

IRT MORUYA

SITE INFRASTRUCTURE AND UTILITY REPORT

MARCH 2026

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IRT Moruya Site Infrastructure and Utility Report

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1 INTRODUCTION

1.1 GENERAL

This Utility Report is submitted to the Department of Planning, Housing and Infrastructure (DPHI) on behalf of the Applicant in support of a State Significant Development Application (SSDA) for a new seniors housing development, located at 11 Spencer Street, Moruya NSW 2537 (the site). This report provides an overview of the existing electrical, communication, potable water and sewerage infrastructure around the site and potential augmentation works required to facilitate the new site development. All utility requirements will be developed further and finalised during later stages of the project including completion of all required utility applications.

1.2 PROJECT DESCRIPTION

- Demolition and site preparation works, including demolition of the existing residential dwelling on site.
- Construction of 120-bed residential aged care facility (with at-grade car parking).
- Construction of 252 Independent Living Units including:
 - 4 x 4-storey apartment buildings along Spencer Street (includes basement car parking).
 - 4 x 3-storey apartment buildings (including undercroft car parking).
 - 86 single storey villas.
 - 7 manor houses including 14 x 1-bedroom ILUs at ground level and 14 x 1-bedroom units at first floor level for essential workers.
- Construction of 36 1-bedroom cabins for essential workers.
- Construction of internal roads, car parking, landscaping and public domain works.
- Construction of ancillary community facilities.

1.3 SITE DESCRIPTION

The site located at 11 Spencer Street, Moruya NSW 2537 in the Eurobodalla Shire Local Government Area (LGA). As illustrated in Figure 1, the site comprises one lot (Lot 11 DP1008755) with a total area of approximately 18.26 Ha. The site has access to Spencer Street, Francis Street and Dwyers Creek Road. The site is currently being used for a single freestanding dwelling.



Figure 1-1: Site Locality Map

1.4 SOURCES OF INFORMATION

This report considers information obtained from:

- 1 Before You Dig Australia (DBYD) responses from affected utilities.
- 2 Essential Energy GIS
- 3 Essential Energy Preliminary Enquiry
- 4 Relevant Australian Standards, primarily AS/NZS 3000, AS/NZS 3500, AS 5601, AS 2419 and AS 2118
- 5 NCC 2022 Deemed to Satisfy (DtS) requirements.
- 6 Utilities Report for lot 11 Spencer Street Moruya NSW (N0211573-RPT.01B) from Jones Nicholson PTY LTD
- 7 Discussions with Eurobodalla Shire Council and Essential Energy

1.5 ASSUMPTIONS

WSP have made the following assumptions in preparing this report:

- 1 The assessments contained herein are based upon the sources of information listed in **Section 1.4**. Should additional site utility infrastructure information be made available beyond the course of our scope, WSP reserve the right to review and amend our assessment outcomes accordingly.
- 2 Coordination between any new incoming utilities to service the site has not been reviewed.

2 ELECTRICAL

2.1 ESSENTIAL ENERGY INFRASTRUCTURE

The below figure shows Essential Energy assets in the surrounding site area as captured by a Before You Dig Australia (BYDA) search.



Figure 2-1: Essential Energy Before You Dig Australia Plan

The below figure shows Essential Energy assets in the surrounding site area as captured by a GIS search.



Figure 2-2: Essential Energy GIS Plan

Essential Energy Before You Dig Australia mapping and GIS information indicate there are Essential Energy services currently installed along all the roadways surrounding the site. Services include both high voltage (11kV) arial cabling and low voltage arial cabling (400V). Some of the neighbouring dwellings are connected to the arial wiring system via underground cabling connected to pole mounted transformers.

A zone substation (Moruya one) is located near the Princess Highway approximately 1.2km from the Spencer Street / Francis Street intersection. All the Essential Energy assets surrounding the site originate from a single feeder from the zone substation.

An Essential Energy easement exists along the southern site boundary where 33 kV overhead power lines are installed.

2.2 POWER INFRASTRUCTURE ASSESSMENT

2.2.1 MAXIMUM DEMAND

WSP has completed a preliminary maximum demand calculation based on the latest available master planning and architectural schemes for the site. The preliminary calculation indicates the site load will be circa 4,450kVA. The site maximum demand will need to be re-reviewed during the detailed design stage of the project.

2.2.2 NEW FEEDER AND NEW SUBSTATIONS

Essential Energy planning has completed an enquiry assessment for the project (refer to Appendix B – Case 00359414 CP Enquiry Assessment). The assessment notes the proposed developments ultimate load is approaching 4.5 MVA and identifies the customer point of connection at Moruya Town Zone Substation (MYT). The recommended connection method is a high-voltage extension from the zone substation via a new dedicated feeder.

Essential Energy has confirmed that the existing feeder MYT3B2 is almost at its total capacity (5.72 MVA) and will not be able to supply any stage of the new development.

Accordingly, Essential Energy's planning assessment is to establish a new feeder from Moruya Town Zone Substation to supply this development, using a spare feeder switching port (MYT3B1 or MYT3B8), each with capacity up to 5.72 MVA.

The planning assessment identifies the site as being approximately 1.2 km from Moruya Town Zone Substation and proposes the following connection concept:

- Install an underground HV extension from MYT Zone Substation (new feeder at port MYT3B1) to a 3/4-way RMU (Sub 1), with HV UG cable noted as 3C 500 mm² XLPE;
- Establish a HV loop-out connection to feeder MYT3B2 at a suitable point on Spencer Street at Stage 1 or later stages, as the development progresses;
- HV switching and protection requirements to be determined during the formal connection application.

Several new kiosk substations will be required to service the staged development. Substation locations, quantities, and final sizing will be confirmed through the formal Essential Energy connection application and the subsequent ASP3 design and certification process, with due consideration to site grading, flood constraints, and access for Essential Energy plant and maintenance.

The new kiosk substations will supply power to external distribution boards which in turn will distribute power to internal building distribution boards via underground conduits.

2.2.3 ESSENTIAL ENERGY DEVELOPMENT ASSESSMENT PROCESS

WSP has submitted a preliminary enquiry to Essential Energy and received a preliminary enquiry response (refer to Appendix B – Case 00359414 CP Enquiry Assessment). This response outlines Essential Energy's high-level network

solution for supplying the ultimate load of the development, including the likely supply arrangement, feeder impacts and any network augmentation required to service the overall project.

