



# **Traffic Committee Meeting**

## **BUSINESS PAPER**

Notice is hereby given in accordance with the *Local Government Act 1993* and *Local Government (General) Regulation 2005* of the below mentioned meeting.

**Wednesday, 02 March 2022**

**Commencing at 9:30 AM**

**Shellharbour Civic Centre  
Ground Floor Training Room**

---

# AGENDA

<b>1. Attendance.....</b>	<b>3</b>
<b>2. Acknowledgement to Country.....</b>	<b>3</b>
<b>3. Apologies / Leave of Absence.....</b>	<b>3</b>
<b>4. Confirmation of Minutes .....</b>	<b>3</b>
4.1. Traffic Committee Meeting 1 December 2021.....	3
<b>5. Addresses to Traffic Committee .....</b>	<b>3</b>
<b>6. Disclosure of Interest.....</b>	<b>3</b>
<b>7. Presentations.....</b>	<b>3</b>
<b>8. Traffic Reports.....</b>	<b>3</b>
8.1. Installation of Emergency Vehicles Excepted Sign - Webb Lane, Albion Park.....	4
Committee Recommendation.....	5
8.2. Warilla Streetscape Stage 2.....	8
Committee Recommendation.....	10
8.3. School Zone Infrastructure Sub-Program - Detailed Designs .....	15
Committee Recommendation.....	18
8.4. Pedestrian Crossing - Airport Road, Albion Park Rail .....	31
Committee Recommendation.....	33
8.5. Run Shellharbour Event.....	40
Committee Recommendation.....	42
8.6. Signage & Linemarking Plan - DAM0139/2021.....	80
Committee Recommendation.....	81
8.7. Footpath and Refuge Installation - Boomerang Avenue, Albion Park Rail .....	85
Committee Recommendation.....	86
<b>9. General Business .....</b>	<b>89</b>
<b>10. Items for Information .....</b>	<b>89</b>
10.1. Shellharbour City Festival of Sport .....	89
10.2. Police Matters.....	95
<b>11. Next Meeting.....</b>	<b>95</b>

## **1. Attendance**

Record of attendees to be taken at the meeting.

## **2. Acknowledgement to Country**

Shellharbour City Council acknowledges the Traditional Custodians of the Dharawal Country and recognise their continued connection to the land we meet on today. We pay our respects to Elders past, present and emerging and the contribution they make to the life of this city and this region and extend our recognition to their descendants who continue to live on country.

## **3. Apologies / Leave of Absence**

## **4. Confirmation of Minutes**

### **4.1. Traffic Committee Meeting 1 December 2021**

That the Minutes of the Traffic Committee Meeting held on 1 December 2021 as circulated be taken as read and confirmed as a correct record of proceedings.

## **5. Addresses to Traffic Committee**

## **6. Disclosure of Interest**

## **7. Presentations**

## **8. Traffic Reports**

## 8.1. Installation of Emergency Vehicles Excepted Sign - Webb Lane, Albion Park

### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Tyson Perry – Engineering Technical Officer

### Summary

The purpose of this report is to seek endorsement from the Committee for the installation of an "Emergency Vehicles Excepted" sign under the existing "No Right Turn" sign at Webb Lane, Albion Park (**Attachment 1**).

### Background

Council received a request from Lake Illawarra Police District to install an "Emergency Vehicles Excepted" sign under the existing "No Right Turn" sign (**Attachment 2**) at Webb Lane, Albion Park. The route is a regular route for the Lake Illawarra Police when heading north to attend urgent jobs.

### Financial / Resources Implications

If approved, works will be carried out and funded by Council.

### Legal and Policy Implications

Nil.

### Public / Social Impact

- No changes to traffic conditions for the general public.
- Permits emergency services to legally turn at location as required.

### Link to Community Strategic Plan

This report supports the following objectives and strategies of the Community Strategic Plan:



<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network
	2.3.4	Facilitate the development of the built environment to meet community needs

## Consultations

The following consultations were undertaken:

### Internal

- Manager Floodplain and Transport
- Senior Transport Engineer
- Road Safety Officer

### External

- Lake Illawarra Police

## Political Donations Disclosure

Not Applicable

## Committee Recommendation

**That Council approve the installation an "Emergency Vehicles Excepted" sign (r9-200n) at Webb Lane, Albion Park in accordance with Attachment 2 and relevant Australian Standards.**

## Approved By

<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

## Attachments

1. Locality Plan
2. Proposed Sign Location

Attachment 1 - Locality Plan





**Attachment 2 - Proposed Sign Location**



**Install “No Right Turn” and “Emergency Vehicles Excepted” signs on left hand side as shown**

## 8.2. Warilla Streetscape Stage 2

### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Tyson Perry – Engineering Technical Officer

### Summary

The purpose of this report is to seek endorsement from the Committee for the signage and linemarking plan for the Warilla Streetscape Stage 2 works (**Attachment 1**).

### Background

Warilla Streetscape Stage 2 works are under way and aims to create a public space that includes seating, landscaping, artwork and a new amenities block including all services. As part of the project, the existing amenities block within the carpark will be demolished making way for a new amenities block and seating area. As part of these works, Council's Transport team are proposing extensive improvements to the vehicular access and egress to the carpark which will improve road safety in the area. These proposed changes include altering the traffic flow within Hall Lane as well as other signage and linemarking changes as illustrated in **Attachment 2**. Stage 2 works commenced in February 2022 with works expected to complete at the end of May 2022 subject to approval(s).

### Financial / Resources Implications

If approved, works will be carried out and funded by Council.

### Legal and Policy Implications

Nil.

### Public / Social Impact

- Improved road safety through the reduction in conflict points at entry/exit points of the carpark and revision of the internal traffic flow of the carpark.
- Removal of car parking in Hall Lane and delineation of car parking within the carpark.
- Improved delineation and signage.

- Installation of three (3) disabled parking spaces designed in accordance with Australian Standards.

### Link to Community Strategic Plan

This report supports the following objectives and strategies of the Community Strategic Plan:

<b>Objective:</b>	1.2	Active and healthy
<b>Strategy:</b>	1.2.1	Provide access to services and facilities where people can live, learn and play

<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network
	2.3.4	Facilitate the development of the built environment to meet community needs

<b>Objective:</b>	4.2	Supported by a Council that is responsive, accountable and financially viable
<b>Strategy:</b>	4.2.1	Undertake Council activities within a clear framework of strategic planning, policies, procedures and service standards

### Consultations

The following consultations were undertaken:

#### Internal

- Manager Floodplain and Transport
- Senior Transport Engineer
- Manager Compliance & Regulation
- Road Safety Officer
- Manager Projects
- Project Delivery Officer
- Manager Asset Planning

**External**

- Businesses in close proximity to proposed works

**Political Donations Disclosure**

Not Applicable

**Committee Recommendation**

That Council approve the signage and linemarking plan for the Warilla Streetscape Stage 2 works as shown in Attachment 2 subject to the disabled parking spaces being installed in accordance with relevant Australian Standards.

**Approved By**

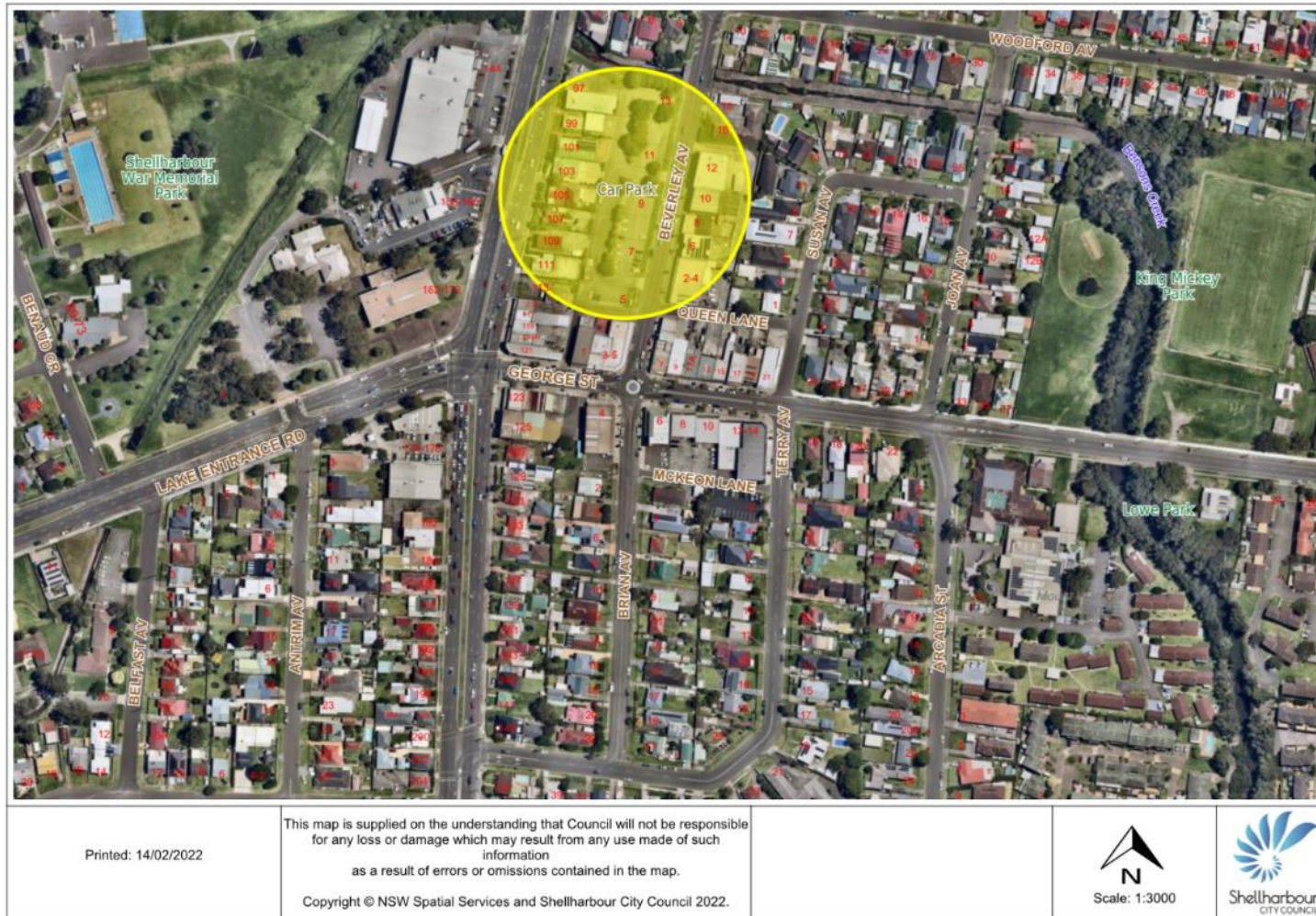
<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

**Attachments**

1. Locality Plan
2. Signage & Linemarking Plan

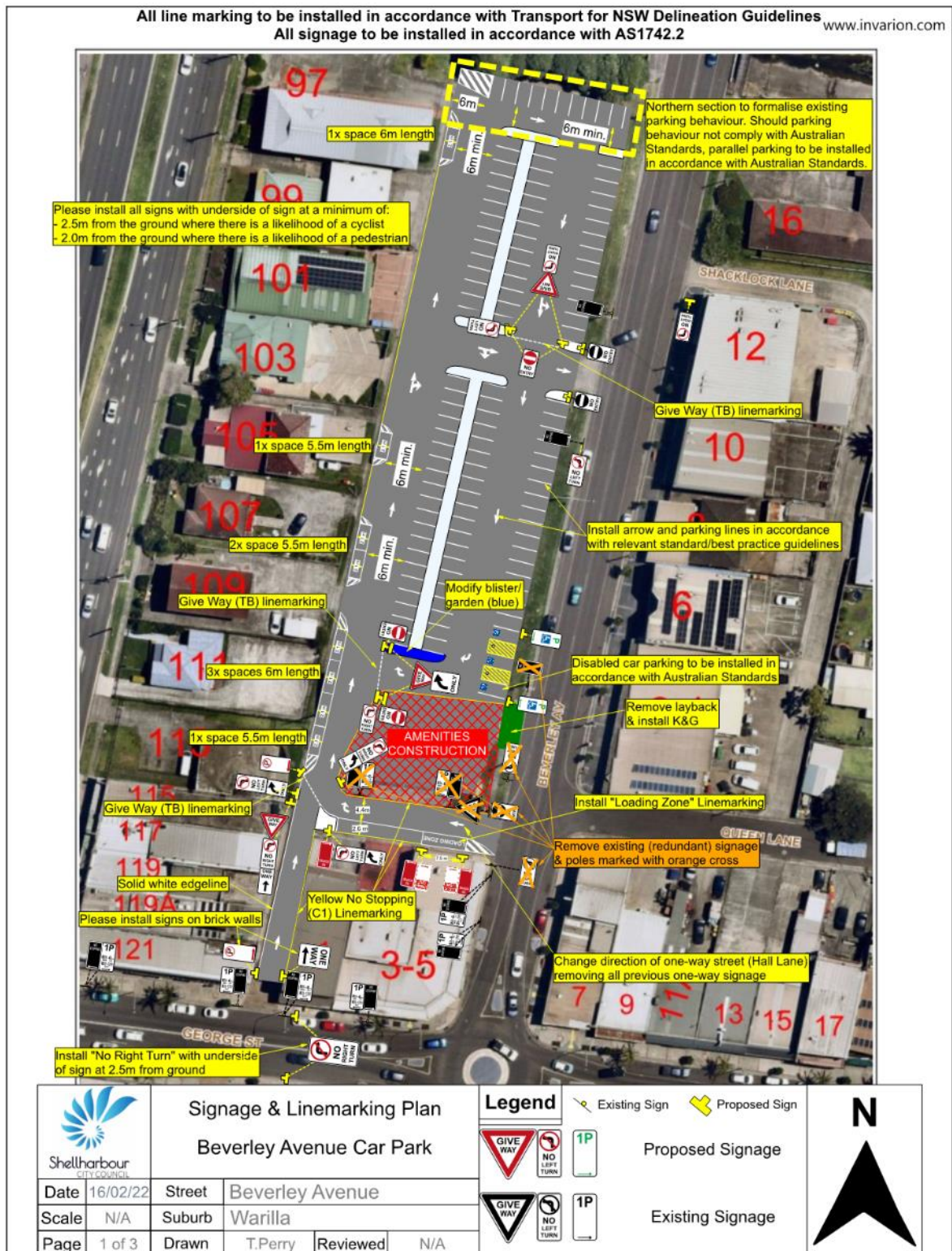


Attachment 1 - Locality Plan





Attachment 2 - Beverley Avenue Car Park Improvements











### 8.3. School Zone Infrastructure Sub-Program - Detailed Designs

#### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Tyson Perry – Engineering Technical Officer

#### Summary

The purpose of this report is to seek endorsement from the Committee for the installation of raised wombat crossings and the upgrade to a pedestrian refuge at several schools across the Shellharbour Local Government Area.

#### Background

As reported to the Committee in August 2021, Shellharbour City Council were successful in obtaining grant funding under the School Zone Infrastructure sub-program which is part of the \$540 million Federal Road Safety (NSW) Program. The key objective of this program is to improve pedestrian facilities along main pedestrian routes to and from school and within school zones. As many children walk and take public transport, routes to and from school are key risk areas for children around school start and finish times.

Council has recently received the detailed designs (**Attachment 1**) for the following projects:

1. Raised Wombat Crossing - Oldfield Street, Warilla
2. Raised Wombat Crossing - Stradbroke Avenue, Shell Cove
3. Raised Wombat Crossing - Wentworth Street, Oak Flats
4. Raised Wombat Crossing - Willinga Road, Flinders
5. Pedestrian Refuge Upgrade - Ulster Avenue, Warilla

Community consultation with the adjacent schools and surrounding residents/businesses were undertaken prior to the detailed design of the facility with any concerns raised being addressed at detailed design (where possible). If approved, the facilities are expected to be installed by the end of the 2021/22 Financial Year. In addition to the installation of the facilities, Council's Transport team are also seeking to improve the signage and linemarking at Oak Flats and Shell Cove Public Schools. These are illustrated in **Attachment 2** and **Attachment 3** respectively.

Please note that the proposed advisory speeds are non-standard and must end in a '5' in accordance with Section 3.3.5 of NSW Speed Zoning Guidelines.

### Financial / Resources Implications

If approved, works will be carried out by Council with works funded by School Zone Infrastructure sub-program (Federal Stimulus Funding).

### Legal and Policy Implications

Nil.

### Public / Social Impact

- Improved road safety around schools

### Link to Community Strategic Plan

This report supports the following objectives and strategies of the Community Strategic Plan:

<b>Objective:</b>	1.2	Active and healthy
<b>Strategy:</b>	1.2.1	Provide access to services and facilities where people can live, learn and play

<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network
	2.3.4	Facilitate the development of the built environment to meet community needs

<b>Objective:</b>	4.1	Led through collaboration
<b>Strategy:</b>	4.1.2	Actively engage, consult and inform the community

<b>Objective:</b>	4.2	Supported by a Council that is responsive, accountable and financially viable
<b>Strategy:</b>	4.2.1	Undertake Council activities within a clear framework of strategic planning, policies, procedures and service standards

## **Consultations**

The following consultations were undertaken:

### **Internal**

- Manager Floodplain and Transport
- Senior Transport Engineer
- Manager Compliance & Regulation
- Road Safety Officer
- Manager Projects
- Manager Asset Strategy
- Design Services Officer

### **External**

- Adjacent schools
- Residents/businesses in close proximity to the works

### **Political Donations Disclosure**

Not Applicable

---

## Committee Recommendation

### That Council:

1. Approve the installation of a raised wombat (pedestrian crossing) and associated signage/linemarking at Oldfield Street, Warilla as shown in Attachment 1 and all advisory speeds being revised in accordance with Section 3.3.5 of NSW Speed Zoning Guidelines.
2. Approve the installation of a raised wombat (pedestrian crossing) at Stradbroke Avenue, Shell Cove as shown in Attachment 1 subject to the signage and linemarking being installed in accordance with Attachment 2 and all advisory speeds being revised in accordance with Section 3.3.5 of NSW Speed Zoning Guidelines.
3. Approve the installation of a raised wombat (pedestrian crossing) at Wentworth Street, Oak Flats as shown in Attachment 1 subject to the longitudinal linemarking being installed in accordance with Attachment 3 and all advisory speeds being revised in accordance with Section 3.3.5 of NSW Speed Zoning Guidelines.
4. Approve the installation of a raised wombat (pedestrian crossing) at Willinga Road, Flinders as shown in Attachment 1 and all advisory speeds being revised in accordance with Section 3.3.5 of NSW Speed Zoning Guidelines.
5. Approve the upgrade to the pedestrian refuge at Ulster Avenue, Warilla as shown in Attachment 1.

