



**ACT**  
Government

Chief Minister, Treasury and  
Economic Development

## Freedom of Information Disclosure Log Publication Coversheet

The following information is provided pursuant to section 28 of the *Freedom of Information Act 2016*.

Application Details	
Ref. No.	CMTEDDFOI 2023-410
Date of Application	1 December 2024
Date of Decision	9 February 2024
Processing time (in working days)	43
Fees	Waived
Decision on Access	Partial Release
<b>Information Requested (summary)</b>	<ul style="list-style-type: none"><li>• all the amended BA and envelope assessments for DA 202037990</li><li>• the Crown lease that permits the approved development at Block 9 Section 33 Division of Torrens (required in the conditions of approval 30 march 2021)</li></ul>
Publication Details	
Original application	<input checked="" type="checkbox"/> Published <input type="checkbox"/> N/A
Decision notice	<input checked="" type="checkbox"/> Published <input type="checkbox"/> N/A
Documents and schedule	<input checked="" type="checkbox"/> Published <input type="checkbox"/> N/A
Decision made by Ombudsman	N/A
Additional information identified by Ombudsman	N/A
Decision made by ACAT	N/A
Additional information identified by ACAT	N/A

**From:** [REDACTED]  
**To:** [CMTEDD FOI](#)  
**Subject:** FOI request - [REDACTED] CMTEDDFOI 2023-410  
**Date:** Friday, 1 December 2023 5:22:32 AM

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Hi

Would you please provide me with:

- all the amended BA and envelope assessments for DA 202037990
- the Crown lease that permits the approved development at Block 9 Section 33 Division of Torrens (required in the conditions of approval 30 march 2021)

thank you

[REDACTED]



**ACT**  
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Chief Minister, Treasury and  
Economic Development

Our ref: CMTEDDFOI 2023-410



## FREEDOM OF INFORMATION REQUEST

I refer to your application under section 30 of the *Freedom of Information Act 2016* (the Act), received by the Chief Minister, Treasury and Economic Development Directorate (CMTEDD) on 1 December 2023 in which you sought:

- *all the amended BA and envelope assessments for DA 202037990*
- *the Crown lease that permits the approved development at Block 9 Section 33 Division of Torrens (required in the conditions of approval 30 March 2021).*

On 5 December 2023 you confirmed by email you did not require the Development Application documents.

### Authority

I am an Information Officer appointed by the Director-General of CMTEDD under section 18 of the Act to deal with access applications made under Part 5 of the Act.

### Timeframes

In accordance with section 40 of the Act, CMTEDD is required to provide a decision within 30 working days of the access application being received. Following on from third party consultation, the due date for a decision is **13 February 2024**.

### Decision on access

Searches were completed for relevant documents and **seven** documents were identified that fall within the scope of your request.

I have included as **Attachment A** to this decision the schedule of relevant documents. This provides a description of the documents that fall within the scope of your request and the access decision for each of those documents.

In relation to the second dot point of your scope, I have been advised that the Crown Lease is publicly available through [www.actlis.act.gov.au](http://www.actlis.act.gov.au) for a fee. Under section 43(1)(d) a respondent can refuse to deal with government information that is already available. Under section 45 (g) this includes information available for purchase.

I have decided to grant **full access** to one document, **partial access** to the remaining documents, as I consider them to contain information that would, on balance, be contrary to the public interest to disclose under the test set out in section 17 of the Act.

My access decisions are detailed further in the following statement of reasons and the documents released to you are provided as **Attachments B** to this letter.

### **Statement of Reasons**

In accordance with section 54(2) of the Act a statement of reasons outlining my decisions is below.

In reaching my access decisions, I have taken the following into account:

- the Act
- the scope of your requested information
- third party consultation
- the content of the documents that fall within the scope of your request.

### **Exemptions claimed**

My reasons for deciding not to grant access to the identified documents and components of these documents are as follows:

Information that would, on balance, be contrary to the public interest to disclose under the test set out in section 17 of the Act

#### Public Interest

The Act has a presumption in favour of disclosure. As a decision maker I am required to decide where, on balance, public interest lies. As part of this process, I must consider factors favouring disclosure and nondisclosure.

In *Hogan v Hinch* (2011) 243 CLR 506, [31] French CJ stated that when 'used in a statute, the term [public interest] derives its content from "the subject matter and the scope and purpose" of the enactment in which it appears'. Section 17(1) of the Act sets out the test, to be applied to determine whether disclosure of information would be contrary to the public interest. These factors are found in subsection 17(2) and Schedule 2 of the Act.

Taking into consideration the information contained in the documents found to be within the scope of your request, I have identified that the following public interest factors are relevant to determine if release of the information contained within these documents is within the 'public interest'.

#### Factors favouring disclosure in the public interest (Schedule 2.1)

*a) disclosure of the information could reasonably be expected to do any of the following:*

- (i) promote open discussion of public affairs and enhance the government's accountability.*

Having considered the factor identified above as relevant in this matter, I consider that the release of the requested information will promote an open discussion and enhance the ACT Government's accountability regarding the building application for the property concerning DA 202037990.

I am satisfied this is a relevant consideration favouring disclosure and in the interests of enhancing government accountability, afford this factor significant weight.

I also note the FOI Act has an express pro-disclosure bias which reflects the importance of public access to government information for the proper working of a representative

democracy. This concept is promoted through the objects of the FOI Act. I have considered this overarching concept in making my decision in relation to access.

Factors favouring nondisclosure in the public interest (Schedule 2.2):

(a) *disclosure of the information could reasonably be expected to do any of the following:*

(ii) *prejudice the protection of an individual's right to privacy or any other right under the Human Rights Act 2004*

(xi) *prejudice trade secrets, business affairs or research of an agency or person*

I am satisfied that the protection of an individual's right to privacy, especially in the process of complying with ACT Government regulations is a significant factor as the parties involved have provided personal information which includes the interior layout of their property, for the purposes of meeting obligations under relevant legislation.

I consider that the layout of an individual's home is a matter that an individual should have the right to choose to disclose or not, and to arbitrarily release this information could or would prejudice their rights under *Human Rights Act 2004, section 12 – not to have their privacy, family, home or correspondence interfered with unlawfully or arbitrarily*; I am satisfied in the above instance that this factor favouring nondisclosure should be afforded significant weight as it relates to the protection of a person's rights to privacy.

I have also considered the impact of disclosing information which relates to business affairs. In the case of *Re Mangan and The Treasury* [2005] AATA 898 the term 'business affairs' is interpreted as meaning 'the totality of the money-making affairs of an organisation or undertaking as distinct from its private or internal affairs'.

Schedule 2 section 2.2(a)(xi) allows for government information to be withheld from release if disclosure of the information could reasonably be expected to prejudice the trade secrets, business affairs or research of an agency or person. I have taken into consideration the current market for builders in the region and believe that releasing commercial information including what may be unique methodologies and documentation would, or could, give competitors an opportunity to exploit this information to better compete against the businesses named. Therefore, I have found, that if some of the information in the documents in scope is released, it is reasonable to expect that it would, or could, negatively impact the third party by diminishing the value of their commercial activities and impact their business affairs.

Balanced against the factor for disclosure, I afford this factor concerning business affairs some weight.

Having applied the test outlined in section 17 of the Act and deciding that release of some of the information contained in the documents is not in the public interest to release, I have chosen to redact this specific information in accordance with section 50(2). Noting the pro-disclosure intent of the Act, I am satisfied that redacting only the information that I believe is not in the public interest to release will ensure that the intent of the Act is met and will provide you with access to information held by CMTEDD within the scope of your request.

### **Charges**

Processing charges for this request have been waived.

### **Online publishing – Disclosure Log**

Under section 28 of the Act, CMTEDD maintains an online record of access applications called a disclosure log. Your original access application, my decision and documents

released to you in response to your access application will be published in the CMTEDD disclosure log. Your personal contact details will not be published. You may view CMTEDD disclosure log at <https://www.cmtedd.act.gov.au/functions/foi/disclosure-log-2023>.

### **Ombudsman Review**

My decision on your access request is a reviewable decision as identified in Schedule 3 of the Act. You have the right to seek Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day that my decision is provided to you, or a longer period allowed by the Ombudsman.

We recommend using this form [Applying for an Ombudsman Review](#) to ensure you provide all of the required information. Alternatively, you may write to the Ombudsman at:

The ACT Ombudsman  
GPO Box 442  
CANBERRA ACT 2601

Via email: [actfoi@ombudsman.gov.au](mailto:actfoi@ombudsman.gov.au)

### **ACT Civil and Administrative Tribunal (ACAT) Review**

Under section 84 of the Act, if a decision is made under section 82(1) on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision. Further information may be obtained from the ACAT at:

ACT Civil and Administrative Tribunal  
GPO Box 370  
Canberra City ACT 2601  
Telephone: (02) 6207 1740  
<http://www.acat.act.gov.au/>

Should you have any queries in relation to your request please contact me by telephone on 6207 7754 or email [CMTEDDFOI@act.gov.au](mailto:CMTEDDFOI@act.gov.au).

Yours sincerely,



Katharine Stuart  
Information Officer  
Information Access Team  
Chief Minister, Treasury and Economic Development Directorate  
08 February 2024



**ACT**  
Government

Chief Minister, Treasury and  
Economic Development

## FREEDOM OF INFORMATION REQUEST SCHEDULE

WHAT ARE THE PARAMETERS OF THE REQUEST		Reference NO.
Would you please provide me with: <ul style="list-style-type: none"> <li>all the amended BA and envelope assessments for DA 202037990</li> <li>the Crown lease that permits the approved development at Block 9 Section 33 Division of Torrens (required in the conditions of approval 30 March 2021)</li> </ul>		CMTEDDFOI 2023-410

Ref No	Page number	Description	Date	Status	Reason for Exemption	Online Release Status
1	1-12	B20213959-Approved Plan-AMENDMENTS-01	5 December 2022	Partial	Sch 2 s2.2 (a)(xi)	Yes
2	13-20	B20213959-Approved Plans - Other-AMENDED PLANS-01	13-16 November 2020	Partial	Sch 2 s2.2 (a)(ii); Sch 2 s2.2 (a)(xi)	Yes
3	21	B20213959-Approved Plans - Site-SITE PLAN -01	13 November 2020	Partial	Sch 2 s2.2 (a)(xi)	Yes
4	22-36	B20213959-Approved Plans - Structural-AMENDED STRUCTURALS -01	26 August 2021	Partial	Sch 2 s2.2 (a)(xi)	No
5	37-51	B20213959-Approved Plans - Structural-AMENDED STRUCTURALS -02	26 August 2021	Partial	Sch 2 s2.2 (a)(xi)	No
6	52-53	B20213959-Approved Plans - Structural-STRUCTURAL PLANS -01	26 August 2021	Partial	Sch 2 s2.2 (a)(ii); Sch 2 s2.2 (a)(xi)	Yes
7	54	List of Building Approval Amendments - Block 9 Section 33 Torrens	5 December 2023	Full		Yes
<b>Total No of Docs</b>						
7						

## REVISIONS LIST:

DATE: 11.11.2022

# 1 - Update of FFL as per built;

# 2 - Update new measurements for overall building height in relation to NGL as per contours and FFL;

# 4 - Update changes to materials;

# 5 - Update changes to window schedule: removal of window 03\_wip\_residence 2;  
changes to window 13\_ens\_residence 2;

Amendments approval only for items noted  
on cover sheet



the fill's are subject to change and are up to builders discretion to be verified on site, maximum change to be under 340mm

location of cuts are indicative only and to be verified on site confirm all levels and contours on site prior to commencement of construction. builder is responsible to ensure all information shown here regarding levels is accurate and represents existing on site levels

development to comply with best practice guidelines - prevent pollution from residential building sites march 2006

block boundaries, contours, services and easements to be verified on site prior to construction

retaining wall heights and all levels to suit site conditions. final heights to be confirmed by builder on site

builder to provide all labour, materials, fittings, paint, tools, permits, insurances etc necessary for the proper completion of the works and ensure that all labour and materials in all trades are the best of the respective kinds. see inclusions list for exclusions

all contractors to inform themselves of the scope of work prior to commencing their relevant duties

follow figured dimensions only. check and verify dimensions before starting and report any discrepancies to the designer

building setbacks, easements and dimensions to be verified by surveyor and certifier prior to commencement of any work materials and workmanship to be in accordance with the building code of australia, and all other relevant codes and australian standards



BLOCK AREA 1105 SQM

**RESIDENCE 1**

LOWER FLOOR	164.98 SQM
UPPER FLOOR	69.72 SQM
GARAGE	40.69 SQM
AL FRESCO	28.45 SQM
PORCH	2.42 SQM

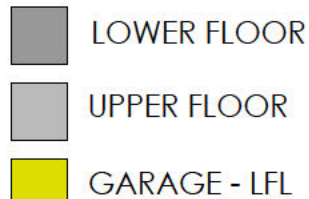
GFA	275.39 SQM
TOTAL AREAS	306.26 SQM

**RESIDENCE 2**

LOWER FLOOR	164.14 SQM
UPPER FLOOR	69.72 SQM
GARAGE	40.69 SQM
AL FRESCO	34.03 SQM
PORCH	2.42 SQM

GFA	274.55 SQM
TOTAL AREAS	311.00 SQM

TOTAL GFA	549.94 SQM
TOTAL FLOOR AREA	617.26 SQM
PLOT RATIO	49.76%



ensure no encroachments, no steps and no eaves, ensure vehicle access is maintained with a vehicular gradient of 1:6 max fall to access easement if applicable fencing over easement to be installed for ease of removal by actew if required if applicable no excavation, cut/fill permissible in the easement/pipe protection envelope no services to be placed in easement sewer, stormwater, gas, telephone and electrical underground services to remain clear of the sewer easement no landscaping to impede across sewer or stormwater easement access route

GATES TO BE MINIMUM 2.5 METRES WIDE TO ALLOW FOR ACTEW/TCCS ACCESS sewer/stormwater easement access route

all cuts and fill's to be verified on site by a certified surveyor where retaining walls are required and included in contract, structural engineer to provide detailed construction details OWNERS RESPONSIBLE FOR ALL RETAINING WALLS

all downpipes and sumps to be in accordance with building code of australia all altered groundlevels to be graded away from residence to eliminate water ponding

Driveway to comply with GW/SD/DC.02 & finish to comply with driveway grade to be verified on site prior to commencement of construction as amended if required DRIVEWAY SHAPE AND MATERIAL TO REFLECT EXISTING DRIVEWAYS IN THE IMMEDIATE AREA IN TERMS OF SHAPE AND LAYOUT AND MATERIAL

