

DELEGATED REPORT

SUBJECT: CONMAT NO. 2 PTY LTD - OPERATIONAL WORKS (ROADWORKS, EARTHWORKS, DRAINAGE, WATER SUPPLY WORKS AND SEWER WORKS) FOR STAGE 1 - DEVELOPMENT PERMIT RAL/23/0009 – LOT 1 ON RP747077 – RAY ROAD & CATER ROAD, MAREEBA - OPW/24/0009

DATE: 26 September 2025

REPORT OFFICER'S TITLE: Coordinator Planning & Building

DEPARTMENT: Corporate and Community Services

APPLICATION DETAILS

APPLICATION		PREMISES	
APPLICANT	Conmat No. 2 Pty Ltd	ADDRESS	Ray Road and Cater Road, Mareeba
DATE LODGED	8 January 2025	RPD	Lot 1 on RP747077
TYPE OF APPROVAL	Development Permit		
PROPOSED DEVELOPMENT	Operational Works (Roadworks, Earthworks, Drainage, Water Supply Works and Sewer Works) for Stage 1 - Development Permit RAL/23/0009		

FILE NO	OPW/24/0009	AREA	7.973 ha
LODGED BY	ERSCON Consulting Engineers	OWNER	Conmat No. 2 Pty Ltd
PLANNING SCHEME	Mareeba Shire Council Planning Scheme 2016		
ZONE	Low Density Residential zone		
LEVEL OF ASSESSMENT	Code Assessable		
SUBMISSIONS	n/a		

ATTACHMENTS: 1. Proposal Plan/s

PREVIOUS APPLICATIONS & APPROVALS

RAL/23/0009.

DESCRIPTION OF PROPOSED DEVELOPMENT

The development application seeks a Development Permit for Operational Works (Roadworks, Earthworks, Drainage, Water Supply Works and Sewer Works) for Stage 1 - Development Permit RAL/23/0009.

ASSESSMENT

State Planning Policy

Separate assessment against the State Planning Policy (SPP) is not required because the Mareeba Shire Council Planning Scheme appropriately integrates all relevant aspects of the SPP.

Relevant Development Codes

The following Development Codes are considered to be applicable to the assessment of the application:

- 6.2.4 Low Density Residential zone code
- 9.4.4 Reconfiguring a lot code
- 9.4.5 Works, services and infrastructure code

The application did not include a planning report and assessment against the planning scheme. An officer assessment has found that the application satisfies the relevant acceptable outcomes (or performance outcome where no acceptable outcome applies) of the relevant codes set out below.

Relevant Codes	Comments
Low Density Residential zone code	The application can be conditioned to comply with the relevant acceptable outcomes contained within the code.
Reconfiguring a lot code	The application can be conditioned to comply with the relevant acceptable outcomes contained within the code.
Works, services and infrastructure code	The application can be conditioned to comply with the relevant acceptable outcomes contained within the code.

Compliance with conditions of earlier related approval

RAL/23/0009 - Reconfiguring a Lot - Subdivision (1 into 41 Lots in 4 Stages)

1. Development must be carried out generally in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, and subject to any alterations:
 - found necessary by the Council's delegated officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements; and
 - to ensure compliance with the following conditions of approval.
2. Timing of Effect
 - 2.1 The conditions of the development permit must be complied with to the satisfaction of Council's delegated officer prior to the endorsement of the plan of survey for each stage of the development, or alternative documentation as approved by the Land Title Act, except where specified otherwise in these conditions of approval.
3. General
 - 3.1 The applicant/developer is responsible for the cost of necessary alterations to existing public utility mains, services or installations

required by works in relation to the proposed development or any works required by condition(s) of this approval.

- 3.2 All payments or bonds required to be made to the Council pursuant to any condition of this approval or the Adopted Infrastructure Charges Notice must be made prior to the endorsement of the plan of survey, or alternative documentation as approved by the Land Title Act and at the rate applicable at the time of payment.
- 3.3 The developer must relocate (in accordance with FNQROC standards) any services such as water, sewer, drainage, telecommunications and electricity that are not wholly located within the lots that are being created/serviced where required by the relevant authority, unless approved by Council's delegated officer.
- 3.4 Where utilities (such as sewers on non-standard alignments) traverse lots to service another lot, easements must be created in favour of Council for access and maintenance purposes. The developer is to pay all costs (including Council's legal expenses) to prepare and register the easement documents.
- 3.5 All works must be designed, constructed and carried out in accordance with FNQROC Development Manual requirements (as amended) and to the satisfaction of Council's delegated officer.
- 3.6 Charges

All outstanding rates, charges, and expenses pertaining to the land are to be paid in full.
- 3.7 Local Heritage Place – Heavy Anti Aircraft Gun Station 448

No aspect of this development shall interfere with or damage the heritage significance of Heavy Anti Aircraft Gun Station 448.

4. Infrastructure Services and Standards

4.1 Stormwater Drainage

- (a) The applicant/developer must take all necessary steps to ensure a non-worsening effect on surrounding land as a consequence of the development.
- (b) Prior to works commencing the applicant must submit a Stormwater Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Queensland Urban Drainage Manual (QUDM) and the FNQROC Development Manual to the satisfaction of Council's delegated officer.

The Stormwater Management Plan and Report must also consider the existing condition of the downstream Easement A on RP733064 and make all necessary recommendations to ensure the long term stability and functioning of this drainage easement.

- (c) Prior to works commencing the applicant must submit a Stormwater Quality Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Urban Stormwater Quality Planning Guideline and the Queensland Water Quality Guideline to the satisfaction of Council's delegated officer.
- (d) The Stormwater Quality Management Plan must include an Erosion and Sediment Control Plan that meets or exceeds the Soil Erosion and Sedimentation Control Guidelines (Institute of Engineers Australia) to the satisfaction of Council's delegated officer.
- (e) The applicant/developer must construct the stormwater drainage infrastructure in accordance with the approved Stormwater Management Plan and/or Stormwater Quality Management Plan and Report.
- (f) Temporary drainage is to be provided and maintained during the construction phase of the development, discharged to a lawful point and not onto the construction site.
- (g) All stormwater channels through private property must be registered, with the easement for drainage purposes in favour of Council. All documentation leading to the registration of the easement must be completed at no cost to Council.
- (h) All stormwater drainage collected from the site must be discharged to an approved legal point of discharge.
- (i) The applicant (at their cost) must video all stormwater lines and submit the video for inspection by Council's delegated officer prior to the development being taken "off maintenance" to ensure that no defects have occurred during the 12 month maintenance period.
- (j) All drainage easements must be constructed to prevent erosion. Construction may be in the form of a concrete invert, with outlet protection.

4.2 Earthworks

All earthworks must be carried out in accordance with the requirements of the FNQROC Development Manual (as amended) to the satisfaction of Council's delegated officer.

4.3 Roadworks/footpaths – Internal

- (a) The subdivision internal roads must be designed and constructed to Access Street standard in accordance with Council's FNQROC Development Manual, as detailed in Table D.1.1

- (b) Individual property access must be designed in accordance with the requirements of FNQROC Development Manual. Appropriate distances are required from intersections and tangent points in accordance with AS2890.1.

The provision of layback/roll-over kerbing along the frontage of each allotment will satisfy this condition.

- (c) The diameter of the cul-de-sacs must be suitable for the largest refuse collection vehicle used throughout the shire to be able to turn around in a forward direction. Swept path diagrams must be submitted as part of the development application for Operational Works to demonstrate this requirement.
- (d) A temporary gravel vehicle turnaround at the end of all partially constructed roads must be provided of a sufficient size to turnaround a refuse collection vehicle, either in a continuous forward movement or by a three-point turn.
- (e) A second 4 metre wide road reserve connection must be provided along the common boundary of proposed Lots 11 & 12 (and ultimately proposed Lots 22 & 23) to allow for future pedestrian only connectivity between Ray Road and the proposed internal road.
- (f) Two (2) metre wide concrete pedestrian footpaths must be installed in the locations marked on the approved Footpath Plan, applicable to the relevant stage. The horizontal alignment of all footpaths must comply with the FNQROC development Manual (specifically Standard Drawing S1004A).

4.4 Roadworks - External (Ray Road and Cater Road)

- (a) Prepare a design for Ray Road (between McIver Road and Cater Road) to a Major Collector Road standard as defined in Council's FNQROC Development Manual. The design must detail the alignment of all associated infrastructure including:
- pavement
 - kerb and channel
 - footpath (western side)
 - street lighting
 - underground stormwater infrastructure

The design should also identify the extent of any land requirements on the subject lots to facilitate the road network, giving consideration to any localised widenings necessary to facilitate the construction/ upgrade of the intersections.

- (b) Undertake road widening along the full Ray Road frontage of the site equivalent to half of a Major Collector Road, inclusive of pavement, kerb and channel, drainage infrastructure, footpath,

landscaping, and street lighting. The arrangement must be compatible with the eventual full upgrade of Ray Road to Major Collector Road standard. Services are required to be installed in the location suitable for the future road upgrade of the eastern half of Ray Road.

- (c) Design Cater Road to a 10 metre wide bus route Access Street standard as defined in Council's FNQROC Development Manual, for the full frontage of proposed Lots 17 and 18.
- (d) Undertake road widening along Cater Road for the full frontage of proposed Lots 17 and 18 equivalent to half of a 10 metre wide bus route Access Street standard, inclusive of pavement, kerb and channel, drainage infrastructure, footpath, landscaping, and street lighting. Services are required to be installed in the location suitable for the future road upgrade of the western half of Cater Road.
- (e) Design and construct the new internal road intersection with Ray Road and upgrade of Ray Road/Cater Road intersection in accordance with Council's FNQROC Development Manual.
- (f) The design and construction of the interim arrangements must allow for all necessary work and adjustments to smoothly join the new works to the existing formation. Minor adjustment to levels may be necessary to achieve this.
- (g) Individual property access must be designed in accordance with the requirements of FNQROC Development Manual. Appropriate distances are required from intersections and tangent points in accordance with AS2890.1.

The access to all properties with two (2) road frontages (Lot 17 & Lot 18) must be from the lower order road being Cater Road. The provision of layback/roll-over kerbing along the frontage of each allotment will satisfy this condition.

