



FORT LARGS



FORT LARGS DESIGN GUIDELINES
PREMIUM BEACHFRONT HOMES - MAY 2024



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ARCHITECTURAL / BUILT FORM VISION

The Fort Largs Style

Reminiscent of small coastal townships, Fort Largs provides the unique opportunity for people to live, work and play in a historically significant, yet untouched piece of Adelaide’s metropolitan shoreline. Fort Largs is a site that is steeped in history. The fort was built in 1878 for the strategic protection of Port Adelaide’s coastline. In 1961, South Australian Police commenced using the site as a police academy for training until the site’s ageing facilities were replaced by a new police academy to the east of the Fort Largs precinct.

Now the site has a new lease on life which enables you to create your own piece of history. In a community which demonstrates a rich blend of coastal and heritage themes, you have the opportunity for freedom of expression to design your own light, bright and airy beach home, which pays homage to the buildings of the past.

Key Themes

- It’s all about the beach
- Bare feet required
- Aspirational yet uncomplicated

A Social Community

Sense of space, through:

- Public open space
- View lines and vistas
- An outdoor lifestyle

But its ‘New and Modern’

- Consistent theme but full of unique homes

Authentic

- It just works

Forms

- Articulated skylines
- Considered proportions
- Unique compositions
- Visually interesting

Textures

- Sun bleached urban smart seaside colours
- Project palette consistency
- Fresh Beach influences
- White render as the dominant and link material

Landscape

- Coastal influences – pines/grass
- The connection between unique houses



DESIGN AND APPROVAL PROCESS

These design guidelines have been developed to provide guidance to purchasers, architects, designers and builders, with the aim of providing residents with certainty that the homes in the Fort Largs community will reflect a high quality and consistent character which achieves the vision.

Step 1 – Review guidelines and 3D Building Envelope Plan (BEP)

You should familiarise yourself with these guidelines prior to, and during the design of your home. Ensure that your home design is compliant with the encumbrance requirements, in conjunction with the Building Envelope Plan (BEP) provided in your land sales contract.

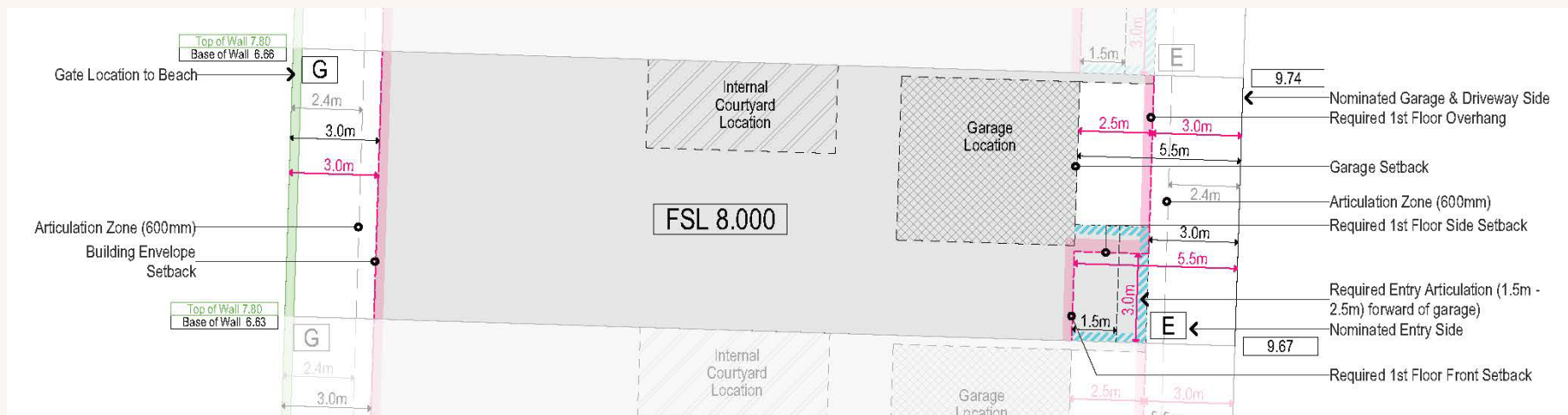
The BEP will form part of the contract of sale, and outlines the garage location, height requirements, minimum building setback distances to lot boundaries, and other details that may be specific to the lot. In some instances, greater setback distances may be required in order to comply with other planning requirements.

Step 2 – Submission of Encumbrance Application

When your plans have been finalised, you may apply for encumbrance approval through the encumbrance portal on the Fort Largs website, or at fortlargs.encumbrances@peet.com.au. Please ensure that all documentation listed in the checklist is provided for the encumbrance team to assess your application. The encumbrance team may require amendments or further information in order to provide approval, and approval is at the discretion of the Encumbrance Manager.

Step 3 – Encumbrance Approval and lodgement of Development Application with Port Adelaide Enfield Council

The design plans are stamped for approval to enable the plans to be lodged with Port Adelaide Enfield Council online through the Plan SA portal. Your builder may do this for you as part of the pre-construction process. Council cannot grant Development Approval without the encumbrance approved plans being provided.



BUILDING FORMS

The freedom of expression without the risk of chaos.

The architectural design intent at Fort Largs is of a modern style which is reflective of its beachside location. Character elements of these homes include:

- Clean and composed architectural lines
- Lots of glazing and natural light
- A natural beachy colour palette, with feature colour elements (“hero materials”)
- Variation of roof styles and pitches



BUILT FORM REQUIREMENTS

1. Materials & Colour Palette

The use of beachy colours and materials will reinforce the character of your home at Fort Largs.

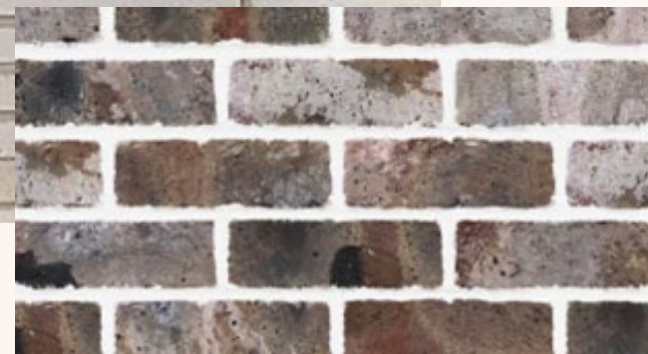
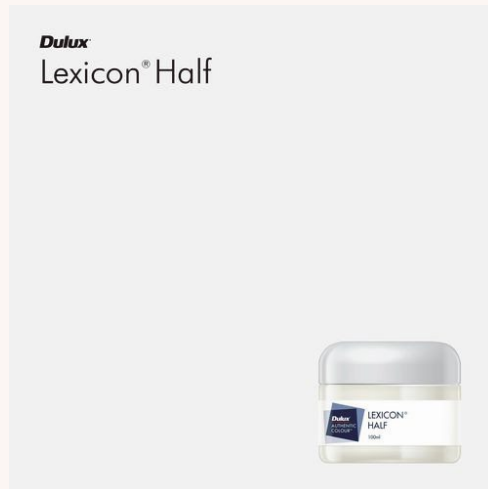
General Requirements:

1. White will be a required colour in the palette of your front façade. It can be a feature element, or the dominant colour - your choice. The shade of white may be Dulux “Lexicon” or similar.
2. A minimum of 2 predominant façade materials on the frontage, such as a combination of brick, render, decorative cladding, stone.
3. Contrasting colours - such as a complimenting dark and light colour, or complimentary colour shades.
4. High quality and modern cladding materials.
5. Other feature colours and materials not shown on the palette are encouraged as minor elements to give your home some “pop” and individuality.



1. Materials & Colour Palette (continued)

These colours and materials provide an example and offer a starting point for the beachy theme of your home. Adding other feature colours and modern cladding materials is encouraged.