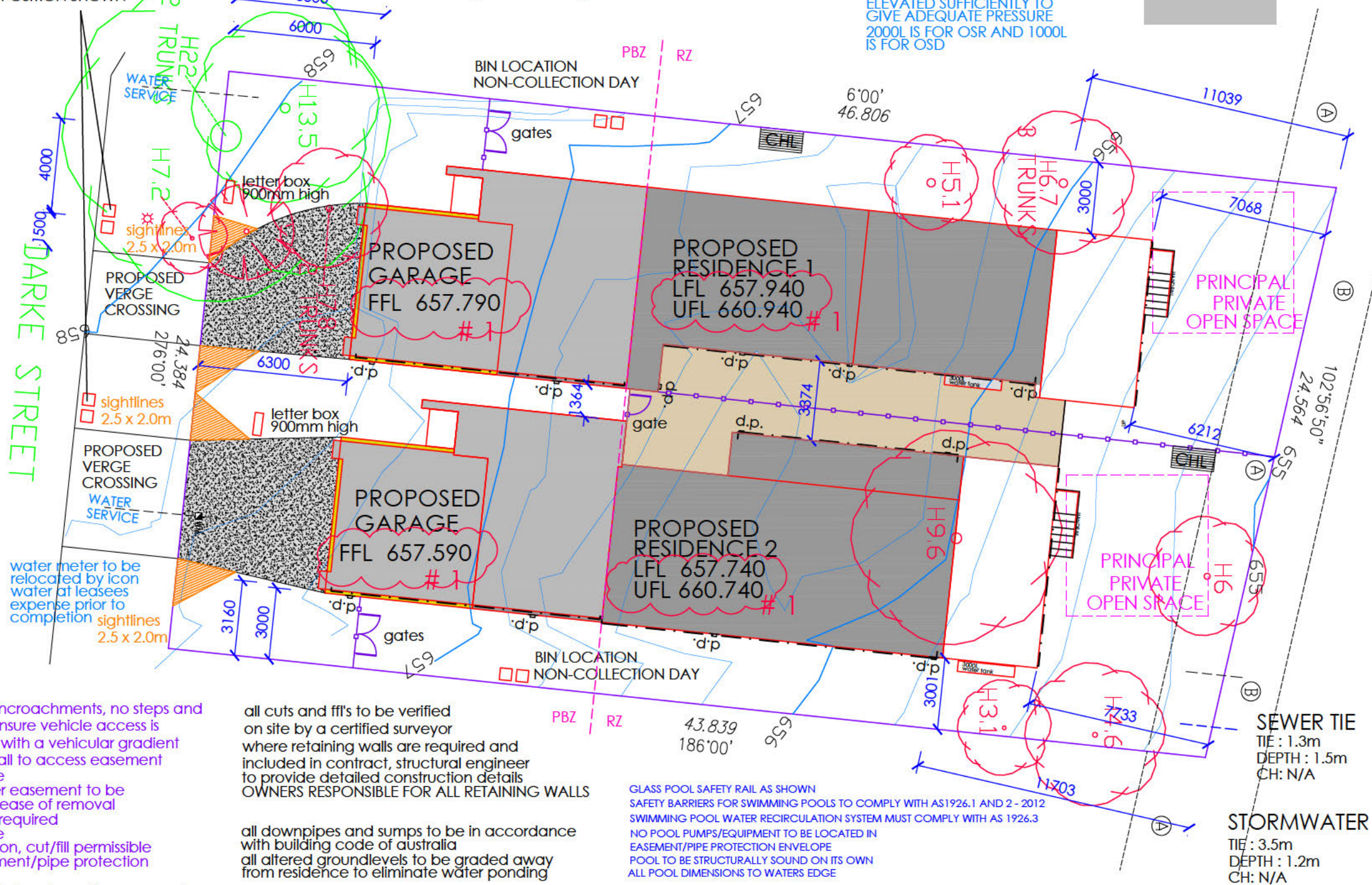
BIN LOCATIONS COLLECTION DAY TRAVEL VIA D/WAY TO POSITION SHOWN

RETAINING WALLS WITHIN SIGHTLINES TO BE UNDER 800MM IN HEIGHT

1.8m high standard paling fence between residence 1 & 2

ALL FENCING TO COMPLY WITH TERRITORY PLAN AND RELEVANT GUIDELINES all boundary fencing to be 1.8m high all internal fencing to be 1.8m high

minimum 3000 litres rainwater tank to comply with wsud and housing development guide to be connected to 50% or 100 sqm of roof and connected to toilets, laundry and all external taps must comply with rule 6.1.15.1b no reliance on landscaping measures to reduce consumption THE CONNECTION WILL REQUIRE A PUMP WHERE IT CANNOT BE ELEVATED SUFFICIENTLY TO GIVE ADEQUATE PRESSURE 2000L IS FOR OSR AND 1000L IS FOR OSD

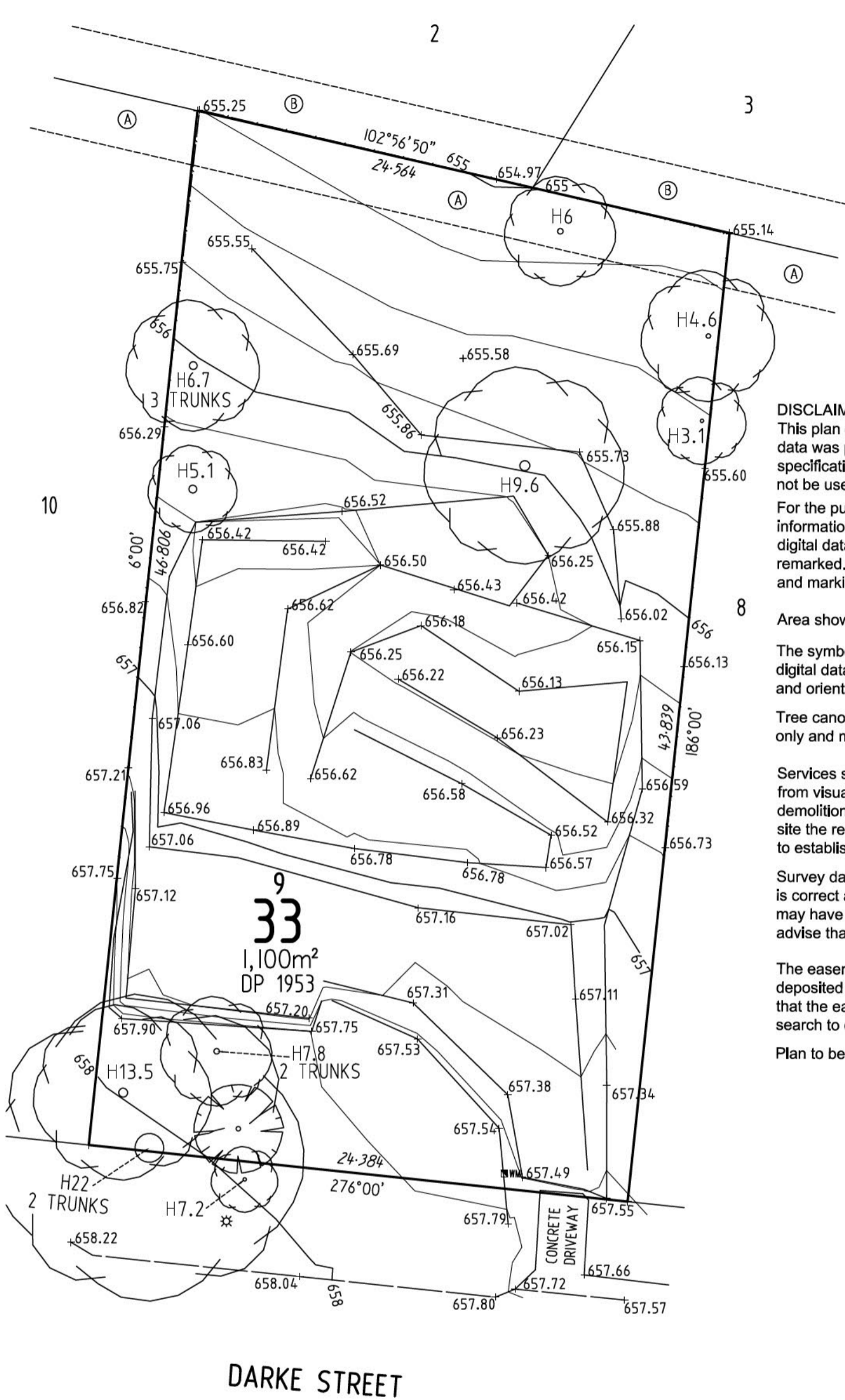


GLASS POOL SAFETY RAIL AS SHOWN SAFETY BARRIERS FOR SWIMMING POOLS TO COMPLY WITH AS1926.1 AND 2 - 2012 SWIMMING POOL WATER RECIRCULATION SYSTEM MUST COMPLY WITH AS 1926.3 NO POOL PUMPS/EQUIPMENT TO BE LOCATED IN EASEMENT/PIPE PROTECTION ENVELOPE POOL TO BE STRUCTURALLY SOUND ON ITS OWN ALL POOL DIMENSIONS TO WATERS EDGE

- (A) SEWERAGE & ELECTRIC SUPPLY EASEMENT 2.438 WIDE
- (B) DRAINAGE & ELECTRIC SUPPLY EASEMENT 2.438 WIDE

A MINIMUM OF 50% OF THE PRIVATE OPEN SPACE IS TO BE RETAINED AS PLANTING AREA AS SET OUT IN RULE 39 IN THE SINGLE DWELLING HOUSING DEVELOPMENT CODE

Sch 2.2(a)(xi)



**DISCLAIMER:**  
 This plan of survey and its associated digital data was prepared under instruction to meet specification as agreed. This information should not be used or relied upon by any other party.  
 For the purpose of this plan, the boundary information shown is from DP1953 & Actmap digital database. Boundaries have not been remarked. For future development, further survey and marking of boundaries may be necessary.

Area shown is from DP 1953.

The symbols used in this plan and associated digital data do not necessarily reflect the size and orientation of the object they represent.

Tree canopies are shown as a circular representation only and may not reflect irregular canopies.

Services shown hereon have been determined from visual evidence only. Prior to any demolition, excavation or construction on the site the relevant authority should be contacted to establish detailed location and depth.

Survey data including services shown on this plan is correct at the date of survey. Site conditions may have altered since the date of survey & we advise that the survey data may need verification.

The easements shown have been derived from the relevant deposited plan and the ACTmapi data base. We recommend that the easement information shown be verified with a title search to ensure that it is accurate and current.

Plan to be read in conjunction with the digital data.

LEGEND

- ⊗ LIGHT POLE
- TREE
- WATER METER

- Ⓐ SEWERAGE & ELECTRIC SUPPLY EASEMENT 2.438 WIDE
- Ⓑ DRAINAGE & ELECTRIC SUPPLY EASEMENT 2.438 WIDE

Contour Interval	0.25m	BM	KBM 952
Datum	A.H.D	RL	655.728
Scale	1:200	0 2 4 8	
Surveyed	Sch 2.2(a)(ii)		15/01/2018
Drawn			18/01/2018
Checked			
Approved			

Sch 2.2(a)(xi)

**ACT GOVERNMENT**  
 DETAIL SURVEY  
 BLOCK 9 SECTION 33  
 18 DARKE STREET  
 DIVISION OF TORRENS

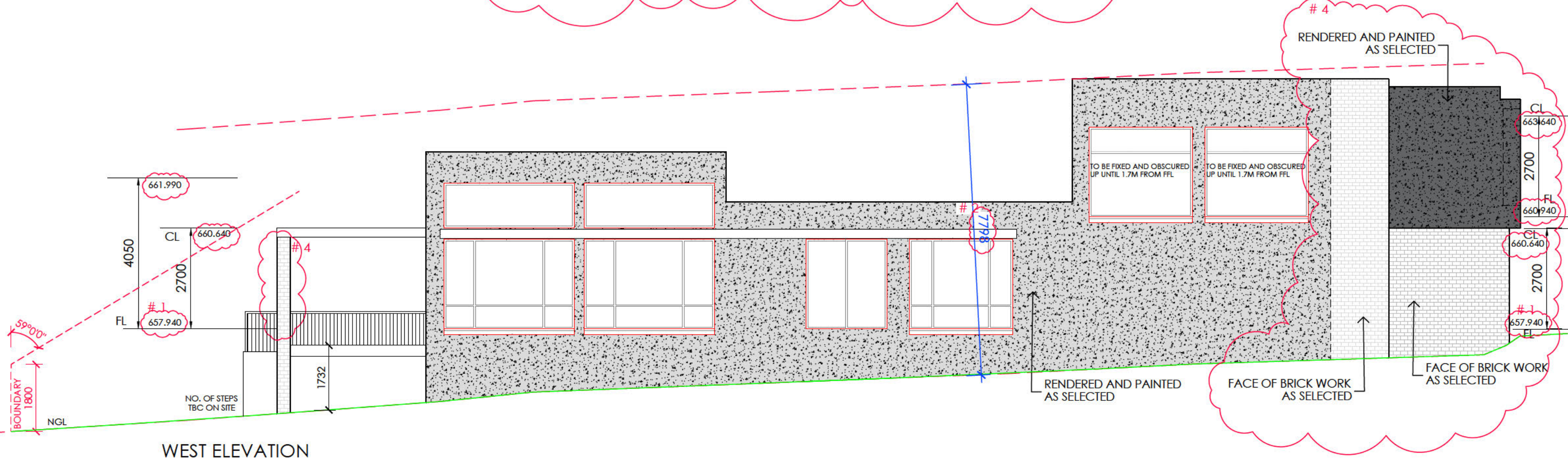
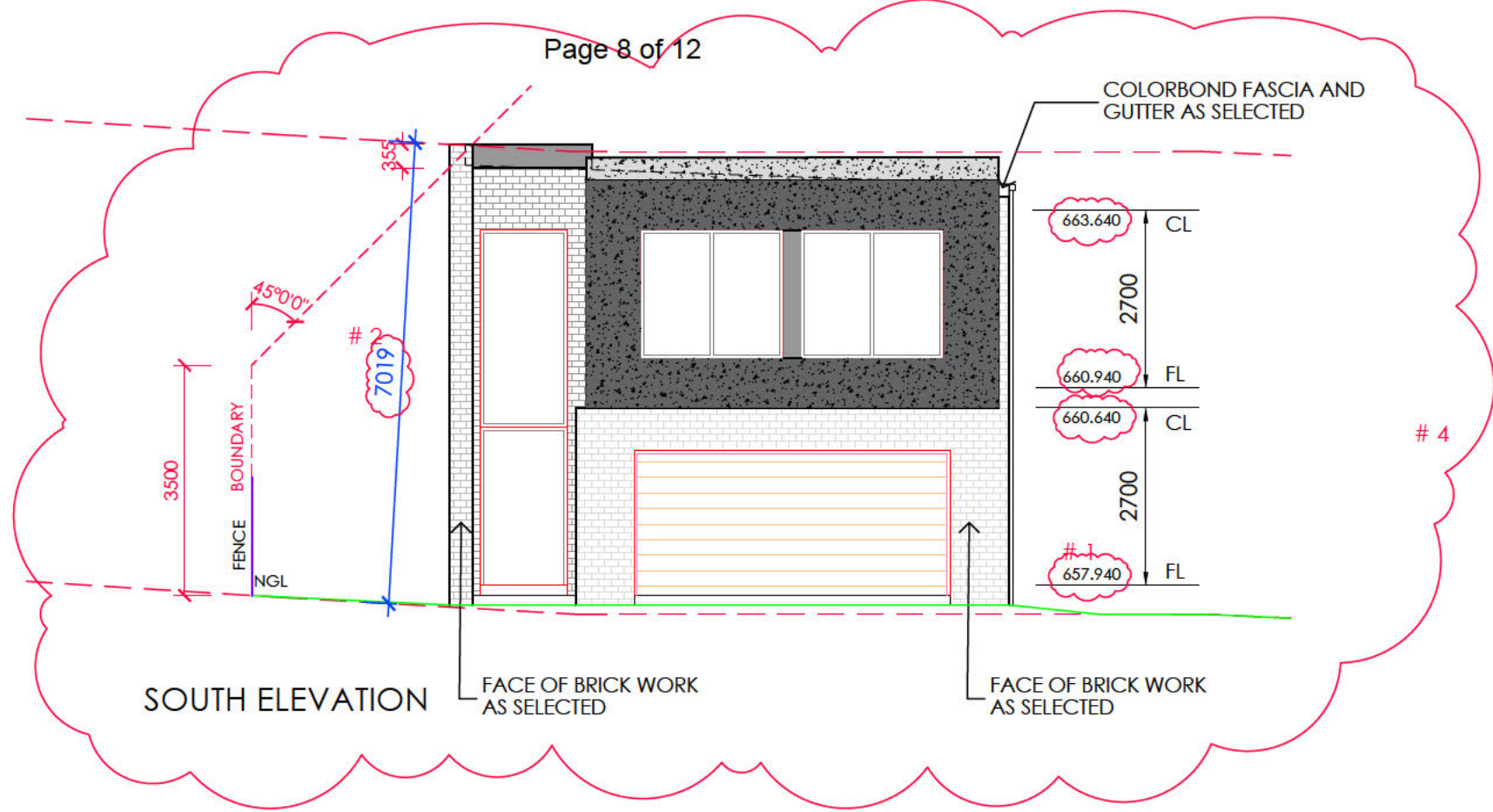
**Proj No. 18002.10** **Rev**  
 Sheet No. 1 of 1 18002.10\_DT\_001.dwg  
 © LANDdata SURVEYS Pty Limited ABN 97 118 699 728 A3

Sch 2.2(a)(xi), Sch 2.2(a)(ii)