### Approved By

Approved for Council's Consideration:	Matthew Apolo
Date of Meeting:	2 March 2022

### Attachments

1. Detailed Designs
2. Shell Cove School Signage & Linemarking Plan
3. Oak Flats School Linemarking Plan

Attachment 1 - Detailed Designs

# PROPOSED PEDESTRIAN FACILITIES FLINDERS, OAK FLATS, SHELL COVE AND WARILLA TfNSW ROAD SAFETY PROGRAM

SHEET INDEX	
DRAWING No.	DESCRIPTION
2129-001	TITLE SHEET
2129-002	NOTES
2129-003	SURVEY AND SERVICES PLANS - OLDFIELD ST AND STRADBROKE AVE
2129-004	SURVEY AND SERVICES PLANS - WENTWORTH ST, WILLINGA RD & ULSTER AVE
2129-005	OLDFIELD STREET WOMBAT CROSSING
2129-006	STRADBROKE AVENUE WOMBAT CROSSING
2129-007	WENTWORTH STREET WOMBAT CROSSING
2129-008	WILLINGA ROAD WOMBAT CROSSING
2129-009	ULSTER AVENUE PEDESTRIAN REFUGE
2129-010	TYPICAL DETAILS AND SECTIONS



LOCALITY PLAN - STRADBROKE AVENUE, SHELL COVE  
NOT TO SCALE



LOCALITY PLAN - WILLINGA ROAD, FLINDERS  
NOT TO SCALE



LOCALITY PLAN - OLDFIELD STREET, WARILLA  
NOT TO SCALE



LOCALITY PLAN - WENTWORTH STREET, OAK FLATS  
NOT TO SCALE



LOCALITY PLAN - ULSTER AVENUE, WARILLA  
NOT TO SCALE

NO.	DESCRIPTION	DATE
4	ISSUED FOR CONSTRUCTION	28/01/22
3	ISSUED FOR DETAILED DESIGN APPROVAL	14/01/22
1	ISSUED FOR CONCEPT DESIGN APPROVAL	11/11/21
RELE	DESCRIPTION	DATE

ISSUED FOR  
CONSTRUCTION

SCALES	ORIGINAL
N.T.S	A1
CLIENT	Shellharbour City Council

SURVEYOR:	CEH
DATE:	AND
ASSEMBLER:	MGA
DRAWN:	AB
DESIGNED:	AB
DESIGNED DATE:	OCT 2021
CHECKED:	AB

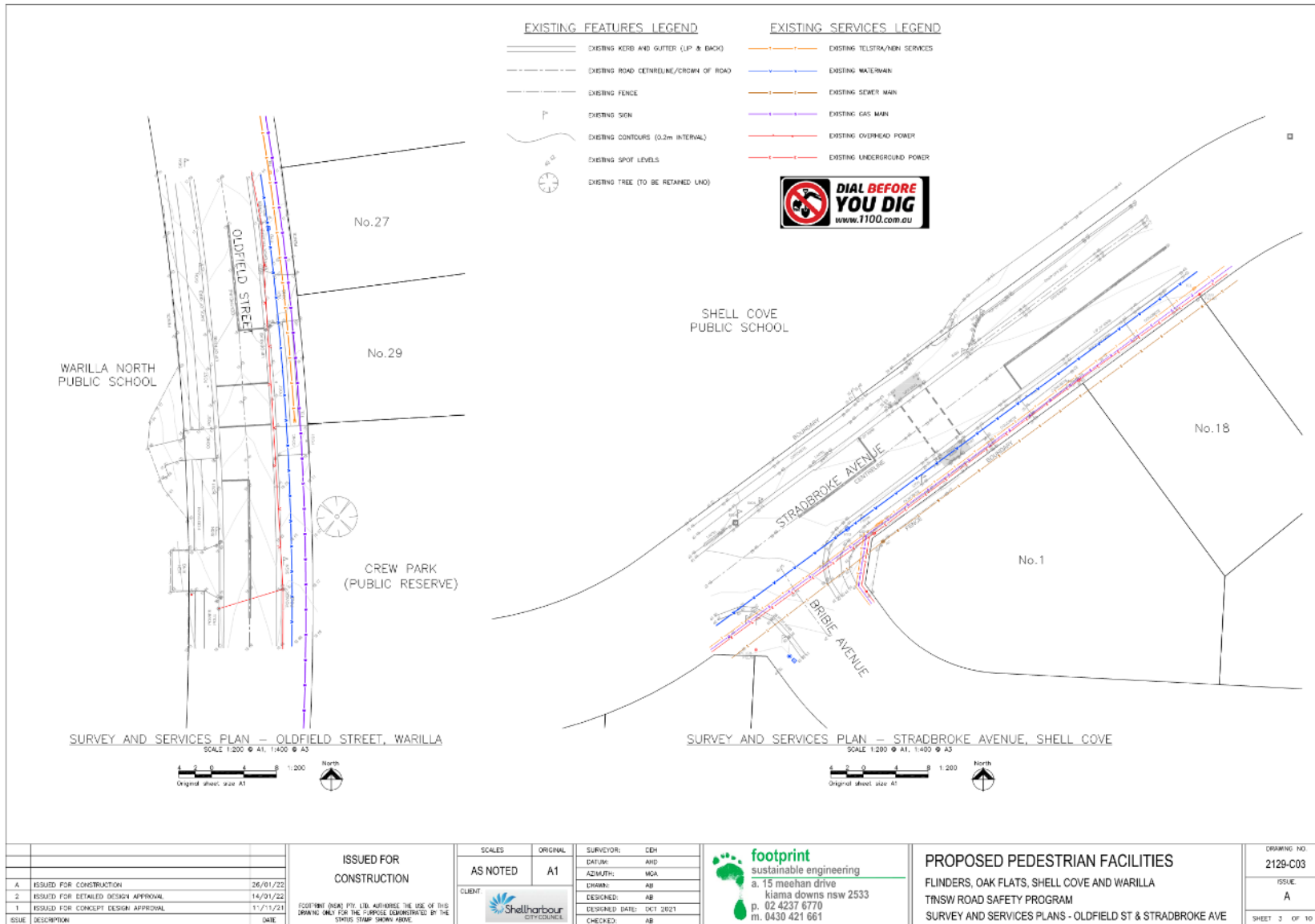
**footprint**  
sustainable engineering  
a. 15 meehan drive  
kiama downs nsw 2533  
p. 02 4237 6770  
m. 0430 421 661

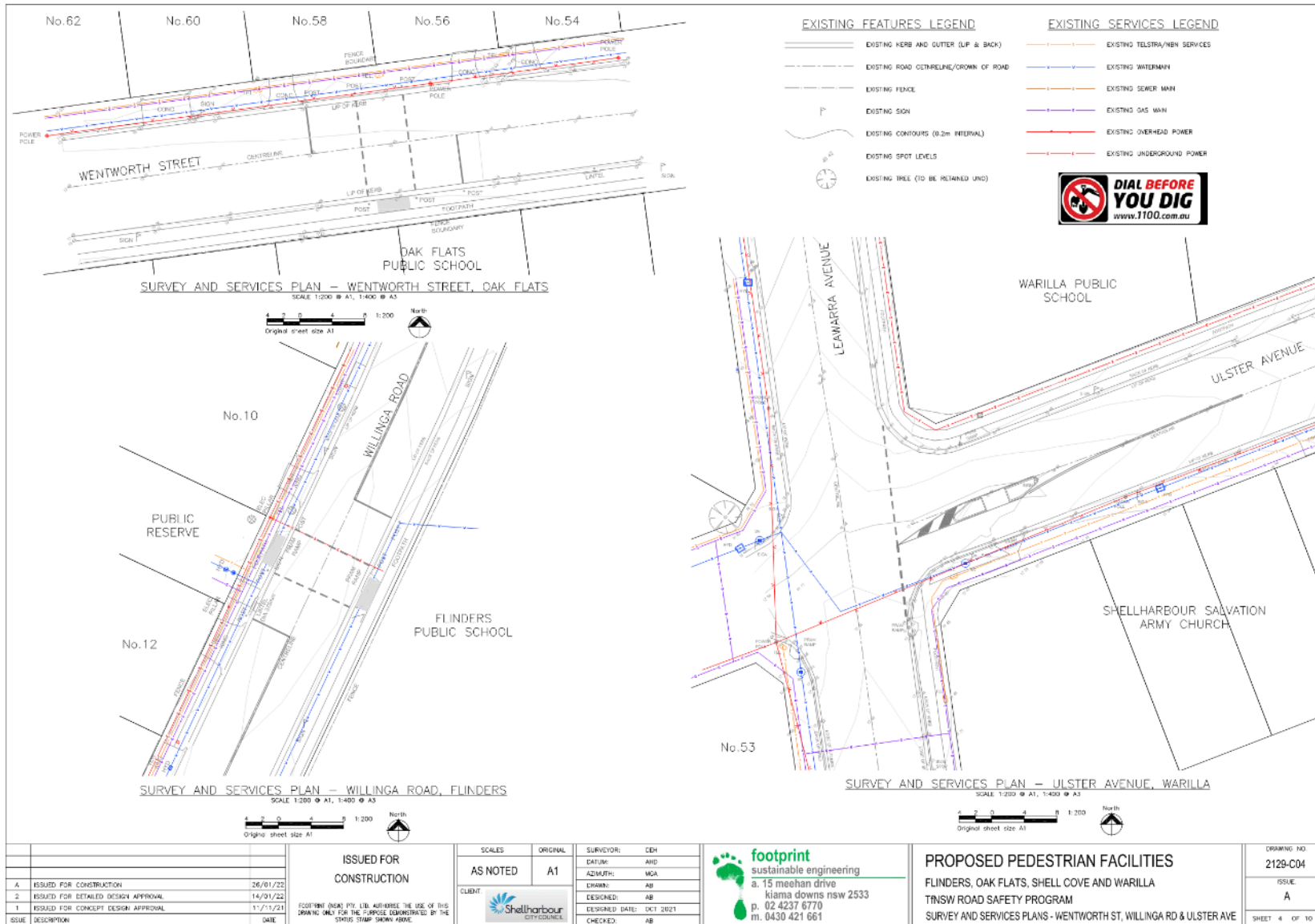
PROPOSED PEDESTRIAN FACILITIES  
FLINDERS, OAK FLATS, SHELL COVE AND WARILLA  
TfNSW ROAD SAFETY PROGRAM  
TITLE SHEET

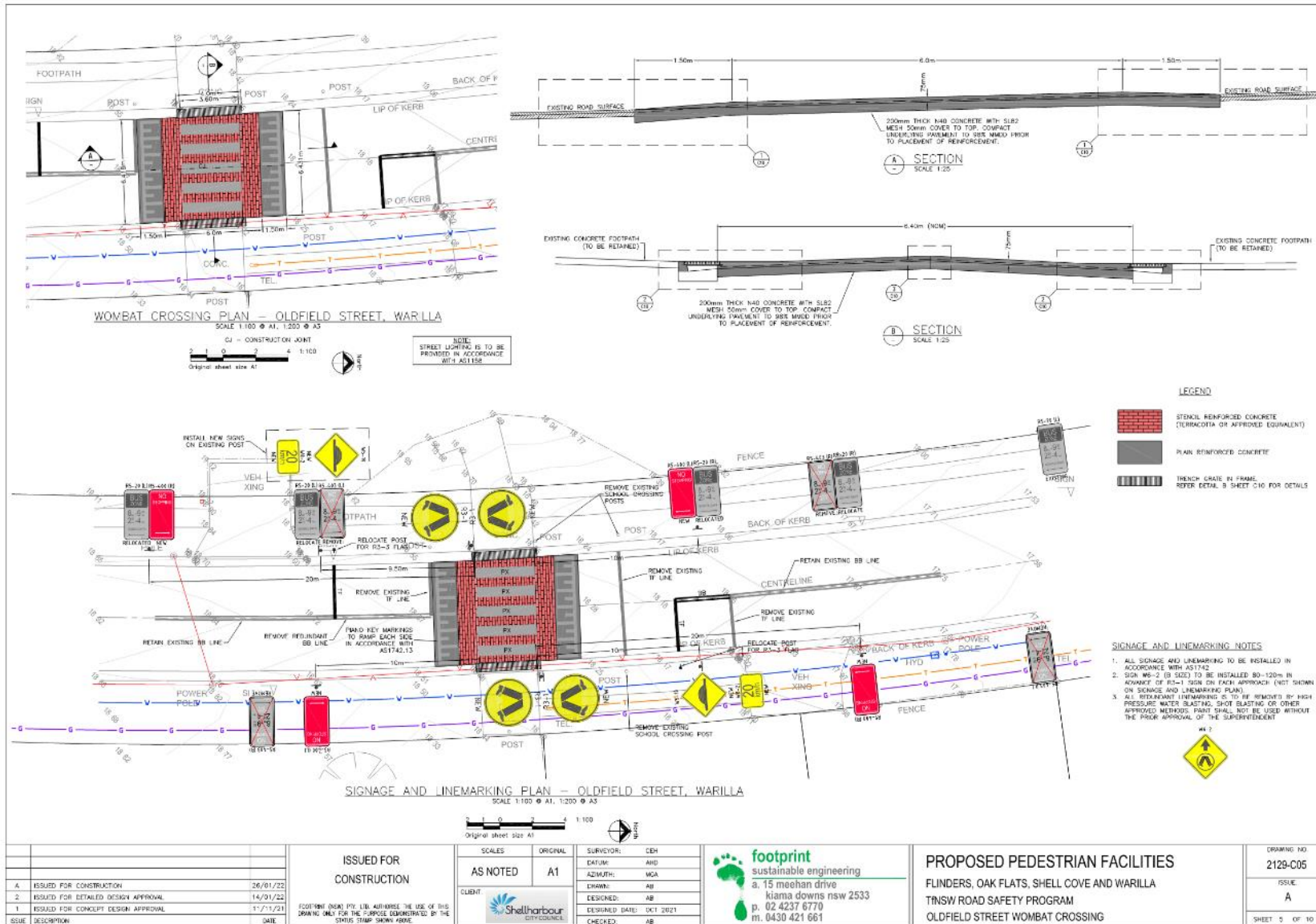
DRAWING NO.	2129-C01
ISSUE	A
SHEET	1 OF 10