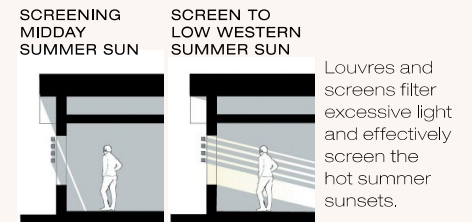
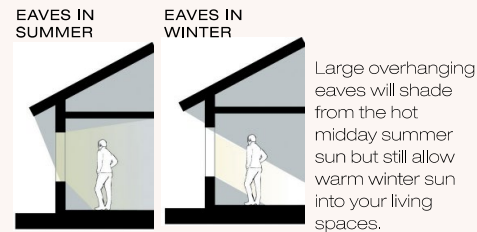
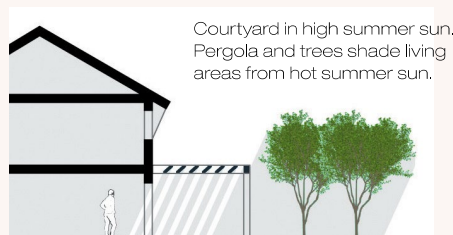


2. Sustainability

With considered design and the use of energy efficient appliances and inclusions, your home will be comfortable to live in all year round, without the need for excessive heating and cooling, and will help to reduce the environmental impact of your home.

General Requirements:

1. All homes need to achieve a 6-star energy efficiency rating in accordance with the Building Code of Australia.
2. All homes require a minimum 1.5kW photo voltaic solar energy system to be installed.
3. Energy efficient appliances which can be powered or offset by renewable resources (i.e. electrical appliances offset by solar power) are preferred over appliances which rely on non-renewable resources (such as gas).
4. West facing windows to bedrooms and living areas are to include external or internal blinds, louvres, decorative blades/fins, slats or other shade devices to match the style of your home (external roller shutters and traditional style fabric blinds not permitted). Suitable glazing may be used as an alternative.
5. Each home needs to provide a minimum of a 1000 litre capacity rainwater tank, plumbed to a toilet, water heater and /or to all cold water outlets in the laundry.



3. Private Open Space & Outdoor Living Areas

The careful consideration of the orientation and design of your outdoor space can ensure that you can enjoy your uninterrupted sea views all year round.

General Requirements:

1. The private open space requirement for your lot is:
 - a. 24sqm for lots 300sqm and less in area
 - b. 37.5sqm for lots over 300sqm in area
2. Your home is required to have 16sqm of private open space directly accessible from a living room, of a minimum width of 3m.
3. A private courtyard area that is screened from public view is required to be integrated into the design of your home. This may be any size based on the function that it serves- whether a service yard for utilities and clothesline, a light well, a secondary outdoor living area, or a combination.
4. The courtyard location shown on the BEP is indicative, to maximise acoustic and visual privacy. Should you wish to flip the courtyard to the opposite side of the allotment, you will need to demonstrate how the same level of acoustic and visual privacy is achieved between you and your neighbour.
5. Your home and garage are to be designed to fit within the setbacks as defined in your Allotment Development Plan (ADP). Variations to the setback to Oceanview Boulevard may be accepted by the Encumbrance Manager based on streetscape merit, however the garage setback remains fixed to ensure sufficient space for an additional car space in front of the garage without overhanging the verge.
6. Consider the coastal aspect to ensure that your living areas (indoors and outdoors) are comfortable all year round. Shield from the prevailing South Westerly breeze during winter will ensure that your alfresco area can be used all year round.
7. Consider the inclusion of a sunroom adjoining your outdoor space which retains the beach views, but can be closed off to the outside if needed.

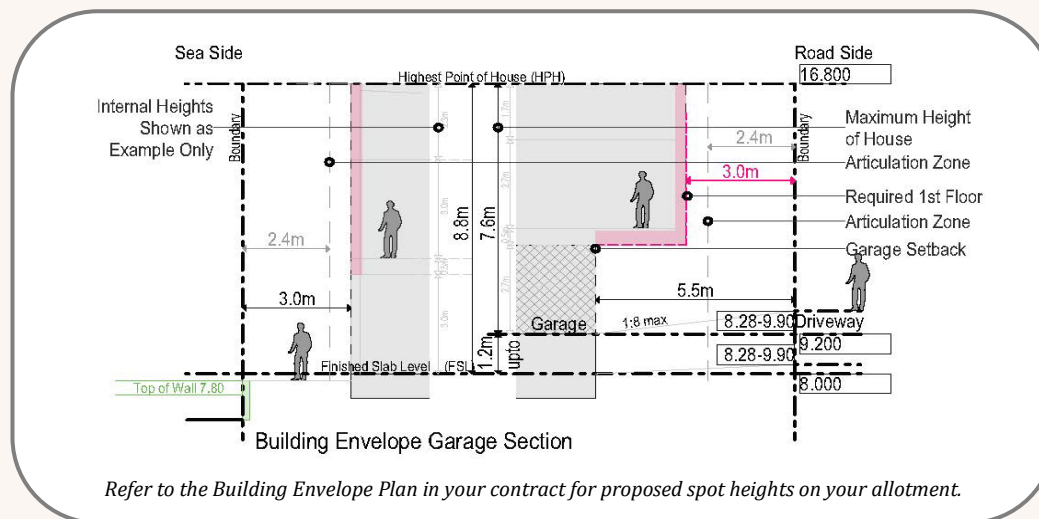


4. Siting and Building Height Levels

Between Oceanview Drive and Lady Gowrie Drive, the allotments slope down towards the beach. Ensuring that your home is designed appropriately to the designated build levels of the allotment will reduce side boundary retaining walls between neighbours, and ensure that beach views are mutually shared with the homes behind. The allotment levels have been carefully designed to provide each home with a view.

General Requirements:

1. The maximum building height shown on the BEP for your allotment is fixed and cannot be exceeded with any part of the building, roof or other structure, such as an antenna. This is to ensure that the homes situated behind can also enjoy an unobstructed view of the beach.
2. Reference heights are provided on the BEP for the front and the rear of the allotment. These are provided as parameters for your architect to work within, and each home needs to design the home in accordance with these levels.
3. A split-level floorplan is required for this allotment. Mezzanine floors and raked ceilings are encouraged to help achieve higher ceiling heights and a greater sense of space in your living areas. Homes designed with a single level ground floor from the front to the rear of the allotment will not achieve the reference heights and will not be accepted.
4. Proposed floor levels need to be provided on the plans to demonstrate how the slope of the site is managed in the design of your home.



Split levels can account for the height difference between the front and rear of the allotment, without requiring extensive earthworks and reduce the visual prominence of multiple retaining walls.



Carefully designed split level homes can also create beautiful light and airy internal living spaces with high ceilings. Speak to your architect about how you can use split levels as a feature in your home design.

5. Articulation

This allotment is a dual fronted allotment which means a strong level of articulation is required on two frontages- Oceanview Drive and Lady Gowrie Drive. The design of both frontages is important to ensure consistency with the architectural design intent for Fort Largs, and to create a strong, attractive streetscape for the new community.

General Requirements:

1. To provide articulation, your home will need a combination of recessed and projected sections as to avoid presenting as a flat façade, unless designed by considerable architectural merit.
2. The upper floor of your home (where applicable) needs to project forward of your garage a minimum of 1m with either a cantilevered room, entry feature, balcony, architectural blade wall, or a combination.
3. Windows on any street frontage are to be contemporary in design, form and placement, and are to be commercial, semi-commercial, timber, or certain contemporary styles of window. Bay, Colonial, Federation, or traditional reproduction style windows are not consistent with the character at Fort Largs.
4. The minimum required ceiling heights to the ground floor is 2.7m to give your home a greater street presence.
5. Replica styles of architecture such as ‘villas’, ‘bungalows’, ‘Tuscan’, ‘Georgian’, or ‘colonial’ are not consistent with the character at Fort Largs. Traditional elements such as finials, quoins, banding, lacework, keystones, or Dutch gables are also not permitted. Interpretations of elements used in an architectural sense that fit within the setting of a modern beachfront theme may be accepted with a supporting architectural design statement.
6. Your front façade design cannot be the same as your neighbour’s home. Please speak to your builder or liaise with the encumbrance team to ensure that the home next door will not match. If a similar design is chosen, there must be variation to:
 - a. The roof form
 - b. The colours
 - c. The placement and type of feature materials

Alternative designs for front facades which demonstrate significant architectural merit and suits the beach character will be considered. They will need to include a façade which has features and finishes that meet a high specification, and a supporting



Combinations of recessed and projected sections contribute to the articulation on the façade of your home, providing depth and interest.