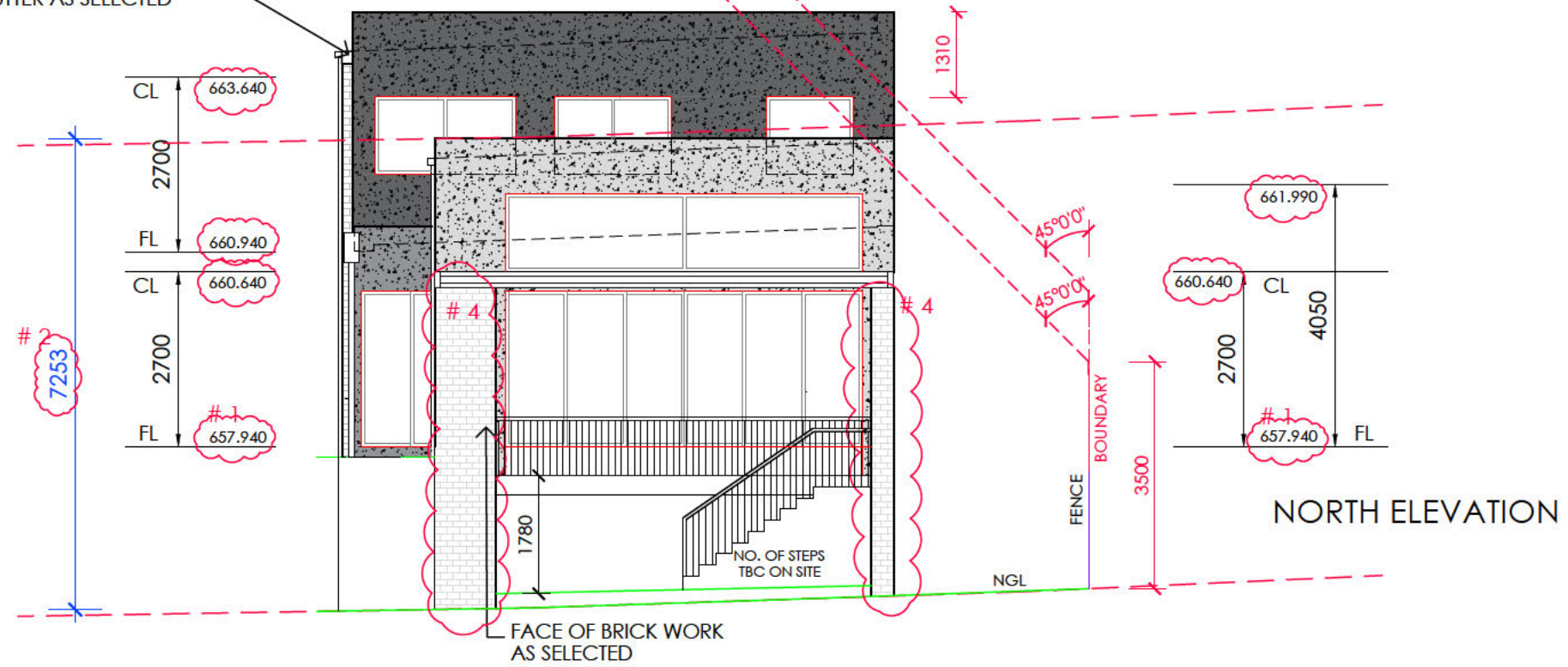
Sch 2.2(a)(xi), Sch 2.2(a)(ii)

Sch 2.2(a)(xi), Sch 2.2(a)(ii)

Sch 2.2(a)(xi), Sch 2.2(a)(ii)



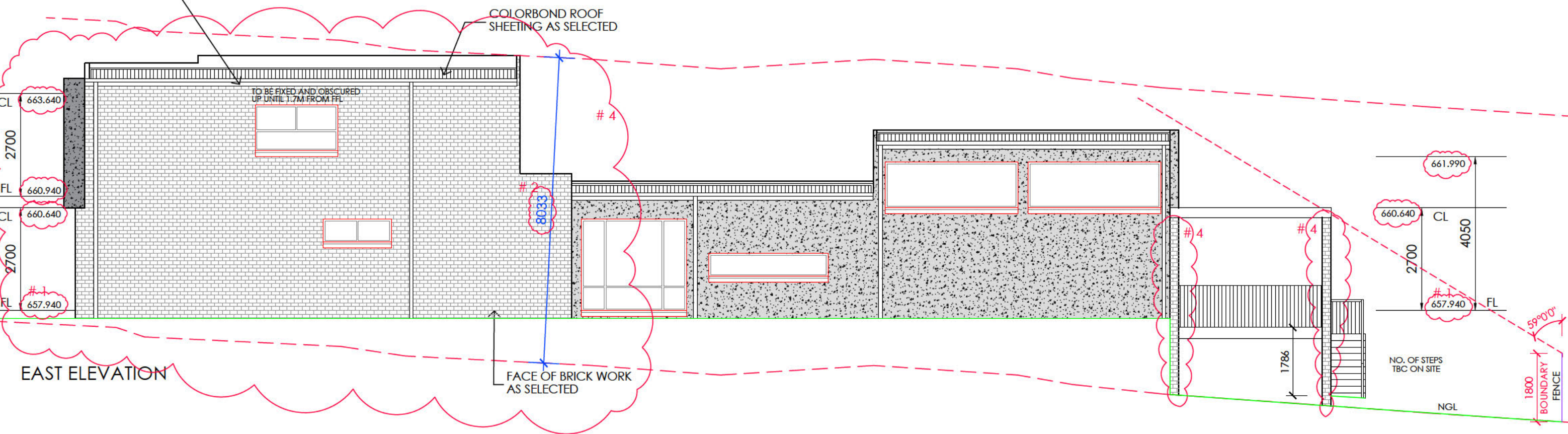
COLORBOND FASCIA AND GUTTER AS SELECTED



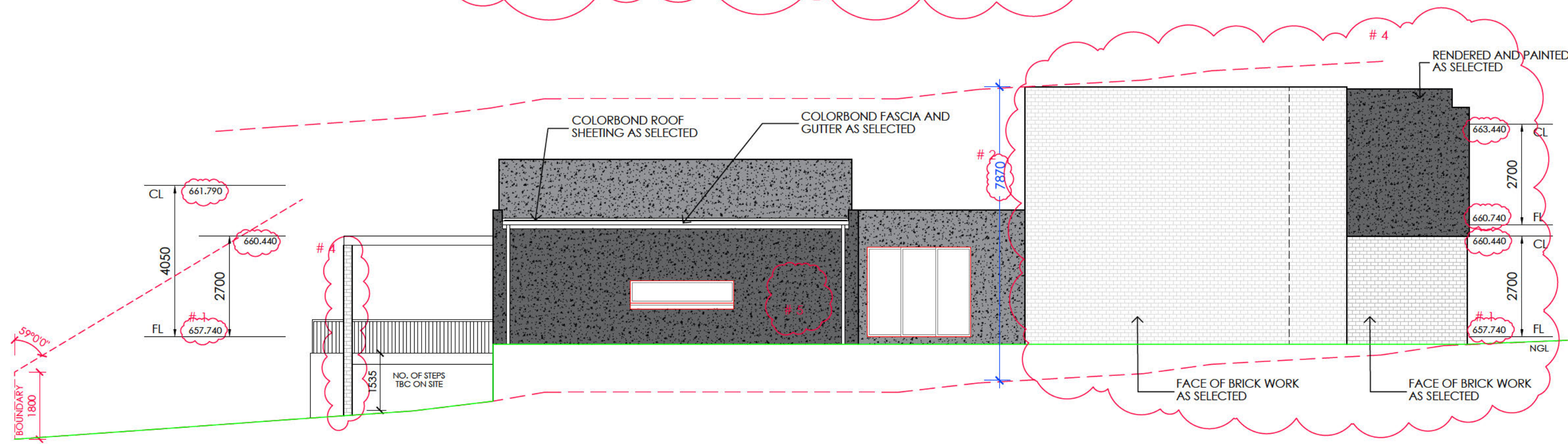
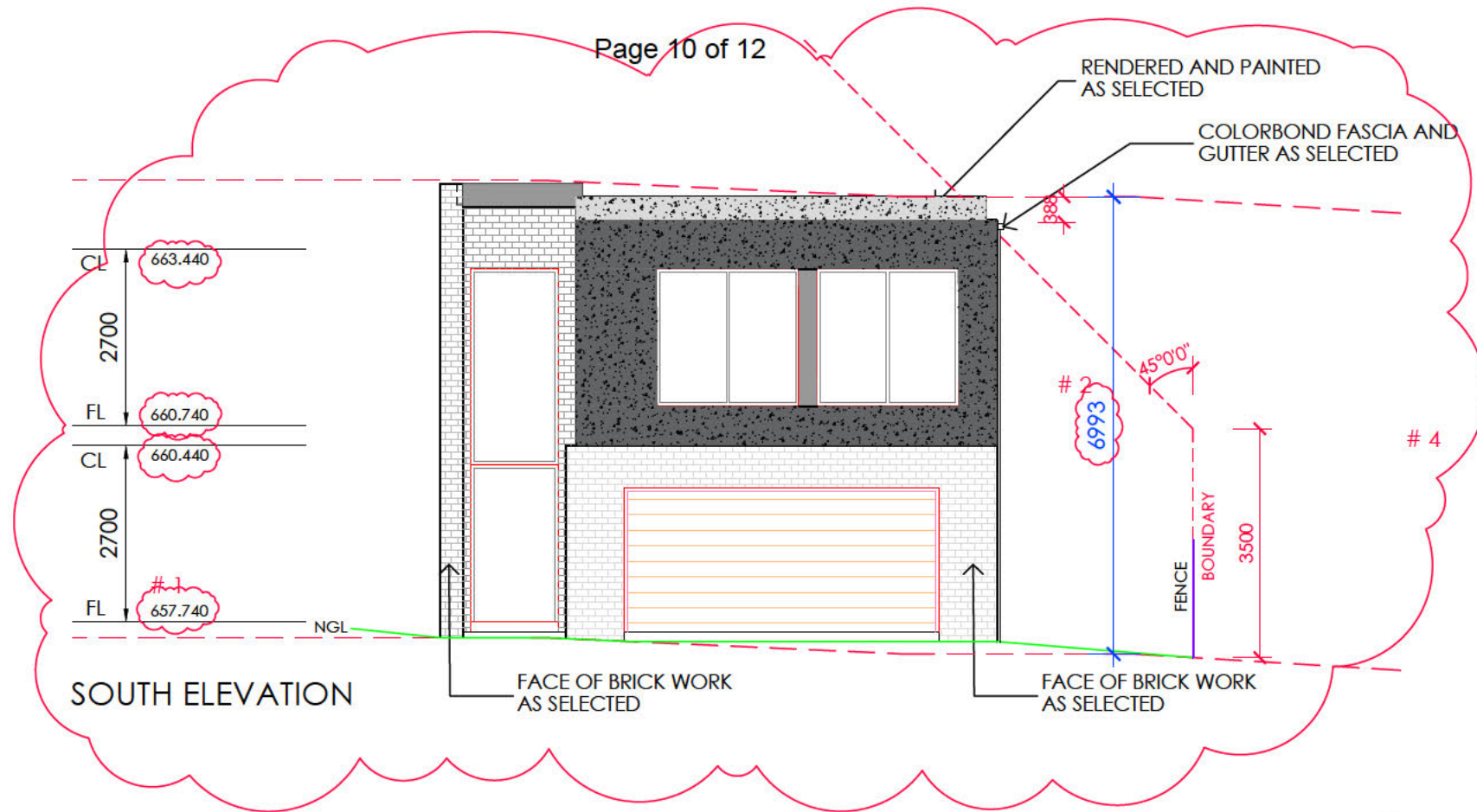
COLORBOND FASCIA AND GUTTER AS SELECTED

COLORBOND ROOF SHEETING AS SELECTED

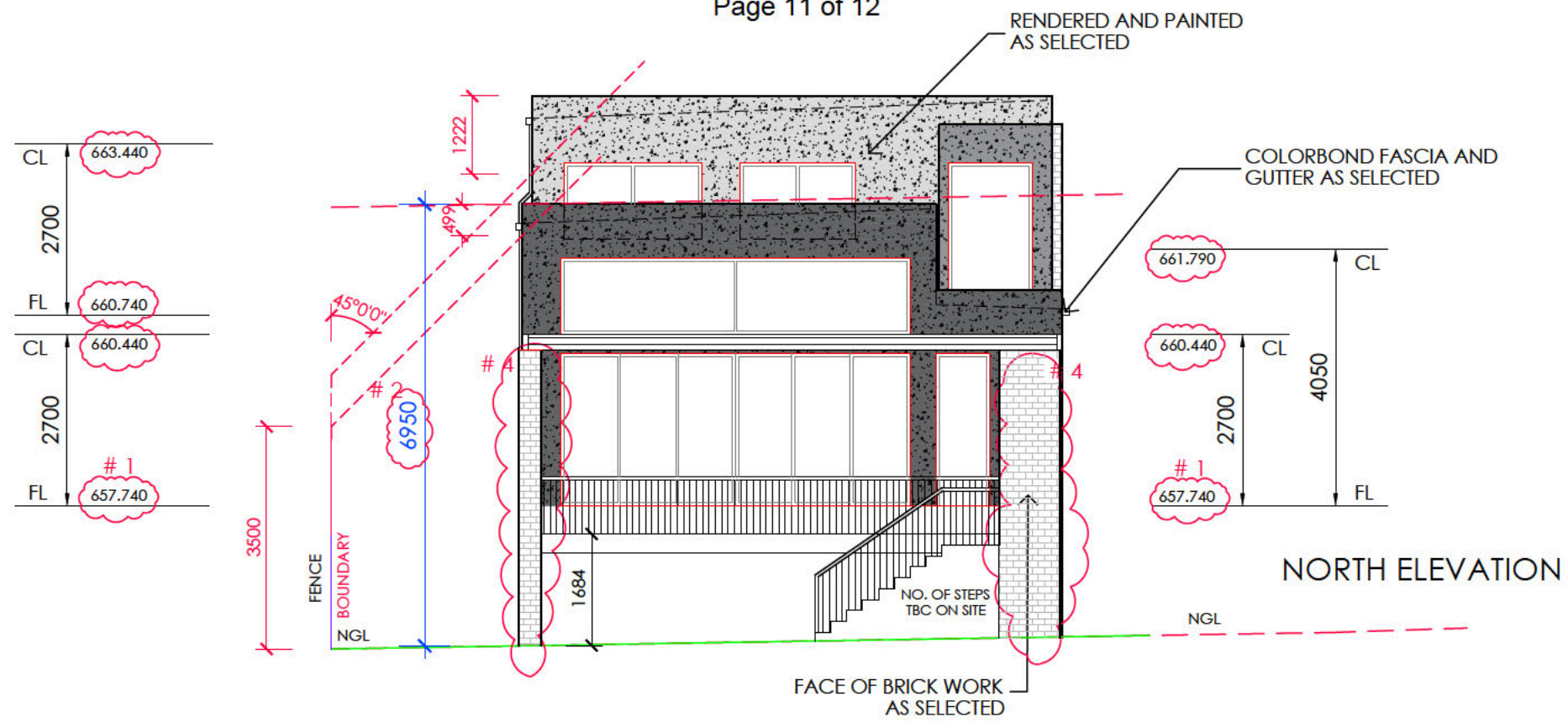
TO BE FIXED AND OBSCURED UP UNTIL 1.7M FROM FFL