It is noted that the preliminary enquiry response provides an overarching supply strategy for the full site and does not replace the detailed stage-by-stage connection and certification process required to deliver the works. The development is proposed to be constructed in stages, and each stage will require its own design development and approval pathway through Essential Energy's contestable works process.

For each stage of development, the standard delivery process is anticipated to be as follows:

1. **Stage application lodgement (contestable works)**
A formal application will be submitted to Essential Energy for the relevant stage, including the stage scope, staging drawings, maximum demand, and concept supply proposal.
2. **Site investigation and data gathering**
Following application lodgement, site investigations will be undertaken as required to confirm route constraints and existing services (e.g., BYDA review, survey checks, and other investigations required to support design development). Where required, Essential Energy may nominate additional investigation requirements.
3. **Method of Supply (MOS) and supply strategy confirmation**
WSP (ASP Level 3) will prepare a Method of Supply for the stage, confirming the proposed point of supply, substation arrangement, HV/LV route concept, easement requirements, and interface with existing network assets. The MOS will be submitted to Essential Energy for review.
4. **Design information / design brief issued by Essential Energy**
Upon review of the MOS and supporting information, Essential Energy will issue a Design Information Package / Design Brief outlining the requirements for detailed design, certification, network standards, and any contestable vs non-contestable elements.
5. **Detailed design and certification submission**
WSP (ASP Level 3) will prepare the detailed design package for the stage in accordance with Essential Energy requirements. This typically includes design drawings, protection and earthing requirements (where applicable), environmental and safety documentation (as required), and any supporting calculations. The detailed design package will then be submitted to Essential Energy for review and design certification.
6. **Construction of certified design**
Once certified, the works will be constructed by an ASP Level 1 contractor in accordance with the certified design and Essential Energy requirements. Any non-contestable works identified by Essential Energy (e.g., works within the zone substation, feeder connections, switching/energisation) will be carried out by Essential Energy or their nominated contractor at the project's cost.
7. **Commissioning, energisation, and as-built documentation**
Following construction, testing, commissioning and energisation will be coordinated with Essential Energy. The final as-built documentation will be provided in line with Essential Energy's handover requirements.

This stage-by-stage approach will be applied across all packages of the project to progress from application through to design certification and construction.

2.2.4 ESSENTIAL ENERGY EASEMENTS

Pad Mount Substation Easement and Location Requirements:

- The 1500 kVA 11kV elongated padmount substation requires a minimum easement area of 4.2 m x 7.0 m, free from all services and structures, as per Section 8.3 of Essential Energy's standard.
- Substation must not be located in a 1 in 100-year flood zone.
- Substation must not be installed over overland flow paths.

- Must be within 5 metres of an accessible driveway.
- Easement must be level, with a maximum crossfall of 2%.
- The surrounding area must have a maximum slope of 1 in 3.
- Must be located in Fire and Noise zone; structures within 3 m must comply with FRL 120/120/120.
- Mechanical ventilation openings must be located at least 6 m away.
- Hydrant boosters must be at least 10 m away.
- Substation should be more than 30 m from swimming pools or other water bodies.
- Maintain a minimum 1.5 m clearance around the kiosk for operational and maintenance access.
- Ensure earthing separation complies with AS2067 and EE guidelines, especially in relation to buried metal services, fences, and structures.

Underground Cable Easement Requirements:

- Easement width for underground cables:
 - 11kV cables: 2.0 m
 - LV cables: 1.0 m
- Cables must not run under driveway pavement, except under footpaths.
- Must be clear of all services and structures; only perpendicular crossings permitted.
- Cable easement must not encroach into drainage easements.
- No permanent structures allowed above easement (turf or footpath only).
- No trees above easement; only shallow-rooted shrubs (less than 400 mm depth).

Heavy Vehicle Right of Access Way Requirements:

- Access way must be at least 5.5 m wide, accommodating truck manoeuvring.
- Maximum slope of the access way: 1 in 15.
- Maintain sufficient vertical clearance (4.5 m) for high-voltage truck access.
- The surface must support a 30-tonne, 12.5 m long truck (check pavement strength).
- Ensure 24/7 access to the easement from public roads. If gated, gates must be fitted with Essential Energy-approved locks.

3 COMMUNICATIONS

3.1 NBN INFRASTRUCTURE

The below figure shows NBN Co. assets in the surrounding site area as captured by a Before You Dig Australia (BYDA) search.