Traditional style facades, and elements such as quoins and finials are not permitted.



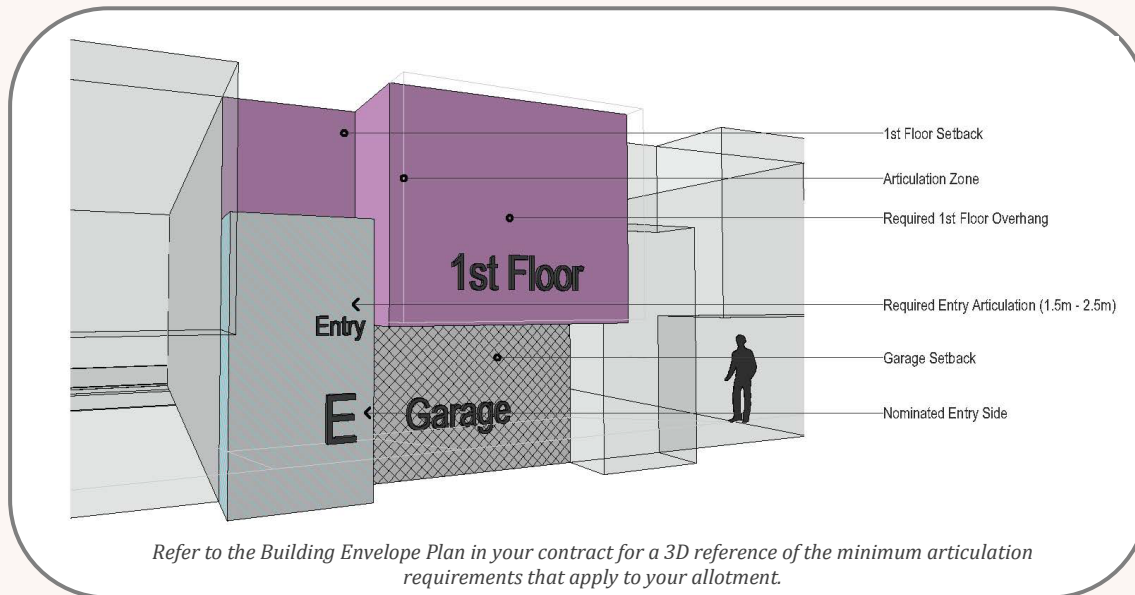
The upper floor and main building line cannot be set behind the garage.

5. Articulation (continued)

Oceanview Drive is your designated street address. This will be where your garage, letterbox, meter box and front door will be located, and are to be shown on the plans.

Oceanview Drive Frontage Requirements:

7. All homes need an entry such as a defined portico, porch, cantilevered canopy or other architectural feature with a minimum depth of 1.0 to 1.2m.
8. A first-floor overhang or feature projecting forward of the garage by 1.5m – 2.5m, which may also provide definition for the entry to the home.
9. The entry to your home needs to be visually prominent and easily accessible from the street – not tucked away.
10. All front doors need to be contemporary in design, style and placement. They can either be oversized (2.4m high and 1.2m wide) or have top fan light and sidelight windows.
11. The meter box is to be painted to match the colour of the surrounding wall.



Combinations of recessed and projected sections contribute to the articulation on the façade of your home, providing depth and interest.



Alternate designs which respond to the level variations on the allotments will be considered on architectural merit.



Simplicity through clean architectural lines and feature glazing and a defined front entry.

5. Articulation (continued)

The Lady Gowrie Drive frontage will demonstrate the premium nature of the beachfront location with premium specifications and finishes.

You are encouraged to push the boundary of the modern beachside architectural style, utilising premium finishes, clean lines, and feature architectural elements that will make this home uniquely yours.

Lady Gowrie Drive Frontage Requirements:

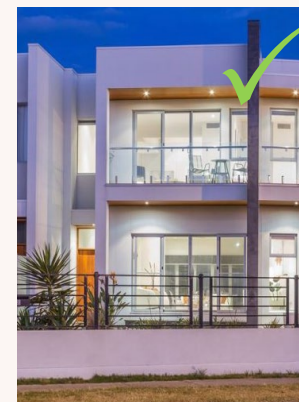
12. Feature glazing across each façade overlooking the beach, through the use of oversize or feature windows. Obscure or frosted glass is not permitted.
13. Balconies, projects and/or feature materials and fixtures are to be used in suitable combinations and proportions to complement the modern beachside theme.
14. Living areas are to be located on the Lady Gowrie Drive frontage. Utilities and storage areas (such as closets, walk in robes, and pantries) and wet areas (such as bathrooms, toilets and, laundries) are to be located away from the beach side if they are considered to have a detrimental impact on the architectural design outcome.
15. A secondary entry is encouraged to provide access from the Lady Gowrie Drive access gate. This will separate any outdoor living area/ alfresco and provide an alternate entry after your beach visit.



“Boxy” designs without architectural feature elements, projections or premium finishes will require further detail.



An example of nautical theming used in the façade design, combined with modern feature glazing and premium finishes.



Feature glazing and premium finishes which demonstrate strong architectural statements.



6. Security and Privacy

By nature of the allotment you have purchased, these guidelines encourage a home design which maximises your premium beach views through glazing, outdoor seating areas, and low open-style fencing. This level of interaction can help to grow the sense of community amongst beachgoers and your neighbours.

With any beachfront home, a degree of overlooking should be expected. However you may like to consider the opportunity to fit your home with some features as part of your home design which will provide some privacy when you like it. There are some solutions which will achieve this for you and can complement the look of your home design – and not detract from the feature elements of your façade.

General Requirements:

1. Suitable security screens for windows and doors need to meet the following requirements:
 - a. Comprise a clean woven mesh infill, perforated aluminium sheet, or similar material.
 - b. A matt black frame and infill, or alternative colour which matches the door frame and door furniture.
 - c. No grille pattern is to be used, such as traditional diamond patterns or ornate symmetrical designs.
2. External roller shutters are not accepted, regardless of colour or make.
3. If outdoor cameras and/or sensor lighting is desired, units are required to be wall-mounted, internally wired, discreet, and contemporary in design. The facades of your home facing Lady Gowrie Drive and Oceanview Drive should be kept as clean and clear as possible.
4. An access gate may be integrated into the design of the fence and retaining wall on Lady Gowrie Drive.



Outdoor cameras and sensor lighting are to be discreet. If security cameras are desired, elect for a contemporary unit which combines decorative outdoor lighting with a built-in camera.



Use of roller shutters and traditional style screen doors to achieve privacy is not permitted.



Screening for glass doors or alfresco areas can include fitted bi-fold or concertina screen doors.



Acceptable window and door screens can include woven mesh infill, with black frames.