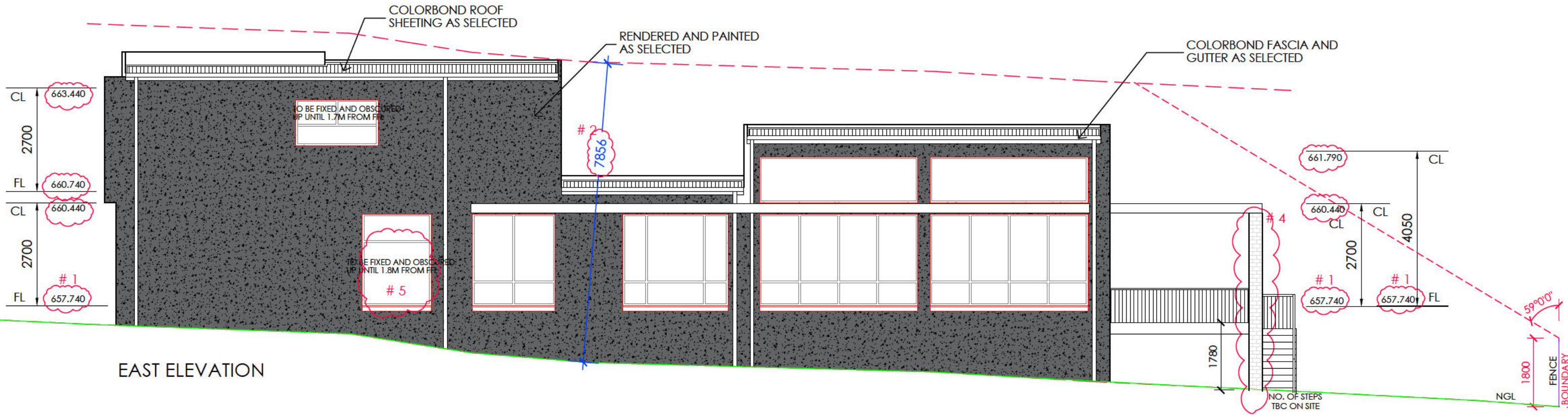




Sch 2.2(a)(xi)



NORTH ELEVATION



EAST ELEVATION

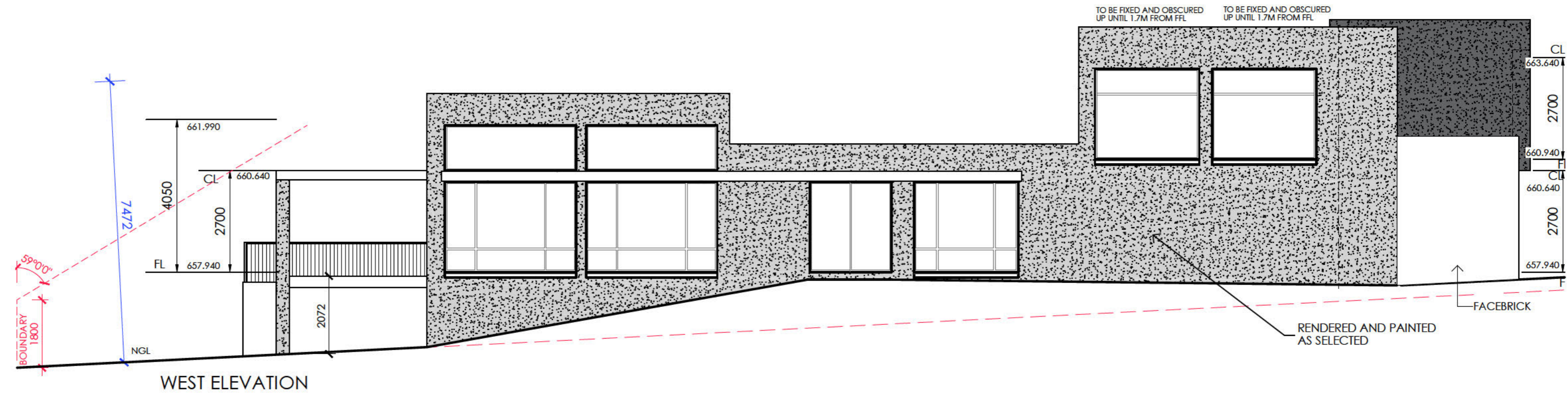
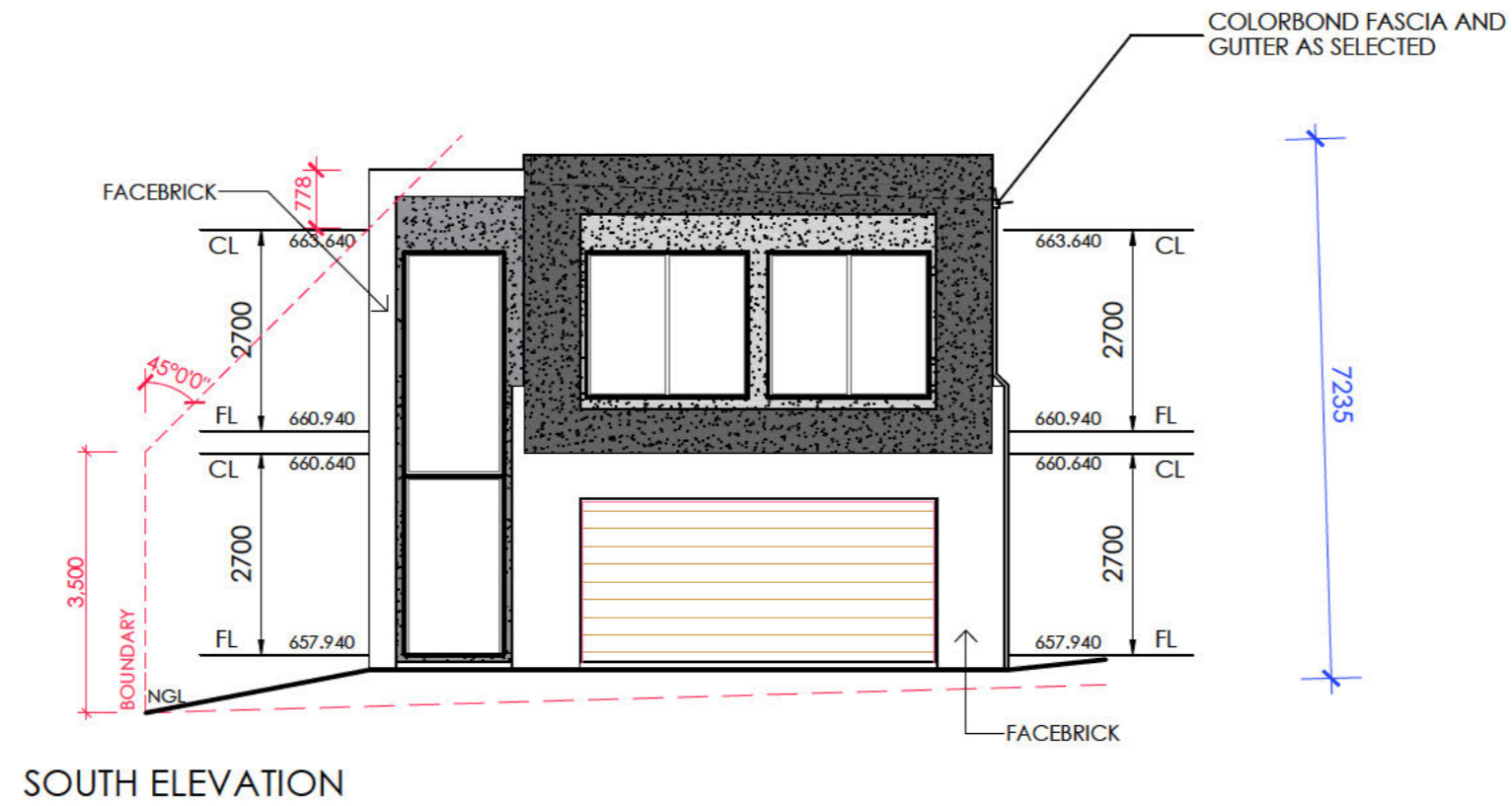


Sch 2.2(a)(xi)

Sch 2.2(a)(xi), Sch 2.2(a)(ii)

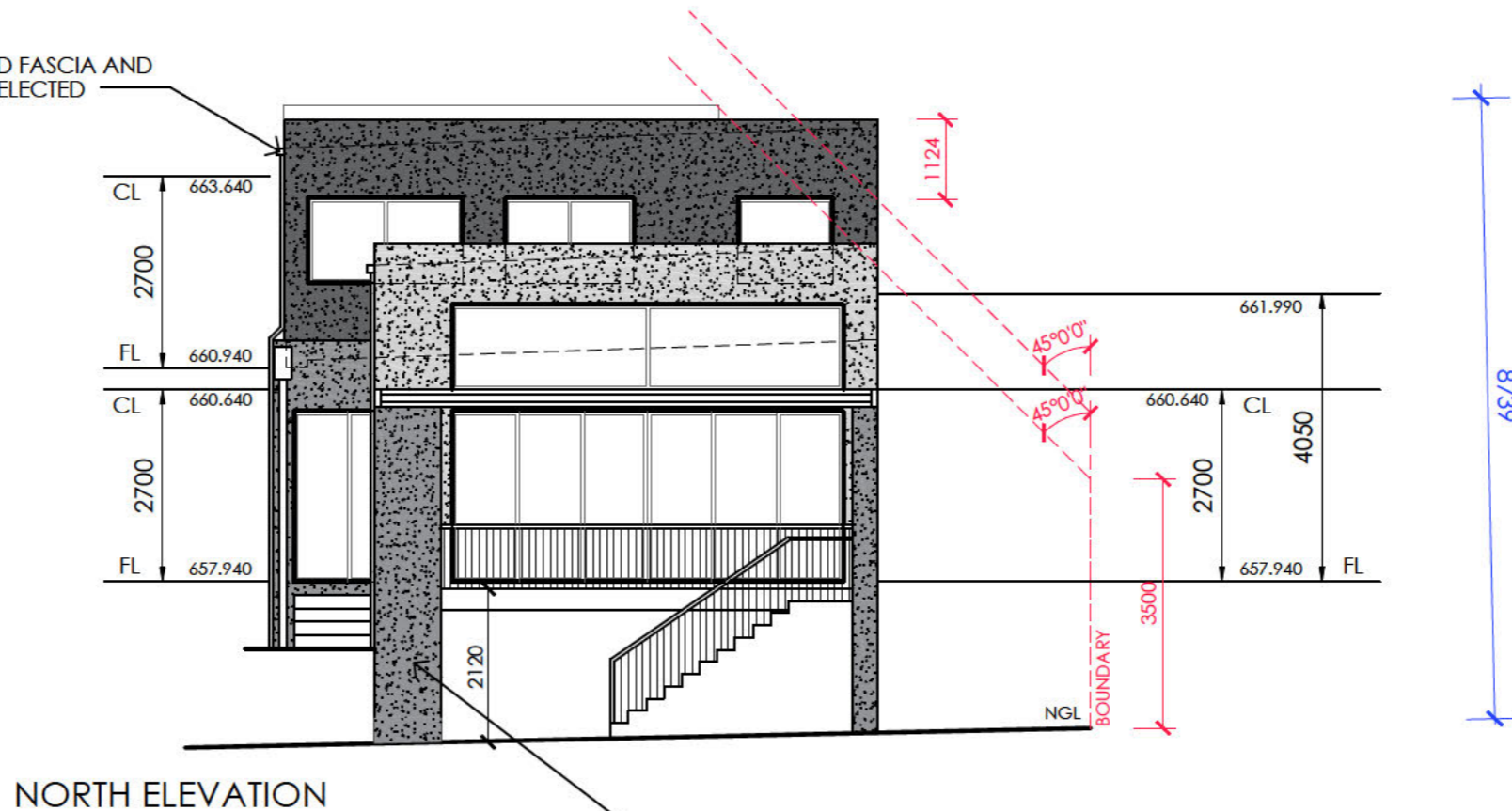
Sch 2.2(a)(xi), Sch 2.2(a)(ii)

Sch 2.2(a)(xi), Sch 2.2(a)(ii)