4.5 Water Supply

- (a) A water service connection must be provided to each proposed lot in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer
- (b) Where the existing reticulated water supply does not currently service the site or is not at an adequate capacity, the developer is required to extend or upgrade the reticulated water supply infrastructure to connect the site to Council's existing infrastructure at a point that has sufficient capacity to service the development in accordance with FNQROC Development Manual standards (as amended).

4.6 Sewerage Connection

- (a) The developer must connect the proposed development to Council's reticulated sewerage system in accordance with

FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.

- (b) Where sewerage connections are not available to the site, or where existing connections are not satisfactory for the proposed development, the developer is required to extend or upgrade the reticulated sewerage infrastructure to connect the site to Council's existing infrastructure at a point that has sufficient capacity to service the development in accordance with FNQROC Development Manual standards (as amended).

4.7 Electricity provision/supply

The applicant/developer must ensure that an appropriate level of electricity supply is provided to each allotment in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.

Written advice from an Electricity Service Provider is to be provided to Council indicating that an agreement has been made for the provision of power reticulation.

4.8 Telecommunications

The applicant/developer must enter into an agreement with a telecommunication carrier to provide telecommunication services to each allotment and arrange provision of necessary conduits and enveloping pipes.

4.9 Lighting

- (a) The new intersection formed on Ray Road for the purpose of accessing the development and the intersection of Ray Road/Cater Road must be provided with street lighting for a distance equivalent to at least two (2) spans either side of the intersection to the relevant Lighting Category.
- (b) Prior to the issue of a development permit for Operational Works a Rate 2 lighting scheme is to be prepared by an Ergon Energy approved consultant and submitted to Council for approval. The Rate 2 lighting scheme is to be designed in accordance with the relevant Road Lighting Standard AS/NZS 1158 and the FNQROC Development Manual. The applicable lighting category is to be determined from the Road Hierarchy Table D1.1.

4.10 Street Trees

One (1) street tree must be at the planted at centre of each lot's road frontage. Corner allotments must have a street tree planted on each frontage.

All street trees must be provided in accordance with the FNQROC Development Manual - Design Manual D9 Landscaping.

Plans for the development works required under Conditions 4.1 - 4.10 must be submitted to Council for approval as part of a subsequent application for operational works.

FNQROC Regional Development Manual

All development works will be carried out in accordance with FNQROC Development Manual standards and in accordance with the Earthworks Notes shown on the submitted plan.

REFERRALS

Internal & External Consultation

Technical Services, Water & Waste
Trinity Engineering and Consulting

OFFICER'S RECOMMENDATION

1. That in relation to the following development application:

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and in accordance with the Planning Act 2016, the applicant be notified that the application for a development permit for the development specified in (A) is:

Approved by Council in accordance with the approved plans/documents listed in (B), subject to assessment manager conditions in (C), relevant period in (D) and further approvals from Council listed in (E);

(A) **APPROVED DEVELOPMENT:** Development Permit for Operational Works (Roadworks, Earthworks, Drainage, Water Supply Works and Sewer Works) for Stage 1 - Development Permit RAL/23/0009

(B) **APPROVED PLANS:**

Plan/Document Number	Plan/Document Title	Prepared by	Dated
160-011-C101 D	Cover Sheet, Locality Plan and Drawings List	Erscon	10/09/25
160-011-C102 B	General Notes	Erscon	30/06/25
160-011-C103 B	Existing and Demolition Layout	Erscon	30/06/25
160-011-C104 D	General Layout (Sheet 1 of 2)	Erscon	02/09/25
160-011-C105 B	General Layout (Sheet 2 of 2)	Erscon	30/06/25
160-011-C106 C	Grading Plan (Sheet 1 of 2)	Erscon	30/06/25

160-011-C107 C	Grading Plan (Sheet 2 of 2)	Erscon	30/06/25
160-011-C108 B	Ray Road Longitudinal Section (Sheet 1 of 2)	Erscon	30/06/25
160-011-C109 B	Ray Road Longitudinal Section (Sheet 2 of 2)	Erscon	06/06/25
160-011-C110 B	Road B Longitudinal Section	Erscon	30/06/25
160-011-C111 B	Ray Road and Road B Intersection	Erscon	30/06/25
160-011-C112 B	Ray Road Cross Sections (Sheet 1 of 2)	Erscon	30/06/25
160-011-C113 B	Ray Road Cross Sections (Sheet 2 of 2)	Erscon	30/06/25
160-011-C114 B	Road B Cross Sections	Erscon	30/06/25
160-011-C115 D	Drainage Plan (Sheet 1 of 2)	Erscon	02/09/25
160-011-C116 D	Drainage Plan (Sheet 2 of 2)	Erscon	02/09/25
160-011-C117 C	Drainage Longitudinal Section (Sheet 1 of 3)	Erscon	30/06/25
160-011-C118 D	Drainage Longitudinal Section (Sheet 2 of 3)	Erscon	30/06/25
160-011-C119 C	Drainage Longitudinal Section (Sheet 3 of 3)	Erscon	30/06/25
160-011-C122 B	Rear Drain Longitudinal Section	Erscon	30/06/25
160-011-C123 B	Stormwater Pit Design (Sheet 1 of 2)	Erscon	30/06/25
160-011-C124 B	Stormwater Pit Design (Sheet 2 of 2)	Erscon	30/06/25
160-011-C125 C	Sewer Plan (Sheet 1 of 3)	Erscon	02/09/25
160-011-C126 D	Sewer Plan (Sheet 2 of 3)	Erscon	02/09/25
160-011-C127 C	Sewer Plan (Sheet 3 of 3)	Erscon	02/09/25
160-011-C128 C	Sewer Longitudinal Section (Sheet 1 of 3)	Erscon	02/09/25
160-011-C129 C	Sewer Longitudinal Section (Sheet 2 of 3)	Erscon	02/09/25
160-011-C131 C	Water Plan (Sheet 1 of 2)	Erscon	02/09/25
160-011-C132 C	Water Plan (Sheet 2 of 2)	Erscon	02/09/25
160-011-C133 C	Erosion and Sediment Control Plan (Sheet 1 of 2)	Erscon	02/09/25
160-011-C134 D	Erosion and Sediment Control Plan (Sheet 2 of 2)	Erscon	02/09/25
160-011-C135 B	Erosion and Sediment Control Notes and Details	Erscon	30/06/25
160-011-C136A C	Stormwater Pit Typical Details	Erscon	27/08/25
160-011-C136B A	Stormwater Pit 2/2 Lid Slab Details	Erscon	27/08/25
160-011-C136C A	Stormwater Pit 3/2 Lid Slab Details	Erscon	27/08/25
160-011-C136D A	Stormwater Pit 4/2 Lid Slab Details	Erscon	27/08/25
160-011-C136E A	Stormwater Pit 5/2 Lid Slab Details	Erscon	27/08/25
160-011-C137 C	Base Slab for 600x600/5-A RCBC	Erscon	27/08/25
160-011-C138B C	Base Slab for 600 x 600/5-A RCBC Structural Engineering Notes Sheet 1 of 2	Erscon	27/08/25

160-011-C138C C	Base Slab for 600 x 600/5-A RCBC Structural Engineering Notes Sheet 2 of 2	Erscon	27/08/25
160-011-C139 B	Workplace Health and Safety Design Report	Erscon	30/06/25
160-011-C141 A	Temporary Rear Drain Longitudinal Section	Erscon	11/02/25
160-011-C142 A	Outlet Head Wall 1/1 Apron Slab Plan and Wing & Head Wall Plan	Erscon	30/06/25
160-011-C143 B	Outlet Head Wall 1/1, Detail Sheet (Sheet 1 of 2)	Erscon	27/08/25
160-011-C144 B	Outlet Head Wall 1/1, Detail Sheet (Sheet 2 of 2)	Erscon	27/08/25

(C) ASSESSMENT MANAGER'S CONDITIONS (COUNCIL)

1. General

- (i) All operational works must be designed and constructed in accordance with the procedures as set out in the FNQROC Development Manual.
- (ii) Development must be carried out substantially in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, and subject to any alterations:
 - found necessary by the Council's Delegated Officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements;
 - to ensure the works comply in all respects with the requirements and procedures of the FNQROC Development Manual and good engineering practice; and
 - to ensure compliance with the following conditions of approval.
- (iii) Council's examination of the documents should not be taken to mean that the documents have been checked in detail and Council takes no responsibility for their accuracy. If during construction, inadequacies of the design are discovered, it is the responsibility of the Principal Consulting Engineer to resubmit amended plans to Council for approval and rectify works accordingly.
- (iv) Upon completion of excavation and filling works, a statement of compliance of works endorsed by a Registered Professional Engineer of Queensland (RPEQ) must be submitted to Council.

Timing of Effect

- 2. The conditions of the Development Permit must be effected prior Works Acceptance except where specified otherwise in these conditions of approval.

Sewerage

- 3. Sewage infrastructure works must be constructed in accordance with the approved plans to the requirements of the FNQROC Development Manual, subject to the following requirements:
 - a. Provide written consent from the property owner of Lot 3 on RP843505 (School) approving the construction works within their property including any conditions of entry prior to the Pre-Start Meeting;

If owner's consent is not able to be obtained, redesign the sewer (including downstream connection) in McIver Road to Council's requirements and satisfaction prior to the Commencement of Works.

The redesigned sewer plans must document, but is not limited to, the following:

- (i) Alignment of proposed sewer;
- (ii) Alignment of all existing services adjacent the new sewer; and
- (iii) Vertical clearances at all service crossing locations.

- b. Unless otherwise approved by the property owner, protect existing significant trees adjacent the works corridor in Lot 3 on RP843505 (School) in accordance with AS4970 at all times.

Where the construction works corridor is likely to encroach into the Structural Root Zone and/or more than 10% of the Tree Protection Zone per AS4970, the impacted tree must be removed. Removal of any trees to facilitate the construction work is to be agreed by the property owner prior to the Commencement of Works.