7. Beachfront Interface

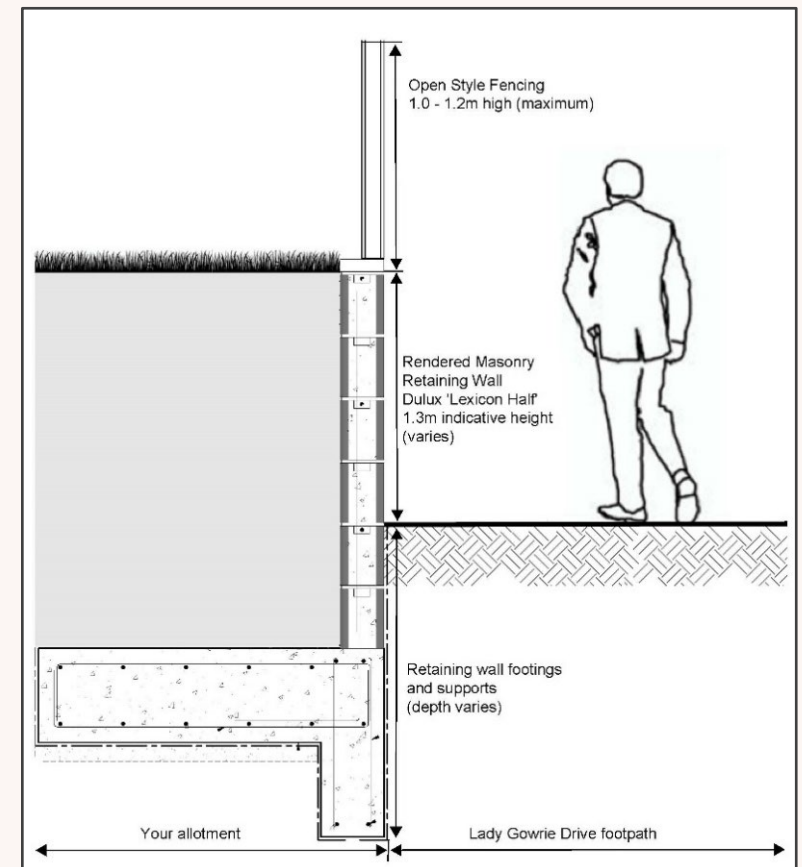
The beachfront interface is designed to ensure consistency between homes, and premium presentation and appearance from Lady Gowrie Drive.

Beachfront Boundary Requirements:

1. All beachfront allotments will require a rendered masonry retaining wall inside the front boundary of the allotment, to be constructed in accordance with the “Laycomm Fort Largs Stage 4 Retaining Wall Design” drawing (refer attached).
2. The height of the retaining wall on the boundary must not exceed the specified height on the Building Envelope Plan. The height is typically around 1.3m on the beachfront.
3. The colour of the rendered wall is required to be Dulux “Lexicon Half” or equivalent. To ensure a clean and consistent look amongst all beachfront homes. No alternate shades or colours will be permitted.
4. Open style fencing is permitted above the boundary retaining wall in accordance with the following requirements:
 - a. Fencing infill is to be contemporary blade style, clear glass balustrade, or alternative of your choice, to suit the style of your home, subject to encumbrance approval.
 - b. Pillars are permitted and are required to match the colour and finish of the retaining wall for consistency.
 - c. Alternative fencing or boundary treatments will be considered by the encumbrance team, such as hedging, landscape features, or other modern beachfront open style fencing.
 - d. The maximum height of any front fencing, pillars, or landscape feature is 1.0m – 1.2m above the retaining wall height.
 - e. Solid style fencing or flat, unarticulated walling on top of the retaining wall will present as a tall barrier to the street and will not be accepted.



Suitable fencing and landscaping style for your beachfront interface.



7. Beachfront Interface (continued)

Beachfront Boundary Requirements (continued):

5. An access gate from Lady Gowrie Drive is to be installed in the location shown on the Building Envelope Plan in accordance with the following requirements:
 - a. The gate is to be a high specification, contemporary decorative finish in a style which either suits your home or matches your fence.
 - b. The access gate is to be in-swinging and set back from the boundary by a minimum of 500mm.
 - c. You may incorporate a porch area which integrates into the design of your home and fencing.
 - d. The height of your access gate and porch cannot exceed the total height of your front retaining

Beachfront Open Space Requirements:

1. Open style fencing is to return down the side boundaries to the home. No solid fencing is permitted forward of the home on the side boundaries.
2. The building setback along the Lady Gowrie Drive elevation is fixed at 3.0m. An articulation zone of 600mm allows for any protrusions, architectural elements, or other feature structures. No solid or fixed structures above 1.2m high will be permitted forward of this point, to retain beach views for you and your neighbours. Refer to the Building Envelope Plan in your contract for setback details.
3. Sub-surface structures (swimming pools, in-ground spas, etc) are accepted on merit. Any associated above-ground structures (such as pool pumps) are required to be suitably integrated into the design of the home or landscaping.



Seamless incorporation of an access gate into the retaining wall design, and beachfront outdoor area.



Side boundary fencing forward of the home needs to be open style, 1.2m high maximum.



Solid, unarticulated walling above the front retaining wall is not permitted.



Projections up to 600mm forward of the main elevation are acceptable to provide articulation.

8. Roof Forms

Your choice of roof form can make a striking statement in the look of your home, and will help to create a diverse and interesting streetscape.

General Requirements:

1. The roof that presents to the main street frontage can be one or a combination of the following:
 - a. An articulated (stepped) hip roof with a minimum pitch of 25 degrees, incorporating a balcony.
 - b. A low profile, architectural style hip roof with a modern architectural gutter profile specified (such as edge gutter i.e. Mosman or quarter round gutter profiles).
 - c. Skillion roof forms with a minimum pitch of 7.5 degrees. Greater than a 15-degree pitch requires a decorative cladding infill or highlight windows.
 - d. A box gable with a contemporary cladding infill or highlight windows.
 - e. Parapets with a box gutter and decorative rainhead and down pipe, painted to complement the front façade.
2. Bulky singular form hip, parapet, gable or skillion roofs are subject to architectural merit and require high design specification and intent to demonstrate that the design is consistent with the Fort Largs design character.
3. Where the roof gutter is exposed, 450mm depth eaves are required as a minimum.
4. The roof needs to be built with corrugated metal deck (custom orb profile) roofing, standing seam roof sheeting or flat tiled shingle design. The colour of your roof should be selected to complement the colour of the materials on your home.
5. Clean, uncomplicated roof lines that are uninterrupted by roof-mounted equipment, such as TV antennae and satellite dishes, which should be located at the rear of the roof space and not visible from the street.



An example of a gable end roof style with decorative brick infill.



An example of a hip roof style, articulated and stepped with a balcony.



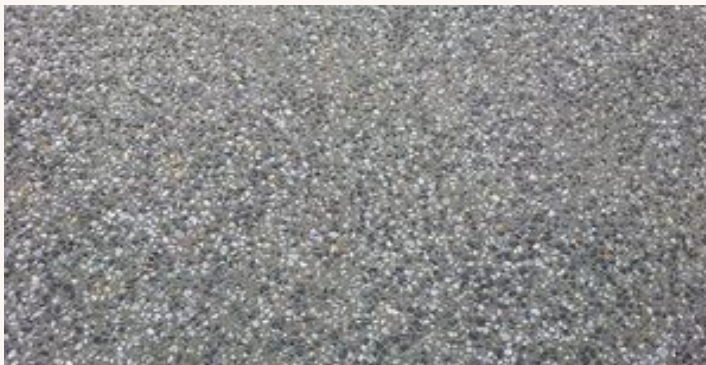
An example of a low profile roof with wide eaves and a modern architectural gutter.

9. Garages and Driveways

The integration of the garage and driveway complements the look of your home and has a positive impact on the streetscape.

General Requirements:

1. Double garages are permitted on lots 10m wide and above, with a double storey home. Triple width or oversized garage doors are not permitted.
2. Garage doors need to be modern and contemporary in design, such as a panel lift door with horizontal panelling. Roller garage doors and traditional style panel lift doors are not consistent with the desired character.
3. Garages are required to be set back a minimum of 5.5m from the front boundary to comply with Council requirements.
4. A landscape strip of 300mm between your driveway and your side boundary is required.
5. Driveways are to be constructed with exposed aggregate concrete ('Grey Stone' or equivalent), between your garage and the street kerb. The required specification is detailed below. Plain or stenciled concrete, or coloured concrete other than the specified colour and type is not permitted, and will not be consistent with the streetscape. Driveways installed with other materials (such as pavers, gravel, or bricks) are also not permitted.
6. The required maximum width of your driveway is:
 - a. 5m wide at your front boundary, for a double garage.
 - b. 3m wide at your front boundary, for a single garage.