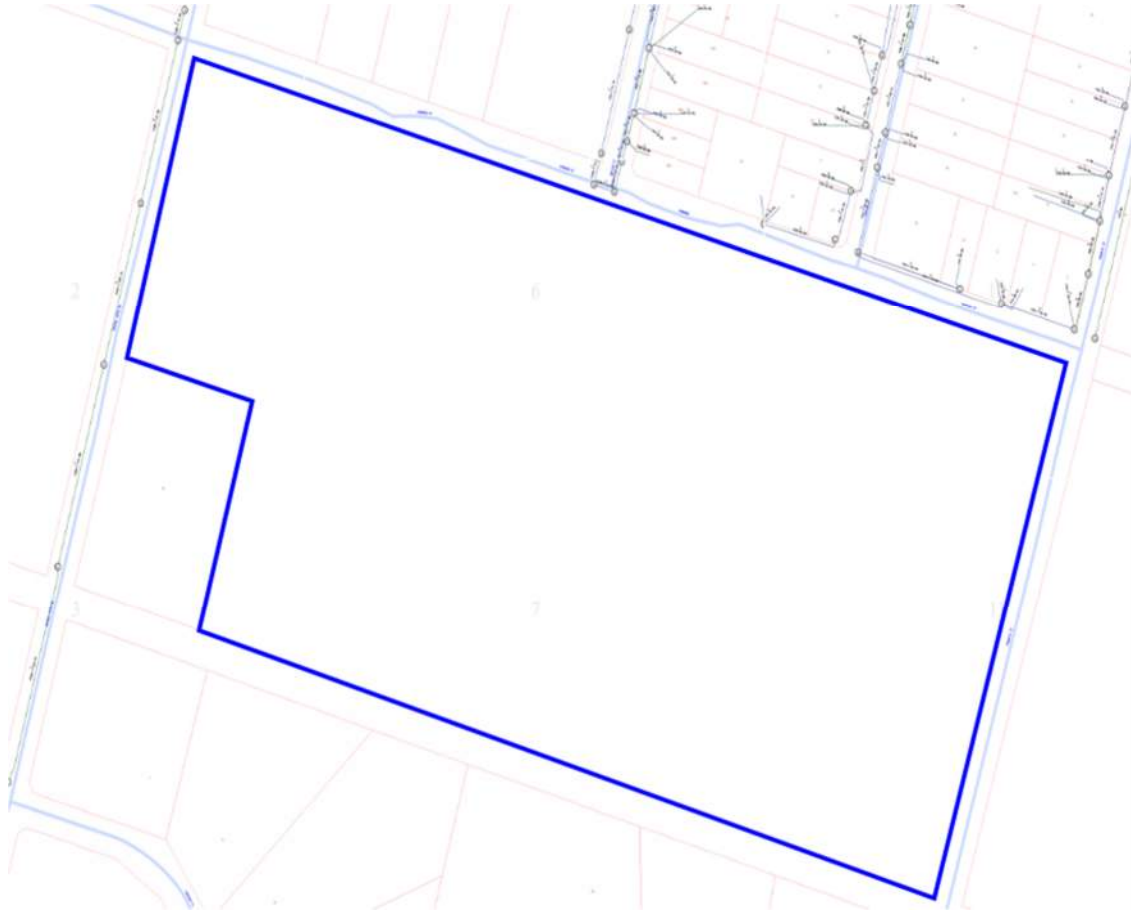


Figure 3-1: NBN Before You Dig Australia Plan Showing Network Assets

3.2 TELSTRA INFRASTRUCTURE

The below figure shows Telstra assets within the surrounding site area as captured by a Before You Dig Australia (BYDA) search.

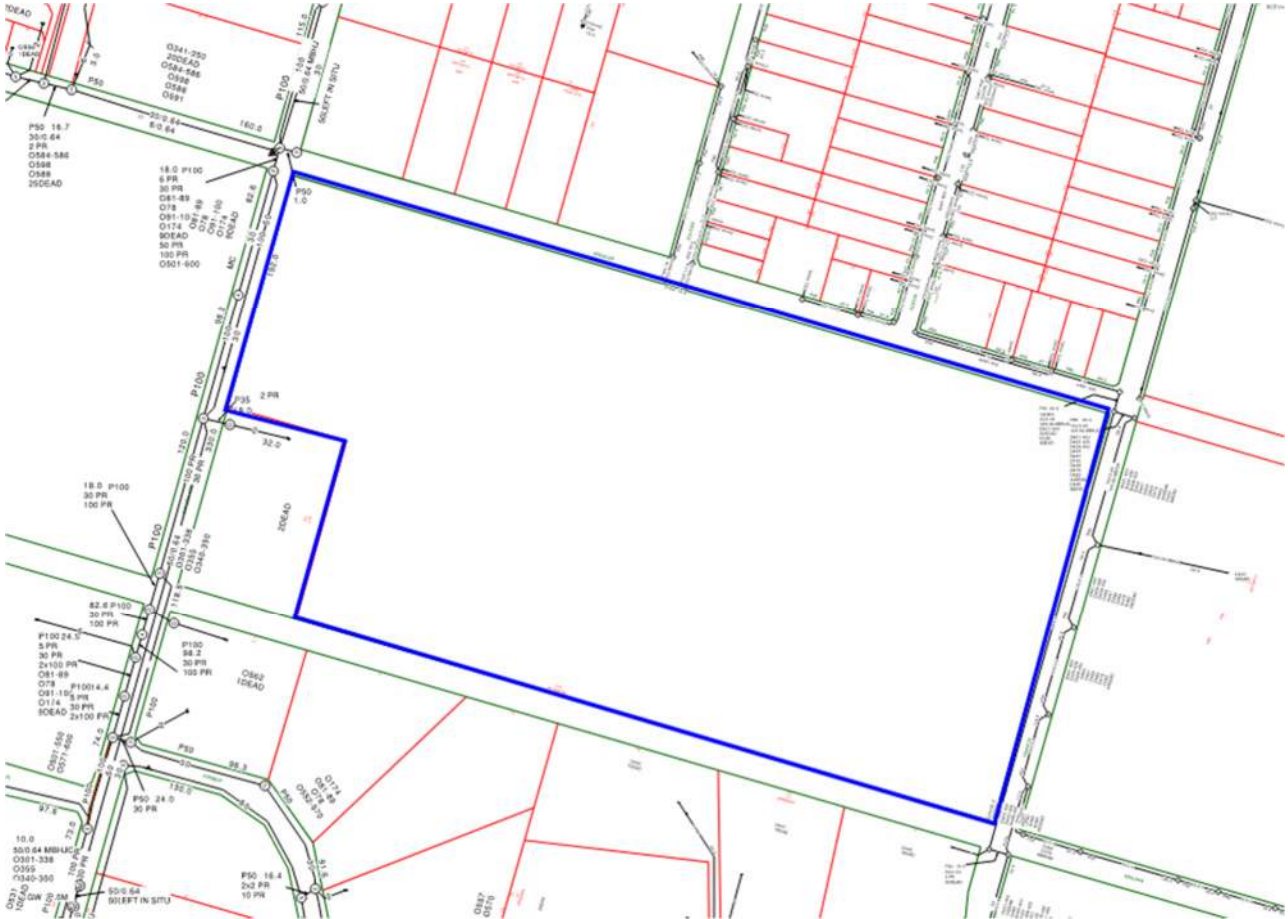


Figure 3-2: Telstra Before You Dig Australia Plan Showing Network Assets

3.3 COMMUNICATIONS INFRASTRUCTURE ASSESSMENT

3.3.1 NATIONAL BROADBAND NETWORK (NBN)

NBNCo Before You Dig Australia mapping shows that there are NBN services currently installed in Dwyers Creek Road. There are also some NBN services planned to be installed in part of Spencer Street however they are not planned to extend the full length of the road. NBN services are currently installed in Francis Street however they terminate at the intersection with Spencer Street and do not extend down past the site.