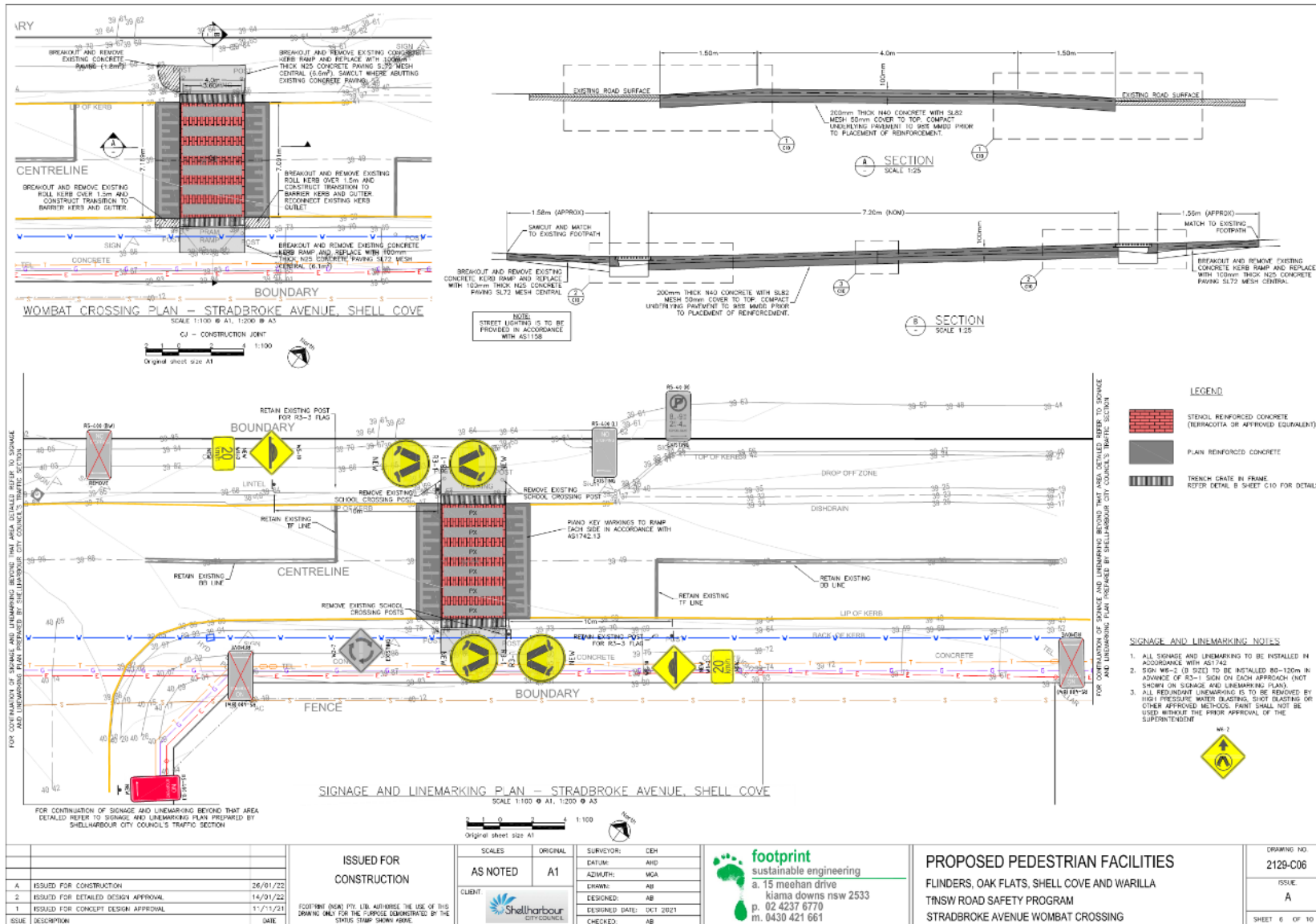
GENERAL:	ENVIRONMENTAL SITE MANAGEMENT:	CONCRETE:	FORMWORK:																		
<p>1. READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS AND SPECIFICATIONS, AND WITH SUCH OTHER WRITTEN INSTRUCTIONS ISSUED. REFER TO CIVIL DRAWINGS FOR SETTING OUT AND DETAILED DIMENSIONS. IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS, THEN NOTES, THEN SPECIFICATIONS.</p> <p>2. CARRY OUT WORK IN A SAFE MANNER IN ACCORDANCE WITH APPLICABLE STATUTORY REGULATIONS, BY-LAWS OR RULES. CONTRACTOR IS RESPONSIBLE FOR OCCUPATIONAL HEALTH AND SAFETY OF SELF, PERSONNEL AND GENERAL PUBLIC IN ACCORDANCE WITH LEGISLATIVE REQUIREMENTS, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.</p> <p>3. REFER DISCREPANCIES TO SUPERINTENDENT BEFORE PROCEEDING WITH WORK.</p> <p>4. SUBMIT DETAILS OF CHANGES TO SCOPE, WORK METHODS, OR MATERIALS ETC FOR APPROVAL BEFORE PROCEEDING. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT.</p> <p>5. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE, BUT INDICATES REQUIRED PROPERTIES OF THE ITEM. SIMILAR ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE SPECIFIED BY AN APPROPRIATE APPROVAL UNDER THE VARIATION TO THE CONTRACT. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS AND RECOMMENDATIONS.</p> <p>6. OBTAIN NECESSARY PERMITS AND APPROVAL FROM RELEVANT AUTHORITIES BEFORE COMMENCING WORK ON SITE.</p> <p>7. NOTIFY RELEVANT SERVICE AUTHORITIES BEFORE COMMENCING WORK ON SITE.</p> <p>8. GIVE TWO WORKING DAYS (AS HOURS) NOTICE SO THAT INSPECTION MAY BE MADE OF CRITICAL STAGES OF WORK.</p> <p>9. INSPECTIONS UNDERTAKEN BY SUPERINTENDENT/OTHERS DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWING AND SPECIFICATIONS.</p> <p>10. DO NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWING.</p> <p>11. DIMENSIONS ARE IN METRES. LEVELS ARE IN METRES UNO. CHANGE ARE IN METRES UNO.</p> <p>12. HAVE SURVEY AND SETTING OUT UNDERTAKEN BY A REGISTERED SURVEYOR.</p> <p>13. TAKE CARE OF HAZARDOUS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS TO ESTABLISH LOCATION AND PROTECT EXISTING SERVICES AT THE SITE. SERVICES SHOWN ON DRAWING ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MUST EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF IN-GROUND SERVICES.</p> <p>14. WORKMANSHIP AND MATERIALS TO COMPLY WITH REQUIREMENTS OF SA CODES, BUILDING CODE OF AUSTRALIA AND BY-LAWS AND ORDINANCES OF RELEVANT BUILDING AUTHORITIES. ALL CODES REFERRED TO ARE THOSE CURRENT (AS AMENDED) AT COMMENCEMENT OF CONTRACT.</p> <p>15. MAINTAIN STRUCTURE IN A STABLE CONDITION DURING CONSTRUCTION AND PROVIDE TEMPORARY BRACING AND/OR SUPPORT AS REQUIRED. PROVIDE SHORINGS AT LOADS AND/OR LIFTING POINTS WHERE REQUIRED. ENSURE NO PARTS OF SHORINGS, DO NOT PLACE OR STORE BUILDING MATERIALS ON STRUCTURAL MEMBERS WITHOUT SUPERINTENDENT'S APPROVAL. PROVIDE CALCULATIONS TO PROVE ADEQUACY OF STRUCTURE FOR PROPOSED CONSTRUCTION METHOD AND LOADS.</p> <p>16. UNLESS NOTED OTHERWISE THESE DRAWING DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORK ARE RESPONSIBILITY OF THE CONTRACTOR.</p> <p>17. DISPOSAL OF SURPLUS MATERIAL OFF SITE AT APPROVED LOCATION.</p> <p>18. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS IN ACCORDANCE WITH HANDBOOK URBAN STORMWATER/SLS AND CONSTRUCTION.</p> <p>19. OBTAIN REQUIREMENTS FOR ADJOINING ELEMENTS TO BE TIED TO OR SUPPORTED ON WORK AND PROVIDE FOR REQUIRED. PROVIDE DRAWINGS DO NOT SHOW DETAILS OF ALL FIXTURES, INTERFACES, BELIEVES, RECESSES OR JOINTS ETC. PROVIDE FOR TEMPORARY SUPPORT OF ADJOINING ELEMENTS DURING CONSTRUCTION.</p> <p>20. HAVE SOLE AND ANY DAMAGE TO EXISTING ELEMENTS PRIOR TO COMPLETION OF WORKS.</p> <p>21. WHERE NEW WORK ADJACENT TO EXISTING PROVIDE SMOOTH TRANSITION FINE OF ADJACENT ELEMENTS.</p> <p>22. HAVE TESTING PERFORMED BY AN INDEPENDENT NATA (NATIONAL ASSOCIATION OF TESTING AUTHORITIES) ACCREDITED AUTHORITY AND PROVIDE TEST REPORTS TO SUPERINTENDENT.</p> <p>23. SEPARATE METALS FROM INCOMPATIBLE MATERIALS (I.E. GALVANISED AND UNGALVANISED STEEL, TREATED TIMBER AND STEEL ETC) BY CONCEALED LAYERS OF SUITABLE INERT MATERIALS OF SUFFICIENT THICKNESS. USE PLASTIC SHEETS AND WRAPERS FOR BOLTS ETC.</p> <p>24. BUILD FABRICATE AND PROTECT ONLY FROM DRAWING ISSUED FOR CONSTRUCTION.</p> <p>25. KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS) AND SITE INSTRUCTIONS.</p>	<p><b>ENVIRONMENTAL SITE MANAGEMENT:</b></p> <p>1. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS IN ACCORDANCE WITH HANDBOOK URBAN STORMWATER/SLS AND CONSTRUCTION (THE BLUE BOOK). REFER TO THE BLUE BOOK FOR STANDARD DRAWING "S0" REFERENCED IN THESE NOTES.</p> <p>2. SEDIMENT AND EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON-SITE.</p> <p>3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM. SUPERINTENDENT SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ANY TRAP/SEDIMENT TO BE REMOVED TO A NEARBY SITE. A SEDIMENT FENCE IS TO BE PLACED DOWNWIND OF ALL STOCKPILES.</p> <p>4. RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED ARE TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE.</p> <p>5. AREAS OR SITE GRASSING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERINTENDENT MAY DIRECT THE CONTRACTOR TO HAVE DISTURBED AREAS COVERED AND STABILISED DURING THE COURSE OF THE WORKS. NOTWITHSTANDING ALL DISTURBED AREAS ARE TO BE SEEDED AND FERTILISED WITHIN 14 DAYS OF EXPOSURE.</p> <p>6. ALL EXISTING TREES TO BE REPAIRED UNLESS SHOWN OTHERWISE OR APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.</p> <p>7. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LOOSE WATER INTO SURROUNDING AREAS ARE PAVED OR DEVELOPMENTS GRASSY OR GROUND/FIT NOTE: FILTERS TO BE IN ACCORDANCE WITH STANDARD DRAWING S06-11 AND S06-12.</p> <p>8. ALL SILT FENCES AND BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER AND REGULARLY MAINTAINED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO STANDARD DRAWINGS S06-8 OR S06-9.</p> <p>9. STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL AND GRAVEL MUST BE COVERED WITH GEOTEXTILE PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRIERS SHOULD BE USED TO ISOLATE STOCKPILES OF SOIL MATERIALS SUCH AS STEEL REINFORCING.</p> <p>10. WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SHIP BINS LOCATED ON SITE AS SHOWN ON PLAN OR IF NOT SHOWN AT A LOCATION APPROVED BY THE SUPERINTENDENT.</p> <p>11. NO MORE THAN 150m<sup>2</sup> OF TRENCHING IS TO BE OPEN AT ANY ONE TIME. IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE GRASSING/VEGETATION TO PROTECT EXPOSED SOIL. TRENCHES TO BE MAXIMUM 20m INTERVALS. FILTERS TO REMAIN IN PLACE UNTIL VEGETATION HAS OCCURRED.</p> <p>12. ALL VEHICLES LEAVING THE SITE MUST PASS OVER A STABILISED ACCESS BALLAST AREA (SIMILAR TO STANDARD DRAWING S06-14) TO SHAKE OFF SITE DIRT AND SOIL. IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN. BALLAST IS TO BE MAINTAINED AND REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD.</p> <p>13. THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN.</p> <p>14. ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY INCLUDING FOOTPATH RESERVE AND ROAD SURFACE IS TO BE REMOVED IMMEDIATELY.</p> <p>15. TRUCKS REMOVING EXCAVATED/DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PAVES. MATERIAL ARE TO BE TIED TO THE TRUCKS TO PREVENT TRUCK MOVEMENTS ON-SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY ROAD VEHICLES (NO SEMI-TRAILERS).</p> <p>16. DURING TRENCH EXCAVATION ALL SPILL SHALL BE MOUND ON THE UPHILL SIDE OF TRENCHES AND FLAGGED IN TO COMPLY WITH THE SUPPLY LOGGING REQUIREMENT.</p> <p>17. OVERFLOW BARRIERS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL (MIN HEIGHT 600mm) WHERE DIRECTED MATERIAL TO BE RESPIRATED ON FOOTPATHS AFTER FINAL TRIMMING.</p> <p>18. UNDISTURBED BUFFER ZONE AREAS ARE TO BE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.</p>	<p><b>CONCRETE:</b></p> <p>1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 AND AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARYED BY THE CONTRACT DOCUMENTS.</p> <p>2. ALL CEMENT TO BE TYPE GF, GENERAL PURPOSE CEMENT IN ACCORDANCE WITH AS3202.</p> <p>3. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 3600</p> <p>4. DETAILS OF THE PROPOSED MIX ARE TO BE SUBMITTED FOR APPROVAL PRIOR TO POURING ANY CONCRETE.</p> <p>5. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.</p> <p>6. MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE:</p> <table border="1"> <thead> <tr> <th>ELEMENT</th> <th>STRENGTH GRADE (MPa)</th> <th>SLIMP (mm)</th> <th>MAX AGGREG. SIZE (mm)</th> <th>CAST AGAINST GROUND (mm)</th> <th>CAST IN FORMS AND NOT EXPOSED (mm)</th> </tr> </thead> <tbody> <tr> <td>RAISED THRESHOLD</td> <td>40</td> <td>80</td> <td>20</td> <td>50</td> <td>50</td> </tr> <tr> <td>FOOTPATH</td> <td>20</td> <td>80</td> <td>20</td> <td>50</td> <td>50</td> </tr> </tbody> </table> <p>7. CONCRETE SIZES/DIMENSIONS SHOWN DO NOT INCLUDE THE THICKNESS OF ANY APPLIED FINISHES. NO FINISH THAT DECREASES COVER IS PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE SUPERINTENDENT/ENGINEER.</p> <p>8. MAINTAIN COVER TO REINFORCEMENT AT CHAMBERS, DRIP GROOVES, RIDGELTS ETC</p> <p>9. NO HOLES, CHANGES, BLOCKOUT, DUCTS OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE SUPERINTENDENT/ENGINEER.</p> <p>10. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE SUPERINTENDENT/ENGINEER.</p> <p>11. ALL CONCRETE MEMBERS SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK AND THOROUGHLY EMBEDDING THE REINFORCEMENT AND FIRST OF STONE PEGGERS.</p> <p>12. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT.</p> <p>13. CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING.</p> <p>14. ALL CONCRETE SHALL BE PLACED IN SUCH A MANNER SO AS TO AVOID SEGREGATION OR LOSS OF MATERIALS.</p> <p>15. UNDER NO CIRCUMSTANCES SHALL EXCESS CONCRETE BE DISPOSED OF ON-SITE. ALL EXCESS CONCRETE MUST BE CARRIED FROM SITE AND DISPOSED OF IN AN APPROPRIATE MANNER.</p> <p>16. WATER USED FOR FLUSHING CHUTES AND FOR CLEANING OF CONCRETE TRUCKS AND OTHERS MUST BE DISCHARGED IN AN AREA DESIGNATED FOR THAT PURPOSE AND WHICH HAS EROSION AND SEDIMENT CONTROL MEASURES IN PLACE.</p>	ELEMENT	STRENGTH GRADE (MPa)	SLIMP (mm)	MAX AGGREG. SIZE (mm)	CAST AGAINST GROUND (mm)	CAST IN FORMS AND NOT EXPOSED (mm)	RAISED THRESHOLD	40	80	20	50	50	FOOTPATH	20	80	20	50	50	<p><b>FORMWORK:</b></p> <p>1. RESPONSIBILITY FOR DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF FORMWORK AND FALSEWORK LIES WITH CONTRACTOR.</p> <p>2. DO NOT SUPPORT OR RESTRAIN FORMWORK ON PERMANENT WORKS WITHOUT SUPERINTENDENT'S WRITTEN APPROVAL.</p> <p>3. CONTRACT FORMWORK TO COMPLY WITH AS3610 AND CLAUSE 19.6.2 OF AS3600 WHILE THIS IS MORE SUPPORTIVE TO CONCRETE WILL HAVE DIMENSIONS, SHAPE, LOCATION AND FINISH SPECIFIED. PROVIDE SPECIFICS OR REMOVEABLE PANELS FOR INSPECTION AND CLEANING. APPLY RELEASE AGENT COMPATIBLE WITH CONTACT SURFACES TO INTERIOR OF FORMWORK (EXCEPT WHERE CONCRETE IS TO RECEIVE AND APPLIED FINISH FOR WHICH THERE IS NO COMPATIBLE RELEASE AGENT). WHERE NECESSARY CLEAN REINFORCEMENT TO REMOVE TRACES OF RELEASE AGENT. SEAL JOINT BETWEEN FORMWORK PANELS AND TO UNPAVED CONCRETE WITH FLEXIBLE RUBBER STRIP. SET OUT FORMWORK TO GIVE A REGULAR ARRANGEMENT OF PANELS, JOINT, BOLT HOLES ETC.</p> <p>4. DO NOT USE FORMWORK HARDWARE THAT FORMS A COMPLETE HOLE THROUGH CONCRETE ELEMENTS. DO NOT USE REINFORCEMENT TO SUPPORT FORMWORK.</p> <p>5. PROVIDE HOLES IN REBATE FORMERS ETC AS REQUIRED TO PREVENT AIR ENTRAPMENT.</p> <p>6. CONSTRUCTION TOLERANCES TO BE TO AS3610.</p> <p>7. STRIP FORMWORK TO AS3600 CLAUSE 19.6. REMOVE FROM THE BOLTS WITHOUT DAMAGING CONCRETE. PARTS OF BOLTS LEFT IN CONCRETE MUST NOT INCLUDE INTO COVER CONCRETE. FLUSH ALL HOLES USING PRE-MIXED NON-SHRINK CEMENTITIOUS REPAIR MORTAR MATCHING CONCRETE SURFACE COLOUR, STRENGTH AND DURABILITY AND ADEQUATE BOND.</p>
ELEMENT	STRENGTH GRADE (MPa)	SLIMP (mm)	MAX AGGREG. SIZE (mm)	CAST AGAINST GROUND (mm)	CAST IN FORMS AND NOT EXPOSED (mm)																
RAISED THRESHOLD	40	80	20	50	50																
FOOTPATH	20	80	20	50	50																
			<p><b>UNDERGROUND UTILITIES AND SERVICES:</b></p> <p>1. TAKE CARE OF HAZARDOUS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS TO ESTABLISH LOCATION OF AND PROTECT EXISTING SERVICES AT THE SITE. SERVICES SHOWN ON DRAWING ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF IN-GROUND SERVICES.</p> <p>2. EXISTING UNDERGROUND SERVICES &amp; UTILITIES HAVE BEEN IDENTIFIED IN THE AREA FROM A CALL BEFORE YOU DIG SERVICES SEARCH. THE CONTRACTOR SHALL OBTAIN CURRENT "CALL BEFORE YOU DIG" INFORMATION PRIOR TO COMMENCING EXCAVATIONS.</p> <p>3. THE CONTRACTOR SHALL IDENTIFY AND LOCATE ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT ON SITE AND SHALL ENSURE THAT NO DAMAGE OCCURS TO THEM THROUGHOUT WORK UNDERTAKEN IN CONTRACT.</p>																		
			<p><b>SURVEY MARK PROTECTION:</b></p> <p>1. IN ACCORDANCE WITH SECTION 24(1) OF THE SURVEYING AND SPATIAL INFORMATION ACT 2002 A PERSON MUST NOT REMOVE, DAMAGE, DESTROY, DISPLACE, OBLITERATE OR DEFACE ANY SURVEY MARK UNLESS AUTHORIZED TO DO SO BY THE SURVEYOR. GENERAL IN THIS REGARD ANY PROPOSED CONSTRUCTION WORK THAT MAY AFFECT A STATE SURVEY MARK CANNOT BE UNDERTAKEN UNTIL A REGISTERED SURVEYOR IS ENGAGED TO ARRANGE ITS RELOCATION. IN ACCORDANCE WITH THE REQUIREMENTS OF THE NSW GOVERNMENT LAND AND PROPERTY INFORMATION.</p> <p>2. REFER TO SURVEY MARK AUDIT SCHEDULE FOR ADDITIONAL INFORMATION PERTAINING TO PROTECTION AND RELOCATION OF EXISTING SURVEY MARKS.</p>																		
		<p><b>REINFORCEMENT:</b></p> <p>1. REINFORCEMENT SYMBOLS          - R DENOTES GRADE 300 R HOT ROLLED PLAIN BARS TO AS1302          - F DENOTES GRADE 400 F HARD-DRAWN WIRE REINFORCING FABRIC TO AS1304          - W DENOTES GRADE 400 W HARD-DRAWN PLAIN WIRE TO AS1300          - N DENOTES DEFORMED BAR NORMAL DUCTILITY TO AS/NZS 4671 GRADE 500N          - L DENOTES DEFORMED BAR LOW DUCTILITY TO AS/NZS 4671 GRADE 500L          - RN DENOTES RECTANGULAR WIRE MESH NORMAL DUCTILITY TO AS/NZS 4671          - RL DENOTES RECTANGULAR WIRE MESH LOW DUCTILITY          - SN DENOTES SQUARE WIRE MESH NORMAL DUCTILITY          - SL DENOTES SQUARE WIRE MESH LOW DUCTILITY TO AS/NZS 4671</p> <p>2. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROPORTION.</p> <p>3. SPECIFICS IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER.</p> <p>4. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.</p> <p>5. WELDS OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE SUPERINTENDENT.</p> <p>6. MINIMUM FABRIC LAP SHALL BE TWO TRANSVERSE BARS PLUS 300mm, WHERE FABRIC LAPS SHEETS TO HAVE MAXIMUM 2 LAYERS AT ANY POINT, CUT BACK FABRIC AT CORNERS AS REQUIRED.</p> <p>7. WHERE TRANSVERSE THE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400mm UNLESS NOTED.</p> <p>8. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON WIRE STYL PLASTIC TRIPPED CHAIRS. PLASTIC BAR CHAIRS OR CONCRETE CHAIRS AND NOT GREATER THAN 1 METRE CENTRES BOTH WAYS (800 EACH WAY FOR FABRIC).</p> <p>9. ALL RE-ENTRANT CORNERS TO HAVE 600 x 600mm N12 L-BARS TIED TO EACH LAYER OF MESH.</p>	<p><b>SPECIFICATION</b></p> <p>ALL WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE SHELLHARBOUR ENGINEERING CONSTRUCTION CODE UNLESS OTHERWISE NOTED ON THESE DRAWINGS.</p> <p>THE RELEVANT SECTIONS OF THE CODE ARE NOTED BELOW:</p> <p>0138 - GENERAL REQUIREMENTS (CONSTRUCTION)          0160 - QUALITY MANAGEMENT (CONSTRUCTION)          0219 - AUXILIARY CONCRETE WORKS          1100 - GRASS MANAGEMENT          1102 - CONTROL OF EROSION AND SEDIMENTATION (CONSTRUCTION)          1151 - PAVEMENT MARKINGS          1152 - SIGNPOSTING</p>																		
<p><b>10. SITE MANAGEMENT:</b></p> <p>1. PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITH THE PUBLIC DOWN TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.</p> <p>2. CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE DESIGNATED WORK AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.</p> <p>3. DELIVERY VEHICLES MUST NOT STAND WITHIN THE PUBLIC ROADWAY FOR MORE THAN 20 MINUTES AT A TIME.</p> <p>4. TOILET FACILITIES MUST BE EITHER FLUSHING TOILET OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED AND SERVICES ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT LIMITED.</p> <p>5. TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE TRAFFIC CONTROL AT WORKSITES MANUAL AND AS1742, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.</p> <p>6. PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION IN ACCORDANCE WITH AS1742, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.</p>	<p><b>DEMOLITION</b></p> <p>1. CARRY OUT ALL DEMOLITION WORK IN ACCORDANCE WITH AS 2601.</p> <p>2. SUPPORT EXCAVATIONS FOR DEMOLITION OF UNDERGROUND STRUCTURES.</p> <p>3. PROVIDE SUPPORT TO ADJACENT STRUCTURES WHERE NECESSARY, SUFFICIENT TO PREVENT DAMAGE RESULTING FROM THE WORKS.</p> <p>4. PROVIDE DUST-PROOF SCREENS, BULKHEADS AND COVERS TO PROTECT EXISTING FINISHES AND THE IMMEDIATE ENVIRONMENT FROM DUST AND DEBRIS.</p> <p>5. DO NOT USE EXPLOSIVES.</p> <p>6. CONTRACTOR TO REMOVE AND DISPOSE OF HAZARDOUS MATERIALS TO AUSTRALIAN STANDARDS AND IN ACCORDANCE WITH RELEVANT STATE AND FEDERAL REQUIREMENT.</p> <p>7. ANY ASBESTOS MATERIALS ENCOUNTERED TO BE REMOVED IN LINE WITH WORK COVER CODE OF PRACTICE. PROVIDE RECORDS OF DISPOSAL. PROVIDE AIR MONITORING DURING REMOVAL &amp; CLEANANCE CERTIFICATION ON COMPLETION &amp; PRIOR TO OCCUPATION.</p> <p>8. THE CONTRACTOR SHALL GIVE NOTICE IMMEDIATELY IF UNKNOWN HAZARDOUS MATERIALS OR CONDITIONS ARE FOUND, INCLUDING THE FOLLOWING:          - ASBESTOS OR MATERIAL CONTAINING ASBESTOS          - FLAMMABLE OR EXPLOSIVE LIQUIDS OR GASES          - TOXIC, INFECTIVE OR CONTAMINATED MATERIALS          - IRRITATION OR RADIOACTIVE MATERIALS          - NOXIOUS OR EXPLOSIVE CHEMICALS          - HAZARDOUS OR OTHER CONDITIONS WHICH HAVE BEEN USED FOR STORAGE OF EXPLOSIVE, TOXIC, INFECTIVE OR CONTAMINATED SUBSTANCES.</p> <p>9. PROVIDE CLEARANCE CERTIFICATE TO SUPERINTENDENT FOR REMOVAL OF ANY HAZARDOUS MATERIALS.</p> <p>10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM SITE AND DISPOSE OF ALL ITEMS TO BE DEMOLISHED IN AN APPROPRIATE AND LEGAL MANNER.</p>	<p><b>ISSUED FOR CONSTRUCTION</b></p> <p>ISSUED FOR CONSTRUCTION</p> <p>ISSUE DESCRIPTION DATE</p> <p>26/01/22          14/01/22          11/11/21</p> <p>FOOTPRINT OBTAIN PLY. UNL. AUTHORISE THE USE OF THIS DRAWING ONLY FOR THE PURPOSES AUTHORIZED BY THE STATUS TRAP SHOWN ABOVE.</p>	<p>SCALE: ORIGINAL</p> <p>A1</p> <p>CLIENT</p> <p>Shellharbour City Council</p>	<p>SURVEYOR: CEH          DATUM: AHD          AZIMUTH: WCA          DRAWN: AB          DESIGNED: AB          DESIGNED DATE: OCT 2021          CHECKED: AB</p> <p>footprint sustainable engineering          a. 15 meehan drive          kiama downs nsw 2533          p. 02 4237 6770          m. 0430 421 6671</p>	<p><b>PROPOSED PEDESTRIAN FACILITIES</b></p> <p>FLINDERS, OAK FLATS, SHELL COVE AND WARILLA          TNSW ROAD SAFETY PROGRAM          NOTES</p>	<p>DRAWING NO: 2129-C02</p> <p>ISSUE: A</p> <p>SHEET 2 OF 10</p>															