COLORBOND FASCIA AND GUTTER AS SELECTED



NORTH ELEVATION

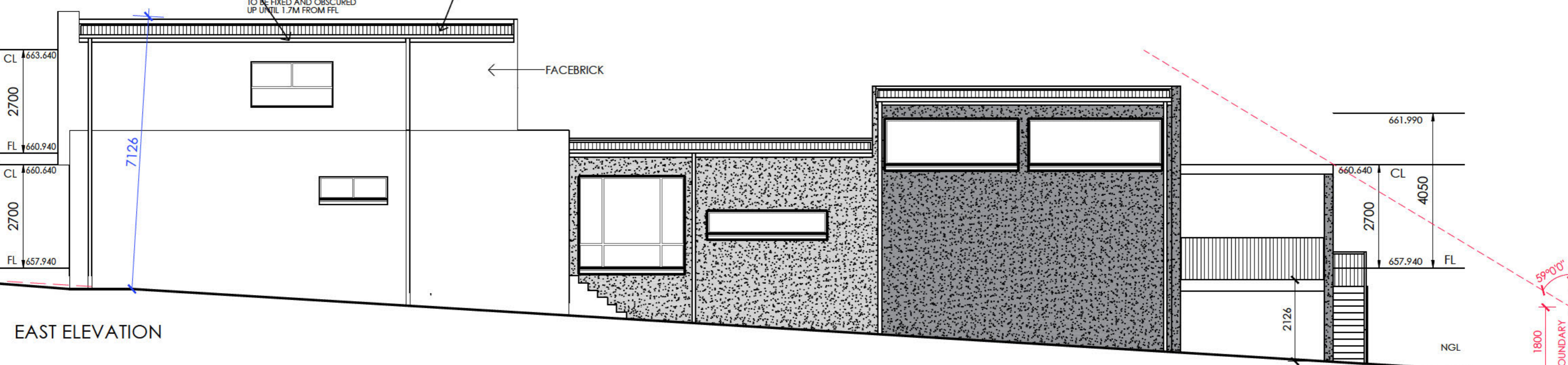
RENDERED AND PAINTED AS SELECTED

COLORBOND FASCIA AND GUTTER AS SELECTED

TO BE FIXED AND OBSCURED UP UNTIL 1.7M FROM FFL

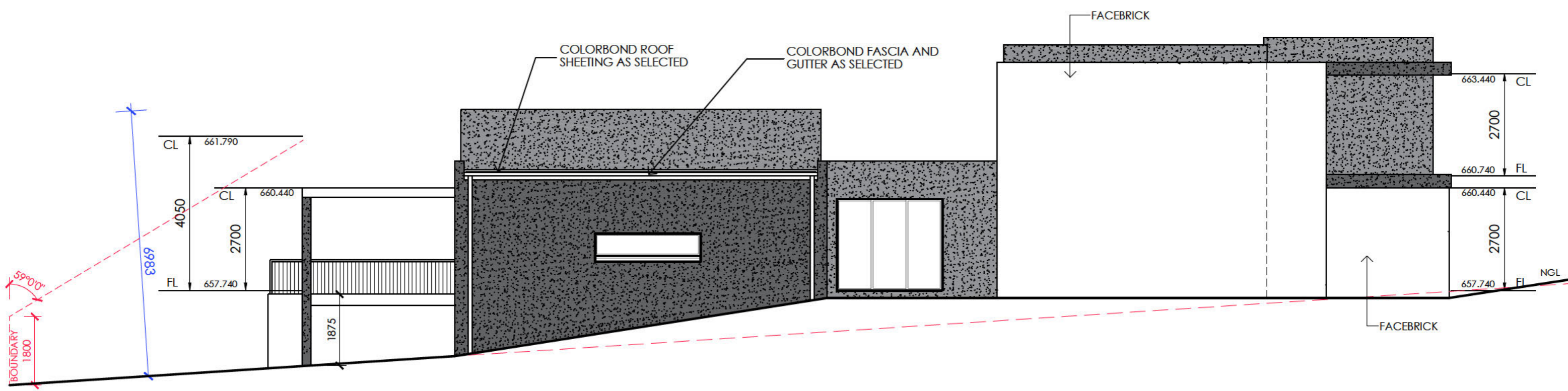
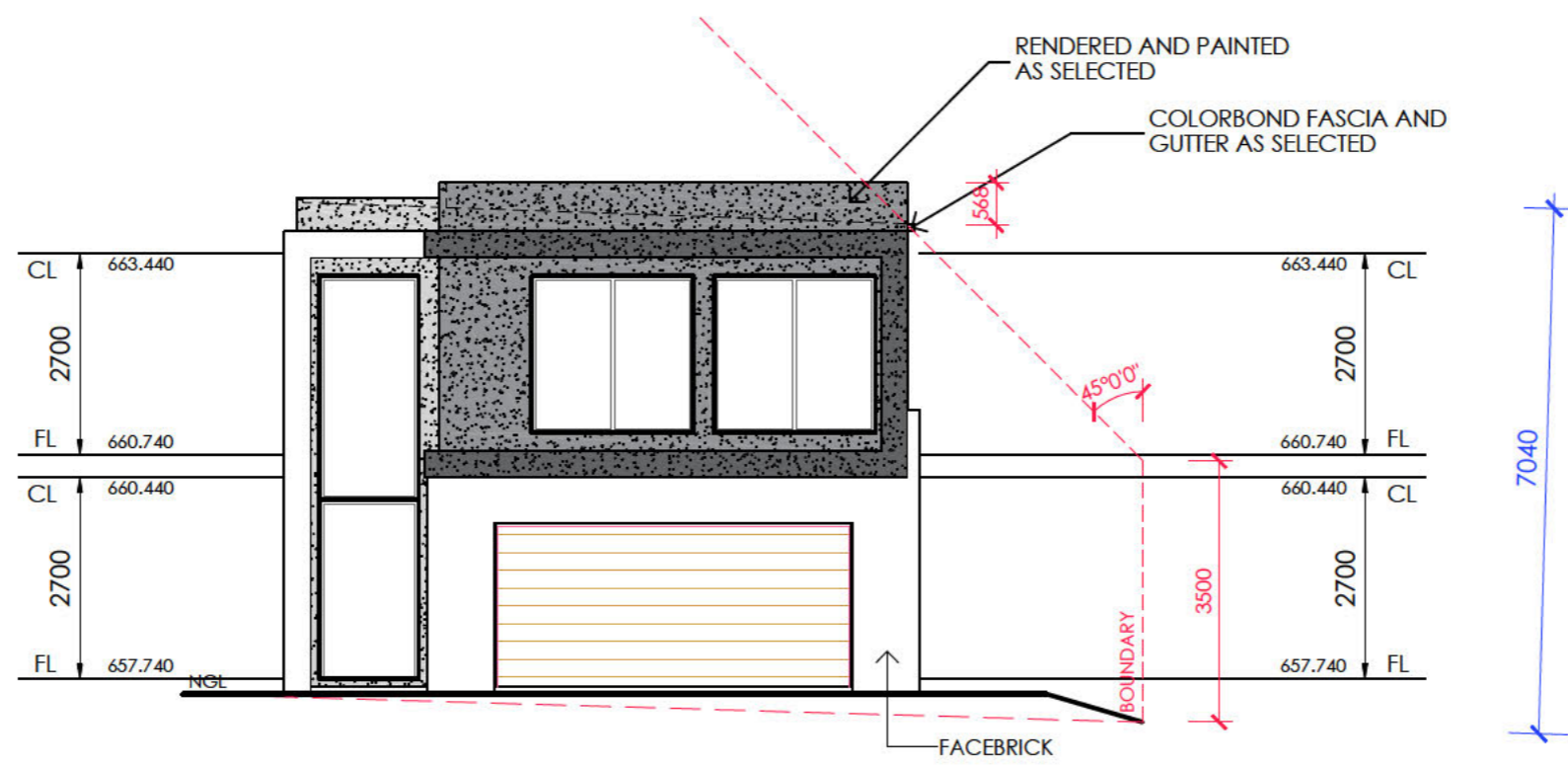
COLORBOND ROOF SHEETING AS SELECTED

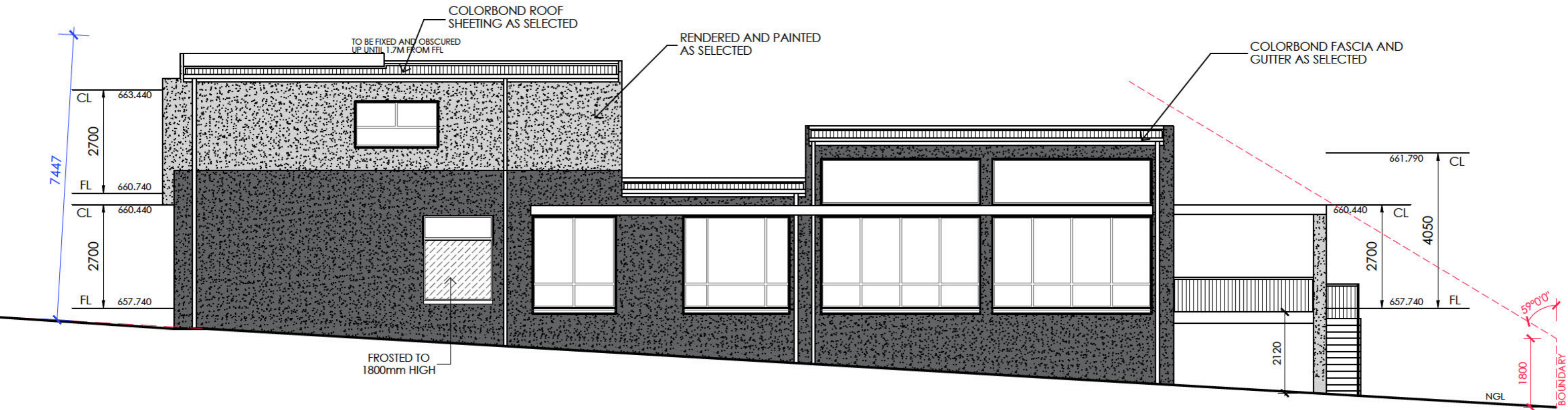
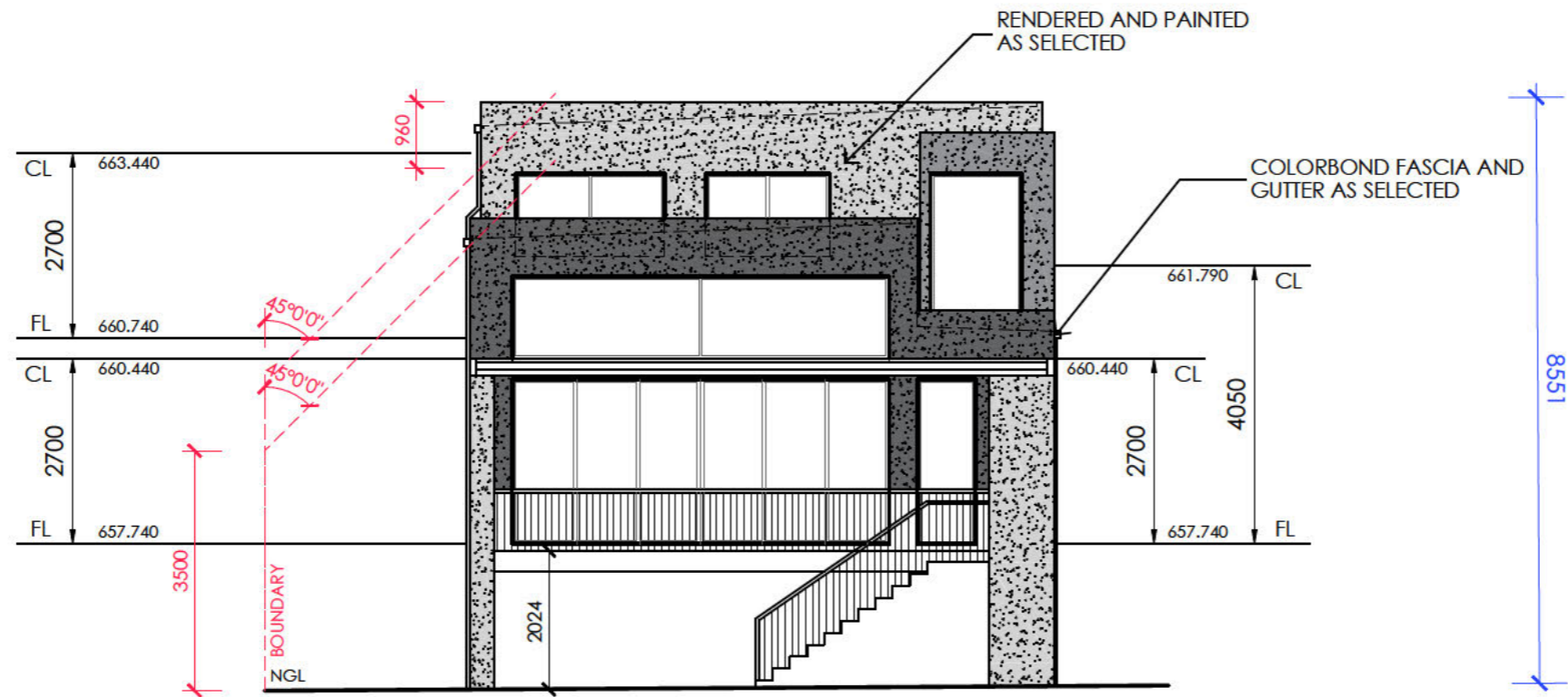
FACEBRICK



EAST ELEVATION

RESIDENCE 1





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BLOCK AREA 1105 SQM

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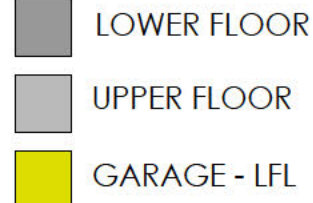
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TOTAL GFA	549.94 SQM
TOTAL FLOOR AREA	617.26 SQM
PLOT RATIO	49.76%



ensure no encroachments, no steps and no eaves, ensure vehicle access is maintained with a vehicular gradient of 1:6 max fall to access easement if applicable  
fencing over easement to be installed for ease of removal by actew if required if applicable  
no excavation, cut/fill permissible in the easement/pipe protection envelope  
no services to be placed in easement sewer, stormwater, gas, telephone and electrical underground services to remain clear of the sewer easement  
no landscaping to impede across sewer or stormwater easement access route  
GATES TO BE MINIMUM 2.5 METRES WIDE TO ALLOW FOR ACTEW/TCCS ACCESS sewer/stormwater easement access route

all cuts and fll's to be verified on site by a certified surveyor where retaining walls are required and included in contract, structural engineer to provide detailed construction details OWNERS RESPONSIBLE FOR ALL RETAINING WALLS

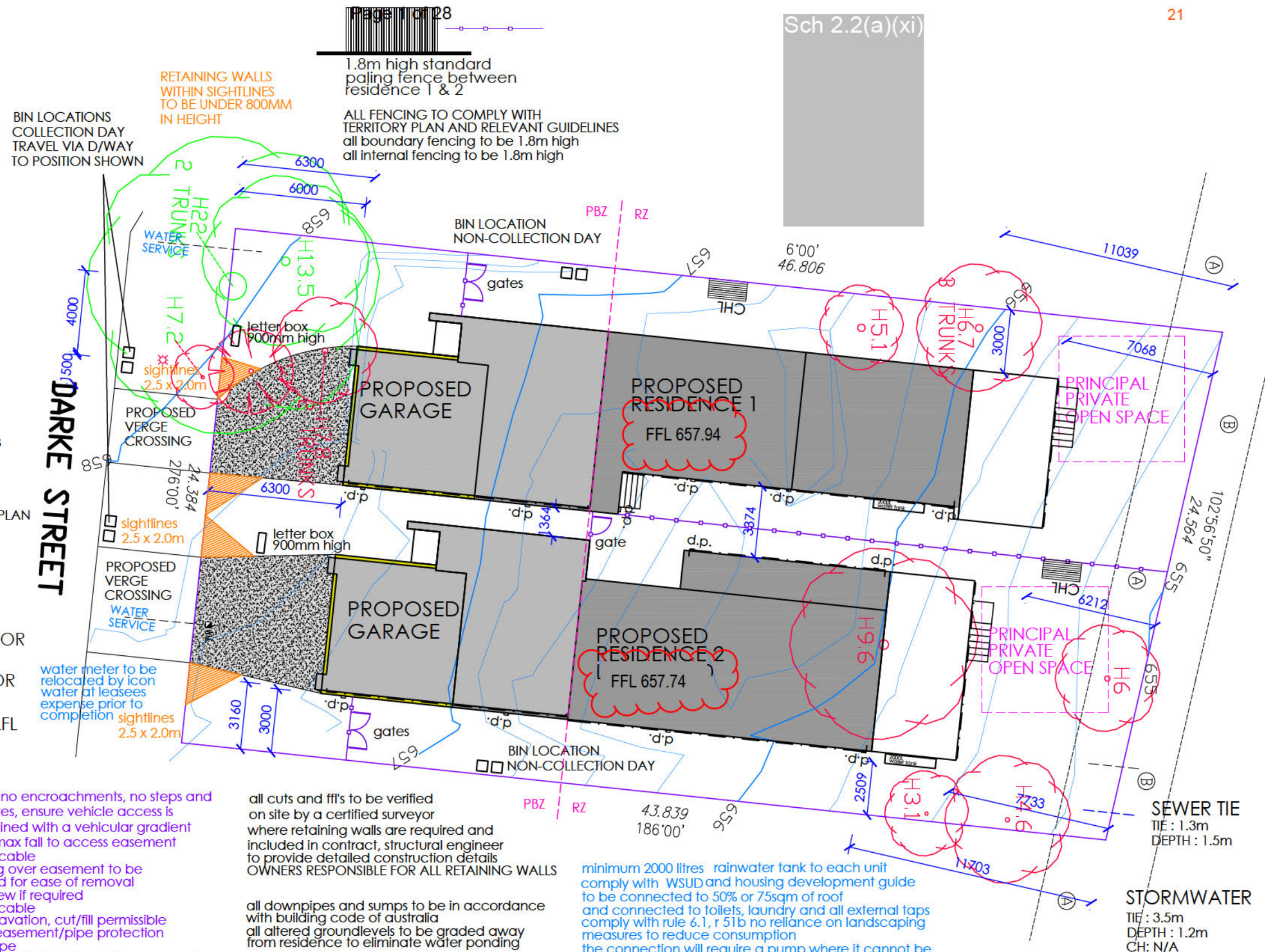
all downpipes and sumps to be in accordance with building code of australia all altered groundlevels to be graded away from residence to eliminate water ponding

Driveway to comply with GW/SD/DC.02 & finish to comply with driveway grade to be verified on site prior to commencement of construction as amended if required DRIVEWAY SHAPE AND MATERIAL TO REFLECT EXISTING DRIVEWAYS IN THE IMMEDIATE AREA IN TERMS OF SHAPE AND LAYOUT AND MATERIAL

minimum 2000 litres rainwater tank to each unit comply with WSUD and housing development guide to be connected to 50% or 75sqm of roof and connected to toilets, laundry and all external taps comply with rule 6.1, r 51b no reliance on landscaping measures to reduce consumption the connection will require a pump where it cannot be elevated sufficiently to give adequate pressure

- (A) SEWERAGE & ELECTRIC SUPPLY EASEMENT 2.438 WIDE
- (B) DRAINAGE & ELECTRIC SUPPLY EASEMENT 2.438 WIDE

A MINIMUM OF 50% OF THE PRIVATE OPEN SPACE IS TO BE RETAINED AS PLANTING AREA AS SET OUT IN RULE 39 IN THE SINGLE DWELLING HOUSING DEVELOPMENT CODE



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## SLAB ON GROUND & RAFT SLABS

1. STRIP ALL TOPSOIL AND VEGETATION THROUGHOUT THE AREA OF THE SLAB. CUT TO BULK EXCAVATION LEVEL AS REQUIRED.
2. PROVIDE IMPERMEABLE SURFACES AROUND THE PERIMETER OF THE BUILDING & GRADED AWAY FROM THE BUILDING TO MINIMISE SEASONAL VARIATION OF SOIL MOISTURE CONTENT BENEATH THE BUILDING.
3. CARRY OUT COMPACTION TESTING TO GEOTECHNICAL ENGINEER'S DIRECTION AND IN ACCORDANCE WITH AS 3798.
4. PROOF ROLL SUB-GRADE UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER.
5. SLABS ON GROUND HAVE NOT BEEN DESIGNED FOR PROPPING LOADS
6. CUT SAWN JOINTS ONCE CONCRETE HAS HARDENED SUFFICIENTLY TO NOT BE DAMAGED AND PRIOR TO THE FORMATION OF SHRINKAGE CRACKS.
7. AS A GUIDE, THE RECOMMENDED TIME FOR SAWING IS