Exposed Aggregate colour ('Grey Stone' colour or equivalent)

Concreteer's specification:

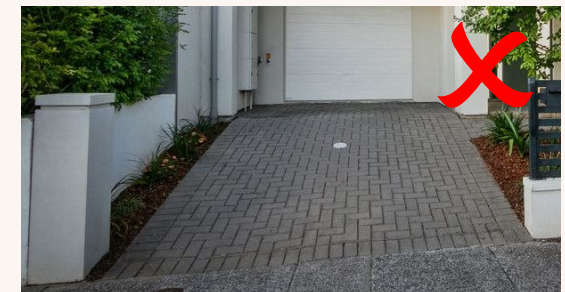
- Cement: 230 kg/m³
- Flyash: 60 kg/m³
- Clinton Sand: 825 kg/m³
- Penrice Aggregate 10mm: 985 kg/m³
- Water: 190 L/m³



An example of a modern timber panel lift garage door.



An example of a suitable modern panel lift garage door.



Paved driveways are not permitted.

10. Fencing, Dividing Walls and Landscaping – Oceanview Drive

The Fort Largs vision is to create open streetscapes and a sense of space that comes with being close to the beach. Your carefully designed and landscaped front yard will provide a statement for your home. Front fences on Oceanview Drive will be substituted with landscape features and trees, designed to extend your front yard all the way to the street.

Front and Side Boundary Requirements:

1. Dividing fences forward of your home on the Oceanview Drive side may be in the form of plain white rendered masonry, white concrete block walling or planters a maximum of 600mm high, which may also act as low retaining walls if there is a level difference between your lot and your neighbours. The low walls cannot protrude further than the front property boundary.
2. Any walling forward of the home on the Oceanview Drive elevation need to meet the following requirements:
 - a. Can be no greater than 600mm in height.
 - b. Must be plain white rendered masonry or white concrete block walls only.
 - c. Concrete sleeper retaining, or sectional retaining walls will not be approved if they are visible from public areas.
 - d. May also form landscape feature planters.
3. Side access gates (if applicable) are to be a decorative style and situated not forward of the front face of the garage. Metal sheeting is not accepted. Acceptable gate materials include timber or aluminium slats, iron or decorative panel style.



General Requirements:

1. Your front yard landscaping is to be designed to suit the coastal conditions, with appropriate native plant species where possible.
2. Your front landscaped area is required to include the verge area (between front boundary and street kerb).
3. Your letterbox is to be a freestanding modern pillar style which complements the design of your home, or an alternative design which complements the coastal location. Traditional style letterboxes are not accepted.

11. Corner Blocks

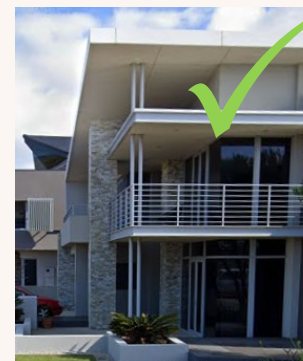
If designed thoughtfully, corner blocks can provide extra usable yard space and bring more light into the home, to help create a greater sense of openness and space in your home.

Corner Frontage Requirements:

1. The secondary frontage is to be designed with an articulation zone of at least 5m from the front corner of your home, where the materials, windows and other articulation are required to have equal quality as the main frontage of your home. This includes:
 - a. Window styles
 - b. Wrap around balconies and porticos
 - c. Roof form and detail
 - d. Decorative cladding materials, features and/or colours
2. The minimum setback on the secondary frontage is 1m for articulated walls on the ground floor, and 1.5m for the first floor, unless otherwise stated on the Allotment Development Plan. 'Box on box' style designs, or straight walls for the entire length of the home without any projected or recessed sections are not consistent with the character at Fort Largs.

Corner Fence Requirements:

1. Side privacy fencing is required to be constructed at 1.8m high and in a feature material, such as:
 - a. Rendered walling
 - b. Breeze block wall
 - c. Post and slat fence (timber or aluminium/steel)



12. Services and Ancillary Structures

Some aspects of your home are often afterthoughts when you are planning your new home. Services and other structures can be considered early to make sure they are screened from sight or located away from public view to ensure they don't detract from the appearance of your home.

General Requirements:

1. A utility / service courtyard is to be incorporated into your home design. This area is to incorporate clothes drying and storage areas, and must not be visible from streets or public areas.
2. Roof mounted plant such as solar panels, air conditioning systems, evaporative coolers, antennae, satellite dishes etc are to be located in the service yard, or alternatively mounted so they are not visible from any street frontage. They are also required to be lower than the maximum building height as specified on your Building Envelope Plan.
3. Provision for all bins is required either within the garage or in a screened location not forward of the garage.
4. Solar hot water systems are required to be located on the ground and cannot be roof mounted.
5. Rainwater tanks are to be located in a suitably screened location and needs to be no more than 2.4m in height.
6. The meter box for your home is to be located in a discreet location, painted to match the surrounding wall colour.
7. Side access to the service courtyard is recommended to be utilised for an outdoor shower after beach visits.



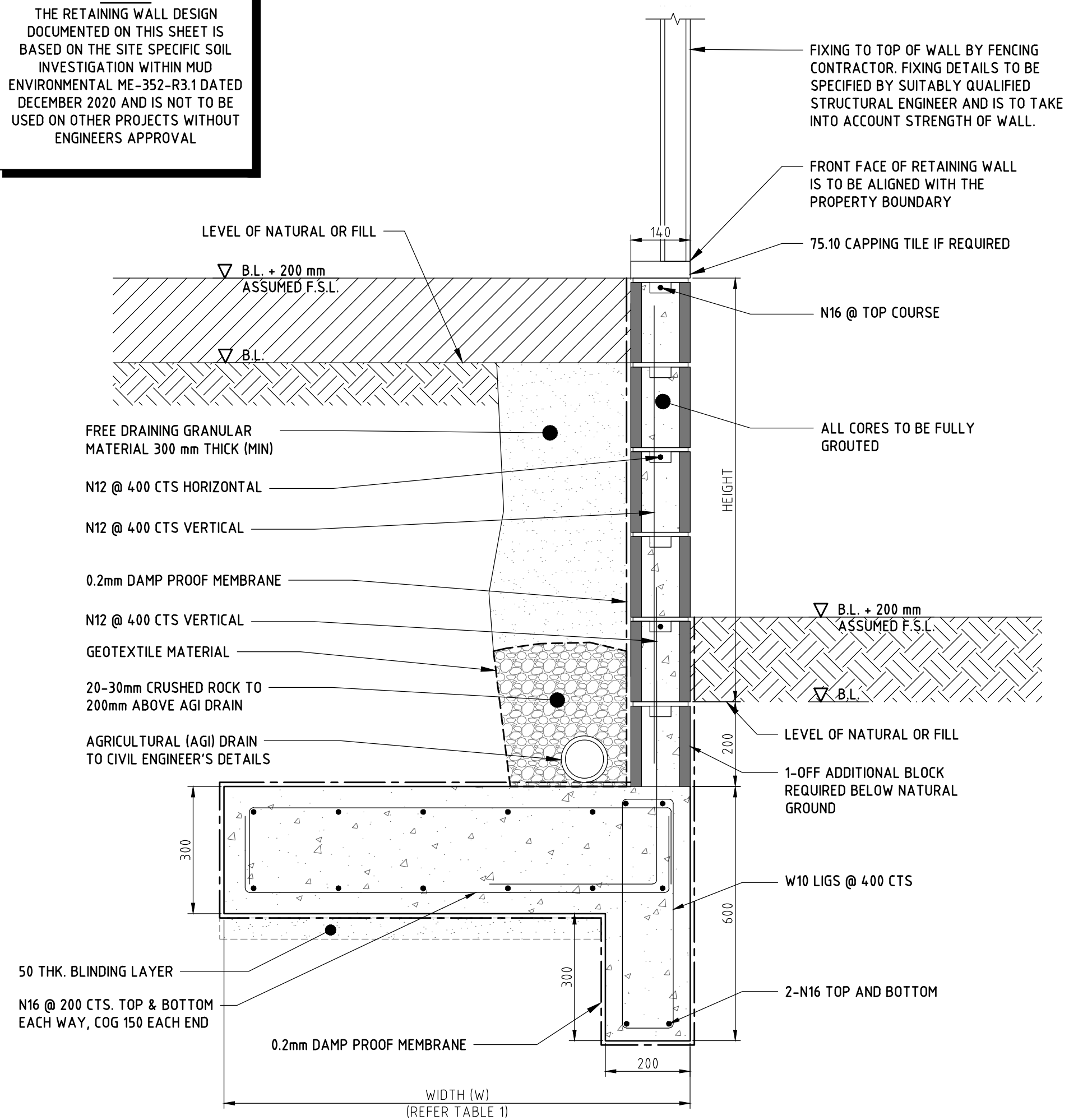
SUBMISSION CHECKLIST – DOCUMENTS REQUIRED

The checklist below is required to be submitted with your encumbrance application. Please ensure that all required documents have been provided and all points listed in the Design Guidelines have been addressed. This will help to expedite encumbrance assessment and approval.