- c. Carry out works near existing infrastructure to the satisfaction of the relevant asset owner at all times;
 - d. Construct the sewer outside of the 1V:1H (45 degrees) zone of influence of existing structures including their footings, electricity poles, underground services and significant trees unless otherwise approved by the relevant asset owner prior to Works Acceptance;
 - e. Reinstate disturbed areas within the road reserve to the pre-construction condition, to Council's satisfaction prior to Works Acceptance;
 - f. Reinstate disturbed areas within Lot 3 on RP843505 (School) to the property owner's satisfaction prior to Works Acceptance.
4. The Applicant is required to provide the following information including prior to the Pre-Start Meeting:
- a. Lot control calculations.
 - b. Revised engineering design drawings that increase the vertical clearance between Sewer Line 1 (between sewer manhole 10/1 and 11/1) and the box culvert crossing on Road B in accordance with the Water Services Association of Australia (WSAA) and best engineering practice, unless otherwise agreed with Council in writing.

Advice Note: Lot control calculations were not included in the Applicant's previous response;

Advice Note: With reference to the sewer longitudinal section below, Officers' preliminary measurements indicate the vertical clearance between the sewer obvert level and the stormwater box culvert invert level, (approximately 160mm), is less than the minimum clearance permitted by WSAA.

Compliance with the vertical clearance required by WSAA must take into account the thickness of the base slab below the stormwater box culvert.

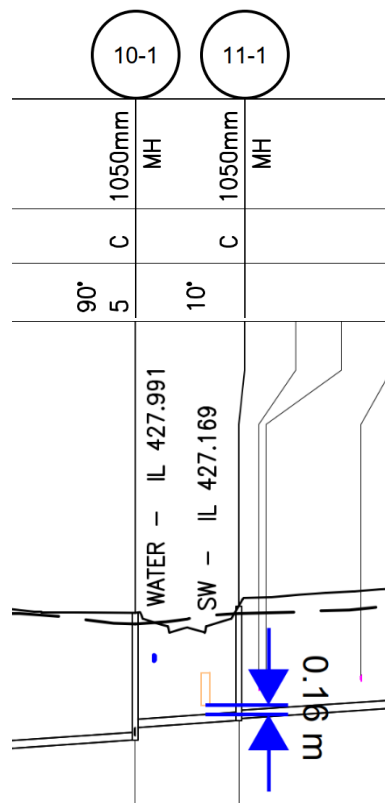


Figure 1: Extract from Sewer Longitudinal Section from Manhole 10/1 to 11/1
[Source: Erscon Drawing C128, Revision C]

5. Advice Note: With reference to the Masterplan Drawings (Erscon Drawing 160-009-C143) the vertical clearance between the sewer (between manhole 6/2 and 7/2) and the 375mm diameter stormwater pipe appears to be less than 300mm and therefore does not comply with requirements of the Water Services Association of Australia. A revised engineering design which achieves 300mm clearance will be required in the future operational works application for that stage.
6. Prepare for lodgement for registration at the Department of Resources (Titles Registry) a minimum 3.0m wide Sewer Easement in favour of Council at the northern boundary of the development site (from Ray Road to Cater Road) and along the western boundary of Lot 34, generally as shown on the Approved Plans.

The easement documents must be endorsed by Council prior to approval of the Plan of Subdivision and lodgement to the Titles Registry for Stage 1.

Advice Note: An easement wider than 3.0m may be required to address the requirements of Condition 3(d).
7. CCTV inspections of all constructed sewers must be undertaken and assessed.

6. Prepare for lodgement for registration at the Department of Resources (Titles Registry) a minimum 3.0m wide Sewer Easement in favour of Council at the northern boundary of the development site (from Ray Road to Cater Road) and along the western boundary of Lot 34, generally as shown on the Approved Plans.

The easement documents must be endorsed by Council prior to approval of the Plan of Subdivision and lodgement to the Titles Registry for Stage 1.

Advice Note: An easement wider than 3.0m may be required to address the requirements of Condition 3(d).

7. CCTV inspections of all constructed sewers must be undertaken and assessed.

An assessment of the CCTV records must be undertaken by a suitably qualified person and a report along with the footage submitted to Council for review prior to Works Acceptance.

Identified defects are to be rectified to the satisfaction of Council at no cost to Council prior to Final Works Acceptance.

The CCTV report, video files and a digital file with coding information (WinCan format), must be submitted as part of the Work Acceptance Submission in accordance with the clause S6.29 (3) FNQROC Development Manual.

Swept Path Assessment

8. Prior to the Pre-Start Meeting, update Erscon Drawing C140 to show the swept path for the right-turn movements at the Ray Road / Road B intersection for the service vehicle in accordance with the requirements of Austroads.

Specifically, show the following swept path movements on Drawing C140:

- Left-turn onto Road B from Ray Road;
- Left-turn onto Ray Road from Road B;
- Right-turn onto Road B from Ray Road; and
- Right-turn onto Ray Road from Road B.

In addition, include the dimensions/specifications for the “service vehicle” used to undertake the swept path movements.

Ray Road Pavement Widening

9. Construct the Ray Road pavement widening between Ray Road Chainage 173.076m to Chainage 650.0m in accordance with the Approved Plans and requirements of the FNQROC Development Manual prior to Works Acceptance.

Where the design surface level for the Ray Road pavement widening does not match the current pavement level at the existing road crown, a minimum 300mm interface treatment is to be carried out generally as nominated on Erscon Drawing 160-011-C109 (Revision B) dated 6th June 2025.

10. Taper the Ray Road pavement widening north from Chainage 173.076m and south from Chainage 650.0m back to the existing pavement width over a length of 20m generally as nominated on Erscon Drawing 160-011-C104 and C105 (Revision C) dated 30th June 2025.

Construct the pavement tapering to the satisfaction of the Chief Executive Officer prior to Works Acceptance.

11. Any additional road widening to facilitate the swept path movements at the Road B/Ray Road intersection required to address Condition 8 above must be constructed as part of the development at no cost to Council prior to Works Acceptance.

Pavement widening works (if required) must be documented on updated drawings prior to works commencing on site.

12. Except where amendments are required to address Condition 11, roads shown on the Approved Plan(s) must be constructed in accordance with relevant design and specifications sections of the FNQROC Development Manual, prior to Works Acceptance.

Stormwater & Drainage

13. Prior to the Pre-Start Meeting, update the alignment and/or cross section detail for the concrete-lined drain at the rear of Lots 33 and 34.

The current alignment shown on the Erscon Drawing 160-011-C115 appears to nominate the concrete-lined drain located centrally within the easement. Erscon Drawing 160-011-C122 indicates the drain is to be located on the southern boundary of the easement at the rear of Lot 33 and 34.

14. Prior to the Pre-Start Meeting, provide a copy of the updated Ray Road Stage 1 Stormwater Management Plan with revised calculations in accordance with the

intent of Item 7 of Mareeba Shire Council's Further Advice letter issued on 24th April 2025.

The calculations provided in the updated Stormwater Management Plan must be to the satisfaction of Council's Delegated Officer unless otherwise agreed with Council in writing.

Any design amendments required to the approved plans as a result of the revised stormwater catchment calculations must be submitted to Council for approval prior to the Pre-Start Meeting.

15. Prepare for lodgement for registration at the Department of Resources (Titles Registry) a Stormwater Easement in favour of Council at the rear of Lots 33 and 34, generally as shown on the Approved Plans.

The easement documents must be endorsed by Council prior to approval of the Plan of Subdivision and lodgement to the Titles Registry for Stage 1.

Advice Note: A shared stormwater and sewer easement may be appropriate to address Condition 3(d) and 6 above.

Easements nominated in future stages of the development will be subject to reasonable and relevant conditions of approval imposed on the Development Permit for Operational Works applicable to that stage.

16. Stormwater drainage as shown on the Approved Plan(s), must be constructed in accordance with the relevant design and specifications sections of the FNQROC Development Manual and the Queensland Urban Drainage Manual, prior to Works Acceptance.
17. A CCTV inspection must be undertaken for all as-constructed stormwater work under this Development Permit. A Consulting Engineering who is a Registered Professional Engineer Queensland (RPEQ) is to assess the CCTV footage and prepare a report on the condition of as-constructed stormwater. The report must be provided to and endorse by Council prior to Works Acceptance.

Any rectification work must be completed to the satisfaction of Council's Delegated Officer prior to Final Works Acceptance.

Water Supply

18. Water supply infrastructure works as shown on the Approved Plan(s), must be constructed in accordance with the relevant design and specifications sections of the FNQROC Development Manual, prior to Works Acceptance.

Boundary Truncation

19. Revise the boundary truncation for Lot 1 and 33 to achieve horizontal clearance from the reinforced concrete box culverts located in the road verge determined by the greater of:

- The Ergon corridor clearance (1.3m); or
- The zone of influence of the stormwater pipe.

The revised boundary truncations must be provided to Council for endorsement prior to the Pre-Start Meeting.

Earthworks Construction

20. All earthworks must be constructed in accordance with AS 3798: Guidelines on earthworks for commercial and residential developments. At the completion of

works, RPEQ Certification of the works and test results are required to be provided to Council, prior to Works Acceptance.

Street lighting

21. Prior to the Pre-Start Meeting, the Applicant must provide the street lighting design for the western half of Ray Road and for Roads A and B, and demonstrate that the proposed stormwater design does not impact the installation of street lighting footings in the standard locations. In particular, demonstrate that the proposed encroachment of stormwater behind the back of kerb does not prevent lighting installation on standard offsets.

The Applicant is to overlay the lighting design on the civil drawings and confirm if any clashes between street lighting poles and stormwater occur. The overlay is to be provided to Council prior to the Pre-Start Meeting and must identify any amendments to the current design that result from this assessment.

For clarity, the stormwater must be realigned if there is a conflict with street lighting.

Advice Note: The box culverts on the southern side of Road B and the western side of Ray Road are noted as locations of concern for services within the verge on standard offsets due to apparent encroachment beyond the back of kerb. The overlay of the lighting design on the civil drawings should confirm if any clashes occur and enable the Applicant to nominate changes to address these clashes.

