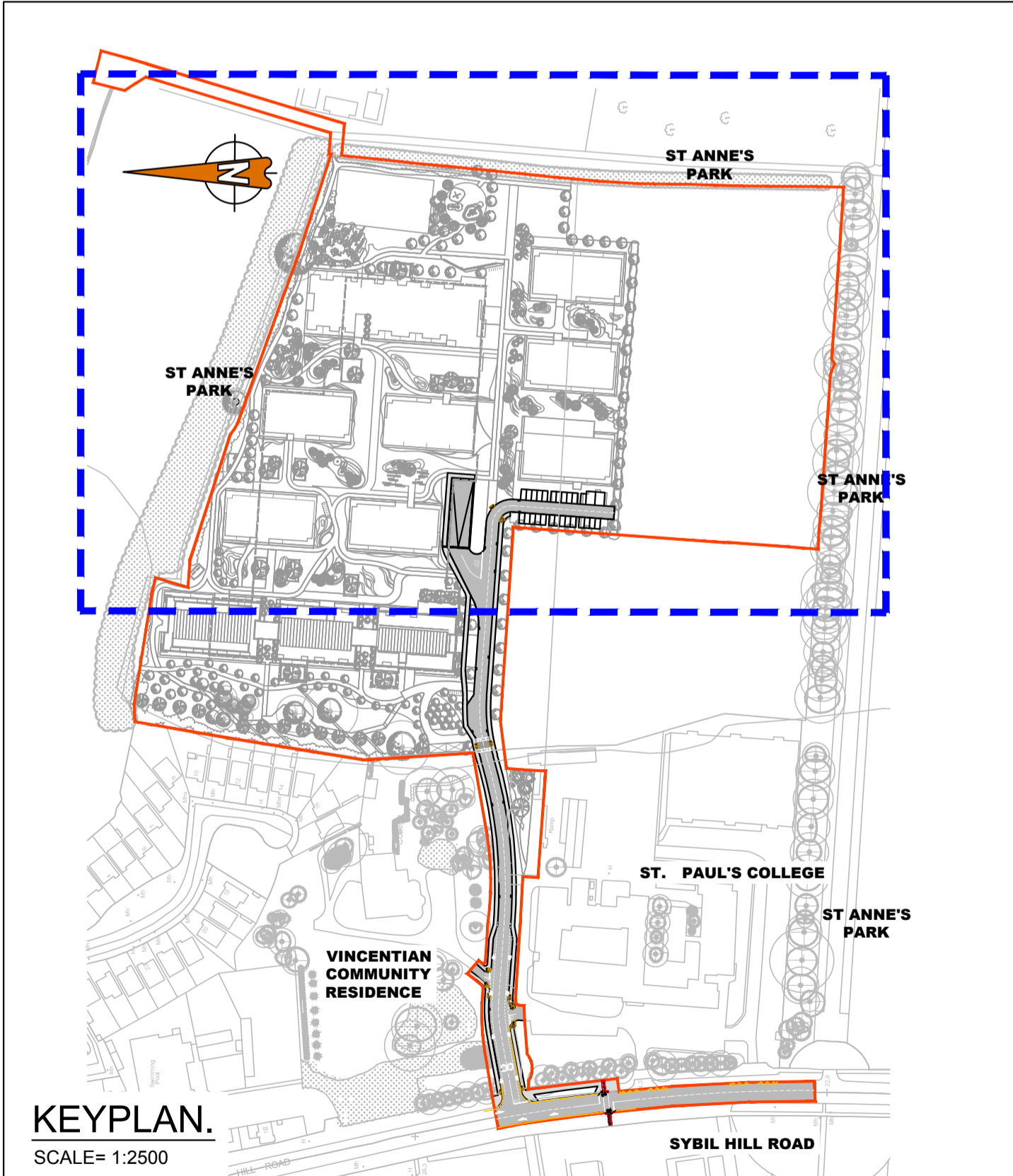
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		Project	St. Paul's Residential Development.		
		Title	ROAD MARKINGS & TRAFFIC SIGNS SHEET 2 OF 2		
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		JS	AL	TH	N251 -F02
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