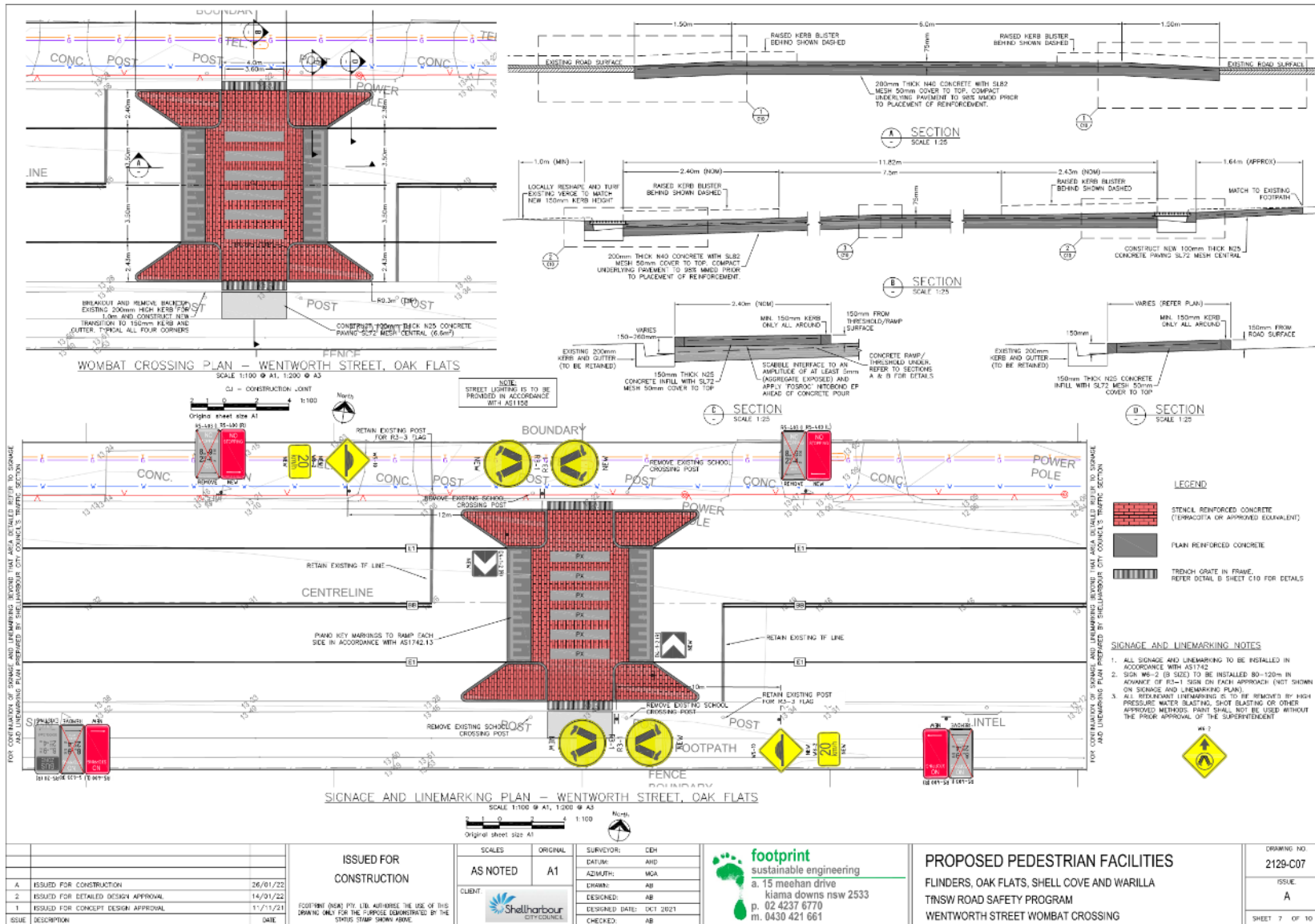


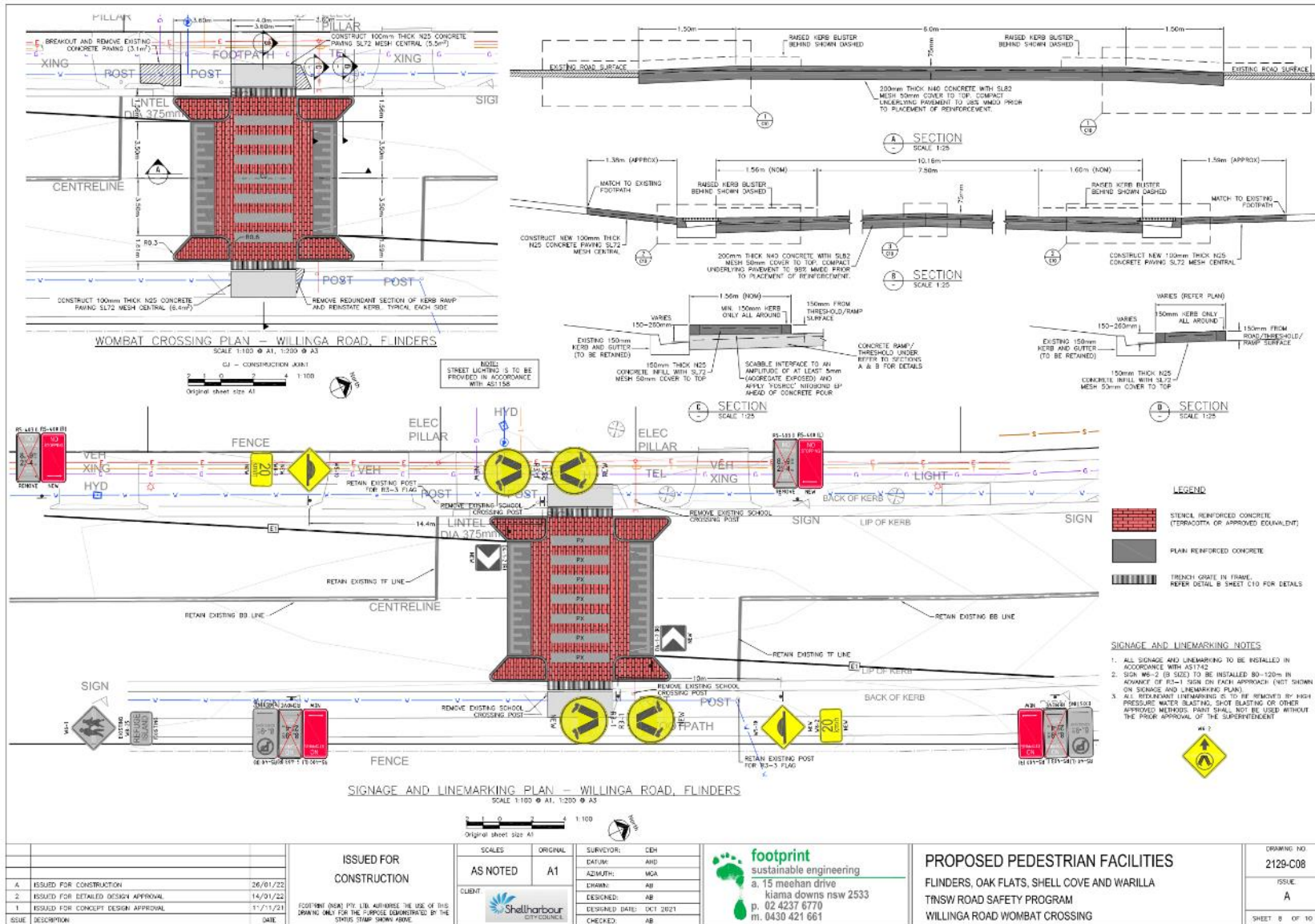


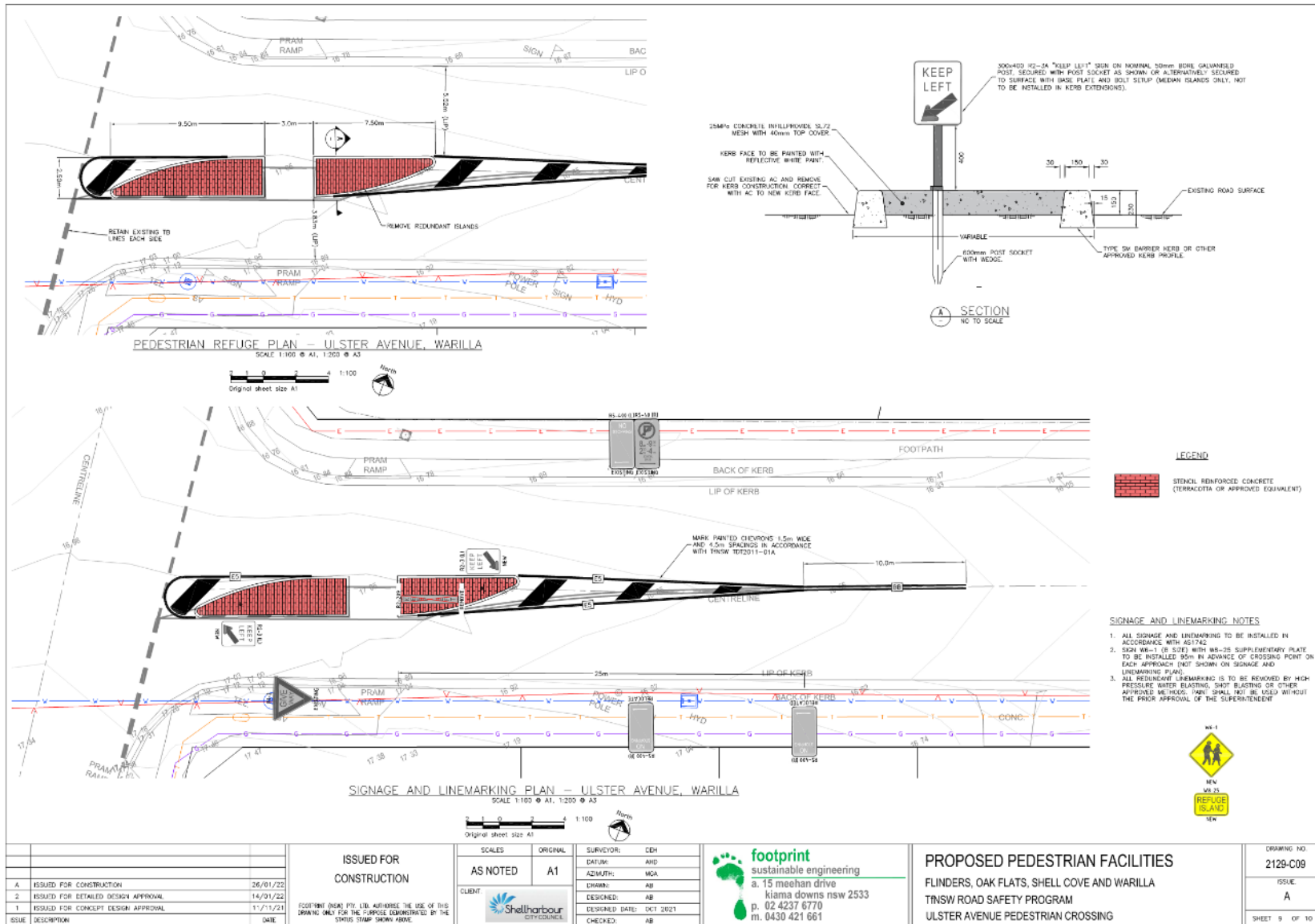












ISSUE	DESCRIPTION	DATE
1	ISSUED FOR CONCEPT DESIGN APPROVAL	11/11/21
2	ISSUED FOR DETAILED DESIGN APPROVAL	14/01/22
3	ISSUED FOR CONSTRUCTION	26/01/22

**ISSUED FOR CONSTRUCTION**

FOOTPRINT ENGINEERING PTY. LTD. AUTHORISES THE USE OF THIS DRAWING ONLY FOR THE PURPOSES INDICATED BY THE STATUS STAMP SHOWN ABOVE.

SCALES	ORIGINAL
AS NOTED	A1

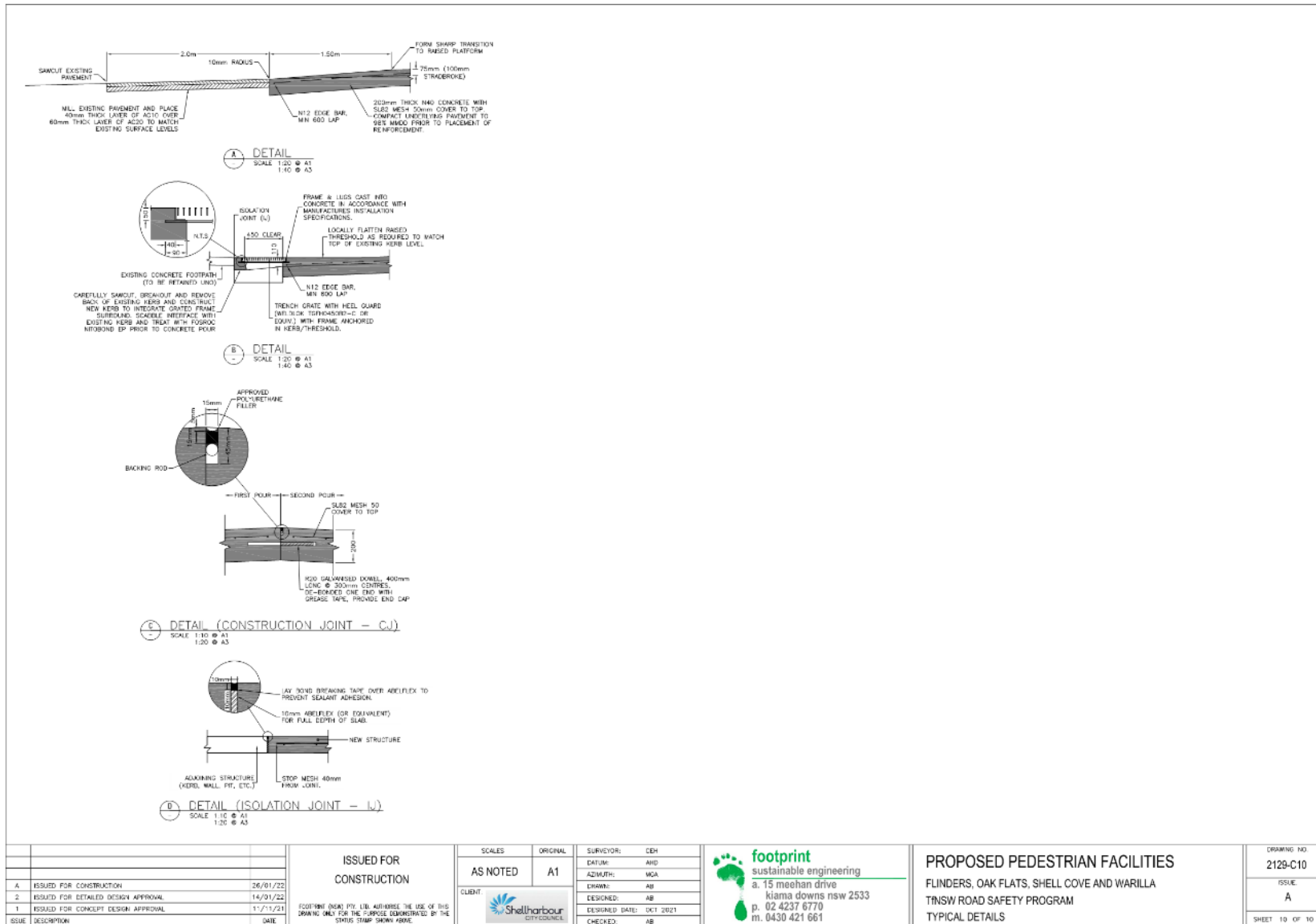
CLIENT:

SURVEYOR:	CEH
DATUM:	AND
AZIMUTH:	MCA
DRAWN:	AB
DESIGNED:	AB
DESIGNED DATE:	OCT 2021
CHECKED:	AB

**footprint**  
 sustainable engineering  
 a. 15 meehan drive  
 kiama downs nsw 2533  
 p. 02 4237 6770  
 m. 0430 421 661

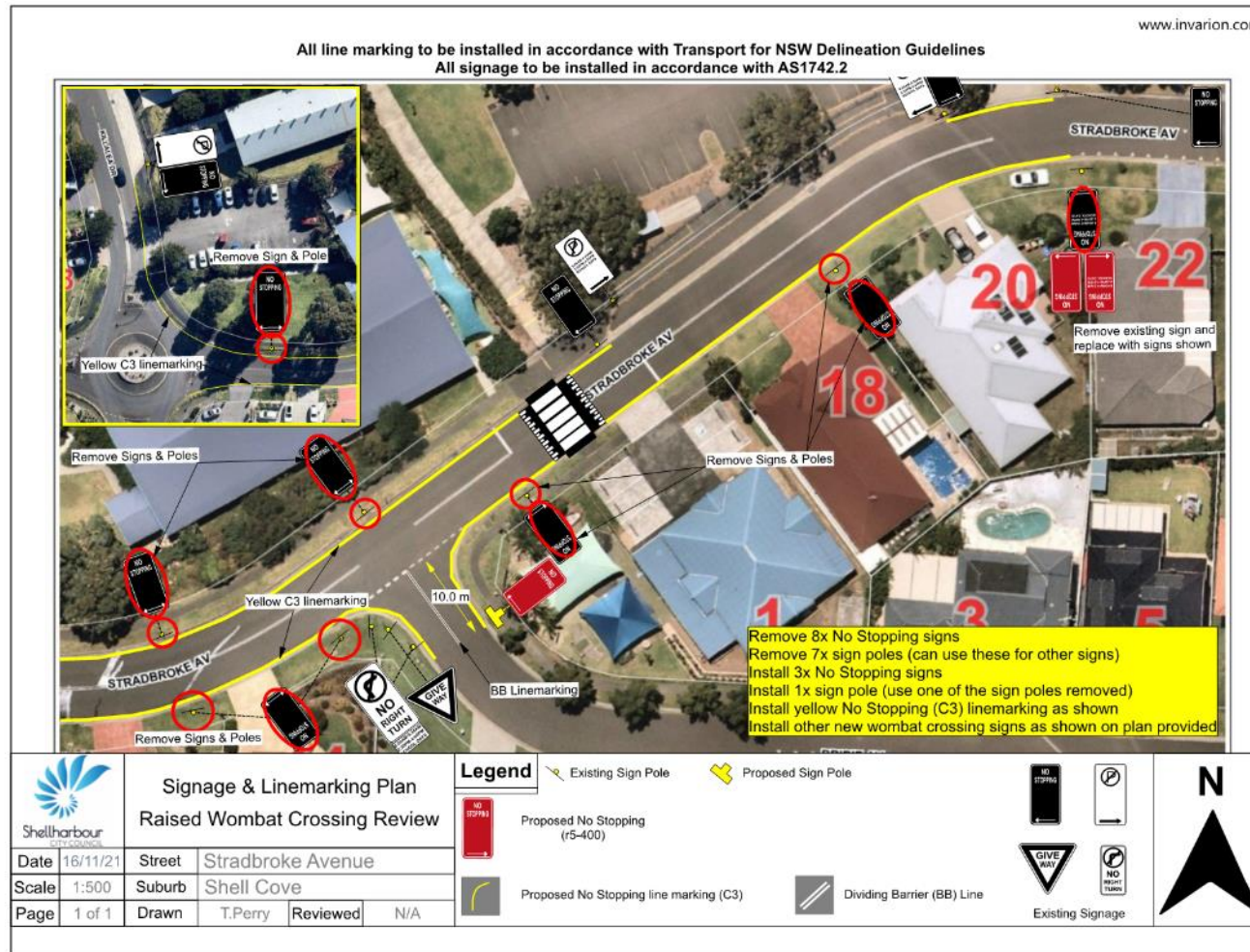
**PROPOSED PEDESTRIAN FACILITIES**  
 FLINDERS, OAK FLATS, SHELL COVE AND WARILLA  
 TRNSW ROAD SAFETY PROGRAM  
 ULLSTER AVENUE PEDESTRIAN CROSSING

DRAWING NO	2129-C09
ISSUE	A
SHEET	9 OF 10





Attachment 2 - Shell Cove School Signage & Linemarking Plan



Attachment 3 - Oak Flats School Linemarking Plan(1)



## 8.4. Pedestrian Crossing - Airport Road, Albion Park Rail

### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Tyson Perry – Engineering Technical Officer

### Summary

The purpose of this report is to seek endorsement from the Committee for the installation of a pedestrian crossing at Airport Road, Albion Park Rail (**Attachment 1**).