The existing NBN services are Fibre To The Node (FTTN) however the NBN rollout map indicates that provisions in Moruya are being updated to Fibre to the Premises (FTTP) and that NBN are aiming to have this available from December 2025. It is envisioned the site can be connected to the NBN by extending the existing street services in the surrounding areas. The project will need to be registered with NBN during the detailed design process for the installation of NBN services to the site.



Figure 3-3: Potential NBN connection points for the development

3.3.2 TELSTRA

Telstra Before You Dig Australia mapping shows that there are Telstra services currently installed in Dwyers Creek Road, part of Spencer Street and Francis Street. An existing site connection point appears to exist at the intersection of Spencer Street and Francis Street which may need to be removed. There is an online process for registering your development with Telstra however connections to the NBN network are typically used instead of connections to the Telstra network.

4 WATER AND SEWER

4.1 EUROBODALLA SHIRE COUNCIL UTILITY INFRASTRUCTURE

As per Council’s preliminary advice on 21/10/25, the proposed water & sewer connections for the development shall be as follows:

- Existing DN150 or DN200 water network along Spencer St. The overall capacity & sizing of this proposed connection will be assessed by Eurobodalla Council following SSDA application to ensure if the existing network can service the proposed development and identify any required upgrades.
- Existing DN225 uPVC at MO-04 A_13 near intersection of Vulcan St and Rose St. A sewer extension into our proposed development will be required from Vulcan St. Council has also advised that the proposed extension along Vulcan St is likely to be completed by Council but will be confirmed during SSDA phase subject to timeline of development.

The proposed water & sewer services for the development shall satisfy the requirements under Section 95 of the Housing State Environmental Planning Policy (SEPP) 2021: [State Environmental Planning Policy \(Housing\) 2021 - NSW Legislation](#)

Refer to Figure 4-1 and Figure 4-2 below for locality plan in relation to the proposed water & sewer connection.

4.2 WATER INFRASTRUCTURE ASSESSMENT

Proposed development will require private potable water infrastructure (to be owned and maintained by IRT Group) across the site as shown in figure below.

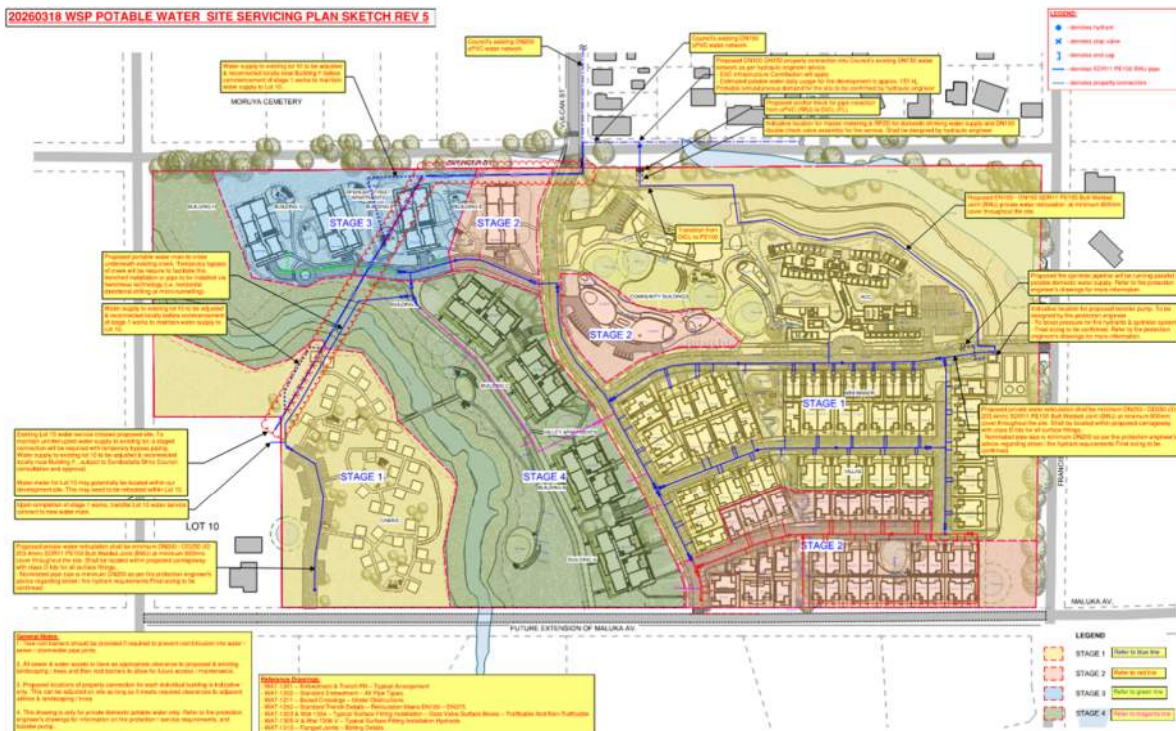


Figure 4-1 Potable Water Infrastructure Concept Design Site Plan

Proposed internal potable water infrastructure for stage 1 – 4 shall be minimum DN200 or OD250 (ID 203.4 mm) SDR11 polyethylene (PE100) pipe as per fire protection engineer advice to facilitate the street hydrants due to insufficient pressure in the Council’s water network. There will be a booster pump near the eastern boundary which will be designed by the fire protection engineer. PE pipelines shall be butt welded joints to eliminate thrust restraints at each bend throughout the pipeline alignment.

For the proposed cabins near the south west corner (Stage 1), The water main will need to cross underneath the existing creek. The existing creek will need to be bypass temporarily to facilitate trenched installation of pipe crossing or it will need to be installed via trenchless technology (i.e. horizontal directional drilling or micro-tunnelling).

Based on Council’s drawing and survey information, the existing water supply service for neighbouring Lot 10 is crossing through the proposed site with a 2m wide easement, and its water meter is also located within the site. The existing water connection including the easement will need to be modified to facilitate the new IRT development, subject to Council’s approval. Prior to the commencement of stage 1 works, a staged connection with temporary bypass piping will be required to maintain uninterrupted water supply to Lot 10.