DAILY MAX TEMPERATURE	RECOMMENDED TIME FOR SAWING
< 25 DEGREES	14-16 HOURS
> 25 DEGREES	10 HOURS

## STRUCTURAL MASONRY

1. TEMPORARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO KEEP THE MASONRY STABLE AT ALL TIMES.
2. MASONRY TO BE IN ACCORDANCE WITH AS 3700
3. MASONRY UNITS SHALL COMPLY WITH AS/NZS 4455 AND AS FOLLOWS:

MASONRY UNIT TYPE	CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH (f <sub>uc</sub> )	CHARACTERISTIC LATERAL MODULUS OF RUPTURE (f <sub>ut</sub> )
CLAY	15 MPa	0.8 MPa
CALCIUM SILICATE	15 MPa	0.8 MPa
CONCRETE	15 MPa (HOLLOW UNITS) 10 MPa (SOLID/ CORE UNITS)	0.8 MPa

4. MORTAR SHALL CONSIST OF THE FOLLOWING:
  - M3: FOR GENERAL APPLICATIONS
    - 1 PART TYPE GP CEMENT: 5 PARTS SAND PLUS WATER THICKENER
  - M4: FOR ELEMENTS IN INTERIOR ENVIRONMENTS SUBJECT TO SALINE WETTING AND DRYING; BELOW A DAMP-PROOF COURSE OR IN CONTACT WITH GROUND IN AGGRESSIVE SOILS; IN SEVERE MARINE ENVIRONMENTS; IN SALINE OR CONTAMINATED WATER INCLUDING TIDAL SPLASH ZONES; AND WITHIN 1KM OF AN INDUSTRY PRODUCING CHEMICAL POLLUTANTS.
    - 1 PART TYPE GP CEMENT: 4 PARTS SAND PLUS WATER THICKENER.
5. PROVIDE VERTICAL CONTROL JOINTS IN MASONRY OVER PERMANENT FLOOR JOINTS AND AS PER THE ARCHITECTURAL DRAWINGS.
6. MASONRY WALLS SHOWN ON THE STRUCTURAL PLANS ARE LOAD-BEARING UNO NON-LOADBEARING WALLS SHALL BE SEPARATED FROM THE CONCRETE STRUCTURE ABOVE WITH 20MM COMPRESSIBLE FILLER. MASONRY WALLS SUPPORTING SLABS SHALL HAVE A LAYER OF MORTAR TROWELED SMOOTH ON TOP. PROVIDE M.E.T. SLIPJOINT TO SEPARATE FLOOR SLABS AND MASONRY. PROVIDE HERCULES HERCUSLIP COMPOSITE TO SEPARATE ROOF SLABS AND MASONRY.
7. OTHER THAN WHAT IS ALLOWED IN THE SPECIFICATION NO CHASING OR REBATES MAY BE MADE IN MASONRY WALLS WITHOUT WRITTEN APPROVAL.
8. THE CONTRACTOR SHALL PROVIDE RECORDS THAT DEMONSTRATE ALL MASONRY BED JOINT REINFORCEMENT, MASONRY TIES AND MASONRY ALL STIFFENERS HAVE BEEN INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATION.
9. ALL LOAD BEARING CONCRETE MASONRY WALLS SHALL HAVE ALL CORES FILLED WITH GROUT UNO. CORE FILLING GROUT SHALL BE THOROUGHLY COMPACTED. GROUT TO BE IN ACCORDANCE WITH AS3700 AND AS FOLLOWS:

LOCATION	f <sub>cg</sub> (MPa)	SPECIFIED SLUMP	MAX AGGREGATE SIZE
GROUT	20 MPa	230	10mm

10. ALL CORE FILLED BLOCKWALLS SHALL BE CONSTRUCTED WITH "DOUBLE U" BLOCKS
11. IN CORE FILLED BLOCKWALLS CLEANOUT OPENINGS SHALL BE PROVIDED AT THE BOTTOM OF EACH CORE AND SHALL BE CLEANED OF MORTAR PROTRUSIONS BEFORE GROUTING.
12. ALL CORE FILLED BLOCK WALLS SHALL HAVE ALL CORES FILLED WITH GROUT UNO. CORE FILLING GROUT TO BE IN ACCORDANCE WITH NOTE 4.
13. COVER TO REINFORCEMENT TO BE 50MM TO FACE OF BLOCK UNO.
14. PROVIDE BED JOINT REINFORCEMENT AS FOLLOWS
  - M.E.T. GALVANIZED MASONRY REO WHERE M3 MORTAR IS USED (SUPPLIED BY DUNSTONE MAZE IN NSW)
  - ANCON STAINLESS STEEL WHERE M4 MORTAR IS USED AND LOCATED AS FOLLOWS.
    - IN 2 BED JOINTS BELOW AND ABOVE HEAD AND SILL FLASHINGS TO OPENINGS
    - IN 2 BED JOINTS BELOW AND ABOVE OPENINGS
    - IN THIRD BED JOINT ABOVE BOTTOM OF WALL
    - IN SECOND BED JOINT BELOW TOP OF WALL

## STRUCTURAL STEEL

1. COMPLY WITH AS/NZS 1163, AS/NZS 1594, AS/NZS 3678, AS/NZS 3679.1, AS/NZS 3679.2, AS/NZS 1554, AS 4100 AND THE SPECIFICATION EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
  2. ACCEPTABLE MANUFACTURERS OF STRUCTURAL STEEL MUST HOLD A VALID CERTIFICATE OF APPROVAL ISSUED BY THE AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS LTD (ACRS). EVIDENCE OF COMPLIANCE WITH THIS CLAUSE MUST BE SUBMITTED AT TENDER, SUPPLY AND COMPLETION
  3. COMPLY WITH THE NATIONAL STRUCTURAL STEELWORK COMPLIANCE SYSTEM AND THE CODE OF PRACTICE USING THE FOLLOWING CATEGORIES (UNO):
- |                        |     |
|------------------------|-----|
| IMPORTANCE LEVEL:      | 3   |
| SERVICE CATERGORY:     | SC1 |
| FABRICATION CATEGORY:  | FC1 |
| CONSTRUCTION CATEGORY: | CC3 |

4. ABBREVEATIONS USED ARE AS FOLLOWS

BW	BUTT WELD	WC	WELDED COLUMN
F.W	FILLET WELD	WB	WELDED BEAM
EA	EQUAL ANGLE	UA	UNEQUAL ANGLE
PL	PLATE	UB	UNIVERSAL BEAM
PFC	PARALLEL FLANGE CHANNEL	UC	UNIVERSAL COLUMN
RHS	RECTANGULAR HOLLOW SECTION	SHS	SQUARE HOLLOW SECTION
CHS	CIRCULAR HOLLOW SECTION		

5. PROVIDE UPWARD CAMBER TO BEAMS WHERE SHOWN. PRE-CAMBERS MAY BE ACHIEVED BY PRE-SETTING SUBJECT TO APPROVAL FROM THE ENGINEER.
6. STABILITY OF THE STRUCTURE DURING CONSTRUCTION IS THE BUILDER'S RESPONSIBILITY. PROVIDE ANY TEMPORARY BRACING THAT MAY BE REQUIRED FOR THIS PURPOSE
7. USE THE FOLLOWING GRADES FOR STEEL UNO

STEEL ELEMENT TYPE	GRADE
PLATE	250
WELDED SECTIONS	300
ROLLED SECTIONS	300
CIRCULAR HOLLOW SECTIONS	350
RECTANGULAR HOLLOW SECTIONS	450
SQUARE HOLLOW SECTIONS (GREATER THAN 50mm)	450
SQUARE HOLLOW SECTIONS (LESS OR EQUAL TO THAN 50mm)	350

8. ALL BOLTS SHALL BE M16 GRADE 8.8/S. U.N.O. NO CONNECTION SHALL HAVE LESS THAN 2 BOLTS. BOLT DESIGNATION IS AS FOLLOWS :
 

BOLT TYPE	REMARKS
4.6/S	COMMERCIAL BOLTS OF GRADE 4.6 TO AS 1111 SNUG TIGHTENED TO AS 4100
8.8/S	HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 SNUG TIGHTENED TO AS 4100.
8.8/T.B	HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS BEARING JOINT
8.8/T.B	HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS FRICTION JOINT WITH FACING SURFACES LEFT UNCOATED UNO.
9. TB AND TF BOLTS TO BE INSTALLED USING AN APPROVED DIRECT TENSION INDICATION DEVICE SUCH AS "HOBSON SQUIRTER WASHERS".
10. WHERE SLOTTED HOLES ARE SPECIFIED, BOLTS ARE TO BE AT MID LENGTH OF SLOT AT COMPLETION OF ERECTION.

## STRUCTURAL STEEL - CONT

11. ALL WELDS SHALL BE CATEGORY SP UNO. ALL WELDS SHALL BE 6MM CONTINUOUS FILLET USING E49XX ELECTRODES UNO. BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS TO AS 1554.
12. THE EXTENT OF NON-DESTRUCTIVE WELD EXAMINATION SHALL BE AS SHOWN IN THE TABLE BELOW. VISUAL SCANNING, VISUAL EXAMINATION, AND ADIOGRAPHIC OR ULTRASONIC EXAMINATION SHALL BE IN ACCORDANCE WITH AS/NZS 1554.1, AS 2177.1, AND AS 2207 AS APPROPRIATE

WELD TYPE & CATEGORY	EXTENT (% OF TOTAL LENGTH OF WELD TYPE)		
	VISUAL SCANNING	VISUAL EXAMINATION	RADIOGRAPHIC OR ULTRASONIC INSPECTION
FILLET WELDS, SP	100 %	50 %	---
FILLET WELDS, GP	100 %	25 %	---
BUTT WELDS, SP	100 %	50 %	10 %
BUTT WELDS, GP	100 %	25 %	---

13. WHERE SUPPORTED BY MASONRY OR CONCRETE PROVIDE 190 MINIMUM BEARING LENGTH AT EACH END OF ALL BEAMS AND 150 AT LINTELS UNO.
14. USE NON-SHRINK GROUT WITH A MINIMUM COMPRESSIVE STRENGTH = 30MPA, TIGHTLY PACKED UNDER ALL BEARINGS AND BASE PLATES.
15. CONCRETE ENCASMENT SHALL HAVE A STRENGTH OF 25 MPA AND 65 COVER OR ADEQUATE TO SUIT FIRE RATING OR EXPOSURE CONDITIONS AND SHALL BE REINFORCED WITH 3.15MM WIRE AT 100MM PITCH.
16. PORTAL FRAME COLUMNS TO BE PLUMB UNDER ROOF DEAD LOADS
17. ALL ROOF BRACING TO BE HUNG FROM EVERY SECOND PURLIN WITH RODS OR SIMILAR SO THAT BRACING IS STRAIGHT.
18. ALL PROPRIETARY CHEMICAL AND MECHANICAL ANCHORS ARE TO BE INSTALLED AT SPACINGS, EDGE DISTANCES AND DEPTHS AS INDICATED ON THE DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS INCLUDING DRILLING METHOD, HOLE DIAMETER, CLEANING, CURING, AND TIGHTENING.

## CORROSION PROTECTION - STEEL

1. SURFACE PREPARATION AND CORROSION PROTECTION OF THE STEELWORK IS TO BE PROVIDED TO SATISFY THE FOLLOWING ATMOSPHERIC CORROSIIVITY CATEGORIES AND YEARS TO FIRST MAINTENANCE IN ACCORDANCE WITH AS/NZS 2312.1 AND/OR 2312.2
 

STEELWORK ELEMENTS	ATMOSPHERIC COROSIVITY CATEGORY (Excluding micro-environments)	YEARS TO FIRST MAINTENANCE
INTERNAL STEEWORK	C1	25+
EXTERNAL STEEWORK	C3	25+
2. STEELWORK IN AN INTERNAL ENVIRONMENT SUBJECT TO CROSS VENTILATION OF OUTSIDE AIR IS TO BE CLASSIFIED AS BEING IN AN EXTERNAL ENVIRONMENT.
3. STEELWORK BUILT INTO AN EXTERNAL MASONRY SINGLE SKIN WALL, OR EITHER SKIN OF AN EXTERNAL MASONRY CAVITY WALL OR MASONRY VENEER WALL, IS TO BE CLASSIFIED AS BEING IN AN EXTERNAL ENVIRONMENT.
4. SURFACE PREPARATION AND APPLICATION PROCEDURES ARE TO BE IN ACCORDANCE WITH AS/NZS 2312.1, 2312.2 AND THE SUPPLIER'S SPECIFICATION.
5. PROVIDE BOLTS IN THE COMPLETED STRUCTURE WITH EQUIVALENT CORROSION PROTECTION AS FOR THE STEEL MEMBERS THEY CONNECT.
6. IN ADDITION TO THE FINISH SPECIFIED ANY STEELWORK IN CONTACT WITH THE GROUND IS TO BE COATED WITH A BITUMEN PAINT TO A MINIMUM DRY FILM THICKNESS OF 0.4MM, TO 100MM ABOVE GROUND LEVEL UNO.
7. WHEN GALVANISING HOLLOW SECTIONS OF STEELWORK PROVISION FOR VENTING AND DRAINING SHALL BE MADE DURING THE GALVANISING PROCESS IN ACCORDANCE WITH AS/NZS 4680. THE LOCATION AND SIZE OF HOLES SHOULD BE SHOWN ON SHOP DRAWINGS AND REVIEWED BY STRUCTURAL ENGINEER.
8. REFER TO THE ARCHITECTURAL SPECIFICATIONS FOR TOP COAT FINISHES AND COLOURS. ALL CORROSION PROTECTION COATINGS ARE TO BE COMPATIBLE WITH ANY APPLIED FINISHES AND TOP COATS, INCLUDING ANY FIRE RATED COATINGS.
9. ANY COATING REPAIRS SHALL BE UNDERTAKEN TO PROVIDE THE SAME LEVEL OF PROTECTION AS THE ORIGINAL SURFACE TREATMENT

## RESIDENTIAL TIMBER TRUSSES

1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, SERVICES DRAWINGS AND SPECIFICATIONS.
2. ROOF FRAMING PLAN IS DIAGRAMMATIC ONLY. THE TRUSS MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF ALL TRUSSES, GIRDER TRUSSES, HIP TRUSSES AND ANY ADDITIONAL SUPPORTS, BEAMS, LINTELS, STIFFENING AND ASSOCIATED CONNECTIONS AS REQUIRED BY THE DESIGN.
3. TRUSS MANUFACTURER IS RESPONSIBLE OF ANY ADDITIONAL BRACING REQUIRED BY THE DESIGN AND FOR THE STABILITY OF ALL TRUSS ELEMENTS DURING ERECTION.
4. TRUSS MANUFACTURER IS TO CERTIFY THE DESIGN AND DETAILS OF THE TRUSSES PRIOR TO SUBMITTING TO THE ENGINEER FOR REVIEW. COPIES OF RELEVANT COMPLETED FORMS IN ACCORDANCE WITH B.C.A. AND DESIGN ARE TO BE SUBMITTED TO THE ENGINEER PRIOR TO ERECTING TRUSSES.
5. TRUSSES TO BE LOADED WITH TILES PRIOR TO CONNECTING BOTTOM CHORD TO NON-LOAD BEARING WALLS.
6. TRUSS ARE TO BE DESIGNED TO ALLOW FOR ANY ADDITIONAL LOADS, SUCH AS MECHANICAL UNITS AND ACCESS WALKWAYS.
7. ALL TIMBER TRUSSES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH AS 1684 AND AS 1728.1 - THE TYPE AND GRAD OF ALL TIMBER USED IN THE TRUSSES SHALL BE NOMINATED IN THE SHOP DRAWINGS.
8. ANTICIPATED DEFLECTION OF THE TRUSSES (BOTH SHORT & LONG TERM) SHALL BE SUBMITTED FOR REVIEW WITH SHOP DRAWINGS.