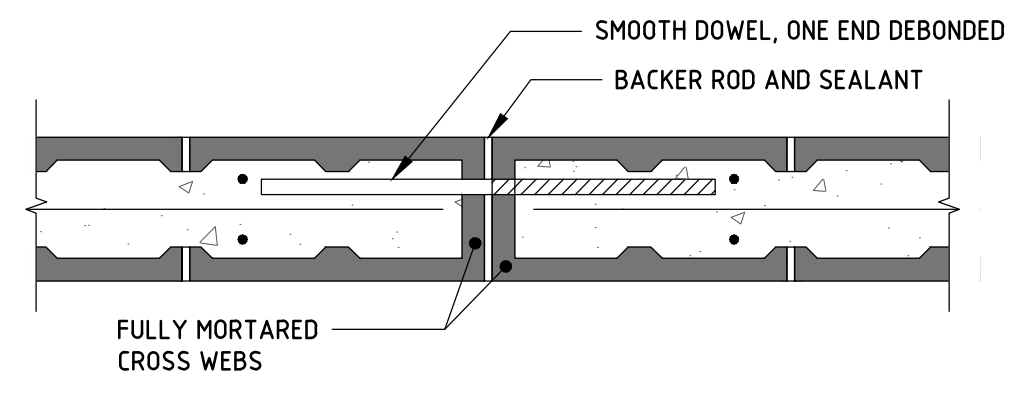
Required Documents

- | | |
|---|---|
| <input type="checkbox"/> Site Plan | <input type="checkbox"/> Full Schedule of Finishes and Materials |
| <input type="checkbox"/> Floor Plans | <input type="checkbox"/> Energy Assessment in accordance with the BCA |
| <input type="checkbox"/> Front, Rear and Side Elevation Plans | <input type="checkbox"/> Engineering Plan |
| <input type="checkbox"/> Coloured 3D Render of Facade | <input type="checkbox"/> Landscape Plan (if applicable) |

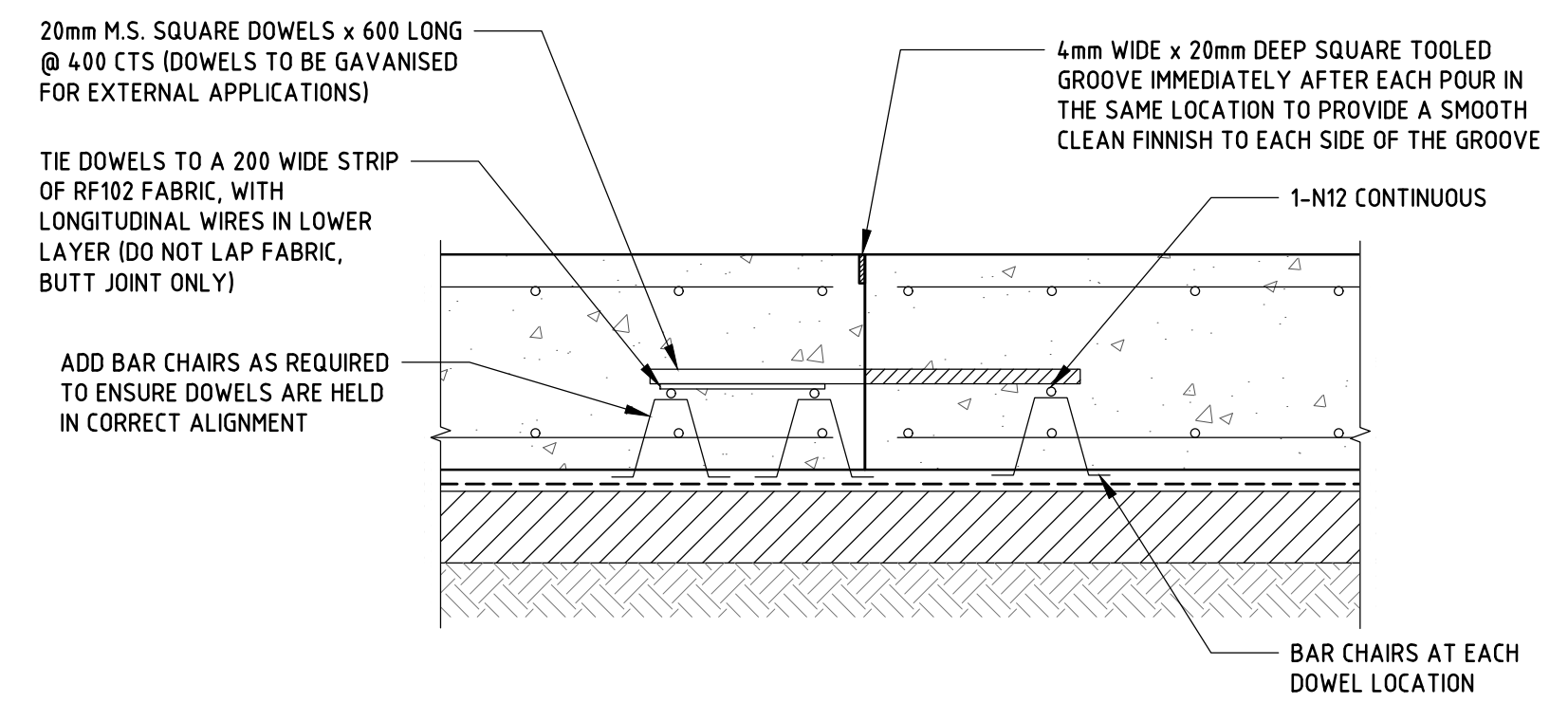
NOTE:
THE RETAINING WALL DESIGN DOCUMENTED ON THIS SHEET IS BASED ON THE SITE SPECIFIC SOIL INVESTIGATION WITHIN MUD ENVIRONMENTAL ME-352-R3.1 DATED DECEMBER 2020 AND IS NOT TO BE USED ON OTHER PROJECTS WITHOUT ENGINEERS APPROVAL