### Background

Council's Projects team are preparing a detailed design for the Airport Road footpath and pedestrian upgrades. During this work, it was noted that the existing pedestrian crossing nearby was substandard and potentially not endorsed via the Shellharbour Traffic Committee. The main issues at this location are the presence of a merge area for southbound traffic in close proximity to the pedestrian crossing (non-compliant), unclear linemarking, and parking close to the pedestrian crossing. A signage and linemarking plan (**Attachment 2**) has been prepared to address the non-compliant elements at this location. Please note that the illustration of the 'No Stopping' signage on the plans is a non-standard sign. The recommendation of this report has requested that standard signage be installed.

### Financial / Resources Implications

If approved, works will be carried out and funded by Council

### Legal and Policy Implications

Pedestrian crossing will be revised to ensure compliance with Australian Standards.

### Public / Social Impact

- Clearer traffic flow direction for road users with improved delineation and signage
- Increased crossing safety by providing chevron linemarking at the centre of the pedestrian crossing (reduced crossing length)

**Link to Community Strategic Plan**

This report supports the following objectives and strategies of the Community Strategic Plan:

<b>Objective:</b>	1.2	Active and healthy
<b>Strategy:</b>	1.2.1	Provide access to services and facilities where people can live, learn and play

<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network
	2.3.4	Facilitate the development of the built environment to meet community needs

**Consultations**

The following consultations were undertaken:

**Internal**

- Manager Floodplain and Transport
- Senior Transport Engineer
- Manager Compliance & Regulation
- Acting Road Safety Officer
- Manager Projects

**External**

Nil.

**Political Donations Disclosure**

Not Applicable

**Committee Recommendation**

That Council approve the signage and linemarking plan at Airport Road, Albion Park Rail as shown in Attachment 2 subject to:

1. the 'No stopping' sign on approach to the pedestrian crossing (southbound traffic) being relocated closer (in-line) with the parking lane edgeline.
2. all 'No Stopping' signage (r5-400) be in accordance with Transport for NSW Standard Signs.

**Approved By**

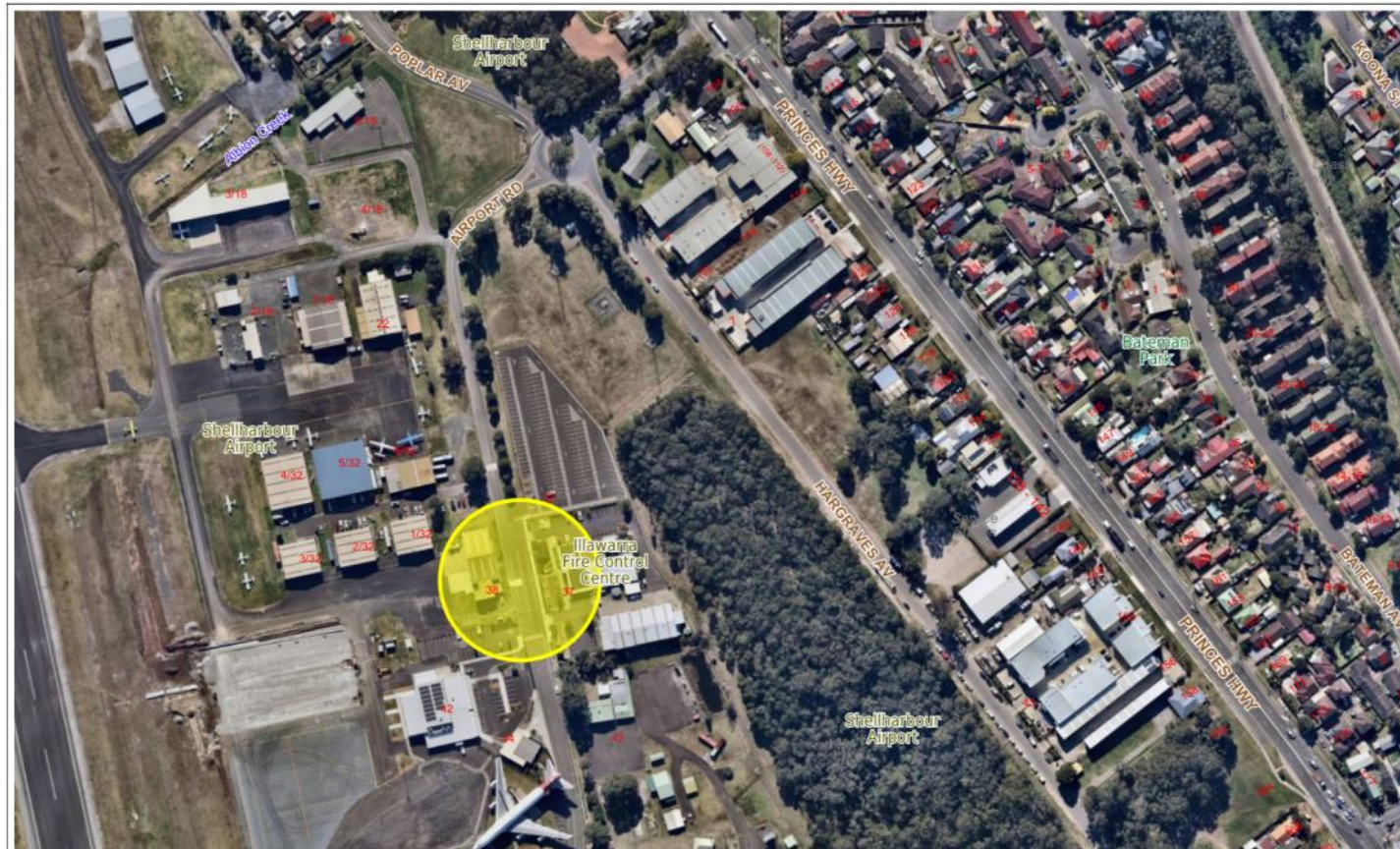
Approved for Council's Consideration:	Matthew Apolo
Date of Meeting:	2 March 2022

**Attachments**

1. Locality Plan
2. Signage & Linemarking Plan



Attachment 1 - Locality Plan



Printed: 23/12/2021

This map is supplied on the understanding that Council will not be responsible for any loss or damage which may result from any use made of such information as a result of errors or omissions contained in the map.  
Copyright © NSW Spatial Services and Shellharbour City Council 2021.



Scale: 1:3000



Shellharbour  
CITY COUNCIL

**Attachment 2 – Signage and Linemarking Plan**



**Technical Memorandum**

February 14, 2022

<b>To</b>	Bree Hoek	<b>Tel</b>	61 2 9239 7164
<b>Copy to</b>		<b>Email</b>	jayme.akstein@ghd.com
<b>From</b>	Jayme Akstein	<b>Ref. No.</b>	12566960
<b>Subject</b>	Shellharbour Signage and Line Marking Plan		

**1. Background**

GHD was engaged by Hutchinson Builders to prepare a Signposting and Line Marking Plan for the Shellharbour Airport Project (formally known as the Illawarra Airport New Terminal and Car Park Upgrade) located in Albion Park Rail, Shellharbour City, New South Wales (see Figure 1). The plan is required to satisfy Condition 40 of the Client’s Development Application (DA). The condition states that the plan must detail all facilities, signage and line marking required within and surrounding the development.



Figure 1 Site Location  
Image Source: Metromap 2021

## 2. Purpose of this technical memorandum

This technical memorandum is prepared to accompany the signage and line marking plan, outlining the design process and documenting the standards and assumptions of the plan.

## 3. Assumptions and Limitations

The preparation of this plan relied on the following data sources or was limited by the following:

- Drawings provided by Client:
  - 19202-CD-AR-0100(10) – SITE PLAN.dwg
  - 19422\_CC\_C100.dwg
- Illawarra Regional Airport Passenger Terminal DA Traffic and Parking Assessment (GHD, 2018)
- Illawarra Airport New Terminal and Car Park Upgrade - Short term parking amendment (GHD, 2019)
- No site inspection was undertaken.

## 4. Design Development

Signage and line markings provide visual guidance to road users for efficient and safe journeys. They provide advice on restrictions, ease traffic flow, help identify potential hazards on the road, and reduce possible occurrence of accidents and damages to property. Hence, planning and designing appropriate signs and markings are important for road safety.

The Shellharbour Airport Signage and Line Marking Plan was designed in accordance with the following relevant standards.

- Australian Standard: Manual for uniform traffic control devices Part 10: Pedestrian control and protection, 2009
- Roads and Transport Authority: Delineation Section 4 – Longitudinal markings, 2015
- Roads and Transport Authority: Delineation Section 6 – Transverse markings, 2010
- Roads and Transport Authority: Delineation Section 7 – Transverse lines – pedestrian facilities, 2010.

Based on the above standards, the following signs and pavement markings are proposed in the plan as presented in the Attachment:

- Pedestrian crossing sign (R3-1)
- Pedestrian crossing ahead warning sign (W6-2)
- "No stopping" signs (R5-100R, R5-400L)
- "Stop" sign (R1-1A)
- Lane line (L3)
- "Stop" line (TF).

Additionally, the existing pedestrian zebra crossing (PX) is proposed to be extended to road edge to reduce conflict between pedestrian and vehicle movements. This would entail removal of four (4) on-street parking spaces along Airport Road.



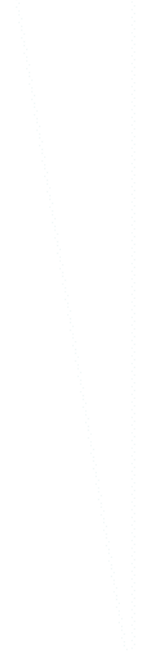
## **5. Conclusion**

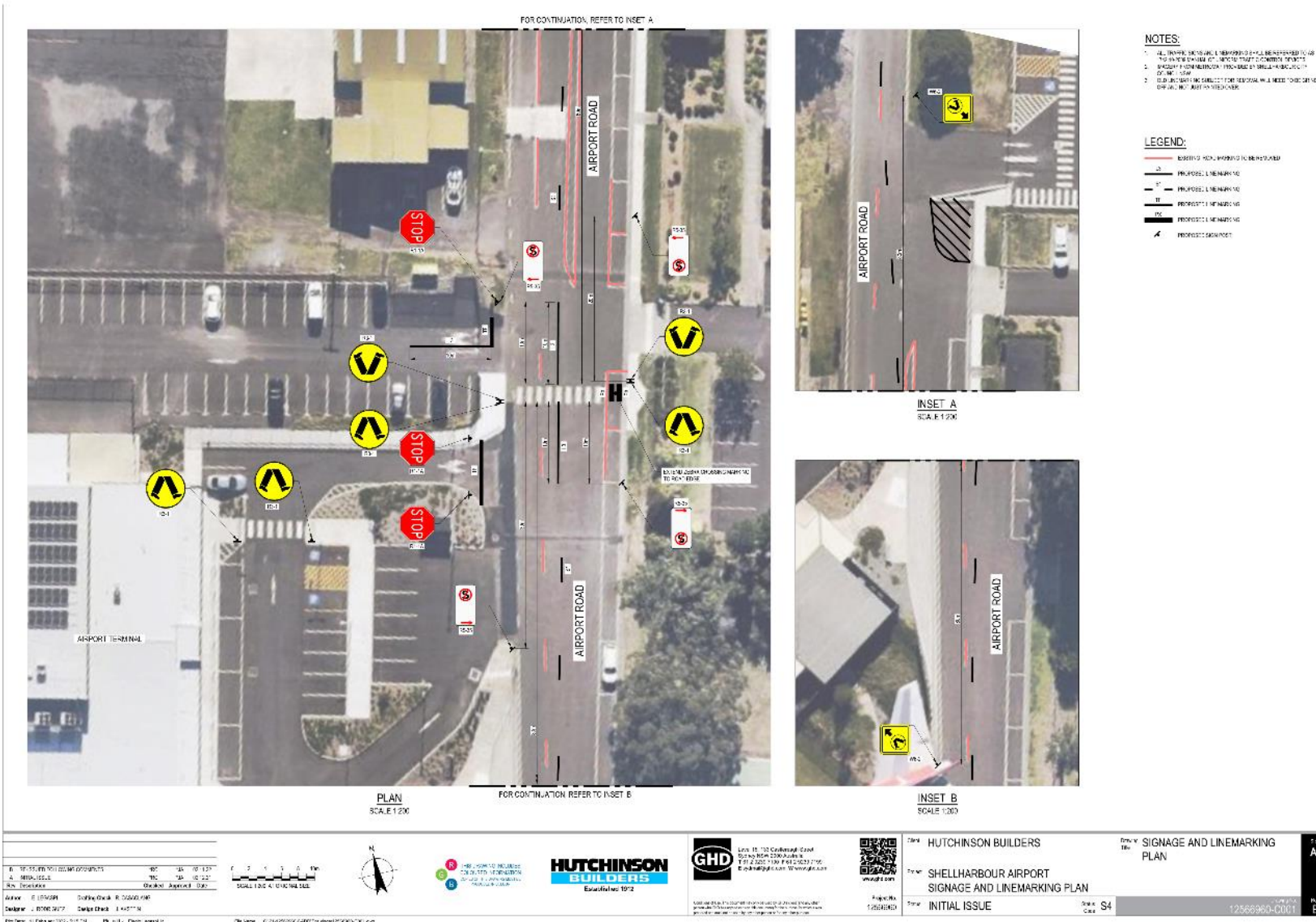
The prepared signage and line marking plan was designed to comply with the Australian Standard AS1742.10:2009 and would likely improve the safe and efficient operation of vehicles at the car park, and minimise conflicts between pedestrian and vehicle movements.



**Jayme Akstein**  
Business Group Leader Traffic Engineering and Transport Planning

**Attachment: Shellharbour Airport Signage and Line Marking Plan**





## 8.5. Run Shellharbour Event

### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Wayne Wilson - Senior Transport Engineer

### Summary

The purpose of this report is to seek endorsement from the Committee for temporary road closures to facilitate the Run Shellharbour event on 1 May 2022.

### Background

Run Shellharbour is a one day running festival to be held on 1 May 2022. The event will incorporate a 21.1 km Harbour Half Marathon. The start and finish area will be located in the southern end of Eric Creary Park, Shellharbour. The event will use the shared path along Reddall Parade, heading under Windang Bridge and return back to Eric Creary Park (**Attachment 1**). The run course will consist mainly of shared footpath and a short distance of road running which will require partial closures along Junction Road, Shellharbour/Barrack Point and Shell Cove Road, Barrack Point. A Traffic Management Plan (**Attachment 2**) and a Traffic Control Plan (**Attachment 3**) have been supplied by the organisers of the event. These plans are the same as those submitted to the November 2021 Traffic Committee for the event last year.

The event is expected to attract 800 competitors. Road closures are proposed to include the following:

- Junction Road, Shellharbour/Barrack Point - There will be a partial temporary road closure along Junction Road from the Shellharbour Surf Club to Surfrider Caravan Park at the commencement of each race. Vehicle access to the caravan park will not be impacted. Road closures will occur at the beginning of each race, for 15 minutes as the race begins. The event will begin at 6:30am, to avoid peak recreation visitors to Reddall Reserve. Junction Road will not be closed for the conclusion of races as runners will use the footpath along Junction Road to return as the field will naturally spread out during the run. (**Attachment 3**)
- Shell Cove Road, Barrack Point - To ensure the safety of the competitors there will be a half road temporary closure along Shell Cove Road. Contra flow will

be in operation from 6am for the duration of the event, which is expected to conclude at approximately 10:30am (**Attachment 3**).

**Financial / Resources Implications**

If approved, works will be carried out and funded by the proponent.

**Legal and Policy Implications**

Nil.

**Public / Social Impact**

Minor traffic delays expected to motorists during event.

**Link to Community Strategic Plan**

This report supports the following objectives and strategies of the Community Strategic Plan:

<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network

**Consultations**

The following consultations were undertaken:

**Internal**

- Manager Floodplain and Transport
- Manager Compliance & Regulation
- Road Safety Officer

**External**

Nil.

**Political Donations Disclosure**

Not Applicable



**Committee Recommendation****That Council:**

- 1. Approve the temporary closure of Junction Road, Shellharbour and Barrack Point as detailed in the report and shown in Attachment 3**
- 2. Approve the temporary partial closure of Shell Cove Road, Barrack Point as detailed in the report and shown in Attachment 3**

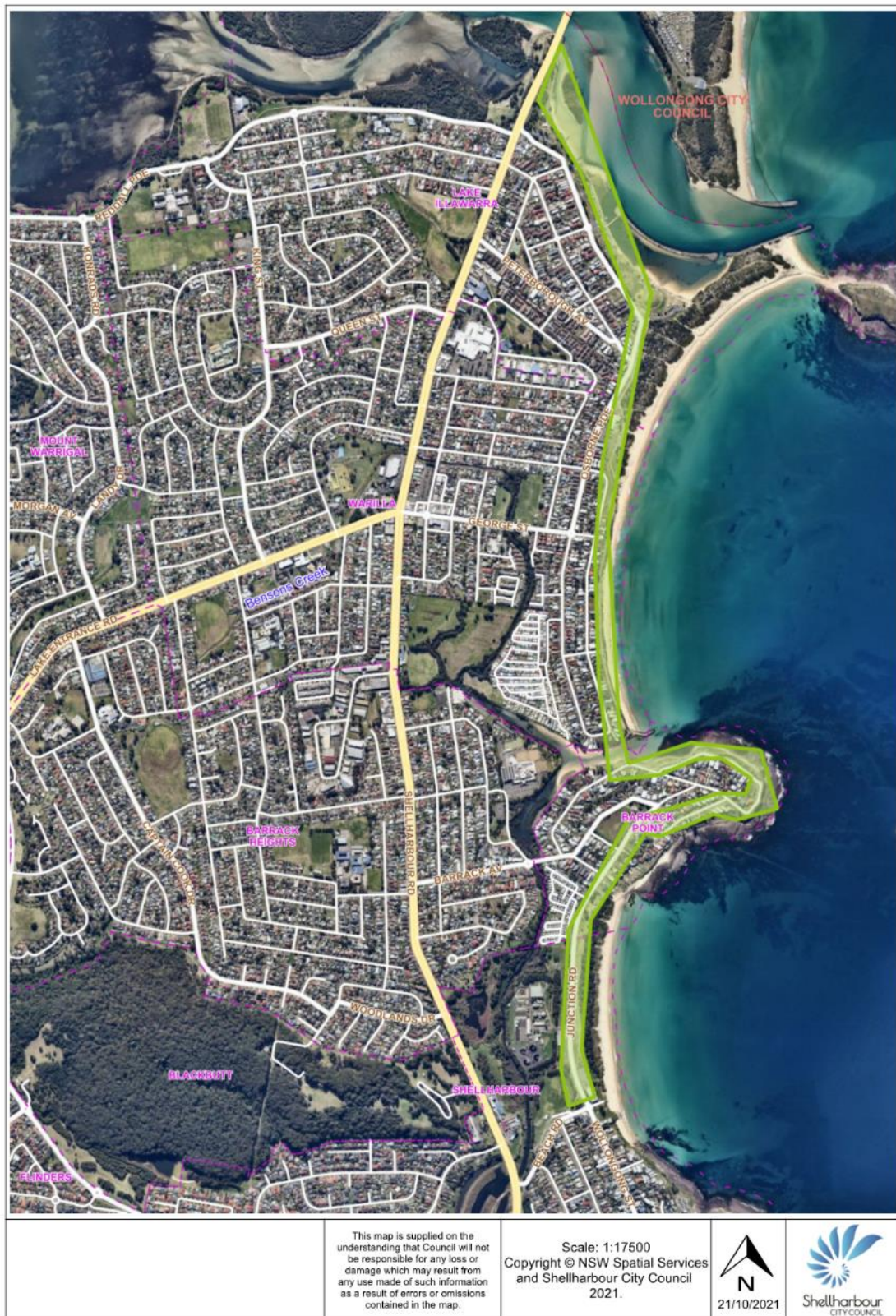
**Approved By**

<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

**Attachments**

1. Locality Plan
2. Traffic Management Plan
3. Traffic Control Plan

Attachment 1 - Locality Plan



**Attachment 2 - Traffic Management Plan**

# **RUN SHELLHARBOUR**

## **2021**

### **SUNDAY 5 DECEMBER 2021**

## **TRAFFIC MANAGEMENT PLAN**

## **TABLE OF CONTENTS**

PART 1 Event Overview

PART 2 Traffic Arrangements

PART 3 Maps

PART 4 VMS Strategy

PART 5 Operational Manual

PART 6 Contact List

PART 7 Traffic Control Plans

PART 8 Risk Assessment



## PART 1 Event Overview

**TMP Event Overview**

<b>Event Name:</b>	Run Shellharbour 2021
<b>Event Date:</b>	5 December 2021
<b>Time:</b>	0700 - 1430
<b>Location:</b>	Eric Creary Park
<b>Event Organiser:</b>	Kao Kreative
<b>TMP Version:</b>	Version 1
<b>Revision Date:</b>	5/10/2021
<b>Document Author:</b>	Sarah Hallam

**This Traffic Management Plan reviewed by:**

<b>Shellharbour City Council:</b>	/ /	
<b>NSW Police:</b>	/ /	
<b>Roads &amp; Maritime Services (if required – see below):</b>	/ /	

**Authority of the TMP**

This Traffic Management Plan (TMP) when reviewed by the above relevant authorities becomes the prime document detailing the traffic and transport arrangements under which the Run Shellharbour will proceed.