## RESIDENTIAL CONSTRUCTION NOTE

1. THE BUILDER IS RESPONSIBLE OF CHECKING IF THE WORK IS DONE AS PER CONSTRUCTION DRAWINGS. ANY DISCREPANCY OR CONCERN THAT MAY ARISE IS TO BE REFERRED TO THE STRUCTURAL ENGINEER FOR CLARIFICATION.
2. THE BUILDING OWNER IS RESPONSIBLE FOR THE BUILDING AND SITE MAINTENANCE AS DETAILED IN THE CSIRO PAMPHLET 10-19 GUIDE TO HOME OWNERS ON FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE. THE BUILDER SHALL GIVE THE OWNER A COPY OF THIS DOCUMENT.
3. FOR SPECIFICATIONS OTHER THAN THOSE SUPPLIED, THE CONTRACTOR SHALL OBTAIN AND USE THE LATEST EDITION OF THE NATSPEC DOMESTIC SPECIFICATION.
4. TERMITE PROTECTION IS TO BE IN ACCORDANCE WITH THE LATEST EDITION OF "PROTECTION OF BUILDINGS FROM SUBTERRANEAN TERMITES AS 3660.1".
5. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS - AS 3798".
6. ALL FOOTINGS AND SLABS ARE TO COMPLY WITH THE LATEST EDITION OF "RESIDENTIAL SLAB AND FOOTING CODE AS 2870.1" AND ANY SPECIAL REQUIREMENTS FROM COUNCIL. CLASSIFICATION FOR CLAY SITES SHALL BE OBTAINED FROM COUNCIL OR GEOTECHNICAL INVESTIGATIONS.
7. SUBSOIL DRAINS (AGRICULTURAL DRAINS) SHALL NOT BE PLACED ADJACENT TO FOOTINGS. EXCAVATIONS FOR SERVICES PARALLEL TO THE EDGE OF THE SLAB OR FOOTING SHALL NOT EXTEND BELOW A LINE DRAWN AT 45 DEGREES TO THE HORIZONTAL FOR CLAY AND 30 DEGREES FOR SAND FROM THE BOTTOM OF THE EDGE BEAM OR FROM THE BASE OF BORED OR BULK PIERS. ALL SUBSOIL DRAINS MUST BE INSTALLED WITH FALLS AS PER MANUFACTURERS RECOMMENDATIONS. DRAINS SHALL COMPLY WITH LOCAL GOVERNMENT REQUIREMENTS.
8. ALL TIMBER FRAMING INCLUDING BRACING SHALL BE CONSTRUCTED IN ACCORDANCE WITH "AS 1684.4. RESIDENTIAL TIMBER-FRAMED CONSTRUCTION. PART 4: SIMPLIFIED - NON-CYCLONIC AREAS" UNLESS NOTED OTHERWISE IN THE DRAWINGS, SPECIFICATIONS OR TIMBER NOTES.

REV	REVISION DESCRIPTION	DATE	DESIGN	APPROV	Builder:	ARCHITECT:	STRUCTURAL ENGINEER:	PROJECT:	STRUCTURAL DESIGN TEAM:	DRAWING NAME:
								TORRENS DUAL RESIDENCE BLOCK 09 SECTION 33 TORRENS 2607	DESIGNED BY: MG 05/05/2021	GENERAL STRUCTURAL NOTES
2	ISSUED FOR CONSTRUCTION	25/08/2021	SER	MG					DRAWN BY: SER 05/05/2021	PROJECT No: 2021.06 DRAWING No: STR 002 SCALE: 1 : 10
1	ISSUED FOR COORDINATION	30/05/2021	SER	MG					CHECKED BY: MG 05/05/2021	PRINT DATE: 26/08/2021 3:10:52 PM REVISION: 2

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Sch 2.2(a)(xi)

Sch 2.2(a)(xi)

**GENERAL NOTES**

1. DO NOT OBTAIN DIMENSIONS BY SCALING THESE DRAWINGS. ONLY PRINCIPAL STRUCTURAL DIMENSIONS ARE SHOWN. ALL DIMENSIONS ARE IN MILLIMETRES. DETAILS ARE DIAGRAMMATIC AND MAY NOT BE TO SCALE.

2. READ THESE DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, THE DEVELOPMENT CONSENT AND THE REQUIREMENTS OF THE RELEVANT BUILDING AUTHORITIES. BEFORE PROCEEDING WITH WORK, CLARIFY ANY DISCREPANCIES.

3. SHOULD ANY AMBIGUITY, ERROR, OMISSION, DISCREPANCY, INCONSISTENCY OR OTHER FAULT EXIST OR SEEM TO EXIST IN THE CONTRACT DOCUMENTS, IMMEDIATELY NOTIFY IN WRITING TO THE SUPERINTENDENT.

4. MAINTAIN THE STRUCTURE IN A STABLE CONDITION DURING CONSTRUCTION. TEMPORARY BRACING/SHORING SHALL BE PROVIDED BY THE CONTRACTOR TO KEEP THE STRUCTURE AND EXCAVATIONS STABLE AT ALL TIMES, ENSURING THAT NO PART OF THE DOCUMENTED STRUCTURE BECOMES OVERSTRESSED. FOR ALL TEMPORARY BATTERS OBTAIN GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

5. PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE RELEVANT AND CURRENT STANDARDS AUSTRALIA CODES (INCLUDING AMENDMENTS), BUILDING CODE OF AUSTRALIA AND THE SPECIFICATION.

6. ALL DEMOLITION WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH AS 2601.6.

7. WHERE PROPRIETARY PRODUCTS ARE SPECIFIED ON DRAWINGS EQUIVALENT ALTERNATIVES MAY BE USED SUBJECT TO APPROVAL BY THE ENGINEER.

8. ALL PROPRIETARY PRODUCTS ARE TO BE SUPPLIED, STORED, MIXED, APPLIED AND CURED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

9. ALL FLASHING, MEMBRANES, AND WATERPROOFING ELEMENTS SHALL BE AS SPECIFIED IN THE ARCHITECTURAL DOCUMENTS.

10. ALL MATERIAL TESTING AND REPORTING IS TO BE UNDERTAKEN BY A LABORATORY WITH NATA ACCREDITATION APPROPRIATE FOR EACH TEST.

11. PROTECT ALL WORKERS AGAINST WHS RISKS. IF IN THE OPINION OF THE CONTRACTOR THE STRUCTURAL DETAILS PRESENT UNACCEPTABLE WHS RISK LEVELS THEN REFER TO ENGINEER FOR DIRECTION.

12. PRIOR TO COMMENCING ANY WORKS ON SITE CONTACT "DIAL BEFORE YOU DIG" AND/OR THE APPROPRIATE SERVICE AUTHORITIES TO DETERMINE THE DETAILS, LOCATIONS AND DEPTHS OF ALL SERVICES ON OR NEAR THE SITE, AND UNDERTAKE ON-SITE SERVICES SEARCHES

13. CONSTRUCTION USING THESE DRAWINGS SHALL NOT COMMENCE UNTIL A CONSTRUCTION CERTIFICATE IS ISSUED BY THE PRINCIPAL CERTIFYING AUTHORITY.

14. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK THE CONSTRUCTABILITY OF THE DESIGN PRESENTED. ANY QUESTION OR CONCERN THAT MAY ARISE SHOULD BE REFERRED TO THE ENGINEER FOR CLARIFICATION.

**DESIGN LOADS**

THE STRUCTURAL COMPONENTS DETAILED ON THE STRUCTURAL DRAWINGS HAVE BEEN DESIGNED FOR THE FOLLOWING LOADS.

FLOOR LOADS: LIVE LOADS IN ACCORDANCE WITH AS 1170 PART 1

WIND LOADS: VR = 45m/s – WHERE R = 500 YEARS  
REGIONS = A3  
TERRAIN CATEGORY = 3.0

EARTHQUAKE LOADS: DESIGN CATEGORY = 1  
SITE SUB-SOIL CLASS = Ce  
HAZARD FACTOR Z = 0.08  
PROBABILITY FACTOR Kp = 1

**CONCRETE**

1. CONFORM TO AS 3600 AND THE SPECIFICATION EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. STEEL REINFORCING AND STEEL PRESTRESSING MATERIALS FOR CONCRETE SHALL COMPLY WITH AS/NZS 4671 OR AS/NZS 4672, RESPECTIVELY.

3. ACCEPTABLE MANUFACTURERS AND PROCESSORS OF STEEL REINFORCING AND PRESTRESSING MATERIALS MUST HOLD A VALID CERTIFICATE OF APPROVAL ISSUED BY THE AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS LTD (ACRS). EVIDENCE OF COMPLIANCE WITH THIS CLAUSE MUST BE SUBMITTED AT TENDER, SUPPLY AND COMPLETION.

4. REFER TO SCHEDULE OF WITNESS AND HOLD POINTS FOR RELEVANT ITEMS.

5. PROVIDE CONCRETE WITH A MAXIMUM SLUMP OF 80, TYPE SL CEMENT, MAXIMUM AGGREGATE SIZE 20, APPROVED ADMIXTURES AND STRENGTH GRADE AS FOLLOWS:

ELEMENT	EXPOSURE CLASSIFICATION	STRENGTH (MPa)
ALL SHORING ELEMENTS	B1	SEE DRAWINGS
CONCRETE ELEMENTS	A1/A2/B1	SEE DRAWINGS

6. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 3600 AND AS 1379.

7. USE ONLY RIVER GRAVEL OR FINE-GRAINED BASALT AS COARSE AGGREGATE, AND USE CONCRETE WITH A MAXIMUM FREE DRYING SHRINKAGE (TARGET +15% VARIATION) AT 56 DAYS OF 550 MICROSTRAIN FOR GRADE 20, 600 MICROSTRAIN FOR GRADES 25 AND 32, AND 650 MICROSTRAIN FOR GRADES 40 AND 50.

8. CLEAR CONCRETE COVER TO ALL REINFORCEMENTS FOR DURABILITY SHALL BE AS FOLLOWS UNO.

ELEMENT LOCATION	CONCRETE STRENGTH				
	20MPa	25MPa	32MPa	40MPa	50MPa
INTERNAL	-	30	25	20	20
EXTERNAL	-	60H	40	30	30
IN CONTACT WITH GROUND No Damp-proof membrane	-	50	45	40	40
IN CONTACT WITH GROUND Damp-proof membrane	-	40	35	30	30

NOTE: # Can only be used where exposure is essentially to one surface

9. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

10. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS. MAINTAIN THE SLAB AND BEAM DEPTHS SHOWN.

11. DO NOT MAKE ANY CONSTRUCTION JOINTS, HOLES OR CHASES IN THE CONCRETE ELEMENTS UNLESS SHOWN OR APPROVED BY THE ENGINEER.

12. CONDUITS AND PIPES CAST INTO THE PLANE OF SLABS AND BEAMS, OR CROSSING BEAMS :

A. SHALL BE NON-METALLIC UNLESS WRAPPED IN APPROVED ISOLATION TAPE AND KEPT 30MM CLEAR OF ALL REINFORCEMENT,

B. IN SLABS SHALL BE LOCATED BETWEEN THE BOTTOM AND TOP REINFORCEMENT,

C. IN BEAMS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE DEPTH AND SHALL BE 30MM CLEAR OF ALL REINFORCEMENT,

D. GREATER THAN 32MM IN DIAMETER SHALL NOT BE PLACED UNLESS SHOWN OR APPROVED BY THE ENGINEER, AND SHALL BE SPACED AT MINIMUM 3 X CONDUIT DIAMETERS, BUT NOT LESS THAN 150MM UNO.

**CONCRETE – Cont**

13. ALL FALLS IN SLABS, CHAMFERS, REGLETS AND DRIP GROOVES TO ARCHITECTURAL DETAIL AND SPECIFICATION. MAINTAIN CONCRETE COVER AT THESE DETAILS.

14. FORMWORK SHALL BE IN ACCORDANCE WITH AS 3610. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL FORMWORK, ASSOCIATED PROPPING AND CAPACITY OF THE STRUCTURE UNDER CONSTRUCTION TO CARRY THE LOADING.

15. MINIMUM FORMWORK STRIPPING TIMES FOR INSITU CONCRETE SUBJECTED TO CONCRETE TEST RESULTS.

STRIPPING SCHEDULE			
FORMED SURFACE	HOT CONDITIONS > 20oC	AVERAGE CONDITIONS < 20oC > 12oC	COLD CONDITIONS < 12oC > 5oC
VERTICAL FACES BEAMS & SLABS	1 DAY	2 DAYS	3 DAYS
VERTICAL FACES COLUMNS & WALLS	5 DAYS	6 DAYS	7 DAYS
BEAM & SLAB SOFFITS – FORMS	4 DAYS	6 DAYS	8 DAYS
BEAM & SLAB SOFFITS – SUPPORTING MEMBERS (SHORES OR BACKPROPS)	12 DAYS	18 DAYS	24 DAYS

NOTE: # Single storey construction only. Refer to Formwork Engineer and/or AS3610-1995 for multi storey construction

16. DO NOT BUILD BRICK OR BLOCKWORK ON SUSPENDED CONCRETE UNTIL ALL SHORING HAS BEEN REMOVED.

17. PROP CANTILEVER SLABS AND BEAMS FROM A FIRM SUPPORT FOR A MINIMUM OF 28 DAYS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

18. USE MAXIMUM BAR CHAIR SPACINGS OF 750. USE ONLY PLASTIC BAR CHAIRS FOR SURFACES EXPOSED TO GROUND OR WEATHER. PREVENT DAMAGE TO VAPOUR BARRIERS AND MEMBRANES.

19. DO NOT POUR ON HOT AND/OR WINDY DAYS. WHEN THE WATER EVAPORATION RATE WILL EXCEED 1KG PER M<sup>2</sup> PER HOUR, CONSIDER USING AN ALIPHATIC ALCOHOL TO MINIMISE THE RISK OF PLASTIC SHRINKAGE CRACKING.

20. PROP, CURE AND STRIP IN ACCORDANCE WITH AS 3600, AS 3610 AND THE SPECIFICATION.

21. CURING SHALL BE ACHIEVED BY THE APPLICATION OF WATER TO, OR THE RETENTION OF WATER IN, THE FRESHLY CAST CONCRETE, AND SHALL COMMENCE AS SOON AS PRACTICABLE AFTER THE FINISHING OF ANY UNFORMED SURFACES HAS BEEN COMPLETED. WHERE RETENTION OF WATER IN THE FRESH CONCRETE RELIES ON THE APPLICATION TO EXPOSED SURFACES OF SPRAYED MEMBRANE-FORMING CURING COMPOUNDS, THE COMPOUNDS USED SHALL COMPLY WITH AS 3799.

22. MINIMUM STRENGTH & CURING REQUIREMENT FOR CONCRETE.

EXPOSURE CLASSIFICATION TO AS 3600	MINIMUM INITIAL CURING REQUIREMENTS- Continuous	MINIMUM AVERAGE COMPRESSIVE STRENGTH AT THE TIME OF STRIPPING OF FORMS OR REMOVAL FROM MOULDS (MPa)
A1	AT LEAST 3 DAYS	15 MPa
A2	AT LEAST 3 DAYS	15 MPa
B1	AT LEAST 7 DAYS	20 MPa
B2	AT LEAST 7 DAYS	25 MPa
C1	AT LEAST 7 DAYS	32 MPa
C2	AT LEAST 7 DAYS	32 MPa

**REINFORCEMENTS**

1. FIX REINFORCEMENT AS SHOWN ON DRAWINGS. THE TYPE AND GRADE IS INDICATED BY A SYMBOL AS SHOWN BELOW. ON THE DRAWINGS THIS IS FOLLOWED BY A NUMERAL WHICH INDICATES THE SIZE IN MILLIMETRES OF THE REINFORCEMENT.

N	HOT ROLLED RIBBED BAR	GRADE D500N
R	PLAIN ROUND BAR	GRADE R250N
SL	SQUARE MESH	GRADE 500L
RL	RECTANGULAR MESH	GRADE 500L

2. PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING CONCRETE COVER TO ALL REINFORCEMENT UNLESS OTHERWISE NOTED ON DRAWINGS.