For Construction Drawings

22. 'For Construction' Engineering Drawings, inclusive of any amendments required by Conditions of this Permit, must be certified as approved by a suitably qualified RPEQ Engineer and a copy submitted to Council, prior to the Prestart Meeting.

Damage to Infrastructure and Land

23. Where any part of Council's existing infrastructure or land is damaged as a result of construction activities occurring on the land, including but not limited to; mobilisation of heavy construction equipment, stripping, grubbing and vegetation damage, notify Council immediately of the affected infrastructure or land and have it repaired, replaced or reinstated at no cost to Council, prior to Works Acceptance.
24. Pre-start Meeting
- (i) In addition to the requirements of Clause CP1.07 and CP1.08 of the FNQROC Development Manual; after documentation has been approved by Council, a pre-start meeting is to be held on site prior to the commencement of work. Part 1 of the **attached** pre-start meeting pro-forma is to be completed and returned prior to the meeting including clause 1.u 'Request for Meeting' together with the prescribed Construction Monitoring Fee as set out in Council's Schedule of Fees.
25. Inspections
- (i) Inspections are to be carried out as detailed in the FNQROC Manual unless advised otherwise at the pre-start meeting.
26. Construction Security Bond and Defects Liability Bond
- (i) In addition to Clauses CP1.06 and CP1.20 of the FNQROC Development Manual; the Construction Security Bond and Defects Liability Bond shall each be a minimum of \$1000 and Bank Guarantees shall have no termination date.
 - (ii) During the Defects Liability period, it is the responsibility of the developer to rectify any works found to be defective due to design faults and or found to

exhibit faults attributed to the performance of the construction activities in terms of quality and conformance with design and specifications. The bond will be returned on satisfactory correction of any defective work and after expiration of the maintenance period. Failure to comply with a Council issued instruction to correct defective work may result in the call up of the bond to have the work completed.

27. Hours of Work

- (i) Work involving the operation of construction plant and equipment of any description, shall only be carried out on site during the following times:
 - 7.00am to 6.00pm, Monday to Friday;
 - 7.00am to 1.00pm Saturdays;
 - No work is permitted on Sundays or Public Holidays.
- (ii) No variation to the above working hours is allowed unless otherwise agreed in writing by Council.

28. Transportation of Soil

- (i) All soil transported to or from the site must be covered to prevent dust or spillage during transport. If soil is tracked or spilt onto the road pavement from works on the subject land, it must be removed no later than at the end of each working day. Sediment must not enter Council's stormwater drainage network.

(D) RELEVANT PERIOD

When approval lapses if development not started (s.85)

- Any other development – two (2) years (starting the day the approval takes effect).

(E) OTHER NECESSARY DEVELOPMENT PERMITS AND/OR COMPLIANCE PERMITS

- Nil

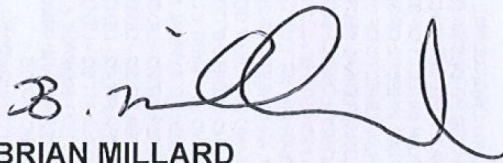
Date Prepared: 26 September 2025

DECISION BY DELEGATE

DECISION

Having considered the planning officer's report detailed above, I approve, as a delegate of Council, the application subject to the conditions listed in the report.

Dated the *26TH* day of *SEPTEMBER* 2025



BRIAN MILLARD
COORDINATOR PLANNING & BUILDING

MAREEBA SHIRE
AS A DELEGATE OF THE COUNCIL

APPROVED PLANS

CONMAT PTY. LTD.

RAY ROAD SUBDIVISION STAGE 1

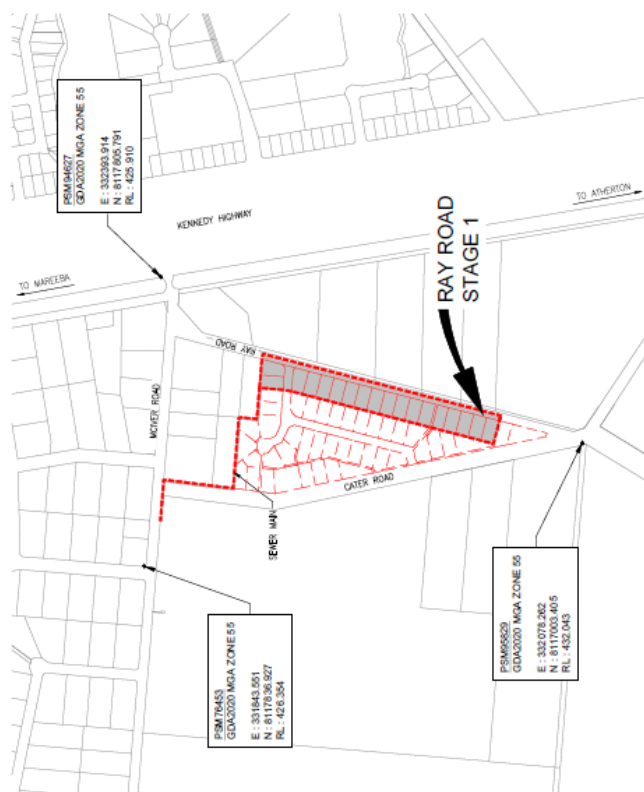
PROJECT DRAWINGS LIST

160-011-C101	COVER SHEET, LOCALITY PLAN AND DRAWINGS LIST
160-011-C102	GENERAL NOTES
160-011-C103	EXISTING AND DEMOLITION LAYOUT
160-011-C104	GENERAL LAYOUT (SHEET 1 OF 2)
160-011-C105	GENERAL LAYOUT (SHEET 2 OF 2)
160-011-C106	GRADING PLAN (SHEET 1 OF 2)
160-011-C107	GRADING PLAN (SHEET 2 OF 2)
160-011-C108	RAY ROAD LONGITUDINAL SECTION (SHEET 1 OF 2)
160-011-C109	RAY ROAD LONGITUDINAL SECTION (SHEET 2 OF 2)
160-011-C110	ROAD B LONGITUDINAL SECTION
160-011-C111	RAY ROAD AND ROAD B INTERSECTION
160-011-C112	RAY ROAD CROSS SECTIONS (SHEET 1 OF 2)
160-011-C113	RAY ROAD CROSS SECTIONS (SHEET 2 OF 2)
160-011-C114	ROAD B CROSS SECTIONS
160-011-C115	DRAINAGE PLAN (SHEET 1 OF 2)
160-011-C116	DRAINAGE PLAN (SHEET 2 OF 2)
160-011-C117	DRAINAGE LONGITUDINAL SECTION (SHEET 1 OF 4)
160-011-C118	DRAINAGE LONGITUDINAL SECTION (SHEET 2 OF 4)
160-011-C119	DRAINAGE LONGITUDINAL SECTION (SHEET 3 OF 4)
160-011-C120	NOT USED
160-011-C121	NOT USED
160-011-C122	REAR DRAIN LONGITUDINAL SECTION
160-011-C123	STORMWATER PIT DESIGN (SHEET 1 OF 2)
160-011-C124	STORMWATER PIT DESIGN (SHEET 2 OF 2)
160-011-C125	SEWER PLAN (SHEET 1 OF 3)
160-011-C126	SEWER PLAN (SHEET 2 OF 3)
160-011-C127	SEWER PLAN (SHEET 3 OF 3)
160-011-C128	SEWER LONGITUDINAL SECTION (SHEET 1 OF 3)
160-011-C129	SEWER LONGITUDINAL SECTION (SHEET 2 OF 3)
160-011-C130	SEWER LONGITUDINAL SECTION (SHEET 3 OF 3)
160-011-C131	WATER PLAN (SHEET 1 OF 2)
160-011-C132	WATER PLAN (SHEET 2 OF 2)
160-011-C133	EROSION AND SEDIMENT CONTROL PLAN (SHEET 1 OF 2)
160-011-C134	EROSION AND SEDIMENT CONTROL PLAN (SHEET 2 OF 2)
160-011-C135	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
160-011-C136A	STORMWATER PIT TYPICAL DETAILS
160-011-C136B	STORMWATER PIT 2/2 - LID DETAILS
160-011-C136C	STORMWATER PIT 3/2 - LID DETAILS
160-011-C136D	STORMWATER PIT 4/2 - LID DETAILS
160-011-C136E	STORMWATER PIT 5/2 - LID DETAILS
160-011-C137	BASE SLAB FOR 600x600/5-A RCBC
160-011-C138A	STORMWATER PIT AND WING & HEAD WALL - STRUCTURAL ENGINEERING NOTES
160-011-C138B	BASE SLAB FOR 600x600/5-A RCBC STRUCTURAL ENG. NOTES (SHEET 1 OF 2)
160-011-C138C	BASE SLAB FOR 600x600/5-A RCBC STRUCTURAL ENG. NOTES (SHEET 2 OF 2)
160-011-C139	WORKPLACE HEALTH AND SAFETY DESIGN REPORT
160-011-C140	TURN PATHS
160-011-C141	TEMPORARY REAR DRAIN LONGITUDINAL SECTION
160-011-C142	APRON SLAB AND WING & HEAD WALL PLAN
160-011-C143	OUTLET HEAD WALL DETAIL (SHEET 1 OF 2)
160-011-C144	OUTLET HEAD WALL DETAIL (SHEET 2 OF 2)