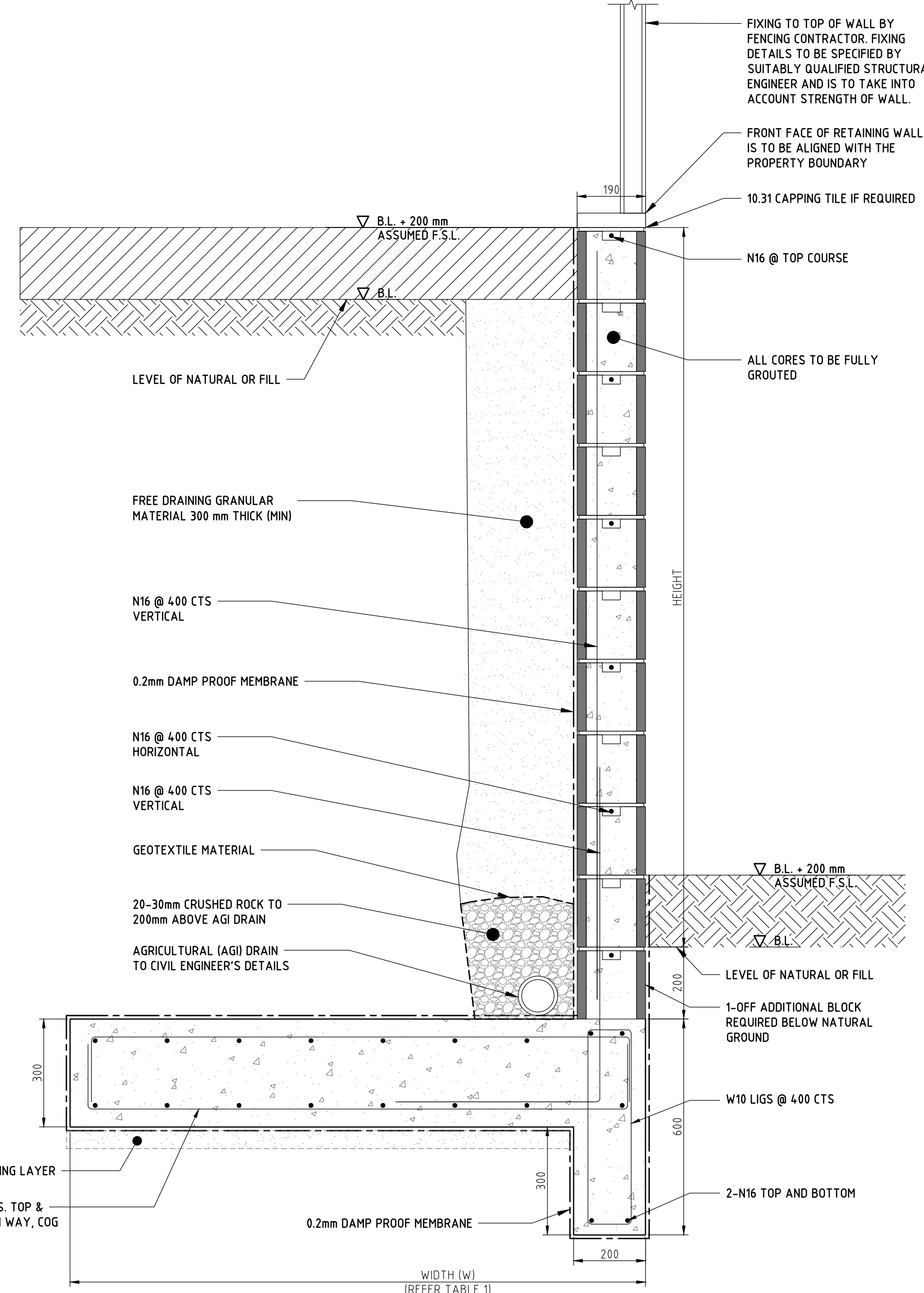
**REINFORCED MASONRY WALL
ELEVATION 1 - LESS THAN 1.2m WALL**
NOT TO SCALE



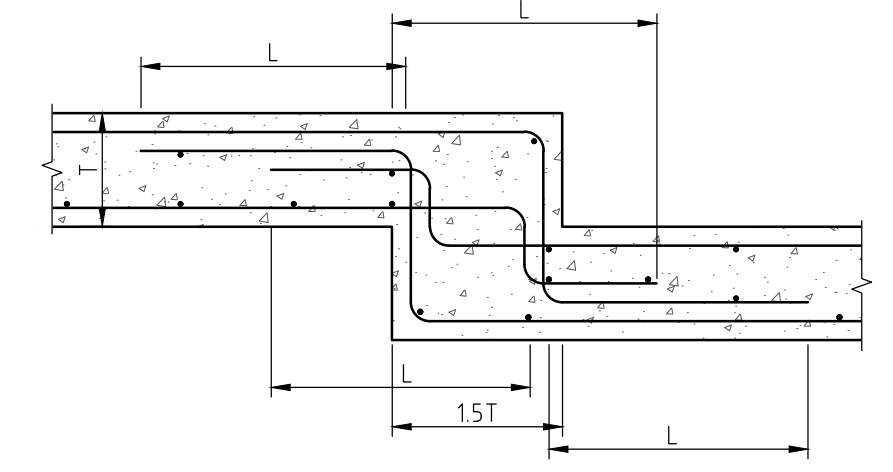
(NOTED D.C.J. ON PLAN)
**DOWELLED CONSTRUCTION JOINT 1
- MASONRY WALL**
NOT TO SCALE



(NOTED D.C.J. ON PLAN)
**DOWELLED CONSTRUCTION JOINT 2
- CONCRETE FOUNDATION**
NOT TO SCALE



**REINFORCED MASONRY WALL
ELEVATION 2 - 1.2m TO 1.8m WALL**
NOT TO SCALE



TYPICAL STEP IN RETAINING WALL FOUNDATION
NOT TO SCALE

BAR SIZE	"L" DEVELOPMENT LENGTH
N12	REFER TO STANDARD LAP TABLE.
N16	REFER TO STANDARD LAP TABLE.
N20	REFER TO STANDARD LAP TABLE.
N24	REFER TO STANDARD LAP TABLE.

RW HEIGHT	WIDTH (w) (mm)
<1000	1100
1001-1200	1200
1201-1400	1300
1401-1800	1600

ELEMENT	GRADE (UNO)	MINIMUM COVER (mm)
RETAINING WALL FOOTING	N32	45

BAR SIZE	LESS THAN 300 mm CONCRETE BELOW BAR OR VERTICAL BAR		MORE THAN 300 mm CONCRETE BELOW BAR	
	CONCRETE GRADE 25 MPa	CONCRETE GRADE ≥ 32MPa	CONCRETE GRADE 25 MPa	CONCRETE GRADE ≥ 32MPa
N12	400	400	500	450
N16	650	550	800	700
N20	700	600	900	800
N24	850	750	1050	950
N28	1050	900	1300	1150
N32	1250	1150	1600	1400
N36	1550	1400	1950	1750

GENERAL NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, CIVIL, AND OTHER CONSULTANTS' DRAWINGS, SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT PRIOR TO PROCEEDING WITH THE WORK.
- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS TO BE VERIFIED BY THE CONTRACTOR. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS.
- THE DOCUMENTED DESIGN IS FOR THE PERMANENT CONDITION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE NEW AND EXISTING STRUCTURE IN A STABLE AND SAFE CONDITION AT ALL TIMES DURING CONSTRUCTION AND ENSURE NO PART OF THE STRUCTURE IS OVERSTRESSED. CONTRACTOR TO ALLOW FOR AND PROVIDE A DETAILED SAFE WORK METHOD STATEMENT OUTLINING THE CONSTRUCTION SEQUENCE AND METHODOLOGY. CONTRACTOR TO ENGAGE A SUITABLY QUALIFIED TEMPORARY WORKS ENGINEER TO REVIEW CONSTRUCTION SEQUENCE AND METHODOLOGY AND PROVIDE DESIGN OF TEMPORARY PROPS, BRACES, ETC. AS REQUIRED.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.
- APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE ENGINEER AND APPROVED IN WRITING PRIOR TO USE.
- PROPRIETARY PRODUCTS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE ENGINEERING DRAWINGS SHOW STRUCTURAL INTENT ONLY. FOR DIMENSIONS AND SETOUT REFER TO CIVIL CONSULTANT DRAWINGS.
- THE STRUCTURAL WORKS HAVE BEEN DESIGNED TO THE FOLLOWING LIVE LOADS:
RETAINING WALL SURCHARGE = 5 kPa
- SHOULD A PROPOSED STRUCTURE OR STRUCTURE FOUNDATION BE PLACED SUCH THAT IT MAY IMPART LOAD ON THE RETAINING WALL OVER THAT DETAILED ABOVE A STRUCTURAL ASSESSMENT IS TO BE UNDERTAKEN BY A QUALIFIED ENGINEER TO ENSURE THE RETAINING WALL IS NOT ADVERSELY AFFECTED.
- THE DESIGN WIND CRITERIA TO AS 1170.2 ARE AS FOLLOWS:
IMPORTANCE LEVEL = 2
V100 = 45 m/s
V20 = 37 m/s
TERRAIN CATEGORY = 2
- ALL STRUCTURAL STEELWORK TO HAVE SURFACE TREATMENT IN ACCORDANCE WITH AS/NZS 2312.1 AND SUITABLE FOR USE IN CORROSION CATEGORY C3 ENVIRONMENT.
- ANY PAINT TREATMENTS TO TARGET MINIMUM 10 YEARS TO FIRST MAINTENANCE.