Property connection points will be provided for each building and will terminate approximately 500 mm within the front area which will then tie into the internal hydraulic services for each building. A master metering and reduced pressure zone device (RPZD) will be provided near the front boundary which will be part of hydraulic services scope.

Surface fittings such as hydrants and stop valves will be provided throughout the alignment for ease of future isolation to maintain the pipeline. Street hydrants will be spaced at maximum 100 m throughout the site as per advice from fire protection engineers. Fire protection / safety is outside of the water team scope.

During the recent street infrastructure / utility coordination meeting, it has been decided that the proposed potable water pipeline will be located within the carriageway due to insufficient space within the verge / footpath. Proposed cover will be minimum 600 mm at trafficable area but may be laid deeper subject to proposed pavement design and additional depth protection during construction. All surface fittings (i.e. hydrants & stop valves) within the carriageway shall be with class ‘D’ trafficable lid.

The overall capacity of the water network must be assessed by Eurobodalla Shire Council following submission of the SSDA process to the satisfaction of issue of a compliance certificate in accordance with Chapter 6 Part 2 Division 5 of the Water Management Act relating to the provision of services to the property. The exact format of this application will be determined during consultation with the local council representative for the development. Refer to section 3 of the Integrated Water Management Plan for more information on hydraulics demand.

The site is proposed to utilise two water connections, one serving the domestic potable water requirements and the second serving the fire services supplies subject to Eurobodalla Shire Council approval.

The architecture and plumbing design shall accommodate a site wide water metering strategy with additional submetering as required by the client or by ESD requirements.

The authority water meter shall be located externally close to the main entrance to the site.

The overall capacity of the water network must be assessed by Eurobodalla Shire Council following submission of the SSDA process to the satisfaction of issue of a compliance certificate in accordance with Chapter 6 Part 2 Division 5 of the Water Management Act relating to the provision of services to the property. **The exact format of this application will be determined during consultation with the local council representative for the development.**

4.2.1 SPRINKLER WATER SUPPLY

A single water supply is designated for the sprinkler system. Based town main flow and pressure information available for 95% of the time, an onsite tank will be provided for the sprinkler system. A common onsite tank will serve both the sprinkler and hydrant systems, with a total capacity of 2x120 Kl, of which 84 Kl is allocated specifically for the sprinkler system. The sprinkler demand subject to the BCA report, FER requirements and water authority requirements.

The tank requires manual refilling. A connection to the town main/private town main with backflow prevention is to be provided by hydraulics services.

4.2.2 *HYDRANT WATER SUPPLY*

Based on available flow and pressure information, an onsite break tank will be provided for the hydrant system. A common onsite tank will serve both the sprinkler and hydrant systems, with a total capacity of 2x120 Kl, of 36000 Kl which is allocated specifically for the hydrant system. 20l/s of automatic inflow to be provided to the tanks. Final available pressure and flow information is subject to change without notice. An undated pressure and flow information should be sort after from council during detailed design.

4.2.3 *AUTOMATIC SPRINKLER SYSTEM*

Fire sprinkler protection will be provided throughout the building as per AS 2118.1-2017 Amd1 &, Amd 2.

A dedicated common pump room will house separate fire water pumps for both the sprinkler and hydrant systems. At this stage, the design includes two sprinkler pumps (both diesel) along with associated jockey and jacking pumps. The number and type of pumps are subject to applicable reference standards, building classification, hazard classification and the total area covered by the sprinkler system, The fire pump room must have a door that opens directly to open space, a road. Fire water pump room is located at the ground level near to the tank and booster assembly.

The fire services water supply connection, booster pumps and tank will be sized to meet the maximum system demand of both systems operating simultaneously.

Common on-site tanks shall be located close to the booster assembly and adjacent to the main site boundary and will be connected to the private town main ring via back flow prevention for maul infill.

The sprinkler system is a standalone system; therefore, an alarm check valve will be provided for each building in accordance with the relevant code requirements. The alarm check valves will be located within the pump rooms.

Hard stand location shall be coordinated for the manoeuvring space with traffic engineer.

Booster assembly will include large bore suction and with the location subject to performance solution and fire brigade approval.

At this stage, the greatest water demand for sprinkler has been considered (Ordinary Hazard 3) with flows of approximately 24 L/s. Sprinkler demand subject to BCA report and refence standard.

No drencher has been allowed.

4.2.4 *FIRE HYDRANT SYSTEM:*

Fire hydrant coverage will be provided throughout the site in accordance with NCC and Australian Standards AS2419.1-2021.

Common on-site tanks shall be located close to the booster assembly and adjacent to the main site boundary and will be connected to private town main ring via back flow prevention for maul infill. 20l/s automatic inflow to be provided from towns main to the fire tanks

A dedicated common pump room will house separate fire water pumps for both the sprinkler and hydrant systems This will consist of an electric booster pump (primary), diesel booster pump (secondary) including jockey pumps for the hydrant system.

It is assumed that largest fire compartment is less than 5000m². The fire hydrant design duty will provide 20l/s (2 off hydrants) @ 700kpa to the most disadvantaged fire compartment with a maximum of 150kpa pressure loss from the hydrant booster assembly to the most disadvantage hydrant.

Flow and pressure discharge at the most remote hydrant via onsite pumps is 10l/s @700kpa.

Booster assembly will include large bore suction and with the location subject to performance solution and fire brigade approval.

Hard stand location shall be coordinated for the manoeuvring space with traffic engineer.

4.3 SEWER INFRASTRUCTURE ASSESSMENT

Proposed development will require private sewer infrastructure (to be owned and maintained by IRT Group) across the site. A gravity system will be utilised across majority of the site to service each building before discharging into Council’s existing DN225 sewer network in Spencer St as shown in figure below.