ELEMENT	POURED AGAINST GROUND	POURED AGAINST SURFACE FORMS OR PLASTIC SHEETING	TOP CLEAR COVER (mm)
PAD AND STIP FOOTINGS	65	50	50
SALB ON GRADE	-	30	35
RETAINING WALLS	65	40	-

SUSPENDED FLOORS AND SLAB	TOP CLEAR COVER	BOTTOM CLEAR COVER	EXPOSURE CLASSIFICATION
INTERNAL SLAB	20	25	A1
EXTERNAL SLAB	25	25	A2

COLUMNS LEVEL	COVER TO STRIRRUP
BASEMENT	40
GROUND FLOOR TO LEVEL 1	30

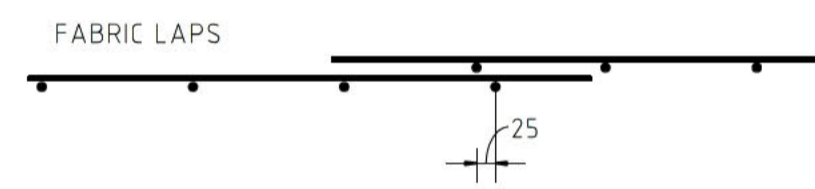
3. COVER TO REINFORCEMENT ENDS TO BE 50 MM UNO.

4. PROVIDE N12-450 SUPPORT BARS TO TOP REINFORCEMENT AS REQUIRED. TENSION LAP UNO.

5. MAINTAIN COVER TO ALL PIPES, CONDUITS, REGLETS, DRIP GROOVES ETC.

6. ALL COGS TO BE STANDARD COGS UNLESS NOTED OTHERWISE.

7. FABRIC END AND SIDE LAPS ARE TO BE PLACED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS TO ACHIEVE A FULL TENSILE LAP. FABRIC SHALL BE LAID SO THAT THERE IS A MAXIMUM OF 3 LAYERS AT ANY LOCATION.



8. LAPS IN REINFORCEMENT SHALL BE MADE ONLY WHERE SHOWN ON THE DRAWINGS UNLESS OTHERWISE APPROVED. LAP LENGTHS AS PER TABLE BELOW. GAP BETWEEN LAPPED BARS TO BE NO MORE THAN 3 BAR DIAMETERS AS PER AS3600 CLAUSE 13.2

**TENSION LAPS**

BAR SIZE	BAR WITH 300mm OR LESS DEPTH IN CONCRETE	BAR WITH MORE THAN 300mm DEPTH IN CONCRETE
N12	550	700
N16	800	1050
N20	1100	1400
N24	1400	1800
N28	1700	2200
N32	2000	2600
N36	2400	3100

**COMPRESSION LAPS**

BAR SIZE	LAPS (mm)
N16	640
N20	800
N24	640
N28	1120
N32	1280
N36	1640

**BORED PIERS – RESIDENTIAL**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS2159 PILLING DESIGN & INSTALLATION CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. THE TERM "BORED PIER" USED IN THE STRUCTURAL DRAWINGS AND SPECIFICATION SHALL BE TAKEN TO MEAN "BORED CAST- IN PLACE PILES". ANY REFERENCE TO PILES IN THE STRUCTURAL DRAWINGS, SPECIFICATION OR AS 2159 SHALL APPLY EQUALLY TO BORED PIERS.

3. ALL DESIGN AND INSTALLATIONS SHALL BE COMPLETED BY AN EXPERIENCED CONTRACTOR SPECIALIZING IN FOUNDATION ENGINEERING AND SHALL BE IN ACCORDANCE WITH AS2159. SUBMIT DETAILS OF PROPOSED DRILLING METHODS, EQUIPMENT AND SEQUENCE. GIVE NOTICE SO THAT INSPECTION MAY BE MADE OF THE FOLLOWING AS APPLICABLE:  
– AT COMPLETION OF EXCAVATION OF PIERS  
– AT REINFORCEMENT OF PIERS

4. SETTING OUT – PEG THE POSITION OF EACH PILE AND ESTABLISH A GRID OF RECOVERY PEGS TO ENABLE THE SETTING OUT TO BE CHECKED AT ANY TIME. PILES AND OR PIERS SHALL BE LOCATED WITHIN 75mm OF THE PLANT LOCATIONS AS SHOWN ON THE ENGINEERING DRAWINGS.

5. PILES SHALL BE SUPPLIED IN ONE CONTINUOUS LENGTH UNLESS OTHERWISE APPROVED. SPLICE LOCATIONS AND DETAILS ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO SPLICED PILE SHALL BE INSTALLED UNTIL SUCH APPROVAL HAS BEEN GIVEN

6. PIERS SHALL BE POURED WITHIN 24 HOURS OF EXCAVATION UNLESS OTHERWISE AGREED. CONTRACTOR MUST ENSURE PIERS WALLS ARE MAINTAINED STABLE PRIOR TO POURING CONCRETE.

7. PIER BASES SHALL BE LEVEL AND FREE OF ALL LOOSE MATERIAL. REMOVE ALL FREE WATER FROM PIERS BEFORE POURING.

8. CONFIRM BEARING PRESSURE AT BASE OF ALL PIERS BY GEOTECHNICAL TESTING/INSPECTIONS.

9. CONCRETE SHALL BE PLACED IN SUCH A MANNER SO AS TO AVOID SEGREGATION

10. THE PILE DEPTHS SHOWN ON THE ENGINEERING DRAWINGS ARE PROVISIONAL. ACTUAL PILE LENGTHS ARE TO BE MEASURED BY THE CONTRACTOR AND APPROVED BY THE SUPERINTENDENT.

11. OBSERVE SAFE -WORKING PRACTICES, INCLUDING THE RELEVANT PRACTICES RECOMMENDED IN AS2159 APPENDIX B.

12. PROVIDE & INSTALL FACILITY NECESSARY FOR INSPECTION OF PILLING INCLUDING SAFE ACCESS, LIGHTING, VENTILATION, AND THE LIKE. REFER TO DRAWINGS FOR ALL OTHER PIER INFORMATION.

13. RECORD THE RELEVANT INFORMATION AS LISTED IN AS2155, AND FORWARD TO ENGINEER /SUPERINTENDENT COPIES OF EACH RECORD TO THE SUPERINTENDENT.

14. PROVIDE A SURVEY OF ALL PILES /PIERS AFTER INSTALLATION, INCLUDING THE LENGTH FROM THE UNDERSIDE OF THE PILE CAP OR FOUNDATION, BEAM TO THE TOE OF THE PILE/PIER AND THE LEVEL OF THE SURROUNDING GROUND AT THE TIME WHEN THE PILE IS INSTALLED.

**FOUNDATIONS**

1. FOUNDATIONS HAVE BEEN DESIGNED FOR:  
ALLOWABLE BEARING PRESSURE – 125 kPa.  
  
ALLOWABLE SIDE SHEAR – N/A

REACTIVITY CLASS – CLASS P TO AS 2870

2. FOUNDATION MATERIAL IS TO BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE CASTING FOOTINGS.

3. REFER TO GEOTECHNICAL REPORT NO: 0B/C11633 DATED 14/04/2021 BY ACT GEOTECHNICAL ENGINEERS.PTY.LTD

4. LOCATE ALL PIPES, RETAINING WALLS AND EXCAVATION OUTSIDE A 1:2 ( VERTICAL: HORIZONTAL ) ZONE OF INFLUENCE FROM THE BOTTOM EDGE OF THE FOOTING.

5. DO NOT EXCAVATE BELOW THE LEVEL OF ADJACENT EXISTING FOOTINGS UNTIL THE ENGINEER HAS BEEN ADVISED AND STRUCTURAL DETAILS OF SHORING AND/OR UNDERPINNING HAVE BEEN APPROVED

6. WHERE SIDE SHEAR IS REQUIRED TO BE DEVELOPED, CLEAN AND ROUGHEN THESIDES OF THE EXCAVATION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.

7. FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.

8. FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE.

9. CONTRACTOR IS TO ALLOW FOR COST OF GEOTECHNICAL INSPECTIONS AND ANY REQUIRED CERTIFICATION

**RETAINING WALLS**

1. DRAINAGE SHALL BE PROVIDED AS SHOWN ON THE DRAINAGE DRAWINGS.

2. BACKFILLING SHALL BE CARRIED OUT AFTER GROUT OR CONCRETE HAS REACHED A MINIMUM STRENGTH OF 0.85 F'C. BACKFILLING SHALL BE APPROVED GRANULAR MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 200MM TO 95% STANDARD COMPACTION UNLESS NOTED OTHERWISE.

3. DO NOT BACKFILL RETAINING WALLS (OTHER THAN CANTILEVER WALLS) UNTIL FLOOR CONSTRUCTION AT TOP AND BOTTOM OF WALLS IS COMPLETED. ENSURE FREE DRAINING BACKFILL AND APPROPRIATELY CONNECTED DRAINAGE IS IN PLACE.

4. PROVIDE WATERPROOFING TO THE BACK OF WALLS AS SPECIFIED OR NOTED.

5. WHERE RETAINING WALLS RELY ON CONNECTING STRUCTURAL ELEMENTS FOR STABILITY, DO NOT BACKFILL AGAINST THE WALL UNLESS IT IS ADEQUATELY PROPPED OR THE ELEMENTS HAVE BEEN CONSTRUCTED AND HAVE SUFFICIENT STRENGTH TO WITHSTAND THE LOADS.

6. FOR ALL TEMPORARY BATTERS OBTAIN GEOTECHNICAL ENGINEERS RECOMMENDATIONS PRIOR TO STARTING THE WORK.

7. WHERE OVER-EXCAVATION AND REPLACEMENT OF MATERIAL IS TO BE DONE AT RETAINING WALL LOCATIONS, THE CONTRACTOR MUST ENSURE THE MATERIAL IS PLACED AND IN ACCORDANCE WITH AS 3798-2007 GUIDELINES ON EARTHWORKS FOR COMMERCIAL & RESIDENTIAL PROPERTIES.

REV	REVISION DESCRIPTION	DATE	DESIGN	APPROV	Builder:	ARCHITECT:	STRUCTURAL ENGINEER:	PROJECT:	STRUCTURAL DESIGN TEAM:	DRAWING NAME:
2	ISSUED FOR CONSTRUCTION	25/08/2021	SER	MG				TORRENS DUAL RESIDENCE BLOCK 09 SECTION 33 TORRENS 2607	DESIGNED BY: MG 05/05/2021	GENERAL STRUCTURAL NOTES
1	ISSUED FOR COORDINATION	30/05/2021	SER	MG					DRAWN BY: SER 05/05/2021 CHECKED BY: MG 05/05/2021	PROJECT No: 2021.06 DRAWING No: STR 001 SCALE: 1:10 PRINT DATE: 26/08/2021 3:10:51 PM REVISION: 2



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Sch 2.2(a)(xi)

**Site Inspection Report**

**Project Name** Torrens Block 9 Section 33  
**Job Number** 2112  
**Inspection Stage** Brick veneer between dwellings  
**Builder Contractor** FIRST SHEDS

**Date of Inspection:** 25/10/2022

**STR-0083**

**Comments**

- Brick veneer between dwellings was inspected.
- Brick veneer found structurally sound
- Slab on ground to be placed to support edge of brick veneer.
- Refer to attachment for slab on ground detail
- Site neat and organised

**Instructions**

- Proceed to next stage of construction

**Photos**

<https://photos.app.goo.gl/neqEwMNELvGyM53Y9>

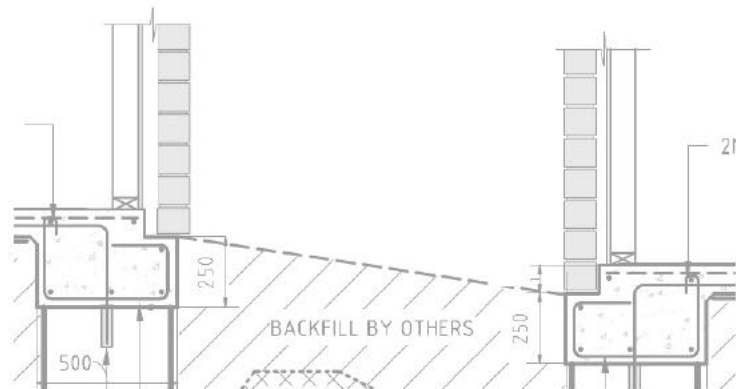
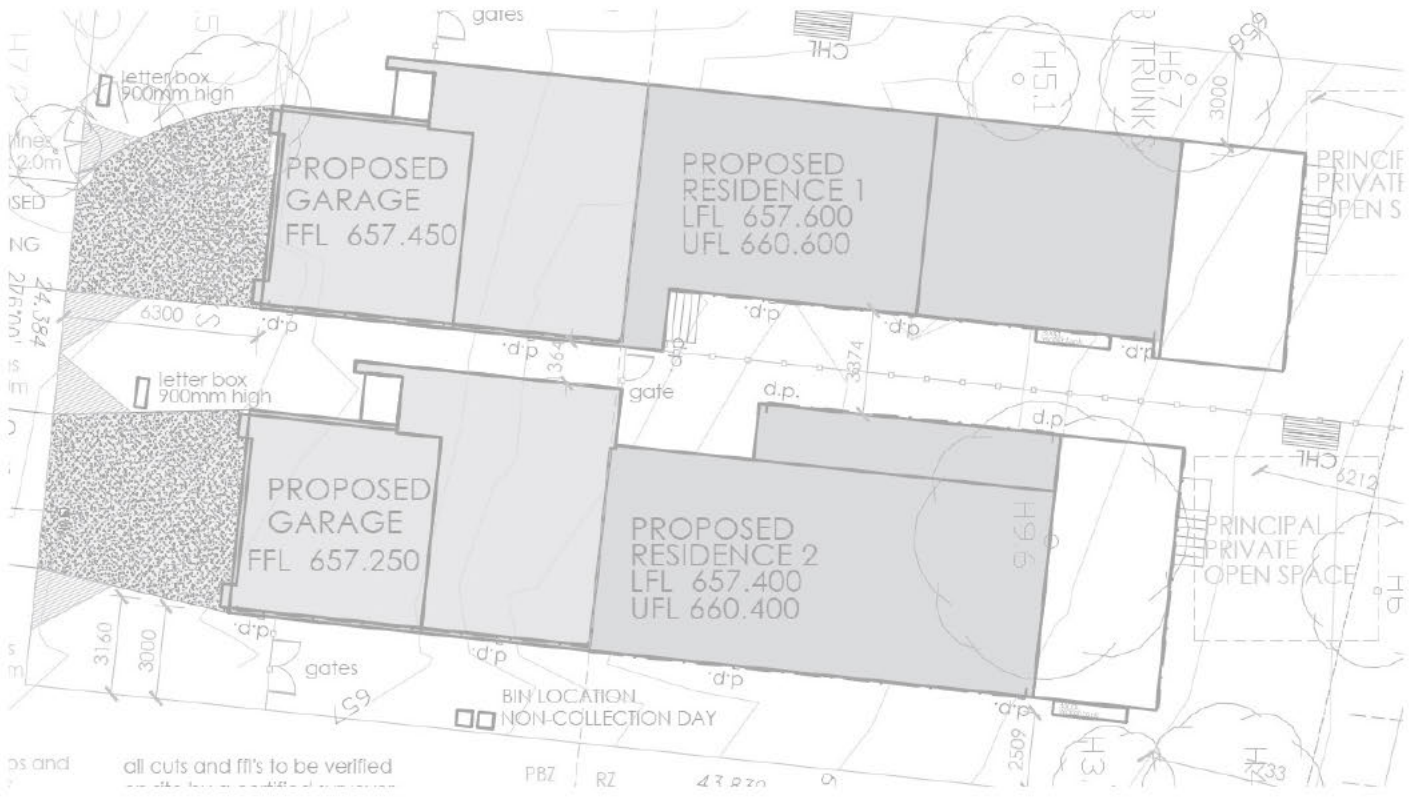
**Issued to:**

**Inspected by:**

Sch 2.2(a)(ii)

**Date of Report:** 25/10/2022

**Signature:**



## List of Building Approval Amendments.

Type	Building Approval Date	Plan Number	Description	Created	Created By
Amendment	24/01/2022	B20213959/B	Changes to structural plans	5/12/2023	ACTGOV\svc_edabs_bas
Amendment	8/03/2022	B20213959/C	Change to ffi	5/12/2023	ACTGOV\svc_edabs_bas
Amendment	2/11/2022	B20213959/D	Change to Finish Floor Level and Structural Plans	5/12/2023	ACTGOV\SVC_eDABS_BAS
Amendment	26/05/2023	B20213959/E	FFL, window change, cladding change, NGL altered	5/12/2023	ACTGOV\SVC_eDABS_BAS