CONCRETE NOTES

- ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH AS 3600 AND THE SPECIFICATION.
- MANUFACTURERS AND PROCESSORS OF STEEL REINFORCEMENT MUST HOLD A VALID CERTIFICATION OF APPROVAL BY AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING STEEL (ACRS).
- REFER TO TABLE C1 FOR MINIMUM COVER AND CONCRETE MATERIAL REQUIREMENTS.
- FOR CONCRETE FINISHES REFER TO ARCHITECT'S SPECIFICATION.
- REFER TO ARCHITECT'S DRAWINGS FOR ANY FALLS, WATERPROOF MEMBRANES DRIP GROOVES ETC. WHERE NOTED.
- SIZE OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT APPROVAL FROM THE ENGINEER.
- CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR AS APPROVED BY THE ENGINEER.
- REINFORCEMENT IS REPRESENTED DIAGMATICALLY ONLY.
- SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER. REFER TO TABLE C2 FOR MINIMUM LAP LENGTHS.
- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT APPROVAL FROM THE ENGINEER.
- ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- REINFORCEMENT SYMBOLS:
N - GRADE 500N HOT ROLLED DEFORMED BARS TO AS 4671
SL - HARD DRAWN STEEL WIRE REINFORCEMENT FABRIC TO AS 4671
W - HARD DRAWN STEEL WIRE TO AS 4671
- ALL CONCRETE CAST ONTO THE GROUND TO HAVE 0.2mm DAMP PROOF MEMBRANE UNO.

FOOTING AND FOUNDATION NOTES

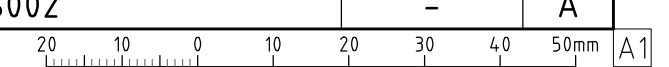
- PLACE 0.2mm DAMP PROOF MEMBRANE TO UNDERSIDE OF SLAB AND BEAMS. LAP ALL JOINTS BY 300mm MINIMUM AND SEAL WITH 50mm WIDE TAPE. TAPE ALL PENETRATIONS TO ENSURE MAINTENANCE OF BARRIER.
- EXCAVATIONS TO BE KEPT FREE OF WATER. CONSTRUCT ALL BLINDING, FOOTINGS ETC. AS SOON AS PRACTICAL AFTER EXCAVATION TO PREVENT SOIL DRYING OUT.
- ENSURE ALL EXCAVATIONS ARE STABLE AND PROVIDE ANY TEMPORARY PROPPING OR SHORING AS REQUIRED.
- SERVICES MUST PASS THROUGH MIDDLE THIRD OF FOOTING BEAMS. DEEPEN FOOTING LOCALLY AND CRANK REINFORCEMENT AS REQUIRED. ALL PENETRATIONS THROUGH FOOTING BEAMS TO BE PROVIDED WITH SUITABLE LAGGING.
- FOOTINGS TO BE PLACED IN UNDISTURBED NATURAL GROUND WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100 kPa. REMOVE ANY LOOSE, SOFT OR WET SOILS AND DELETERIOUS MATERIALS. FILL, WHERE REQUIRED, SHOULD BE PLACED IN LAYERS NOT EXCEEDING 250mm THICKNESS AND COMPACTED TO ACHIEVE AT LEAST 98% COMPACTION WITH RESPECT TO STANDARD MAXIMUM DRY DENSITY (SMDD) AT ITS OPTIMUM MOISTURE CONTENT WITHIN ±2%.
- BACKFILL AGAINST RETAINING WALLS ONLY AFTER SPECIFIED CONCRETE STRENGTH HAS BEEN ACHIEVED. UTILISE LIGHT COMPACTION EQUIPMENT ONLY UNLESS NOTED OTHERWISE.

MASONRY NOTES

- MASONRY BLOCKS SHALL BE SOLID OR HOLLOW AS DETAILED AND HAVE A MINIMUM CRUSHING STRENGTH OF 15MPa. MORTAR SHALL CONSIST OF PART CEMENT, 1/2 PART HYDRATED LIME AND 3 PARTS OF WELL GRADED SAND. GROUT SHALL CONSIST OF 1 PART CEMENT, 0 TO 1/10TH PART LIME, 3 PARTS MORTAR SAND AND UP TO 2 PARTS OF 10mm AGGREGATE. GROUT SHALL HAVE A SLUMP OF 230mm ± 30mm TO THE TIME OF POURING ON A CHARACTERISTIC STRENGTH (f_{cd}) OF NOT LESS THAN 12MPa.
- THERE SHALL BE A MINIMUM OF 15mm COVER OF GROUT AROUND ALL REINFORCEMENT.
- MASONRY TO BE LAID WITH FULL HEAD AND BED MORTAR JOINTS. NO MORTAR FINS SHALL PROTRUDE INTO THE GROUT SPACE.
- THE TWO SKINS OF MASONRY SHALL BE BONDED TOGETHER WITH MASONRY TIES AS SPECIFIED.
- CLEANOUTS SHALL BE PROVIDED FOR EACH POUR BY LEAVING OUT TWO UNITS AT THE BOTTOM OF EACH SECTION TO BE GROUTED. DURING THE WORK, MORTAR FINS AND ANY OTHER MATERIAL SHALL BE REMOVED FROM THE GROUT SPACE. THE CLEAROUT SHALL BE SEALED AFTER INSPECTION AND BEFORE GROUTING. PROVIDE CLEANOUT BLOCKS TO MASONRY AS REQUIRED.
- THE GROUT SPACE SHALL NOT BE LESS THAN 75mm IN WIDTH.
- MORTAR SHALL CURE AT LEAST THREE DAYS TO GAIN STRENGTH BEFORE POURING GROUT.
- GROUT SHALL BE PLACED BY PUMPING OR BY ANOTHER APPROVED METHOD AND SHALL BE PLACED BEFORE ANY INITIAL SET OCCURS AND IN NO CASE MORE THAN 1 1/2 HOURS AFTER WATER IS ADDED.
- GROUTING SHALL BE DONE IN A CONTINUOUS POUR IN LIFTS NOT EXCEEDING 1.2m. IT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING AND RECONSOLIDATED AFTER EXCESS MOISTURE HAS BEEN ABSORBED, BUT BEFORE PLASTICITY IS LOST.
- AFTER A WAITING PERIOD SUFFICIENT TO PERMIT THE GROUT TO BECOME PLASTIC BUT BEFORE IT HAS TAKEN ANY SET, THE SUCCEEDING LIFT SHALL BE POURED AND VIBRATED WITH THE VIBRATOR EXTENDING 450mm INTO THE PRECEDING LIFT.
- THE TOP LIFT SHALL BE RECONSOLIDATED AFTER A WAITING PERIOD AND ANY SPACE LEFT BY SHRINKAGE SHALL BE REFILLED BY GROUT.

**PRELIMINARY ISSUE
NOT FOR CONSTRUCTION**

<p>Rev Date Revision Details</p>		<p>IL JM ML SY (CAD) (DSN) (CHK) (APP)</p>
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<p>Project: FORT LARGS STAGE 4 RETAINING WALL DESIGN</p>		
<p>Client: GREENHILL LEVEL 1, 178 FULLARTON ROAD, DULWICH, SA 5065</p>		
<p>Drawing Title: RETAINING WALL DETAILS AND NOTES</p>		
<p>Drawing No: P2224.04.04-S002</p>		<p>Scale: - Revision: A</p>



FILE: L:\PROJECTS\512 - Greenhill\512 - Fort Largs\512 - Stage 4\03 - CAD\2224.04.04 - Fort Largs Stage 4_Drawing_030302.dwg, PLOT DATE: 16/07/2023