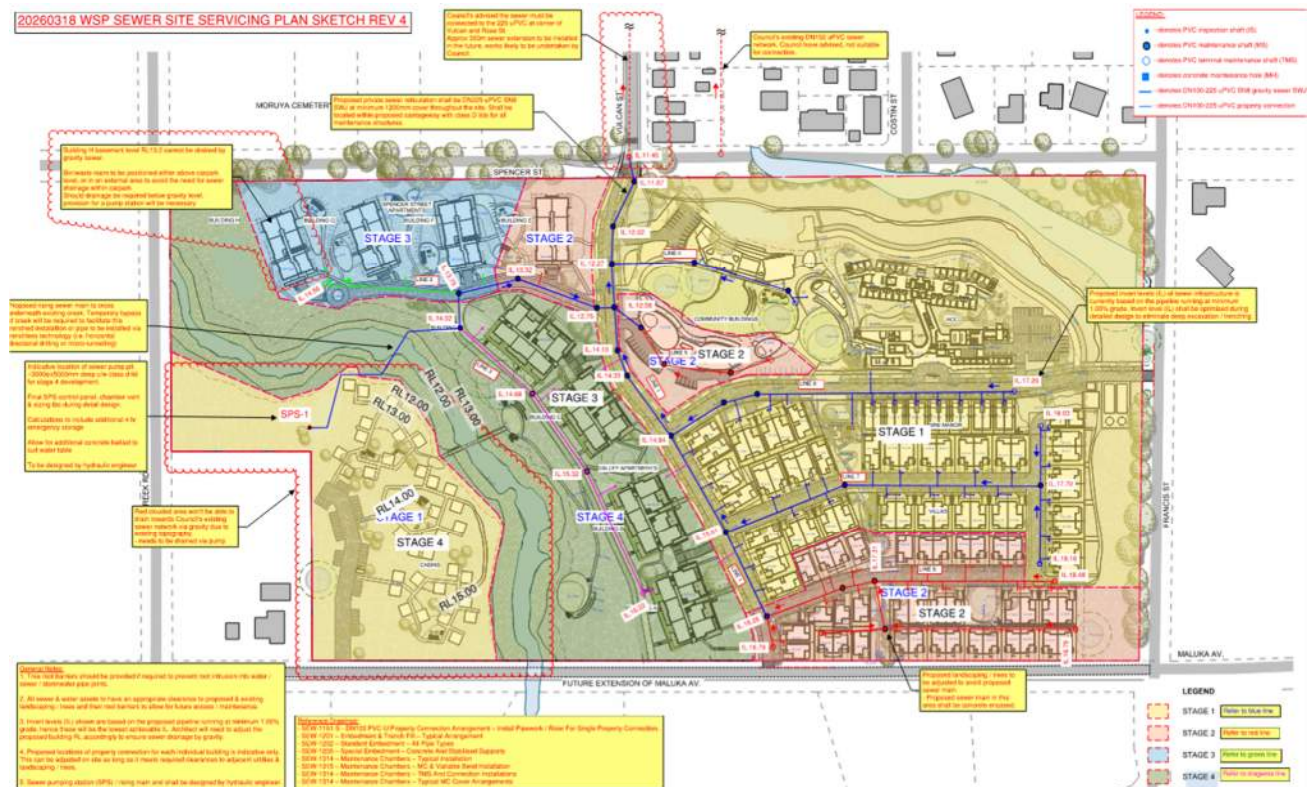


Figure 4-2 Sewer Infrastructure Concept Design Site Plan

Proposed internal gravity sewer infrastructure shall be uPVC SN8 pipe with solvent welded joints (SWJ). Pipe sizes will vary between DN100 – DN225 across the site depending on upstream catchment and the type of building it will be servicing. Property connection points will be provided for each building and will terminate approximately 1000 mm within the front area with a PVC inspection shaft or rodding point as per SEW-1151 and SEW-1350. It will then tie into the internal hydraulic services for each building. PVC maintenance structure shall be provided at intersection of sewers, change of pipe sizes and direction as per SEW-1314. At the end of line, a PVC terminal maintenance shaft (TMS) shall be provided as per SEW-1350.

Due to site topography & proposed building RL, if the basement of Spencer St Apartment (building H) has a bin room which requires a sewer connection, a small sewer pump dedicated to the basement for Building H will be required., unless this can be relocated outside the basement. If required, this will be designed by the hydraulic engineer.

For the proposed cabins in the south west corner (stage 1), a sewer rising main is likely to be required to connect into Council’s existing sewer network in Spencer S due to the existing topography and its location being adjacent to an existing creek which separates it from the rest of the stages / development, A packaged sewer pumping station will be required to service the proposed cabins, which will be designed by the hydraulic engineer.

During the recent street infrastructure / utility coordination meeting, it has been decided that the proposed sewer pipeline will be located within the carriageway due to insufficient space within the verge / footpath. Proposed cover will be minimum 1200 mm at trafficable area but likely to be laid at minimum 1500 mm cover to allow sufficient clearances for property connections to cross underneath other utilities. All maintenance shafts within the carriageway shall be with class 'D' trafficable lid.

Proposed pipelines will be trenched. Final design, and connection details shall be confirmed during detailed design and are subject to authority requirements and consultation with Eurobodalla Council.

The overall capacity of the water network must be assessed by Eurobodalla Shire Council following submission of the SSDA process to the satisfaction of issue of a compliance certificate in accordance with Chapter 6 Part 2 Division 5 of the Water Management Act relating to the provision of services to the property. **The exact format of this application will be determined during consultation with the local council representative for the development.**

Refer to section 3 of Integrated Water Management Plan for more information on hydraulics demand.

APPENDIX A – PRESSURE AND FLOW ENQUIRY



WATER PRESSURE CERTIFICATE

Business/Company Name	WSP
Postal Address	5 Spring Street, Perth WA 6000
Contact Name:	Chee Khoo
Email:	chee.khoo@wsp.com
Telephone:	+61 8 9489 9739
Payment Receipt No.:	
Property Information	11 Spencer St. Moruya
Other Details/Comments	

A field test of the nearest hydrant to the relevant property has been carried out and the results are:

<i>Demand 0 l/s</i>	<i>residual head</i>	<u>44.9 m</u>
<i>Demand 5 l/s</i>	<i>residual head</i>	<u>41.8 m</u>
<i>Demand 10 l/s</i>	<i>residual head</i>	<u>34.7 m</u>
<i>Demand 15 l/s</i>	<i>residual head</i>	<u>33.6 m</u>
<i>Demand 20 l/s</i>	<i>residual head</i>	<u>20.4 m</u>
<i>Demand 25 l/s</i>	<i>residual head</i>	<u>14.2 m</u>
<i>Max Demand 27 l/s</i>		

The test

Date : 10/09/2025

Time: 10:05 am

Reservoir/reticulation zone: Moruya

16-17m

Approximate ground level at supply point:

100mm UPVC

Pipe size:

COMPUTER SIMULATION

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency firefighting, and are not to be construed as availability for normal domestic supply for any proposed development.