Changes to the TMP require the approval of the above relevant authorities. All functional or single agency supporting plans (if any) are to recognise the primacy of this TMP and nothing contained in those plans may contravene any aspect of the TMP.

In the case of emergencies, or for the management of incidents, the NSW Police are not subject to the conditions of the TMP but will make every effort to inform the other stake holders of the nature of the incident and the Police response.

Roads and Maritime Services (RMS) approval is required if the proposed event is to be held on or will impact upon a State Highway or Classified Road (see list below), or is within 100 metres of a Classified Road or any traffic signals. The applicant must also obtain a Road Occupancy Licence (ROL) from Roads & Maritime Services (RMS) and must comply with all conditions of the ROL.

**Contents**

**TMP Event Overview** ..... 3

**Contents** ..... 4

**Planning Contacts**..... 5

**Mission** ..... 6

**Situation Analysis** ..... 6

**Risk Assessment** ..... 7

**Execution**..... 7

**General Outline**..... 7

**Physical Survey of Route** ..... 8

**Survey of Route** ..... 8

**Road Closures**..... 9

**Contingency Plans**..... 9

**Barricade Locations and Road Closure Times** ..... 11

**Traffic Control** ..... **Error! Bookmark not defined.**

**Media** ..... 11

**On-road Event Infrastructure** ..... 12

**Ambulances** ..... 12

**Medical** ..... 12

**Port-A-Loos**..... 12

**Cleaning/removal/disposal**..... 12

**Public Transport Management** ..... 12

**Volunteers and Event Marshals** ..... 12

**Event Signage** ..... 12

**Variable Message Signs** ..... 12

**Access – Local Residents, Business, Emergency vehicles**..... 12

**Parking**..... 13

**Other Considerations** ..... 13

**Attachments** ..... 13

**Planning Contacts**

<b>Organiser</b>	Courtney Beaton	<b>Position:</b>	Kao Kreative
<b>Phone:</b>		<b>Fax:</b>	<b>Mobile:</b> 0466420669
<b>Address:</b>			
<b>E-mail:</b>	<a href="mailto:courtney@kaokreative.com.au">courtney@kaokreative.com.au</a>		

<b>Shellharbour City Council</b>	Melissa Scozzafave	<b>Position:</b>	Team Leader
<b>Phone:</b>	02 4221 6069	<b>Fax:</b>	<b>Mobile:</b>
<b>Address:</b>	76 Cygnet Ave Shellharbour City Centre NSW 2529		
<b>E-mail:</b>	<a href="mailto:Melissa.scozzafava@shellharbour.nsw.gov.au">Melissa.scozzafava@shellharbour.nsw.gov.au</a>		

<b>NSW Police</b>	Craig Gray	<b>Position:</b>	Senior Constable
<b>Phone:</b>	02 4232 5599	<b>Fax:</b>	<b>Mobile:</b>
<b>Address:</b>	6 Pioneer Drive Oak Flats NSW 2529		
<b>E-mail:</b>	<a href="mailto:Gray1cra@police.nsw.gov.au">Gray1cra@police.nsw.gov.au</a>		

<b>Roads &amp; Maritime Services</b>		<b>Position:</b>	
<b>Phone:</b>		<b>Fax:</b>	<b>Mobile:</b>
<b>Address:</b>			
<b>E-mail:</b>			

<b>Other contacts</b>		<b>Position:</b>	
<b>Phone:</b>		<b>Fax:</b>	<b>Mobile:</b>
<b>Address:</b>			
<b>E-mail:</b>			

**Mission**

This document – Traffic Management Plan (TMP) aims to provide a plan for vehicular traffic and pedestrian control measures to assist in delivering safe logistical support of Run Shellharbour event planned to take place Eric Creary Park on Sunday 5<sup>th</sup> December 2021. The underlining objective is to minimise safety conflicts between vehicles and pedestrians and disruption to normal vehicular and pedestrian traffic on all approaches to Eric Creary Park.

The objectives of this TMP are:

- To provide a high level description of the various traffic management elements needed to make the event a success
- Ensure effective separation between event patrons and participants from vehicular traffic
- To provide a framework for each agency to use to develop their own lower level plans
- To serve as the key document that is agreed to by all parties and is the final approval to conduct the event.
- Minimise impact on non-event community and emergency services

**Situation Analysis**

On Sunday 5<sup>th</sup> December 2021, there will be Run Shellharbour event held on Eric Creary Park that will require altered traffic arrangements.

Run Shellharbour is a one day running festival to be held on Sunday 5<sup>th</sup> December 2021. The event incorporates 42.2, 21km, 10km, 5km races and untimed 1km distance event. Run Shellharbour is in its second year and is aimed at all levels of runners who want to experience a fast and flat course that takes in the stunning beautiful scenery of the Shellharbour Coastline.

The start and finish area will be located in Eric Creary Park with the run course routes heading north as far as the Windang Bridge and as far west as the Oak Flats Skiway Park. Each race is out and back and will consist of laps.

Traffic Control measures included in this document is a result of consultation undertaken by KAO Kreative, Shellharbour City Council, NSW Police & RMS (if required).



**TRAFFIC ARRANGEMENTS**

Traffic control measures include simple hard and soft road closures, use of traffic control devices (traffic signs) to warn motorists of the changes in traffic conditions. It is noted that per NSW Workplace Health & Safety (WHS) law the Event Organiser – KAO Kreative and Land Owners – Shellharbour City Council, RMS (if required), bear individual and shared risks related to the safety of event patrons and motorists. KAO Kreative is identified as being responsible for event related safety risks which are associated with non-transferable WHS statute-posed obligations and Common Law Duty of Care provisions. In this context, KAO Kreative should continue to actively consult and take all reasonable measures to practically exercise their duty of care obligations.

**Risk Assessment**

Part 8 of this document includes the completed risk assessment for the event.

**Execution****General Outline**

The event requires highly coordinated efforts from a number of agencies:

**KAO Kreative**

- Co-ordinates the logistics for holding the event, Venue Management / Event Production / Stage Management / Marshalling / Programming
- Arranges advertising for road closure locations, times, other traffic disruptions / delays and alternative route information in the Local News paper if required.
- Prepares the Traffic Management Plan
- Provides traffic information signposting as identified in the TMP and associated Traffic Control Plan(s) (TCPs).
- Provides resources and traffic management infrastructure for traffic control and road closures as identified in the TMP
- Monitors traffic on all roads approaching Eric Creary Park to minimise traffic congestion on the day.

**NSW Police**

- May provide resources in the case of emergencies, or for the management of incidents.

**Physical Survey of Route****Survey of Route**

Item	Verified <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Action Taken
All one way streets are as described	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Block access to Church on Sunday	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block access to local businesses	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block Ambulance access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block fire station access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block heavy vehicle access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block hospital access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block local resident access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block Police vehicle access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block Public facility (football oval, carpark etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Block public transport access	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Can route use alternatives such as bicycle tracks, paths, parks, bush tracks etc?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Construction – existing, proposed that may conflict	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Distance measured is correct	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Lane widths	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Local access	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Numbers of lanes are as described	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Restricted movements – banned turns, heavy/high vehicles	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Road signage – existing/temporary	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Route impeded by traffic calming devices?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Signalised intersections (flashing yellow? Point duty?)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Tidal flows	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A
Traffic generators – shopping centres, schools, churches, industrial area, hospitals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Traffic signals are as described	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Turning lanes are as described	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

**Road Closures**

Part 2 (Traffic Arrangements) of this document provides details of proposed road closures during the event.

Maps showing road closures are in Part 3 (Maps) of this document.

**Contingency Plans**

This section of the Traffic Management Plan describes the contingency plans for the event. The contingency plan checklist identifies all possible issues/risks that may interfere with the event and the action to be taken to minimise the disturbance of the event.

**Contingency Plan checklist**

<b>Issues/Risks</b>	<b>Applicable</b>	<b>Action Taken</b>
Heavy Weather	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Lightening, hail, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Poor Lighting	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Flood hazard on the route	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Flood hazard at the parking area	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Parking during Wet weather	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Bush fire hazard	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Accident on the route	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Breakdown	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Absence of marshals and volunteers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Absence of traffic signs crew	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Block public transport access	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Slow participants	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Delayed Event	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Cancellation of Event	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Security of participants	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Security of very important persons (VIP's)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
Dual purpose bridge	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan
COVID-19	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See attached Contingency Plan



A Risk Management approach shall be an integral part of the planning for Run Shellharbour event. The risk, identification, assessment and control process is a legal obligation (as per the NSW Workplace Health and Safety Act and Regulation) and should be compliant with AS/NZS ISO 31000:2018. The event organiser is responsible for the management of risks arising from Run Shellharbour.

It shall be noted that Traffic Management Plan (TMP) and particularly Traffic Control Plans (TCP) are seen as risk control measures, but alone they cannot substitute and AS/NZS ISO 31000:2018 – compliant and detailed event Risk Assessment.

#### **Barricade Locations and Road Closure Times**

Refer to Part 2

#### **Traffic Control**

- All traffic control including the placement and removal of barricades and/or regulation of traffic is to be carried out in accordance with the requirements of the approved Traffic Control Plan and is to be undertaken by either Police or Traffic Controllers appropriately trained in accordance with the requirements of AS1742.3 and giving consideration to the RMS's Traffic Control at Worksite Manual.
- || Consistent with the requirements of the WH&S regulations; in determining the appropriate resourcing for the event including placement of traffic controllers in accordance with the approved Traffic Control Plan, the event controller (or traffic control supervisor) must consider a traffic controllers age, experience and level of competence to complete any tasks assigned as well as ensure that the extent of information, instruction and training provided to all traffic control resources is appropriate to complete their tasks safely.

#### **Media**

There will be publicity about the event with our associated supporter and partners. 14 days prior to the event information about the events road closures will be available on all social media platforms and websites relating to the event.

**On-road Event Infrastructure****Ambulances**

Emergency access lanes have been provided to allow emergency access to road closures areas.

**Medical**

There are 4 paramedic onsite for the duration of the event, at Eric Creary Park.

**Port-A-Loos**

If any port-a-loos are required insert details. There will be 6 port-a-loos and 1 accessible toilets in Eric Creary Park.

**Cleaning/removal/disposal**

There will be wheelie bins and skips positioned at various locations at event central. During the event there will be staff servicing the area.

**Barricades**

Road closure barriers will be installed by Accredited Traffic Controller.

**Public Transport Management**

Bus services will be notified of our event and will adjust/continue to use their normal route when it safe to do so with some small delays.

**Volunteers and Event Marshals**

Volunteers and Event Marshals are given a verbal induction on arrival, provided with Hi-Vis vests and contacts of Event Staff and Medical Staff. Volunteers and Event Marshals are placed on the course by the staff member in charge with specific instructions on what their role involves in their position. Communications between volunteers and staff will be done throughout the day via mobile phone for breaks and any other issues.

**Event Signage**

Advanced notification and event signage per legislative requirements will be placed at key entry points to the affected area. A letterbox drop at all affected residences and businesses will be carried out.

**Variable Message Signs**

N/A.

**Access – Local Residents, Business, Emergency vehicles****Local Resident and Business Access**

All access for residents will be maintained throughout the day when its safe to do so.

**Emergency Vehicle Access**

The road closures allow for emergency vehicle access. NSW Ambulance, Police and Fire Brigade will be informed of changed conditions by KAO Kreative.

**Parking**

Dedicated on-site parking is available for this event.

**Other Considerations**

**Television**

Television crew may be present on the day but will have zero impact on the roads.

**Major Hotels and Other Businesses**

N/A

**Attachments**

PART 2 Traffic Arrangements

**SPECIAL EVENT TRAFFIC ARRANGEMENTS**

**ROAD CLOSURES**

The following road closures will be in place :

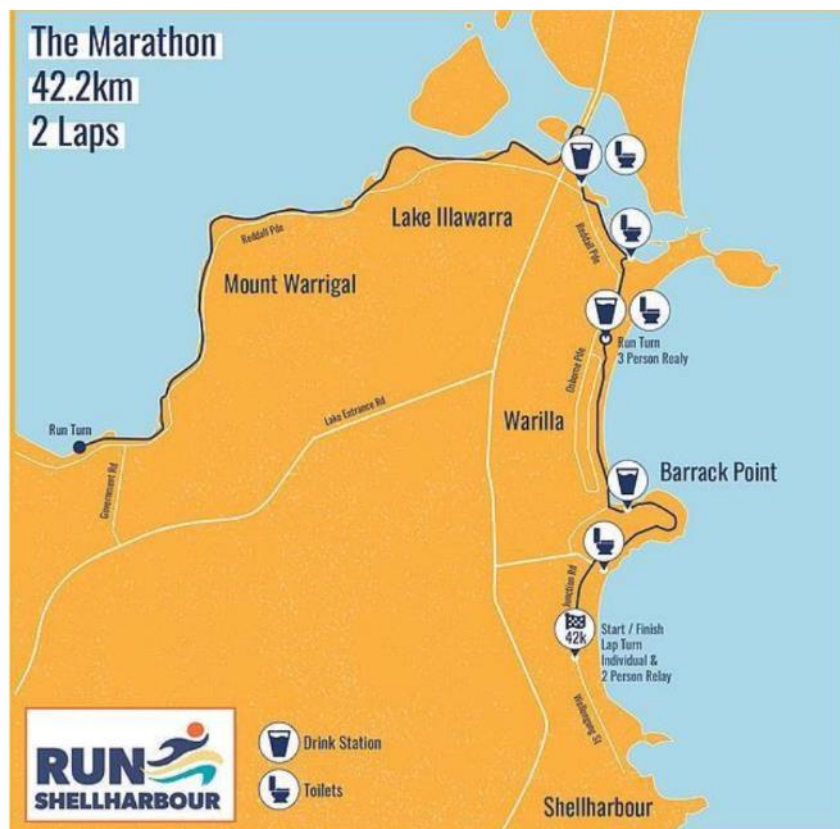
- **Junction Rd** – Between Beach Rd, Shellharbour and Iluka Rd, Barrack Point from 7:00am to 11am

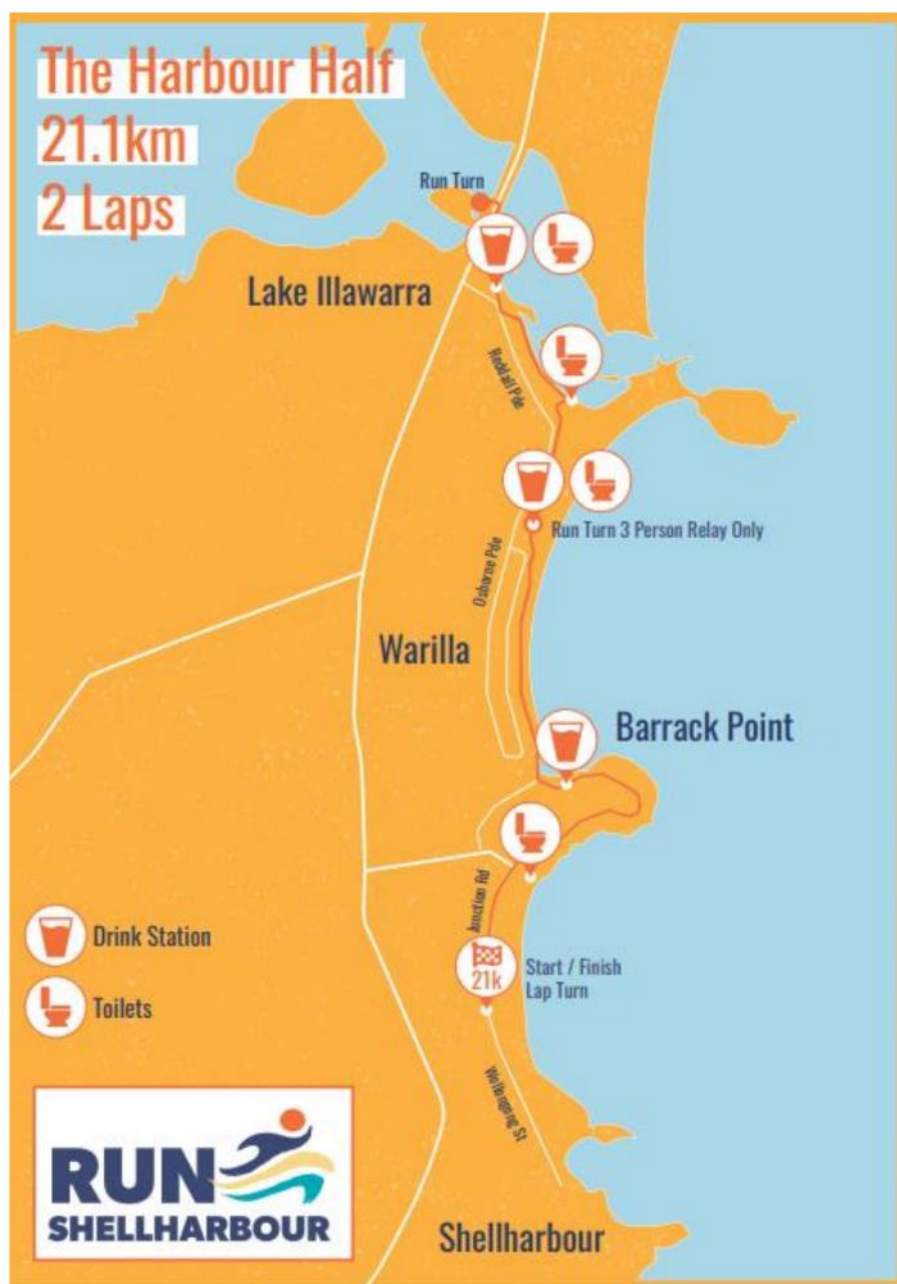
Contra Flow will be place from 7am for the duration of the event on:

- **Shell Cove Rd** – Between Cliff Ave and Barrack Ave.