FOR COUNCIL APPROVAL

160-011-C101 REV D

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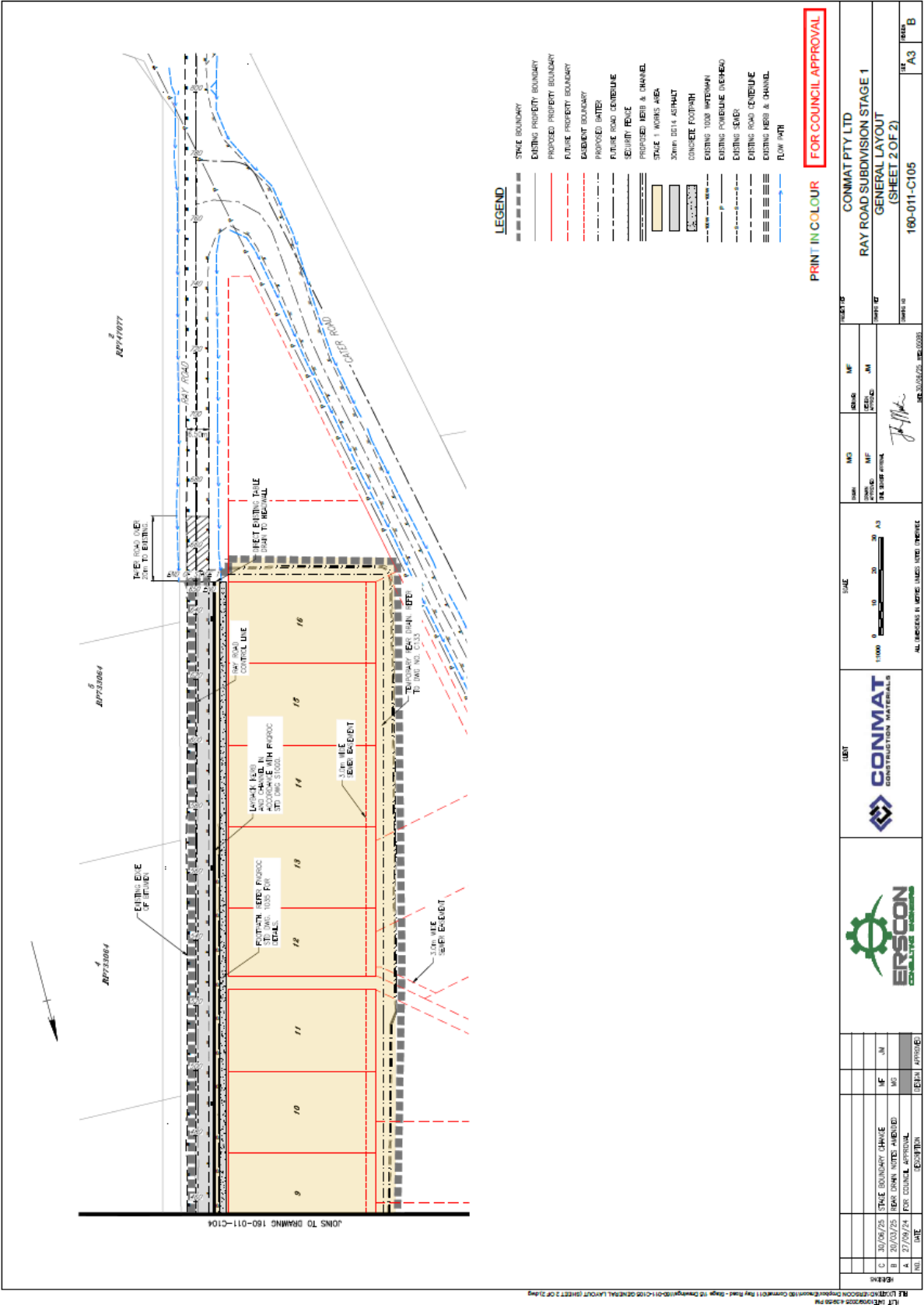


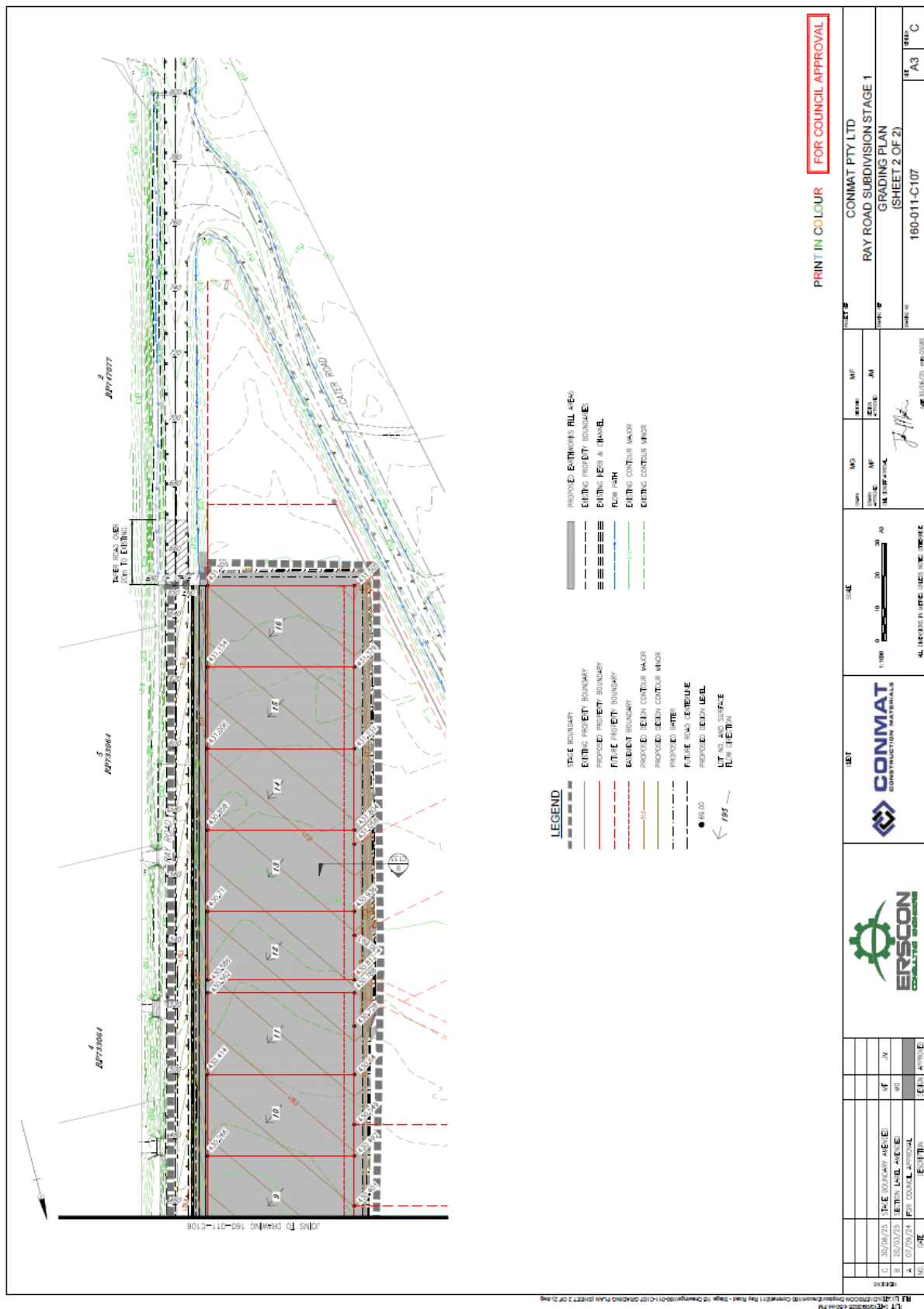
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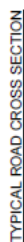
Client:


ERSICON
CONSULTING ENGINEERS

CONMAT
CONSTRUCTION MATERIALS





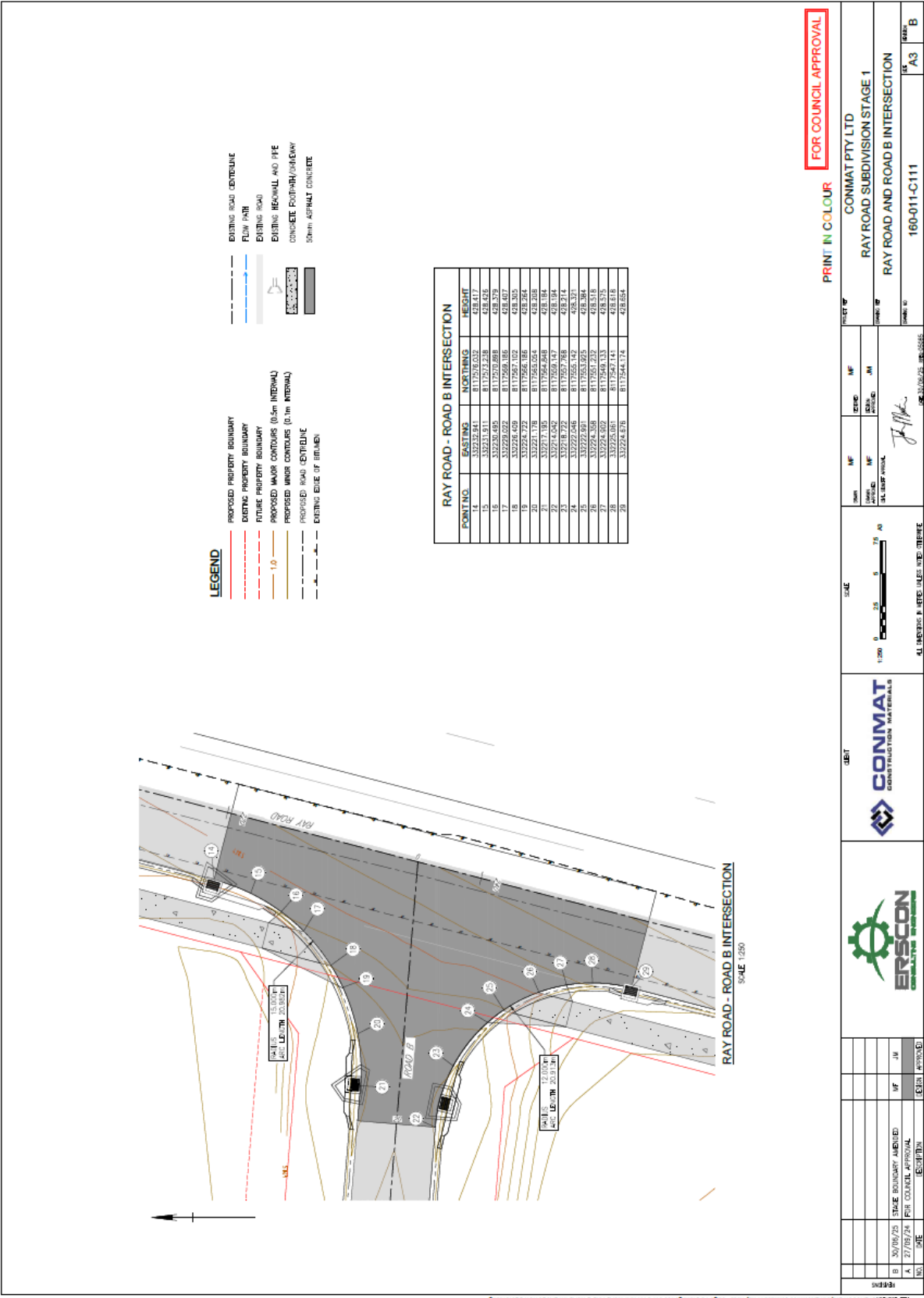


LONGITUDINAL SECTION - ROAD B

PRINT IN COLOUR

FOR COUNCIL APPROVAL

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FOR COUNCIL APPROVAL

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CHECKED BY		JH	
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DATE		27/08/24	
DRAWN BY		JH	
CHECKED BY		JH	
SCALE		1:250	
PROJECT NO.		160-011-C111	
SUBJECT		RAY ROAD AND ROAD B INTERSECTION	
DATE		27/08/24	
DRAWN BY		JH	
CHECKED BY		JH	
SCALE		1:250	