CURRENT CONNECTION DETAILS

Street Name: Spencer Street	Side of Street: South
Distance & Direction from Nearest Cross Street	55 m from Vulcan Street
Approximate Ground Level (AHD):	16 - 17 m
Nominal Size of Water main (DN):	100 mm uPVC

EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	Side of Street: South
Minimum Pressure at Peak Day Demand (PDD)	39 m (2021 PDD)
Maximum Pressure (PDD)	43 m (2021 PDD)

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow (l/s)	Pressure head (m)
Fire Hose Reel Installations (two hose reels simultaneously)	N/A	N/A
Fire Hydrant / Sprinkler Installations	N/A	N/A
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the water main)	See Table 1	See Table 1

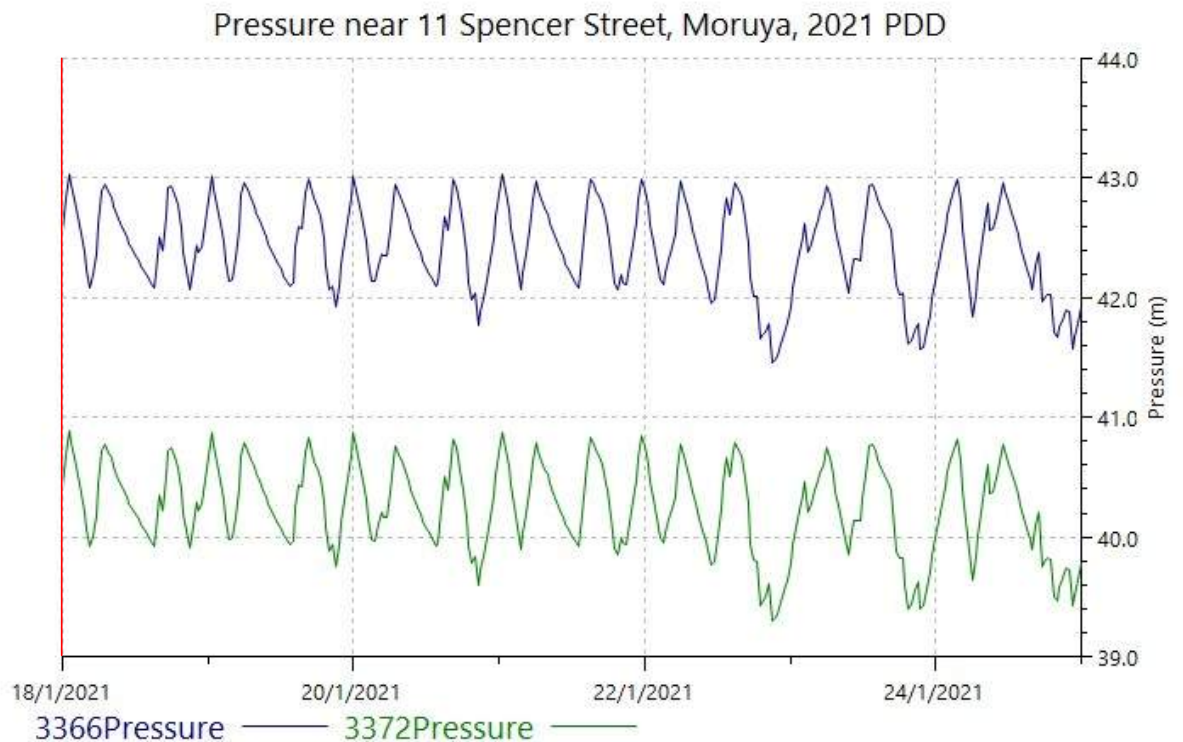
Refer to the model results in and Figure 1.

2021 PDD model	
Hydrant Fire Flow (l/s)	Hydrant Residual Pressure (m) at 19:00
0.02	41.76
5.00	41.66
10.00	41.52
15.00	41.33
20.00	41.09
25.00	40.80
30.00	40.46
35.00	40.06
40.00	39.62

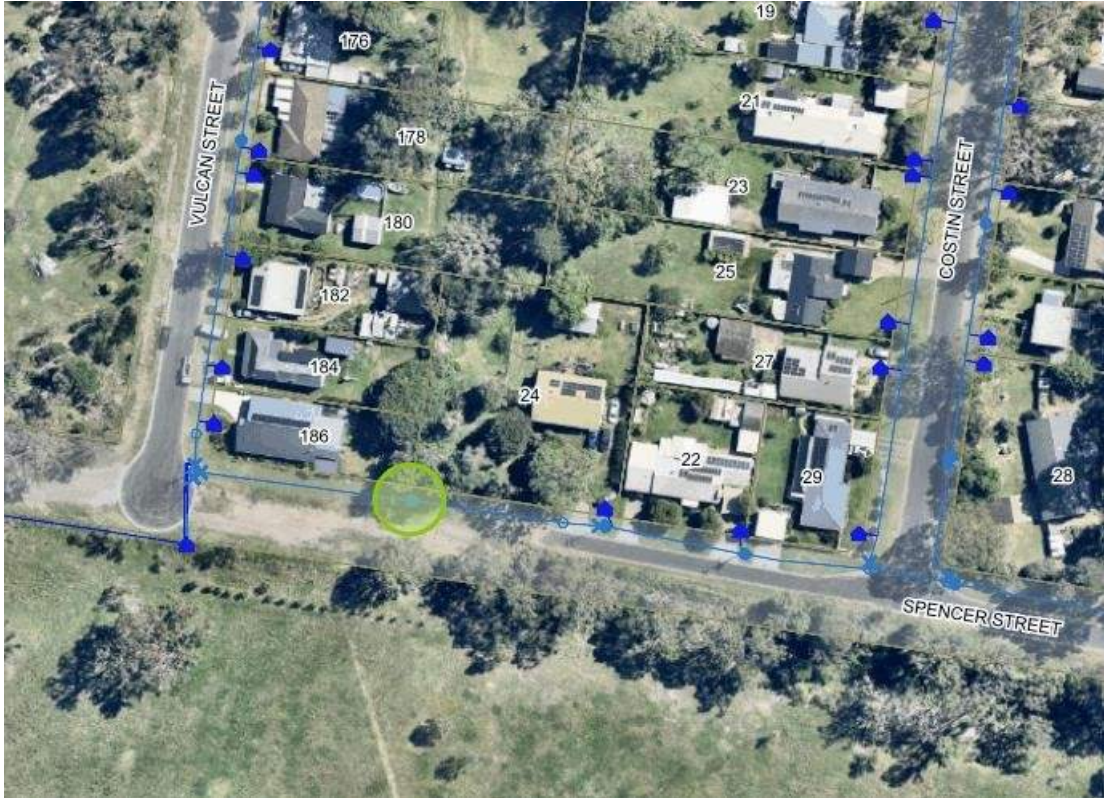
*Fire flows test at Peak Instantaneous Demand (PID) using methodology Forced Fire Flow (a snapshot in modelling).