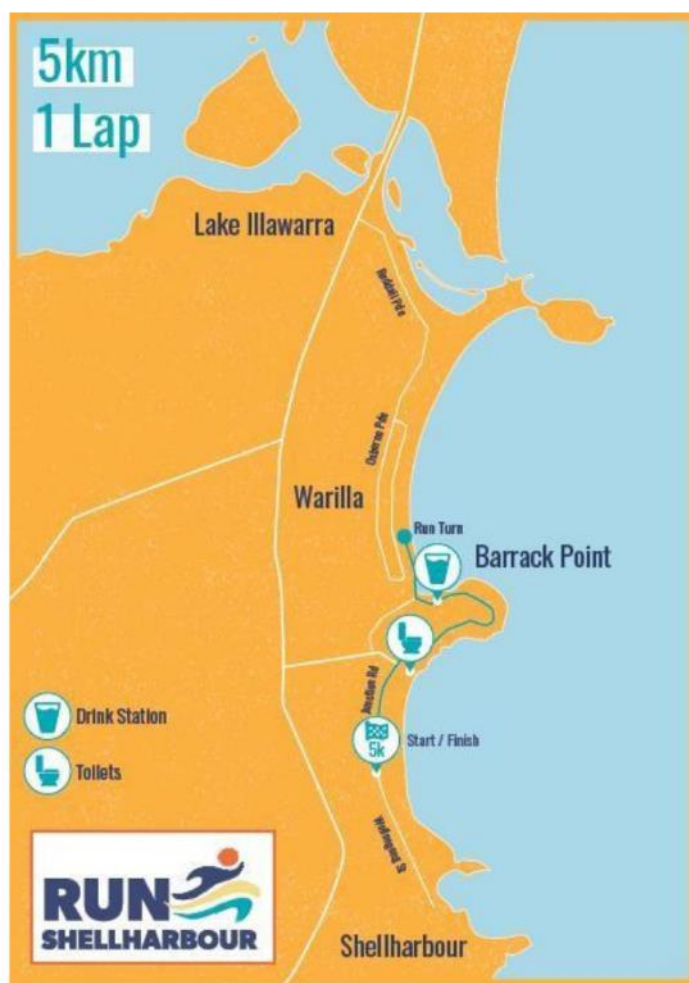


PART 3 Maps











PART 4 VMS Strategy

N/A

## PART 5 Operational Manual

Please see attached document

## PART 6 Contact List

<b>Run Shellharbour</b>				
<b>NAME</b>	<b>ACTING FOR</b>	<b>PHONE</b>	<b>MOBILE</b>	<b>EMAIL</b>
Courtney Beaton	Events, KAO Kreative		0466 420 669	<a href="mailto:courtney@kaokreative.com.au">courtney@kaokreative.com.au</a>
Sarah Hallam	Traffic Director, Elite Energy	02 4423 7775	0475 008 153	<a href="mailto:sarah@eliteenergy.com.au">sarah@eliteenergy.com.au</a>
Fiona Mitchell	Ambulance NSW, Clinical Operations	02 9779 3833		<a href="mailto:Fiona.Mitchell3@health.nsw.gov.au">Fiona.Mitchell3@health.nsw.gov.au</a>

PART 7 Traffic Control Plans

See attached TCP-RS-2021

PART 8 Risk Assessment

See attached SWMS



**Attachment 3 - Traffic Control Plan**

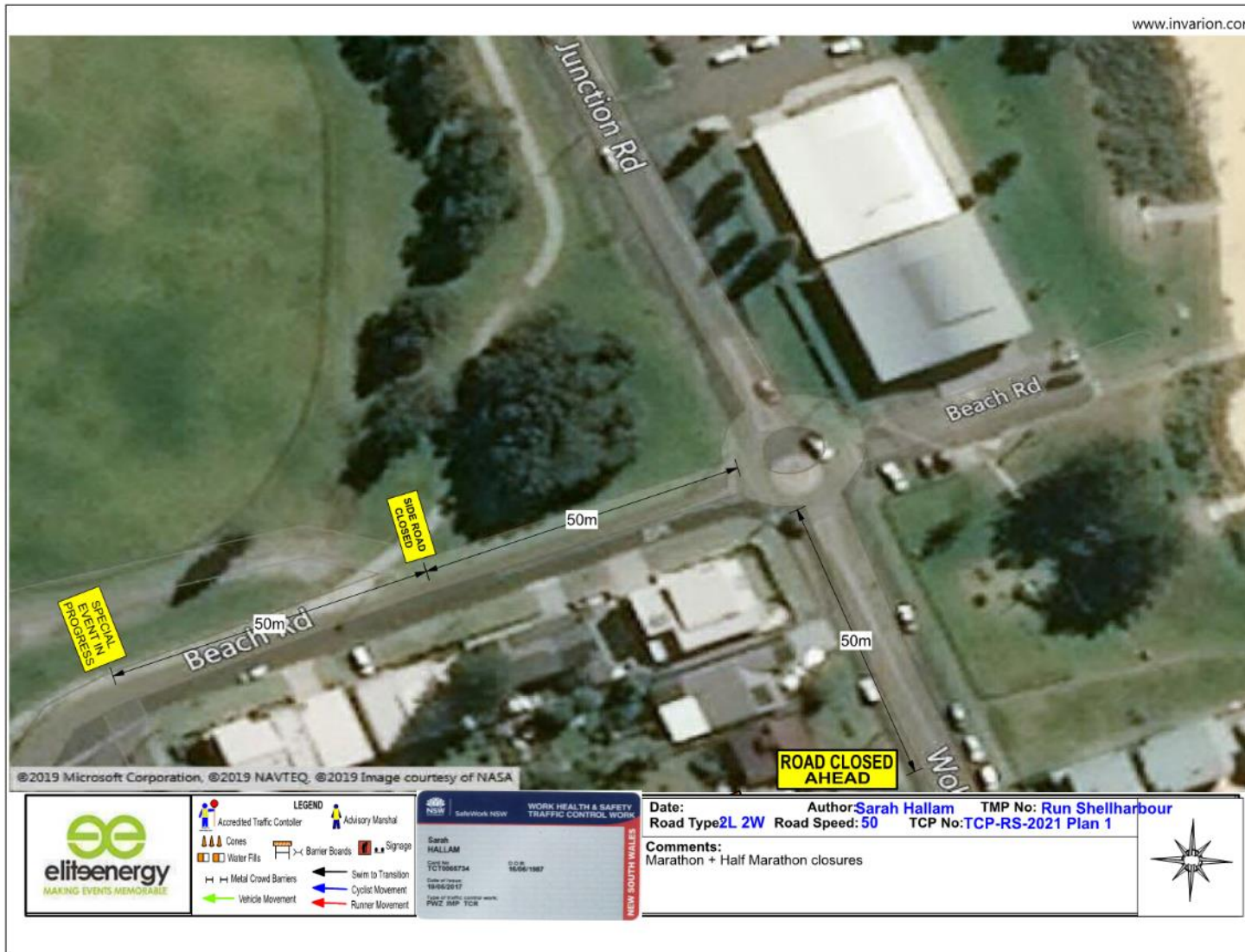
www.invarion.com

**RUN  
SHELLHARBOUR**

**Traffic Control Plan**

**TCP-RS-2021 (Plans 1 - 12)**

Copyright Elite Energy Pty Ltd 2014. This publication is copyright and remains the intellectual property of Elite Energy Pty Ltd. No part of it may be reproduced by any means without the prior written permission of Elite Energy Pty Ltd.



AC

www.invarion.com

Junction Rd  
 Shellharbour Rd

START

ROAD CLOSED

FINISH

**elitenergy**  
 MAKING EVENTS MEMORABLE

**LEGEND**

- Accredited Traffic Controller
- Advisory Marshal
- Cones
- Water Fills
- Metal Crowd Barriers
- Vehicle Movement
- Barrier Boards
- Signage
- Swim to Transition
- Cyclist Movement
- Runner Movement

**NSW SafeWork NSW WORK HEALTH & SAFETY TRAFFIC CONTROL WORK**

Sarah HALLAM  
 Client Ref: TC19062734  
 Date of Issue: 18/05/2017  
 Date of Review: 16/06/1987  
 Level of Traffic Control Work: PWZ IMP TCR

**Date:** Author: Sarah Hallam TMP No: Run Shellharbour  
**Road Type:** 2L 2W **Road Speed:** 50 **TCP No:** TCP-RS-2021 Plan 2

**Comments:**  
 Maratho + Half Marathon closures



www.invarion.com

©2021 Microsoft Corporation ©2021 NAVTEQ ©2021 Image.com

**elitenergy**  
MAKING EVENTS MEMORABLE

**LEGEND**

- Accredited Traffic Controller
- Advisory Marshal
- Cones
- Water Fills
- Barrier Boards
- Signage
- Metal Crowd Barriers
- Swim to Transition
- Cyclist Movement
- Vehicle Movement
- Runner Movement

**SafeWork NSW** WORK HEALTH & SAFETY TRAFFIC CONTROL WORK

Sarah HALLAM  
Card No: TCT066734  
Date of Issue: 18/05/2017  
Date of Review: 18/05/2017  
Type of Worker: Traffic Control Work  
NEW SOUTH WALES

**Date:** Author: Sarah Hallam TMP No: Run Shellharbour  
**Road Type:** 2L 2W **Road Speed:** 50 **TCP No:** TCP-RS-2021 Plan 3

**Comments:**  
Marshal to direct runners ONLY

www.invarion.com

Iluka Rd

50m

50m

Sunset Blvd

Junction Rd

Dolphin Way

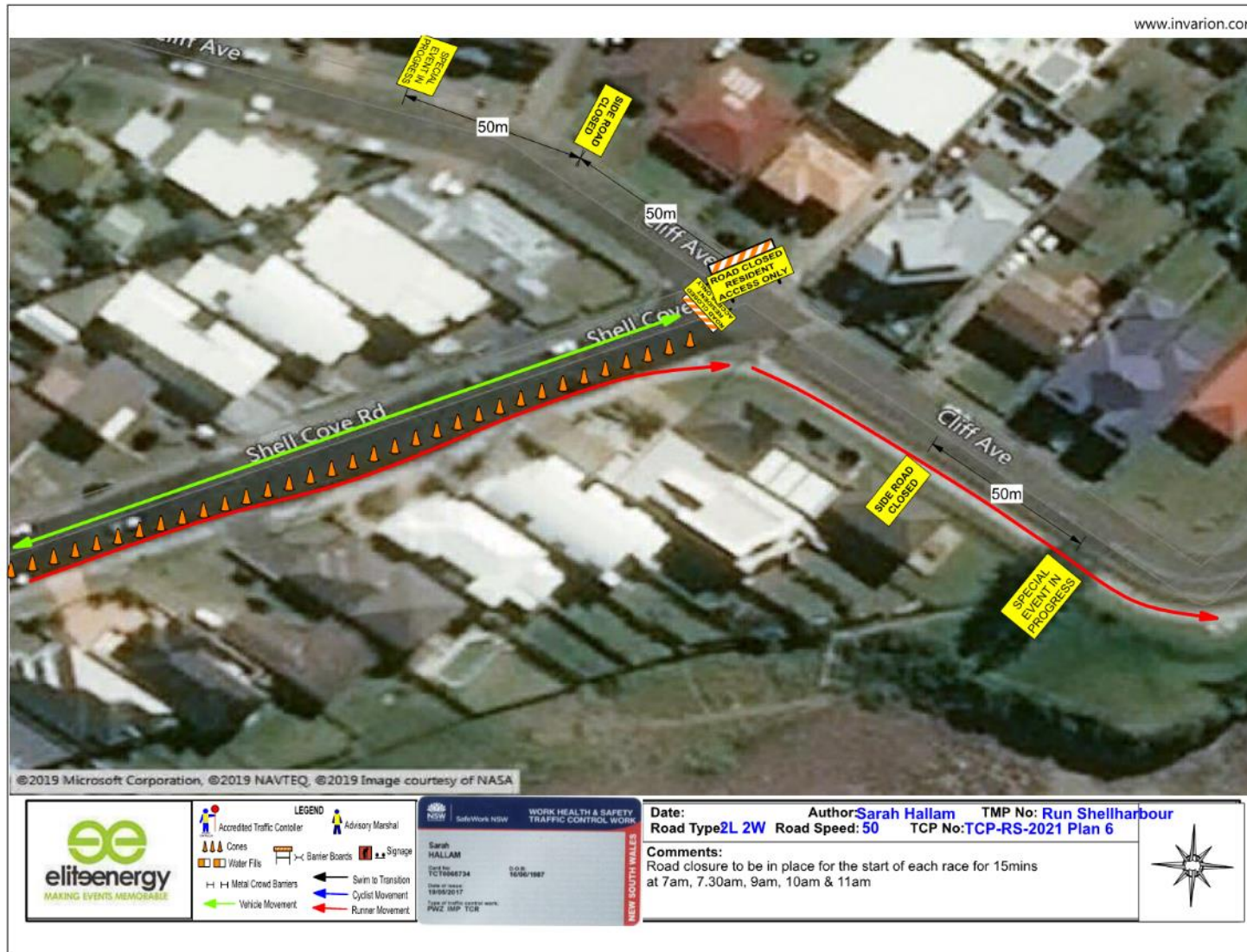
Palms Way

©2021 Microsoft Corporation, ©2021 NAVTEQ, ©2021 Image courtesy of NASA

<p><b>eliteenergy</b> MAKING EVENTS MEMORABLE</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>Accredited Traffic Controller</li> <li>Advisory Marshal</li> <li>Cones</li> <li>Water Fills</li> <li>Metal Crowd Barriers</li> <li>Vehicle Movement</li> <li>Barrier Boards</li> <li>Slipgate</li> <li>Swim to Transition</li> <li>Cyclist Movement</li> <li>Runner Movement</li> </ul>	<p>NSW SafeWork NSW</p> <p>WORK HEALTH &amp; SAFETY TRAFFIC CONTROL WORK</p> <p>Sarah HALLAM Lic No: YCT3868734 Date of Issue: 18/06/2017 Type of traffic control work: PWZ WSP TCR</p>	<p>Date: <b>Author: Sarah Hallam</b> <b>TMP No: Run Shellharbour</b></p> <p><b>Road Type: 2L 2W</b> <b>Road Speed: 50</b> <b>TCP No: TCP-RS-2021 Plan 4</b></p>	
			<p><b>Comments:</b> Road closure to be in place for the start of each race for 15mins at 7am, 7.30am, 9am, 10am &amp; 11am</p>	











www.invarion.com

Ball Parade

Entrance St

Caution Runners

Caution Runners

Reddall Rese

**elitsenergy**  
MAKING EVENTS MEMORABLE

**LEGEND**

- Accredited Traffic Controller
- Cones
- Water Fills
- Metal Crowd Barriers
- Vehicle Movement
- Advisory Marshal
- Barrier Boards
- Signage
- Swim to Transition
- Cyclist Movement
- Runner Movement

**Sarah HALLAM**  
S.O.B. 16/09/1987  
TC 16465734  
19/03/2017  
Type of traffic control work: PWZ BMP YCR

**Date:** 19/03/2022  
**Author:** Sarah Hallam  
**Road Type:** 2L 2W  
**Road Speed:** 50  
**TMP No:** Run Shellharbour  
**TCP No:** TCP-RS-2021 Plan 10

**Comments:**  
Marshal to direct runners ONLY  
Marshals will direct runners to stop when cars are approaching



www.invarion.com

Reddall Parade

Ocean St

**elitsenergy**  
MAKING EVENTS MEMORABLE

**LEGEND**

- Accredited Traffic Controller
- Cones
- Water Fills
- Metal Crowd Barriers
- Vehicle Movement
- Advisory Marshal
- Barrier Boards
- Signage
- Swim to Transition
- Cyclist Movement
- Runner Movement

**Sarah HALLAM**  
S.O.B.  
16/06/1987

**Date:** 18/03/2022  
**Author:** Sarah Hallam  
**Road Type:** 2L 2W  
**Road Speed:** 50  
**TMP No:** Run Shellharbour  
**TCP No:** TCP-RS-2021 Plan 11

**Comments:**  
Marshal to direct runners ONLY  
Marshal will direct runners to stop to allow access to boat ramp

NEW SOUTH WALES  
WORK HEALTH & SAFETY  
TRAFFIC CONTROL WORK



www.invarion.com

Lake Illawarra

Windang Rd

Shellharbour Rd

B65

<p><b>elitenergy</b> MAKING EVENTS MEMORABLE</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>Accredited Traffic Controller</li> <li>Cones</li> <li>Water Fills</li> <li>Metal Crowd Barriers</li> <li>Vehicle Movement</li> <li>Advisory Marshal</li> <li>Barrier Boards</li> <li>Swim to Transition</li> <li>Cyclist Movement</li> <li>Runner Movement</li> <li>Signage</li> </ul>	<p><b>NEW SOUTH WALES</b></p> <p><b>WORK HEALTH &amp; SAFETY</b> <b>TRAFFIC CONTROL WORK</b></p> <p><b>Sarah HALLAM</b> S.O.B. TC 1668734 18/06/1987</p> <p>Type of traffic control work: PWZ BMP YCR</p>	<p><b>Date:</b> Author: <b>Sarah Hallam</b> TMP No: <b>Run Shellharbour</b> Road Type: <b>2L 2W</b> Road Speed: <b>50</b> TCP No: <b>TCP-RS-2021 Plan 12</b></p>	
			<p><b>Comments:</b> Marshal to direct runners ONLY Marshal to manage flow of runners, riders and pedestrians</p>	

www.invarion.com

PCYC LAKE ILLAWARRA

Reddall

Reddall Parade

SPECIAL EVENT IN PROGRESS

SPECIAL EVENT IN PROGRESS

©2021 Microsoft Corporation, ©2021 NAVTEQ, ©2021 Image courtesy of NASA

<p><b>elitenergy</b> MAKING EVENTS MEMORABLE</p>	<p><b>LEGEND</b></p> <p>Accredited Traffic Controller    Advisory Marshal</p> <p>Cones    Barrier Boards    Signage</p> <p>Water Fills    Metal Crowd Barriers    Swim to Transition</p> <p>Vehicle Movement    Cyclist Movement    Runner Movement</p>		<p>WORK HEALTH &amp; SAFETY TRAFFIC CONTROL WORK</p> <p>Sarah HALLAM S.O.B. 16/06/1987</p> <p>Phone: 02 9450 734 Date of issue: 18/05/2017 Date of expiry: 18/05/2017 Type of traffic control work: PWC, SWP, TCR</p>	<p>Date:                    Author: Sarah Hallam    TMP No: Run Shellharbour</p> <p>Road Type: 2L 2W    Road Speed: 50    TCP No: TCP-RS-2021 Plan 7</p>	
	<p>Comments: Marshal to direct runners ONLY. This applies to Half and Marathon Runners (MAY) ONLY.</p>				

AC



www.invarion.com

AID STATION

The Esplanade

Skiway Park

Caution Runners

SPECIAL EVENT IN PROGRESS

©2021 Microsoft Corporation, ©2021 NAVTEQ, ©2021 Image courtesy of NASA

<p><b>elitenergy</b> MAKING EVENTS MEMORABLE</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>Accredited Traffic Controller</li> <li>Cones</li> <li>Water Fills</li> <li>Metal Crowd Barriers</li> <li>Vehicle Movement</li> <li>Advisory Marshal</li> <li>Barrier Boards</li> <li>Signage</li> <li>Swim to Transition</li> <li>Cyclist Movement</li> <li>Runner Movement</li> </ul>	<p><b>NEW SOUTH WALES</b></p> <p><b>WORK HEALTH &amp; SAFETY</b> <b>TRAFFIC CONTROL WORK</b></p> <p><b>Sarah HALLAM</b> S.O.B. 16/09/1987</p> <p>TC 1668734 19/03/2017</p> <p>Type of traffic control work: PWZ BMP YCR</p>	<p><b>Date:</b> 02/03/2022</p> <p><b>Author:</b> Sarah Hallam</p> <p><b>TMP No:</b> Run Shellharbour</p> <p><b>Road Type:</b> 2L 2W</p> <p><b>Road Speed:</b> 50</p> <p><b>TCP No:</b> TCP-RS-2021 Plan 8</p>	
			<p><b>Comments:</b></p> <p>Carpark to be closed for the duration of the event - 8am to 12.30pm</p>	

## 8.6. Signage & Linemarking Plan - DAM0139/2021

### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Wayne Wilson - Senior Transport Engineer

### Summary

The purpose of this report is to seek endorsement from the Committee for the signage and linemarking plan for the subdivision under construction adjacent to Paul Circuit, Tullimbar (**Attachment 1**).

### Background

A new section of the Tullimbar subdivision is being constructed. The developer is required to submit a signage and linemarking plan to the committee for approval. The provided plans (**Attachment 2**) identify proposed signage and linemarking as submitted by the developer. To ensure the cul-de-sac is kept clear to reduce the need for larger vehicles (such as waste collection vehicles) to reverse, suggested changes to the submitted plan are illustrated in **Attachment 3**. It is also noted that Paul Circuit is expected to be widened to 8m as part of this development consent.

### Financial / Resources Implications

If approved, works will be carried out and funded by the developer.

### Legal and Policy Implications

Nil.

### Public / Social Impact

- Additional parking restrictions on Paul Circuit.