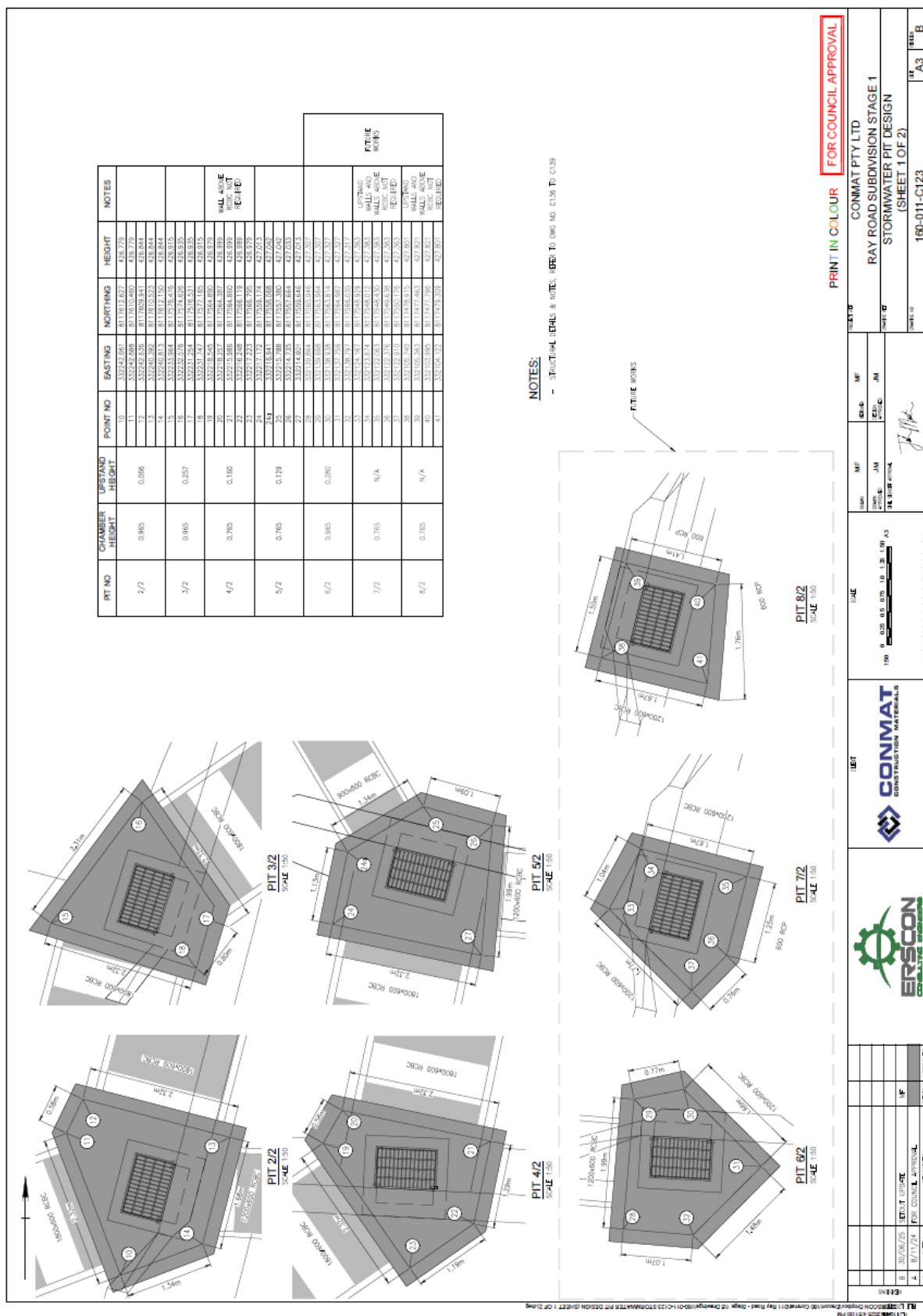
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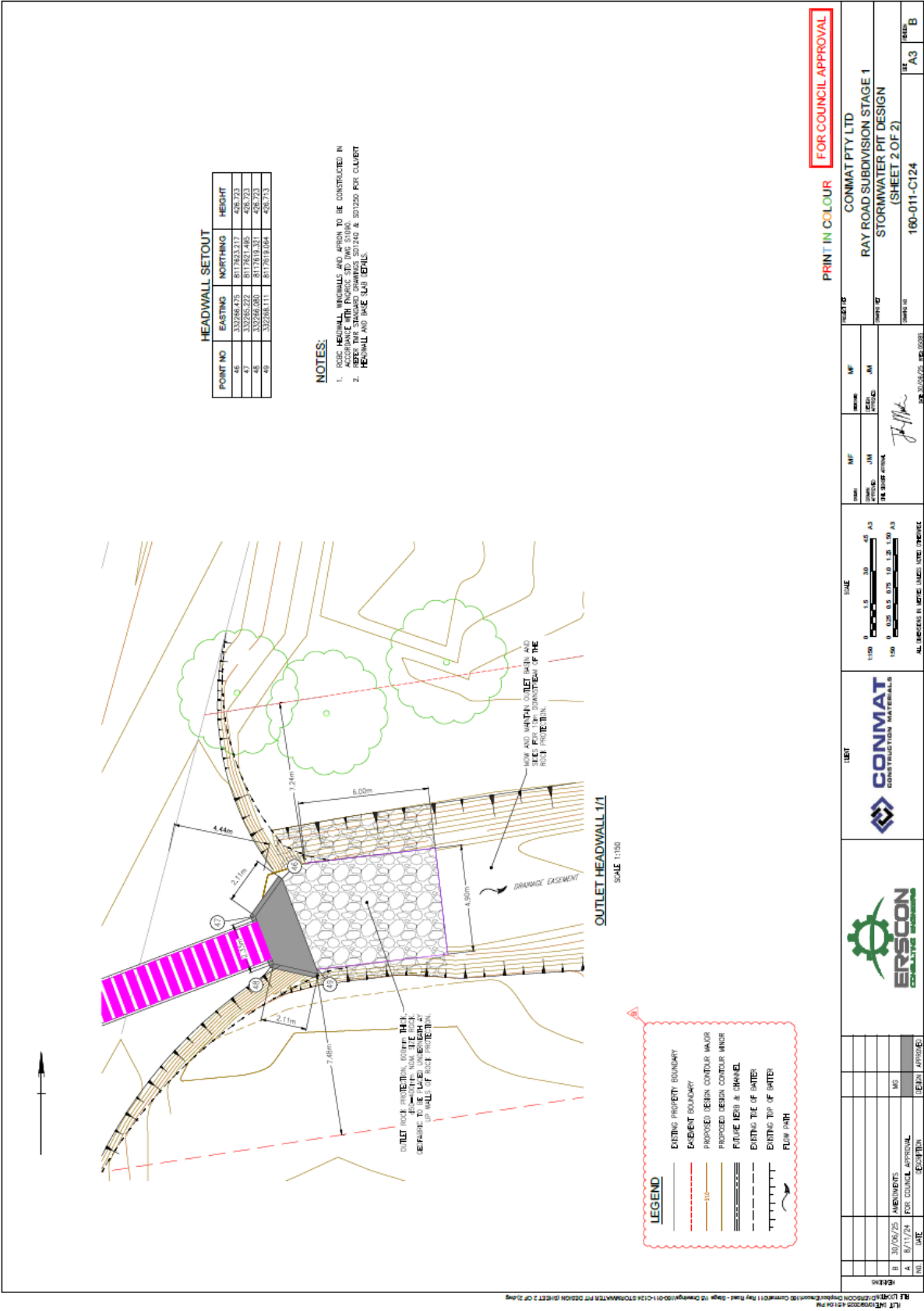
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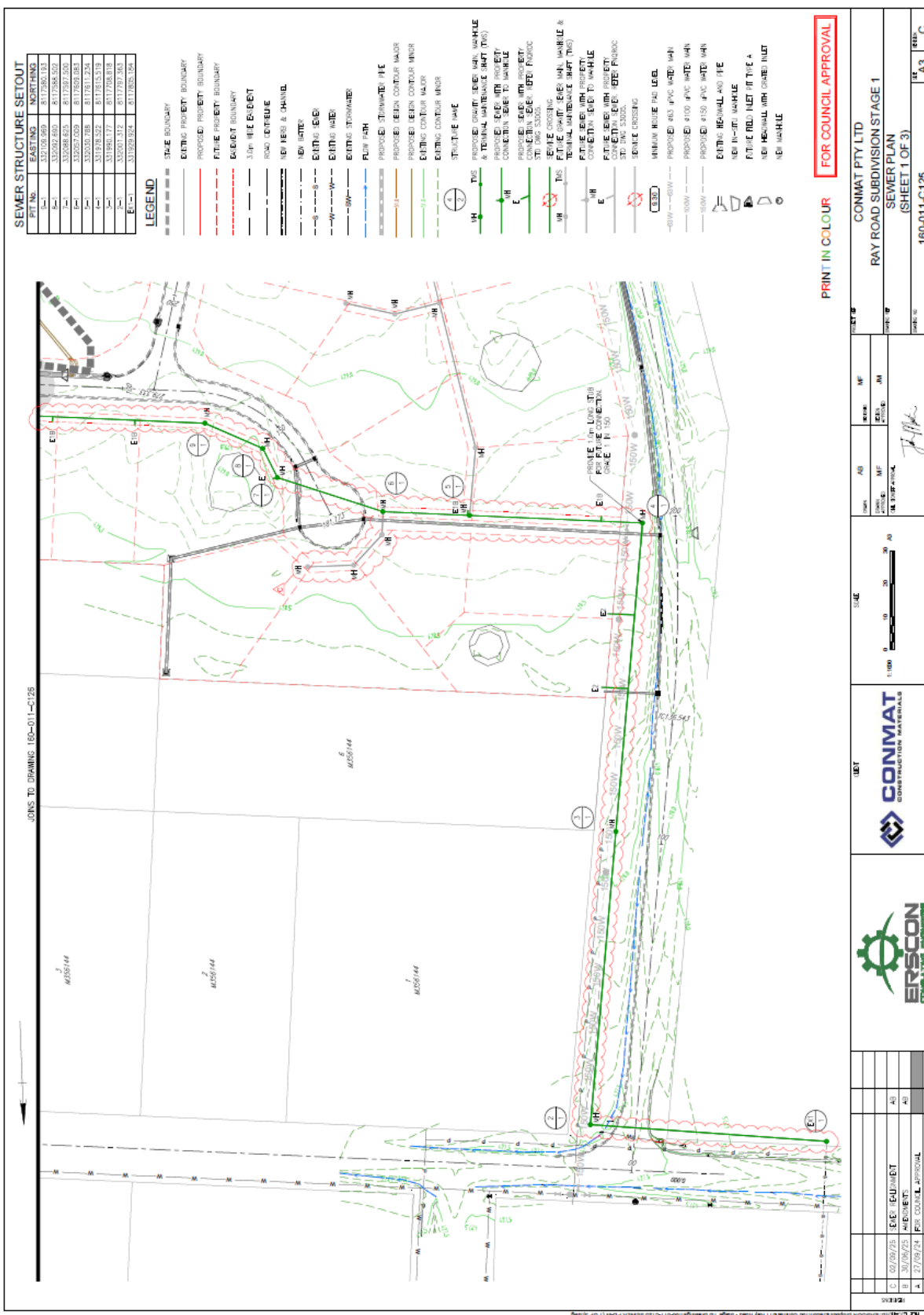
PRINT IN COLOUR