Table 1 *Fire Flow Test Model Results at peak time **19:00** (from 100 mm near 11 Spencer Street, Moruya, in Moruya Town 2 Zone)

Figure 1 Node Pressure (2021 PDD Model: current Northern & Southern systems)



Appendix ESC provision



APPENDIX B – ESSENTIAL ENERGY PRELIMINARY RESPONSE

Enquiry Planning Assessment

Connection Application

An enquiry request has been received from an applicant exploring connection to Essential Energy’s distribution network for the purposes of connecting a load project.

The advice contained within this report is based on network parameters at the time of the assessment and does not reserve the requested capacity nor does it guarantee the constructability of any options provided. This will need to be confirmed as part of the application and any subsequent design certification requirements.

To formalise a connection agreement please submit a connection application via the Essential Energy connection portal referencing this assessment.

Project details are included within Table 1 below:

Table 1: Summary of connection details

Connection Details	Description
Project Identification	Case-00359414
Proponent	WSP AUSTRALIA PTY LTD
Location	Lot 11/DP 1008755
Load/Battery	4.5MVA
Customer POC	Zone sub MYT Moruya Town
Essential Energy Feeder	New feeder MYT3B1
Connection Method	HV extension from MYT Moruya Town Zone substation
Installation Details	Residential/commercial subdivision

Connection Study Scope

Contestable Planning’s assessment has been conducted using a network normal configuration. The project specific assessment considers the thermal rating, voltage constraints, stability, power quality and asset ratings of existing connection assets.

The assessment has been undertaken in compliance with Essential Energy Connection Policy CEOP2513.06

Customer Network Connection Details

The existing feeder MYT3B2 is almost at its total capacity of 5.72MVA, therefore, will not be able to supply any stage of this development.

However, the proposed 4 stage residential/commercial development lot is located approx. 1.2km of MYT Moruya Town zone substation. The zone sub has spare capacity of to install a new feeder on feeder switching port MYT3B1 or MYT3B8 each with capacity upto 5.72MVA.

Network Capacity Assessment & Connection Works

In this enquiry assessment EssE planning perspective is to install a new feeder at switching port MYT3B1 within Moruya Town zone substation to enable a connection point for this 4-stage residential/commercial development.

- Install UG HV extension at zone substation MYT Moruya Town available feeder port MYT3B1 to a 3/4-way RMU Sub 1. HV UG utilise 3C 500mm XLPE.
- A HV loop out to be established on feeder MYT3B2 at a suitable point on Spencer st at Stage 1 or later stages of the development as the development progress.
- HV switching and protection will be decided during a connection application.

Note: Part of the project will be considered non-contestable relevant to the zone sub access and new feeder establishment.

Supporting Evidence

The following figures have been included to complement or provide additional information relating to the proposed development.



Figure 1: Possible HV reticulation

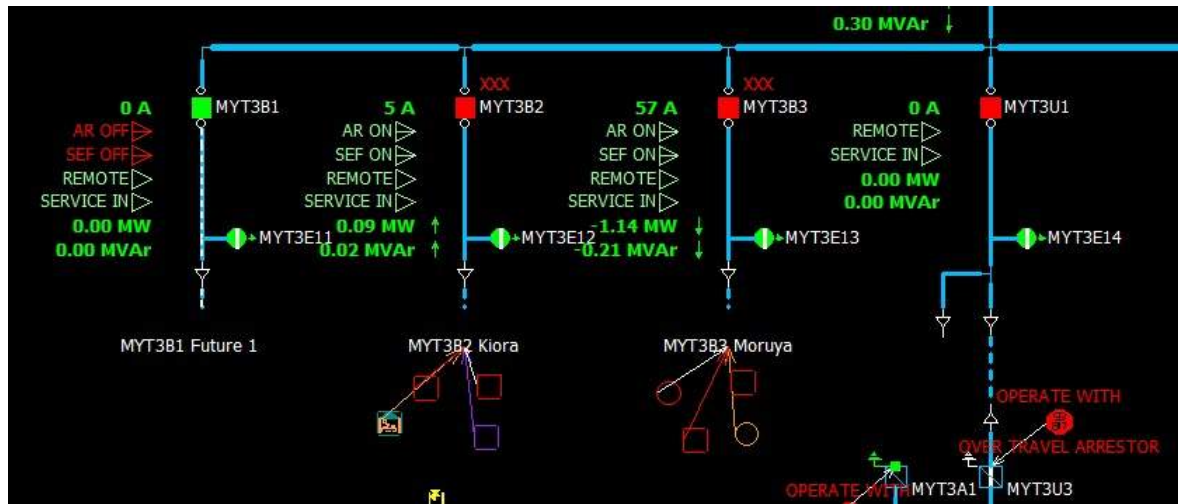


Figure 2: HV new feeder switching port MYT3B1.

END OF REPORT