### Link to Community Strategic Plan

This report supports the following objectives and strategies of the Community Strategic Plan:

<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network

## Consultations

The following consultations were undertaken:

### Internal

- Manager Floodplain and Transport
- Senior Transport Engineer
- Manager Compliance & Regulation
- Road Safety Officer

### External

- Nil

## Political Donations Disclosure

Not Applicable

## Committee Recommendation

**That Council approve the signage and linemarking plan as part of DAM0139/2021 as shown in Attachment 3.**

## Approved By

<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

## Attachments

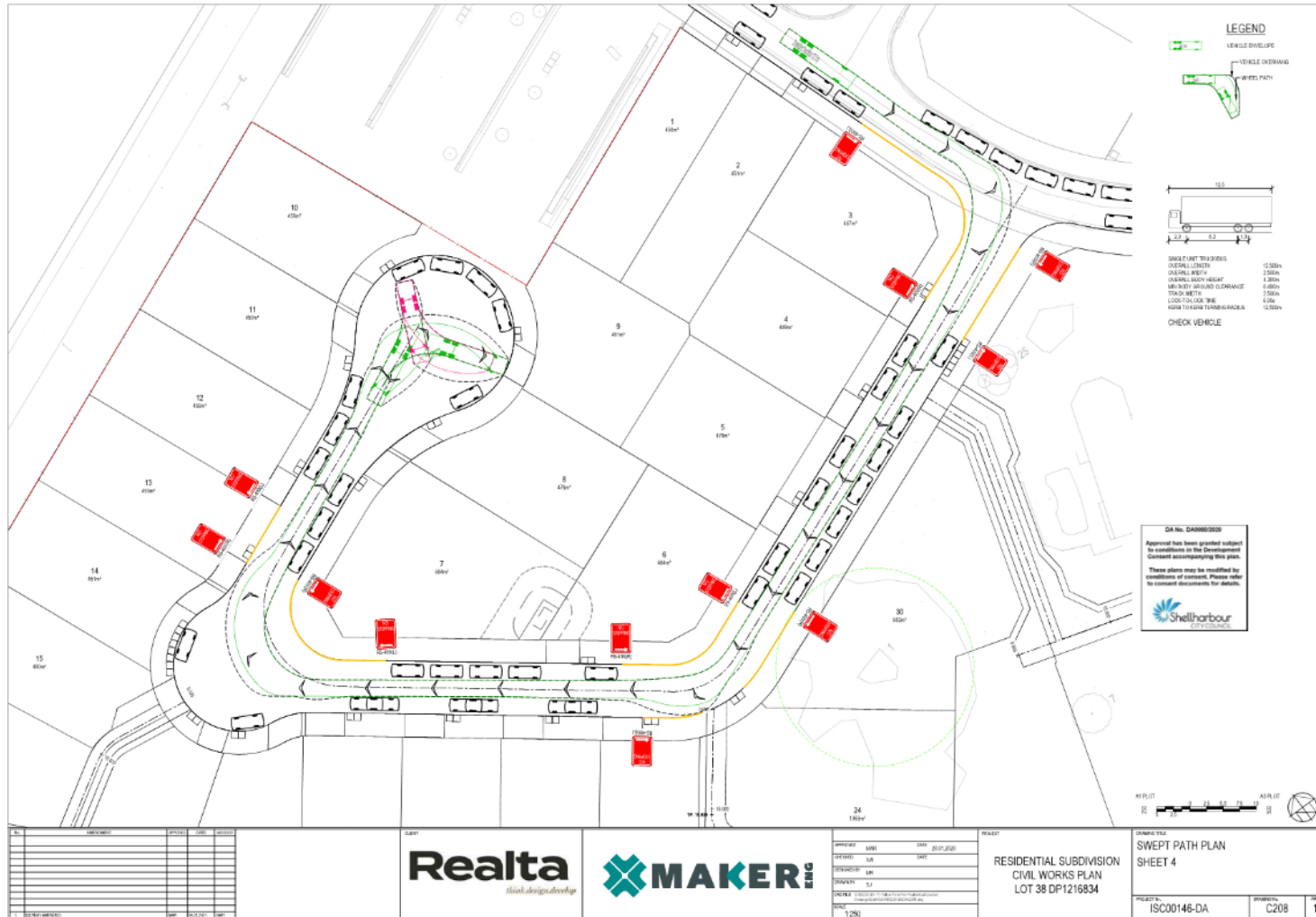
1. Locality Plan
2. Signage & Linemarking Plan
3. Proposed Changes to Signage & Linemarking Plan



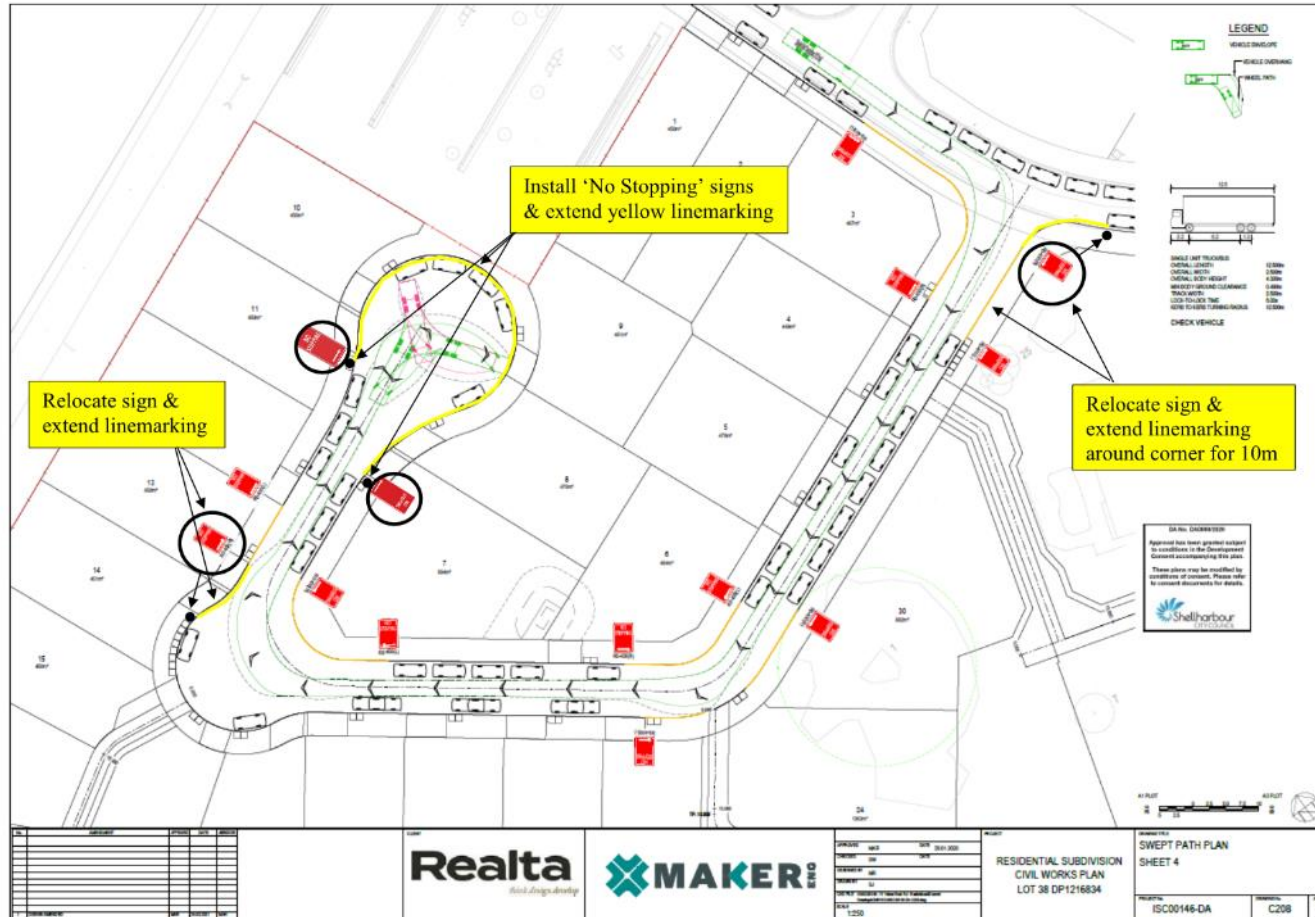
Attachment 1 - Locality Plan



Attachment 2 - Signage & Linemarking Plan(2)



Attachment 3 - Proposed Changes to Signage & Linemarking Plan(4)



## 8.7. Footpath and Refuge Installation - Boomerang Avenue, Albion Park Rail

### To the Chief Executive Officer

<b>Directorate:</b>	Amenity & Assets
<b>Group:</b>	Built & Natural Environment
<b>Manager:</b>	Matthew Apolo – Group Manager Built & Natural Environment
<b>Author:</b>	Tyson Perry – Engineering Technical Officer

### Summary

The purpose of this report is to seek endorsement from the Committee for the installation of a pedestrian refuge (with associated signage and linemarking) on Boomerang Avenue, Albion Park Rail (**Attachment 1**).

### Background

Council's Asset Strategy team has recently completed the detailed design for the installation of a footpath linking Princes Highway to Shellharbour Airport. As part of these works, a pedestrian refuge (with associated signage and linemarking) is proposed to improve pedestrian safety when crossing Boomerang Avenue, Albion Park Rail. The signage and linemarking plan for the proposed refuge will be submitted to the Committee in a separate attachment which will be tabled at the meeting and included in the minutes.

### Financial / Resources Implications

If approved, works will be carried out by Council with funding expected to be via Phase 1 of the Local Roads and Community Infrastructure Program.

### Legal and Policy Implications

Nil.

### Public / Social Impact

- Improved crossing safety for pedestrians crossing Boomerang Avenue

### Link to Community Strategic Plan

This report supports the following objectives and strategies of the Community Strategic Plan:



<b>Objective:</b>	1.2	Active and healthy
<b>Strategy:</b>	1.2.1	Provide access to services and facilities where people can live, learn and play

<b>Objective:</b>	2.3	A city that is connected through places and spaces
<b>Strategy:</b>	2.3.3	Provide and promote a sustainable, safe and connected transport network
	2.3.4	Facilitate the development of the built environment to meet community needs

## Consultations

The following consultations were undertaken:

### Internal

- Manager Floodplain and Transport
- Senior Transport Engineer
- Manager Compliance & Regulation
- Road Safety Officer
- Manager Projects
- Manager Asset Planning

### External

- Adjacent businesses (undertaken by Projects team)

## Political Donations Disclosure

Not Applicable

## Committee Recommendation

**That Council approve the installation of a pedestrian refuge (with associated signage and linemarking) on Boomerang Avenue, Albion Park Rail as shown in the signage & linemarking plan illustrated within the March 2022 Traffic Committee minutes.**



**Approved By**

<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

**Attachments**

1. Locality Plan

Attachment 1 - Locality Plan



## **9. General Business**

### **10. Items for Information**

#### **10.1. Shellharbour City Festival of Sport**

##### **Item for Information**

The Shellharbour City Festival of Sport is an annual two day sport based event established in 1998. The confirmed dates for this year's event are Saturday 5 March and Sunday 6 March 2022.

The Waterfront Ride & Run (or walk) is planned to commence from Keith Hockey Oval Shellharbour at 8:00am and is split into 2 events, (**Attachment 1**).

The course will start and finish at Keith Hockey Oval Boollwarroo Parade with the ride commencing at 8:00am and travelling south along Boollwarroo Parade to the shared path, then along the shared path to John Street / Darley Street to the Shellharbour Pool. This will require the temporary closure of a section of Darley Street and John Street, opposite the Shellharbour Pool between 8:00am and 9:00am, (**Attachment 2**). The ride will continue along the shared path to Elliott Lake Bridge and return.

The Run (walk) will commence from Keith Hockey Oval, Shellharbour then into Shell Cove along Seafaring Way, Brigantine Drive (all roads are currently closed to traffic) to Whimbrel Terrace, then onto Aquatic Drive to the shared path to Harbour Boulevard, across Harbour Boulevard, then south along Harbour Boulevard to Ocean Front Drive, then north to the Shell Cove Marina, then around the Marina to Aquatic Drive (**Attachment 3**).

Road safety messaging consistent with Share the Path etiquette will be used on corflute board placed along the event route. Barriers will be used in low risk areas with minimal traffic especially early in the morning. The intersections at both Boollwarroo Parade and John Street will be marshalled by ticketed controllers, whilst marshals will be at all relevant crossings along the route to ensure direction and safety.

The southern section of the carpark adjacent to the Shellharbour ocean pool will be closed to motorists between 8.00am and 9.00am. All affected residents will be informed of the event via letterbox drop and a VMS will be in place one week prior to the event to inform motorists of event route information and road closures.

**Approved By**

<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

**Attachments**

1. Aerial Map
2. TCP for Bike Ride
3. TCP of Run/Walk



**Attachment 1 - - Aerial Map**

**Attachment 1**

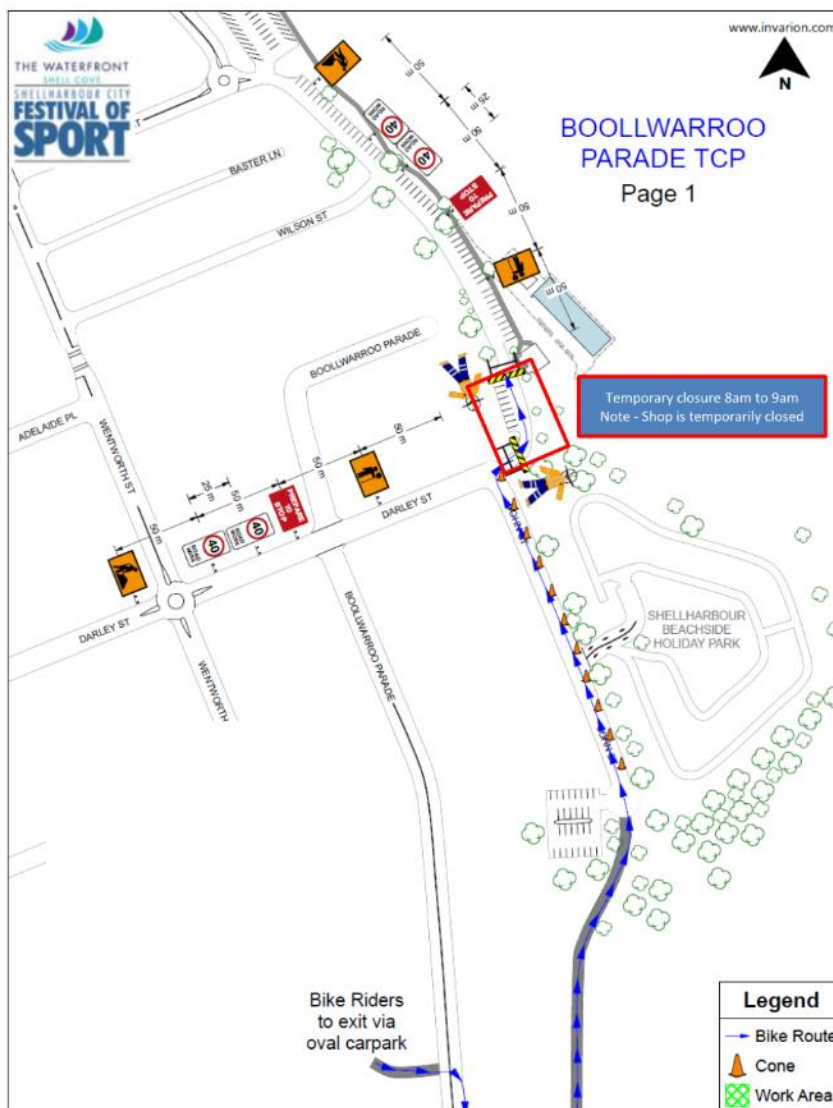
Aerial map showing proposed route- Note - roads highlighted in yellow are not currently open to traffic.



Attachment 2 - TCP for Bike Ride

Attachment 2

TCP for bike ride



Keith Hockey Oval

www.invarion.com

Page 2

**Legend**

- Bike Route
- Cone
- Work Area

**Pedestrian Key**

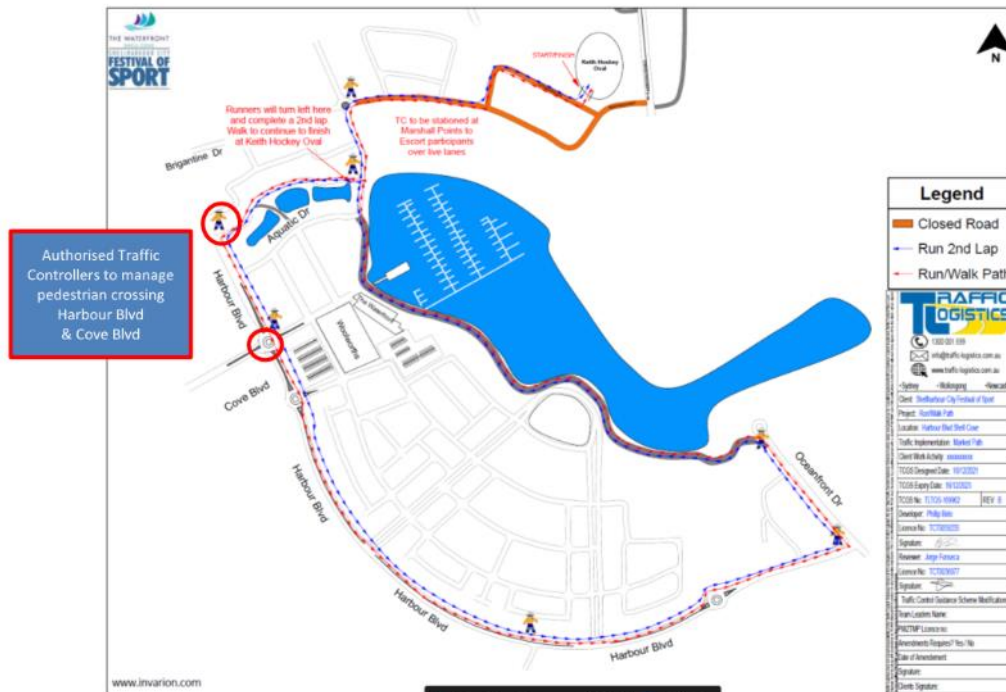
<p>1300 001 599 info@traffic-logistics.com.au www.traffic-logistics.com.au</p> <p>Sydney Wollongong Newcastle</p>	Client: Shellharbour City Festival of Sport	TCGS No: TLTGS-163845	REV: A	Traffic Control Guidance Scheme Modifications
	Project: Bike Plan	Developer: Phillip Belo	Team Leaders Name:	
	Location: Boolwaroo Parade Shell Cove	Licence No: TCT0059235	PWZTMP Licence no:	
	Traffic Implementation: Road Closure/Int. Stops	Signature:	Amendments Requires? Yes / No	
	Client Work Activity: xxxxxxxxxxxx	Reviewer: Jorge Fonseca	Date of Amendment:	
	TCGS Designed Date: 15/12/2021	Licence No: TCT0036977	Signature:	
TCGS Expiry Date: 15/12/2023	Signature:	Clients Signature:		



Attachment 3 - TCP for Run-Walk

Attachment 3

TCP of run/walk





## 10.2. Police Matters

### Item for Information

Can Police please note the following items, raised by the community for potential future patrols:

- 1x report of vehicles driving southbound on Escarpment Drive and accessing Excelsior Drive (right hand turn) via the use of a pedestrian refuge. Lendlease has committed to installing a bollard/rail at the subject location to deter behaviour.
- 1x report of speeding at Brunderee Road, Flinders
- 1x report of speeding on O’Gorman Street, Albion Park
- 1x report of speeding on Pioneer Drive, Flinders
- 1 x report of speeding on The Esplanade, Oak Flats
- 1 x report of speeding and hooning on Lake Entrance Road, Oak Flats
- 2 x reports of illegal petrol powered bikes in Blackbutt Reserve/Shellharbour Road, Blackbutt. Residents concerned for safety as motorbike riders were abusive and often speed past other users of the reserve.
- 1x report of speeding, hooning and cutting the corner when turning right off Captain Cook Drive into Messenger Road, Barrack Heights
- 1x report of speeding on Crest Road, Albion Park

### Approved By

<b>Approved for Council's Consideration:</b>	<b>Matthew Apolo</b>
<b>Date of Meeting:</b>	<b>2 March 2022</b>

### Attachments

Nil.

## 11. Next Meeting

Date: 6 April 2022