LINE 4

[illegible]







[illegible]

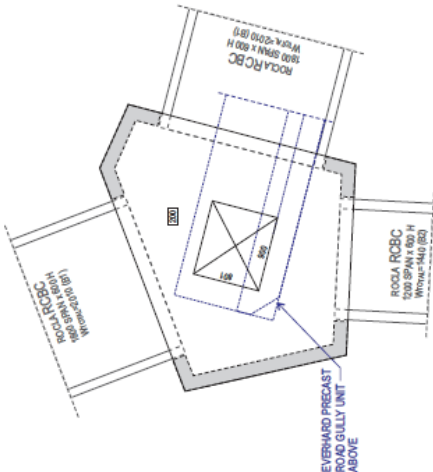
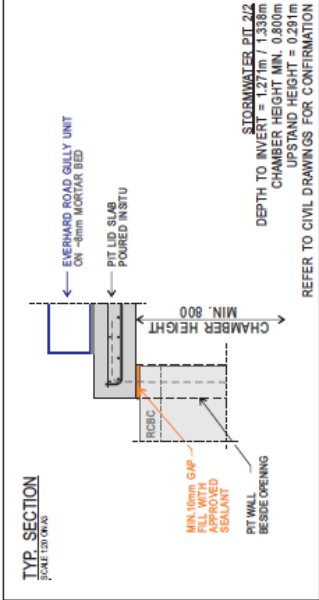
- NOTES**
- (1) REFER TO 160-011-C123 FOR STORMWATER PIT SETOUT POINTS
 - (2) REFER TO 160-011-C138A 'STRUCTURAL ENGINEERING NOTES' FOR FURTHER SPECIFICATIONS
 - (3) ALL MEASUREMENTS T.B.C. BY BUILDER BEFORE COMMENCING ANY WORKS.
 - (4) THE BUILDER MAY INCREASE THE GAP AROUND THE RCBC TO ALLOW FOR LARGER CONSTRUCTION TOLERANCES. IN THAT CASE, THE BUILDER SHALL INFORM THE ENGINEER TO RECEIVE CONFIRMATION OF THE CERTIFIED DESIGN.

LEGEND

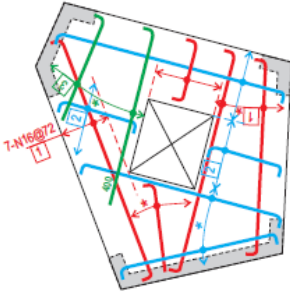
REINFORCEMENT LAYERS

LAY 1 FIRST
LAY 2 SECOND
LAY 3 LAST

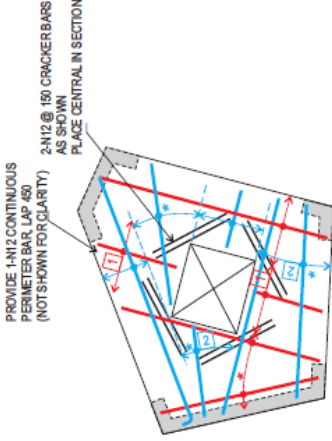
PLACE REINFORCEMENT FANNED OUT



SLAB PROFILE PLAN



BOTTOM REIN.
N16-100 EACH WAY U.N.O.



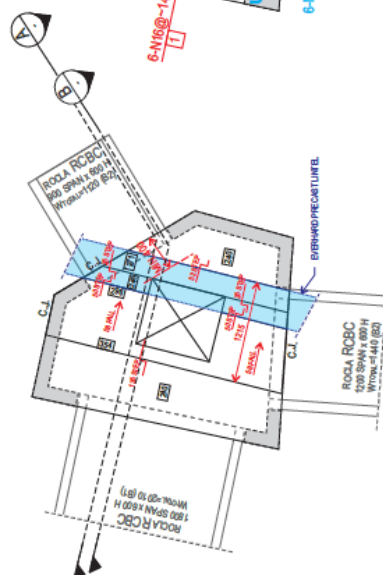
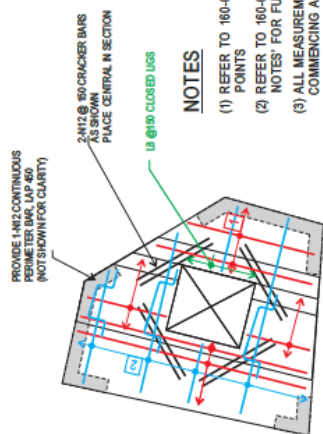
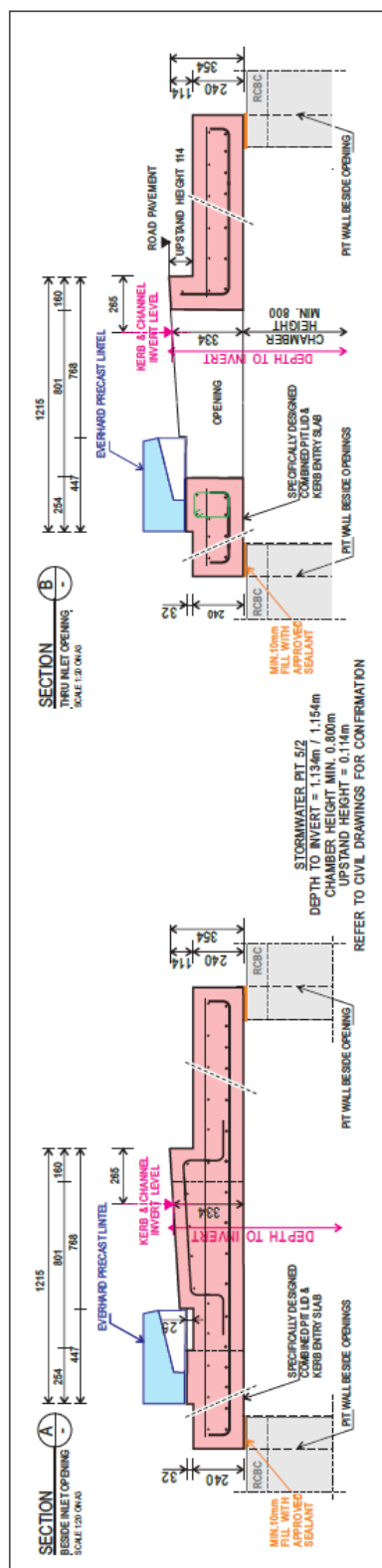
TOP REIN.
N12-200 EACH WAY

STORMWATER PIT - LID SLAB
NOTE: EXISTING SURFACE TO BE MAINTAINED
200mm SLAB THICKNESS, S50 CONCRETE GRADE, MIN. 50 COVER TYP.

FOR COUNCIL APPROVAL

DRAWING NO.		160-011-C138B	DATE		15/06/2024
PROJECT		RAY ROAD SUBDIVISION STAGE 1	DRAWN BY		RD
CLIENT		CONMAT PTY LTD	CHECKED BY		RD
SCALE		AS SHOWN, ON A3	APPROVED BY		RD
CONMAT		CONSTRUCTION MATERIALS	FOR COUNCIL APPROVAL		RD
ERSCON		CONSULTING ENGINEERS	DESIGN APPROVED		RD
LAYER		FOR COUNCIL APPROVAL	DATE		15/06/2024
NO.		160-011-C138B	REV.		A3
			A		A

[illegible]



NOTES

- (1) REFER TO 160-011-C123 FOR STORMWATER PIT SETOUT
- (2) REFER TO 160-011-C130A 'STRUCTURAL ENGINEERING NOTES' FOR FURTHER SPECIFICATIONS
- (3) ALL MEASUREMENTS T.B.C. BY BUILDER BEFORE COMMENCING ANY WORKS.
- (4) THE BUILDER MAY INCREASE THE GAP AROUND THE ROBC TO ALLOW FOR LARGER CONSTRUCTION TOLERANCES. IN THAT CASE, THE BUILDER SHALL INFORM THE ENGINEER TO RECEIVE CONFIRMATION OF THE CERTIFIED DESIGN.

LEGEND

REINFORCEMENT LAYERS

LAY 1 FIRST
LAY 2 SECOND
LAY 3 LAST

- **PLACE REINFORCEMENT FANNED OUT**

FOR COUNCIL APPROVAL

PRINT IN COLOR

TOP REINF.

N12-150 EACH WAY AS SHOWN AND
AS SHOWN IN SECTIONS

BOTTOM REINF.

N16-150 EACH WAY U.N.O.

SLAB PROFILE PLAN

SPECIFICALLY DESIGNED COMBINED PIT LID & KERB ENTRY SLAB

512

NOTE
- AN EVERHARD PRECAST UNTEL WILL BE REQUIRED
NO EVERHARD PRECAST ROAD GULLY UNIT IS REQUIRED

MIN. 240mm SLAB THICKNESS, S50 CONCRETE GRADE, MIN. 50 COVER TYP.

[illegible]

[illegible]

G15. RESPONSIBILITY FOR DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF FORMWORK AND FALSEWORK LIES WITH THE CONTRACTOR.

G16. FORMWORK TO BE DESIGNED AND CONSTRUCTED TO A323610.

G17. APPLY RELEASE AGENT COMPATIBLE WITH CONTACT SURFACES TO INTERIOR OF FORMWORK, WHERE NECESSARY, CLEAN REINFORCEMENT TO REMOVE TRACES OF RELEASE AGENT. SEAL JOINTS BETWEEN FORMWORK PANELS, AND TO HARDENED CONCRETE WITH A FLEXIBLE RUBBER STRIP.

G18. DO NOT STRIP FORMWORK PRIOR TO 36 HOURS AFTER PLACEMENT.

G9. STEEL REINFORCEMENT IS TO COMPLY WITH A532S4671. SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:

R: STRUCTURAL GRADE 250 PLAIN ROUND BAR TO A532S4671	
N: HOT ROLLED GRADE 500 DEFORMED (RIBBED) BAR DUCTILITY CLASS N TO A532S4671	
L: HOT ROLLED GRADE 500 DEFORMED BAR DUCTILITY CLASS L TO A532S4671	
SL: HARD DRAWN WIRE GRADE 500 SQUARE MESH DUCTILITY CLASS L TO A532S4671	
RL: HARD DRAWN WIRE GRADE 500 RECTANGULAR MESH DUCTILITY CLASS L TO A532S4671	
TM: HARD DRAWN STEEL GRADE 500 TRENCH MESH DUCTILITY CLASS L TO A532S4671	
W: GRADE 500 STEEL REINFORCING WIRE TO A532S4671	

FOLLOWING ABBREVIATIONS APPLY TO DESCRIBE THE PLACEMENT OF REINFORCEMENT:

G20.	FF: EACH FACE	NF: NEAR FACE
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BTM: AUTOMATIC
E. EACH ACES (BUTLSTRAN CERTIFICATION AUTHORITY FOR REINFORCING
321. STEEL LTD.) CERTIFICATION OF COMPLIANCE WITH AS/NZS4671 FOR ALL
REINFORCEMENT.
322. PROVIDE DOCUMENTATION TO SHOW THAT REINFORCEMENT SUPPLIER AND MILL
COMPLIES WITH AS/NZS4671.
323. REINFORCEMENT MUST HAVE UNIQUE MARKS TO IDENTIFY SUPPLIER.
324. DO NOT SPlice REINFORCEMENT OTHER THAN SHOWN ON THE DRAWINGS.
325. DO NOT BEND OR STRAIN REINFORCEMENT IN A WAY THAT MAY CAUSE DAMAGE.
326. BEND DIAMETERS TO BE TO AS3600. BARS TO BE BENT COLD UNDO. DO NOT
COLD HEATED BARS BY QUENCHING.
327. WELDING OR SITE BENDING OF REINFORCEMENT IS NOT PERMITTED WITHOUT
APPROVAL OF THE ENGINEER.
328. ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION BEFORE
CONCRETING (BY APPROVED CHAIRS, SPACERS, LIGATURES OR TIES AT 400 mm
MAXIMUM CENTRES EACH WAY UNCL) TO PREVENT DISPLACEMENT
OF REINFORCEMENT BY WORKMEN OR EQUIPMENT DURING CONCRETE PLACEMENT.
329. FOR CONCRETE SURFACES WITH B2 EXPOSURE CLASSIFICATION OR GREATER,
ONLY USE PROPRIETARY HIGH STRENGTH FIBRE REINFORCED CEMENT SPACER
BLOCKS OR SUPPORTS.
330. SECURELY TIE REINFORCEMENT WITH WIRE TIES. TURN ENDS OF THE WIRES INTO
CONCRETE. CLEAR OF COVER ZONE.
331. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH
AS3610.

FOR COUNCIL APPROVAL

[illegible]

32. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES OR REBARS FOR MARKINGS.

33. NO HOLES, CHASES OR EMBEDMENTS OF PIPES, OTHER THAN THOSE SHOWN ON THE DRAWINGS, SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ISSUER OF THESE DRAWINGS.

34. SET CONCRETE TO BE UNIFORM, HOMOGENEOUS, COHESIVE AND ABLE TO WORK READILY INTO CORNERS AND AROUND REINFORCEMENT. COMPLETELY FILLING FORMWORK WITHOUT SEGREGATION, EXCESS FREE WATER ON SURFACE, LOSS OF MATERIAL OR CONTAMINATION, CONCRETE TO HAVE GOOD DIMENSIONAL STABILITY AND ABLE TO RESIST PLASTIC SETTLEMENT CRACKING, THERMAL CRACKING AND SHRINKAGE CRACKING.

35. USE CEMENTITIOUS MATERIALS LESS THAN SIX MONTHS OLD. USE BAGGED CEMENT IN ORDER OF RECEIPT.

36. DO NOT ADD WATER TO CONCRETE AFTER TRUCK HAS LEFT BATCHING PLANT.

37. CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES, UNO.

ELEMENT	GRADE	SLOUP	MAX. AGGREGATE SIZE	EXPOSURE CLASSIFICATION	MIN. CONCRETE COVER TO REINFORCEMENT *
CURVED BASE SLAB	S50	B0 +/- 15	20 mm	B2	65mm U.N.O. ; 95mm FOR SURFACES CAST AGAINST GROUND

- * MIN. CEMENTITIOUS MATERIAL CONTENT 450 kg/m³
- * MAX. THE WATER / CEMENT RATIO 0.40
- * CURVE CAST CONTINUOUSLY FOR AT LEAST 14 DAYS
- * MIN. 32 MPa; CONCRETE STRENGTH AT TIME OF STRIPPING AND CURING
- * USE BLENDED CEMENTS COMPRISING OF 25-30% FLY ASH (EVA) TO COMPLY WITH AS 5562.1 OR 60% SLAG (SLAG TO COMPLY WITH AS 5562.2)

* CONCRETE COVER IS AS PER AS5100.5, AND SURPASSES THE MINIMUM REQUIREMENTS SET OUT IN THE FNOROC DEVELOPMENT MANUAL VERSION 9

68. METHOD OF PLACEMENT BY PUMP.
69. PROJECT ASSESSMENT IS NOT REQUIRED.
G10. PROVIDE A 10mm x 10mm CHAMFER TO EXPOSED EDGES ON CONCRETE UNO.
G11. JOINTS SHALL BE CONSTRUCTED AS SPECIFIED.

1312. TEST SLUMP OF EACH BATCH OF CONCRETE DELIVERED BEFORE PLACING CONCRETE FROM THAT DELIVERY. SLUMP MEASURED TO BE NO GREATER THAN TARGET SLUMP WITHIN TOLERANCES GIVEN IN AS1379 CLAUSE 5.2.3.

1313. CARRY OUT PROJECT ASSESSMENT OF CONCRETE TO AS1379 CLAUSE 6.4 AND 6.5. TAKE SAMPLES AT PROJECT SITE AT POINT OF DISCHARGE FROM AGITATOR. SPREAD SAMPLING EVENLY THROUGH FOUR SAMPLE TAKEN FOR PROJECT ASSESSMENT CONCURRENTLY WITH EACH SAMPLE TAKEN FOR PRODUCTION ASSESSMENT AT PROJECT SITE. FOR EACH CONCRETE DESIGN MIX TAKE ONE SAMPLE FROM EACH 25 CUBIC METRES OF CONCRETE DELIVERED PER DAY, NOT LESS THAN FIVE SAMPLES TOTAL FOR EACH MIX DESIGN. EACH SAMPLE TO COMPRISE FOUR CYLINDERS: TEST TWO AT 7 DAYS AND TWO AT 28 DAYS.

1314. CONCRETE TESTING TO BE BY AN APPROVED INDEPENDENT NATA REGISTERED LABORATORY.

CONCRETE TESTING TO BE BY AN APPROVED INDEPENDENT NATA REGISTERED LABORATORY

[illegible]

THE HEALTH AND SAFETY COMMISSION RECOMMENDS THAT CONSTRUCTION WORK INVOLVING BUT NOT LIMITED TO REGULATION FOR ALL HIGH RISK CONSTRUCTION WORK INCLUDING BUT NOT LIMITED TO: CONSTRUCTION SKEET PLAN, WORK ABOVE STAIRWAYS, ROOF EDGE PROTECTION, SCAFFOLDS AND WORK WITH FLAMMABLES, WORK LAIRING ON TEARLE LOADERS, FALL ARREST PLATFORMS, TRAILBLAZER PROTECTION, FALL ARREST MARKET SYSTEMS, STEEL JOBS PROTECTIVE, OCCUPANT DISE PROTECTION, INDUSTRIAL SAFETY KEN AND DRAINAGE FALL PROTECTION.

